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The Collegiate Courses of this School are a Winter Session, extending from the 1st of October to the end of March, and a Summer Session from the end of the first week in April to the end of the first week in July to be taken after the third Winter Session.

The sixty-first session will commence on the 3rd 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.

Founded in 1824, and organized as a Faculty of McGill University in 1829, this School has enjoyed, in an unusual degree, the confidence of the profession throughout Canada and the neighbouring States.

One of the distinctive features in the teaching of this School, and the one to which its prosperity is largely due, is the prominence given to Clinical Instruction. Based on the Edinburgh model, it is chiefly Bed-side, and the student personally investigates the cases under the supervision of special Professors of Clinical Medicine and Surgery.

The Primary subjects are now all taught practically as well as theoretically. For the department of Anatomy, besides a commodious and well-lighted dissecting room, there is a special anatomical museum and a bone-room. The other branches are also provided with large laboratories for practical courses. There is a Physiological Laboratory, well-stocked with modern apparatus; a Histological Laboratory, supplied with thirty-five microscopes; a Pharmacological Laboratory; a large Chemical Laboratory, capable of accommodating 76 students at work at a time.

Besides these, there is a Pathological Laboratory, well adapted for its special work. It is a separate building of three stories, the upper one being one large laboratory for students 48 by 40 feet. The first flat contains the research laboratory, lecture room, and the Professor's private laboratory, the ground floor being used for the Curator and for keeping animals.

Recently extensive additions were made to the building and the old one 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 15,000 volumes, 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 Maritime Provinces, unless they can produce a certificate of having passed a recognized Matriculation Examination, must present themselves for 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 the 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. The Royal Victoria Hospital, with 250 beds, will be opened in September, 1893, and students will have free entrance into its wards.

REQUIREMENTS FOR DEGREE.—Every candidate must be 21 years of age, having 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 examination.

For further information, or Annual Announcement, apply to **R. F. RUTTAN, M. D, Registrar,**
Medical Faculty, McGill College.

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Original Communications.

MODERN IDEAS WITH REFERENCE TO THE CARE OF THE INSANE.

Read before the Nova Scotia Branch of the British Medical Association by Dr. Geo. L. Sinclair, Superintendent of the Hospital for the Insane, Halifax, N. S.

At the meeting of the American Medico Psychological Association held in May last in the City of Philadelphia, a paper was read by one of the most celebrated neurologists in America, in which was painted in deplorably dark colours the deficiencies of the modern hospitals for the Insane and in scarcely less sombre tints the shortcomings of their medical management.

Every ology in medicine, according to the writer had made giant strides, (and it was assumed that these strides were all advances in the right direction) except psychology. It would be quite unnecessary here to criticise this paper—suffice, if I make it a text to indicate in what direction the trend of thought now is among many of those especially engaged in ministering to minds diseased, as to the kind of structure best suited to such work and the medical management which would produce the highest and best results as regards the care and cure of those suffering from what is usually designated mental disease or insanity.

It is well to bear in mind that in this country it is not more than fifty years since the victims of the disease, which we call insanity, had any provision made for them different from the criminal or pauper.

In this province the first portion of the building, of which in its completed form I have the honor to be the Medical Supt., was opened for the reception of patients in 1859. Previous to this date, persons thought to be insane were cared for in the lunatic wards of the old Poor's Asylum, or if their finances permitted they were sent to asylums for the insane in the adjoining province or to the United States. In 1874 the last wing of the N. S. Hospital for the insane was completed and accommodation provided for the humane and enlightened care of 300 patients.

The plan selected for this hospital was a copy of the Government institution in Washington, U. S., and represented the congregate type, made popular largely through the efforts of that great and good alienist Kirkbride of Philadelphia.

This Kirkbride plan has been adopted with slight modifications in nearly all the hospitals erected on this continent during the last twenty or thirty years. It is only comparatively recently that the question as to its being the best type of building for caring for all classes of the insane has arisen.

To show why another may be better is one object of this paper.

The old superstitious ideas regarding insanity have unfortunately long held sway.

Many evils have resulted as a consequence. One of these is that buildings erected for the care of the insane must have peculiar surroundings and be more or less isolated from the rest of the world. As a consequence those who have medical charge have been separated from their professional confreres, a specialism has been forced upon them, and they are to some extent out of touch with the rest of the profession.

Another result is that the general practitioner is unfamiliar with insanity and when brought in contact with a case feels helpless and is desirous of relieving himself of all responsibility by sending it to an asylum.

The medical staff of such hospitals are thus isolated and separated from the rest of the profession: moreover they are apt to be so engrossed in duties largely of an administrative character as to be unable to make full use of their opportunities for studying an abstruse problem in disease or to contribute to the medical press the results of their observation, for the benefit of the profession at large.

Such contributions would not only increase the knowledge of insanity among general practitioners, but would strengthen the bond of sympathy which should exist between all engaged in the noble work of ministering to those afflicted by disease.

This state of affairs should be remedied, and in no way can it be better done, at least in one direction, than by throwing more open to the medical student the hospitals for the insane, by compelling attendance by the the student and by inaugurating systematic clinical instruction for his benefit.

I know that upon the faculties of some colleges there are teachers of diseases of the mind and nervous system, who are frequently also prolific writers; but they are generally specialists in neurology rather than in psychiatry and their practical familiarity with insanity is apt to be derived from cases of mental disease seen in its incipiency or complicated with hysteria, neurasthenia or gross physical cerebral lesions.

Not long since, a proposal was made to establish in London a hospital for the insane, to be conducted by a visiting staff and to be managed very much as an ordinary hospital. The idea was apparently too radical and proved abortive, one reason for this result was possibly that scarcely a member of the proposed staff possessed a practical familiarity with insanity. What some of us think is really needed is a combination of the plan proposed and the methods now existing.

We want hospitals for acute, recent cases and asylums for the incurables.

We do not think the congregate building the best for all cases of insanity, but that partial segregation is desirable, and we also think that the management of the entire institution should be in the hands of a competent medical director, assisted not only by a goodly number of interns, but also by a consulting staff of able specialists who would work with him in response to a call for aid. The care of the insane must be both medical and custodial. The safety of the patient as well as that of the public requires this latter consideration. All civilized nations regard the insane as wards of the state. Technically they are in the majority of cases paupers; the word should not however be used in the sense in which it is commonly applied. They are not dependent on the public as a result of any deliberate act of their own. Previous to the appearance of their disease, the majority of the inmates of any hospital for the insane, were the bread winners and bread makers of the community in

which they lived. When stricken with the saddest affliction which can befall humanity—the result often of causes entirely beyond their control, or born into the world with the tyranny of a bad organization, they have fallen by the wayside in the struggle of life and the very nature of their desease has made it necessary to separate them from home and friends. They should not be compared to the inmates of the ordinary poor's asylum who are too often paupers as the result of bad habits and vicious lives, and they are entitled to different care and treatment. The duty of the state to its insane wards has been very aptly defined, as "such provision as to accomplish the largest results in the restoration of the curable cases, the element of expense being here a subordinate one, and for the remainder such comfortable provision as shall ensure safety to the community and humane care to the sufferer."

What many of us are now pleading for in this day of medical unrest, is the realization of this definition. We feel that while comfortable provision has been made by the state for the incurable insane, the largest beneficial results cannot accrue to the curable under existing conditions.

Battey-Tuke says: "The subjects of most of the insanities are very sick people indeed, for in the first place they are in danger of their lives, and in the second they are in danger of lapsing into that living death, terminal dementia.

"Each case, under circumstances of curative rest and calm requires special hospital treatment, conducted on identically the same principles as those that regulate the practice in our general infirmaries and conducted under similar conditions as regards rest, nursing and therapeutic agents. The existing system of asylum structure, management and treatment makes this almost unattainable."

It seems to me strange that any other idea than this should ever have been held.

Enormous sums of money have been expended in erecting palatial structures in which are placed all sorts and conditions of insane men and women. To these buildings of late the name of hospital is being applied: unfortunately calling a thing a name does not make it necessarily what that name implies. As a matter of fact, these institutions are Asylums, providing in excess for the needs of the incurable and more or less deficient in ability to perform the duties of hospitals for those afflicted with acute mental disease. The judicious association of certain kinds of curable and incurable insanities may be to some extent unobjectionable; may even be beneficial to both classes of patients; but the enforced companionship of all kinds of chronics with recent cases is distinctly, prejudicial to the recovery of the latter and is quite capable of converting them into incurables. Such an unfortunate result has a pecuniary as well as a professional value. It has been estimated that the average duration of life in the incurable insane is 12 years, and further, that the loss sustained by the community in cost of keep and loss of productiveness is about $5,000 per capita.

To devise a means by which the chance of converting curable into incurable cases will be lessened if not abolished is surely a legitimate problem for the consideration of the social and political economist.

We all know what a wave of reform in hospital construction has spread over the land in recent years, no matter what the cause, the object of the changes has been to increase the chances of restoring the sick to health.

The state as guardian of the poor, erects hospitals replete in every remedial appliance for restoring to health the sufferers from the ordinary ills to which flesh is heir. The question of

cost of construction is subordinate to the end in view.

How is it with regard to providing for the care of those ill with that much more complex disorder involving the organ of mind?

Is a man less a citizen and a brother because his brain and not his liver is involved? Should we be unable to give him the best and most scientific treatment on account of architectural defects in our hospitals or therapeutic deficiencies in their equipment? Surely it is the duty of the state to make such provision as to accomplish the largest results in the restoration of the curable cases. In some of the states in the adjoining republic this duty has been and is being recognised and in designing their new institutions for the insane or in enlarging or altering the existing ones, distinct provision for the real hospital care of the recent cases is being made. It must be remembered that as a rule not only are recent cases those which offer the best chance of cure, but that the curable are often drawn from the bone and sinew of our population. The necessity and justice of providing any and all means by which these can have the best chance of recovery and restoration to their families and friends should be self evident. But you may ask, if the existing system of caring for the insane is not the best, how can it be made better? Must we pull down our asylums and erect others? Not at all. We can make our present methods more perfect by adding annexes which will be essentially hospitals. They need not be very large—say for this institution (Mount Hope) of a size to accommodate thirty or forty patients each. Many admissions bear the stamp of incurability when they come to us; for these our present means are quite sufficient.

This annex should be near, but not too near the main institution, it should be simple in design and structure so as to do away as far as possible with any institutional feeling, be furnished so as to give a home like look and so take away the idea of confinement and restraint. Large wards with the monotonous and often dreary corridors had better be dispensed with and instead there should be plainly furnished, single rooms with sitting rooms, thus giving privacy and at the same time permitting opportunities for social intercourse when such was desirable.

In this hospital annex—which might be called an infirmary—provision should be made for the introduction and use of every known therapeutic agent, such as electricity, gymnastics, hydrotherapy, massage and all means necessary for thorough examination of the blood and various excretions, for the use of the microscope, sphygmograph, ophthalmoscope and for very thorough physical examination. Here should be done the real medical and surgical work and no labour or expense be spared which would in any way tend to aid the recovery of the patient or help to solve the unknown problems of insanity.

The medical superintendent of the whole institution should be a man of experience in mental medicine, a good administrator and not given to riding hobbies. He should have resident assistants and interns, fresh from the practice of general hospitals, one of whom should be a pathologist, and a staff of consulting specialists in all the disorders that complicate or are essential features of insanity. To these he could appeal for aid in thoroughly exploring and investigating every organ and part of the body so as if possible to remedy any disorder even remotely connected with the insanity.

There should be a plentiful supply of nurses of both sexes, thoroughly trained, carefully selected and well paid.

To this department of the general asylum I would not apply a name suggestive of insanity. I would endeavour to make the public realize that it

was a hospital for mental ailments in the true sense of the term replete, with every thing likely to be productive of good to the patients.

Further in this annex it might be well to make provision for the reception of cases from the general asylum developing intercurrent bodily disease, so that they could receive the best nursing and furnish material for the instruction of the nursing staff;—for of course a school for nurses would be a part of the general plan. Here the probationers could obtain teaching and practical knowledge in ordinary disease as well as the special opportunities for studying mental maladies and their management.

As is well known there is a feeling of dread existing in the mind of the public regarding lunatic asylums. It is very unfortunate that such is the case. With such hospital annexes as I have sketched above I would hope to remove this feeling and so have cases placed under treatment at the earliest possible stage of their disease.

The whole question of caring for the insane is one of peculiar interest to the people of this province. The total number of insane in Nova Scotia cannot be less than 1400. We can accommodate 400 of them at Mount Hope—the various county asylums now erected can receive about as many more and the balance of 600 are scattered some where and any where. Before very long some governmental action will be required to provide for the care of the balance.

Whatever general plan is decided upon should always have in view special, separate buildings erected upon the lines I have indicated for the recent curable cases and also if possible some means for removing convalescents from association with cases still in an acute or incurable stage. If you had heard as I have, the stories of the depressing influence which the enforced companionship with the decidedly insane has upon the patient struggling with hesitating and uncertain steps back to mental soundness, you would recognize the desirability, nay the necessity for a means of separating such from hurtful surroundings and associations. Finally what is best to be done with the cases neither recent nor curable, the patients who form the vast majority of the population of our present institution? In reply I say we will keep them where they are and classify them according to the most marked features of their disease and endeavour to associate them in such a way as to let them do most good and least harm to each other.

The mild, neat, cleanly and orderly would be put together and the violent, unclean and destructive should either have a special building or a distinct portion of the present institution as now. When supposedly curable cases drifted into incurability they would be transferred from the hospital building to the general asylum and so room would be made for other recent cases. To carry out fully a programme of advanced lunacy legislation one other matter should be referred to, viz.: the organizing of some kind of detention hospital to which cases whose insanity is not fully made out or who are trembling on the border line, might be temporarily committed.

In New York there is upon the grounds of the Bellevue Hospital such a building, known as the Insane Pavilion. To this are sent cases of the type I have mentioned. After sufficient time (usually only a few days) has been given for a diagnosis to be reached, the patient if decided not to be insane is discharged or, if the opposite opinion is formed, is transferred for further care to the Hospital for the Insane.

The advantage of the plan is that a suspicious case, subsequently adjudged not insane goes back to the world without the stigma so uncharitably attached to one who has been a patient in an asylum for the insane.

"I have been long and you patient. I thank you."

THE RESULTS OF SEROTHERAPY IN MEDICINE.

(MEDICAL WEEK'S REPORT OF GERMAN CONGRESS OF INTERNAL MEDICINE, APRIL 12TH, 1895.)

PROF. HEUBNER (Berlin), *Reporter.*—After Kitasato, Roux, Yersin and Behring by their experiments had laid a firm foundation for antidiphtheritic serotherapy, investigations were set on foot to ascertain whether the phenomena observed in small animals would also be observed in larger animals under similar conditions. The results proved that, not only are the morbid processes characterised by fibrinous exudation the same, but it is also possible to obtain in this way a remedial substance, which may be advantageously employed in human beings. The fact that, up to that time, medical men had been practically powerless in the presence of diphtheria justified, indeed, trying any new method of treatment which offered a chance of success.

It is not without interest, in the light of subsequent events, to recall the nosological conditions at the time when this trial was undertaken. A systematic study of diphtheria in all civilised countries bring out two important facts: in the first place, the mortality of diphtheria, as a rule, reaches a high proportion in the cities, ultimately spreading to the surrounding country; in the second place, the statistics of Munich, Berlin, Dresden Hamburg and Leipzig, show a notable decrease in the mortality from diphtheria within the last five years, without, however, this comparative benignity of the affection being invariably observed.

The introduction of serotherapy determined a sudden fall in the death rate from this disease, at any rate in the city of Berlin. In 1894, before the days of serotherapy, there were, out of 1,332 cases of diphtheria, 517 deaths, which is equivalent to a death-rate of about 39 per cent., which is nearly one-half less than it was before the introduction of the new treatment.

There is no doubt, of course, that a larger number of patients have been admitted into hospital, and that light cases are more frequent now in the diphtheria wards than they used to be; but even if these factors be allowed for, there is still a notable difference in favour of patients treated by serotherapy. It would, consequently, be absurd to persist in attributing the improvement manifested since the employment of serotherapy merely to the admission into hospital of a larger number of benign cases.

Of 558 examined from a *bacteriological* point of view, the results were negative in 61; but of these 558 cases, the clinical symptoms in 504 pointed strongly to the presence of bacilli, and among these the bacteria were absent only in 7 cases. The importance of bacteriological examination for diagnostic purposes is, therefore, self-evident, and it would obviously be well in the future to reserve the term *diphtheritic* for cases in which Loeffler's bacillus exists, all others being described collectively under the general designation of *diphtheroids.*

For the *prognosis with reference to serotherapy* neither the nosologica forms nor the old classifications of these are of any value, early application of the serum treatment being the most important point, as is evident from the experience at Berlin, where, of 181 cases of pure diphtheria, it was possible in 176 to determine on which day after the onset of the disease the serotherapeutical medication was begun, with doses varying from 600 to 3,600 antitoxin unities, to the exclusion of any local antiseptic treatment. The prognostic deductions from these facts, however, were not corroborated at Leipzig, where a less active serum was used, at any rate at the commencement.

For *clinical* purposes, in order to obtain a definite term for comparison, a "normal type of diphtheria" may be

established by means of graphic charts, in a manner analogous to the method employed in producing composite photographs. In this way the course of the fever is found represented by an ascending curve during one or two days, which then gives way to defervescence, followed by another rise in the temperature about the fifth day. This is the stage at which laryngeal and septicæmic symptoms usually supervene. This second rise is absent in cases treated by sufficiently large doses of anti-diphtheritic serum, which apparently exerts a specific influence; at Leipzig, where, as I have already stated, the serum employed was less active, this secondary rise existed, though in less marked degree.

The frequency of the pulse was also diminished in a large proportion of the cases treated by serotherapy.

On comparison of the *local symptoms* in 141 cases observed before the introduction of serotherapy, with those in 148 cases treated with antidiphtheritic serum, it is found that, in the former series of patients, the morbid manifestations were at their height on about the eighth day, while in the second group they began to decline about the sixth day. It is worthy of note that, in cases in which a comparatively inactive serum was employed, improvement did not manifest itself before the ninth or tenth day. In all the cases, however, at a period within this maximum, the local lesions began to recede, and the false membranes become detached. Recrudescence of the disease, when treated by serum, is very rare, and, when it does occur, it is usually slight and of short duration.

Albuminuria is the more likely to be absent, the earlier the treatment is instituted. Thus, this complication did not make its appearance in five-sixths of the cases treated on the first day of the affection, in two-thirds of the cases treated on the second day, and in one-half of the cases treated on the third day.

Of the patients admitted into hospital after the third day of the disease, only 24, or 14 per cent., presented albuminuria after having been subject to serotherapy. As a rule, albuminuria sets in during the second half of the first week, whether or not serotherapy has been resorted to. The serum, consequently, appears to have no influence either way in this respect.

With regard to *invasion of the mucous membranes*, it was found that, of 181 cases of pure diphtheria, the larynx and trachea were affected only in 16; but the larynx was never involved, nor were the false membranes ever reproduced, in cases subjected to serotherapy. Among cases in which the larynx had already been invaded, the affection was checked and the patients recovered without operation in 9. Moreover, serotherapy has markedly reduced the duration of intubation; while at Leipzig the latter was, as a rule, one-hundred hours, at Berlin it was reduced to less than forty hours under the influence of serotherapy.

Among the patients treated on the first and second day after the onset of diphtheria, there was no death; and of those treated on the third day, only 2 succumbed.

Recurrence took place in but 3 out of the 181 cases of pure diphtheria. Of the 162 diphtheritic patients who recovered, 9 presented symptoms of weak heart, and 12 developed paralytic phenomena. No definite conclusion can be arrived at in this respect, however, as the majority of these children left the hospital before the third week.

Among the patients treated on the first day, the death-rate was *nil;* from the second to the fourth day, 4.6 per cent.; on and after the fifth day, 16 per cent. The total mortality in all the 181 cases of pure diphtheria, was about 22 per cent.

In 31 of these 181 cases an eruption occurred, which in 9 cases was accompanied by hyperthermia, and in 2 cases

was accompanied by arthralgic symptoms. These secondary phenomena were observed more frequently at Leipzig. There were no local ill-effects at any time from the injections. The nephritic symptoms in respect of which serotherapy has been incriminated are, to say the least, doubtful.

Preventive injections were resorted to in 64 children, of whom 2 had already arrived at the initial stage of the diphtheritic infection; 2 others had an attack of diphtheria within six weeks, and one of these died. Though immunisation evidently lasts but a short time, it cannot be considered as useless.

A comparison of the observations of diphtheria before and after the introduction of serotherapy brings out two important points, which plead in favour of the specificity of the new treatment, viz: attenuation of the fever, and early expulsion of the false membranes.

Other changes in the characteristics of the disease lately observed are possibly due to epidemiological conditions, seeing that they have been very general. It would be rather strange, however, in spite of the coincidence of the comparative benignity of late epidemics, pretty well all over the world, with the introduction of serotherapy, to assume that there is no relationship between them.

PROF. BAGINSKY (Berlin).—From March 15th, 1894, to the same date in 1895, 525 cases of diphtheria were treated by serotherapy at the Friedrich Hospital, Aronson's serum being first used, and then Behring's. The epidemic, which was raging during this time, was very severe, for during the months of August and September (when we were obliged to abandon this treatment for want of serum) the death-rate was 52 per cent., while during the four preceding years it was respectively 50, 33, 36, and 42 per cent., which is equal to an average mortality of 41.1 per cent. Among the 525 patients, however, who were under treatment while serotherapy was employed, the death-rate was but 15.81 per cent.

The following is a comparative table of the death-rate at various ages, before the inauguration of serotherapy (from 1890 to 1894) and since this treatment was introduced:

	Age.	Cases of diphtheria.	Deaths.	Death-rate.
1890-1894.	0- 2...	243	154	63.36 p. c.
	2- 4 .	333	175	52 "
	4- 6...	274	104	37.98 "
	6- 8...	197	54	27.40 "
	8-10...	124	24	19.35 "
	10-12...	73	11	15 04 "
Under serotherapy.	0- 2 ..	87	22	25.28 "
	2- 4...	146	25	17 12 "
	4- 6...	116	20	17.24 "
	6- 8...	79	9	11.39 "
	8-10...	58	3	5.71 "
	10-12 ..	20	2	10 "

From a clinical point of view, there is no doubt that serotherapy exerts a remarkable influence on the general condition diphtheritic patients, the effect being manifested, if not on the first, at any rate on the second or third day, provided the dose of serum be sufficiently large. At the same time, no special symptom is determined by this treatment, except that the disease progresses more rapidly toward recovery; the pallor and prostration soon give way to a general improvement in tone, associated with restoration of the appetite, which is sufficiently marked to strike even a casual observer.

It is also unquestionable that serotherapy causes a fall of the temperature; but, when the dose injected is not sufficiently large, praecritical hyperthermia, analogous to that which precedes the crisis in infantile pneumonia, frequently occurs. Under such circumstances, another injection brings down the temperature to normal for good.

The local process is also checked, sometimes indeed immediately, by the injection of antitoxic serum. Before the introduction of this method of treatment, the local process went on developing, even in cases in which treatment was instituted on the very

first day. The beneficial effect of the serum is not restricted to the pharynx, but extends also to the larynx, as is evident from the fact that, for the first time in my experience, only one patient at the hospital developed laryngeal stenosis. It is a new experience also to find that intubation may be successfully substituted for tracheotomy in patients, who at the moment of their admission, present diphtheritic manifestations in the larynx. While in 1884, of 177 cases of laryngeal stricture. tracheotomy was necessitated in 82, and intubation appeared to be practical in but 21, the introduction of serotheraphy permitted of resorting to intubation in 54, and restricting tracheotomy to 53 cases.

Intubation, under such circumstances, led to recovery in 62 per cent. of all cases, whereas before the introduction of the serum treatment the successful cases did not exceed 41 per cent. at the most. The success now obtained from intubation must, therefore, be attributed to the effect of the serum on the false membranes, which, even in the tracheo-bronchial tract, sometimes become detached in the form of the finger of a glove.

Diphtheritic nephritis is characterised by a rapid increase and an equally rapid diminution, of albuminuria, and these typical features are present whether or not serotherapy has been resorted to. The urine of 25 patients treated by injections of antitoxic serum was examined regularly in order to ascertain whether the phenol in the injected fluid had something to do with the production of albuminuria, but no trace of phenol was discovered in any case. On the other hand, on injecting animals with 15 centigrammes of phenol dissolved in 10 cubic centimetres of water, the former makes its appearance in a short time in the urine, while the same quantity of phenol, mixed with serum from a non-immunised horse, is placed in special conditions of absorption, which prevents its passing into the urine.

Statistics prove the paramount importance of early treatment by serum :

Cases treated.	Death-rate.
On the 1st day	2.5 per cent.
" 2nd "	10 "
" 3rd "	14 "
" 4th "	23 "
" 5th "	35 "
" 6th " and later.	25 to 60 "

Among the secondary effects of antitoxic serum are abscesses, which were noticed in 7 cases, in which the aseptic measures could not be impugned. They appeared to occur principally in cases in which the injections penetrated deeply into the muscular layers. In many cases of this kind, neither streptococci, staphylococci, nor any other pyogenic microbe could be discovered in the pus.

In additional to the usual eruptions at the seat of injection, there appeared in some fifteen cases, about the twelfth day, polymorphous erythemata, sometimes associated with marked hyperpyrexia and inflammation of the nasal and ocular mucous membrane, which, however, were never followed by death. Whenever there are hæmorrages and fatal complications, septicæmia probably exists. Moreover, diphtheritic erythemata were known long before serotherapy was introduced, and we are, therefore, in no wise justified in ascribing all these ill-effects to the serum.

Preventive injections were resorted to in upwards of 150 children, of whom only 2 were subsequently attacked with diphtheria, and in one of these cases the issue was fatal.

Serotherapy, therefore, obviously constitutes the surest and most promptly efficacious treatment of diphtheria at our disposal ; it is not followed by any secondary effects of importance ; the exanthemata sometimes observed in after injections of antidiphtheritic serum cannot justly be ascribed to the

latter agency, being, moreover, very slight; lastly, contrarily to the opinion expressed by certain investigators, there is nothing to prevent the association of serotherapy with local treatment. The manner in which this remedy acts is still unknown, but its efficacy is established empirically on a sufficiently firm basis to justify the employment of serotherapy in diphtheria in preference to any other known treatment.

Prof. von Widerhofer (Vienna).—Of 300 patients treated in our diphtheria wards by injections of antidiphtheritic serum, 71 died, which is equivalent to a death-rate of 23.7 per cent. On comparison of this percentage with that of the corresponding months for the last five years, it is found that the mortality has decreased by one-half since the introduction of serotherapy.

Of the 32 patients under one year of age, 18 died; in 18 under eighteen months the deaths numbered 5, and in 50 under two years, 14.

Among children over two years, the death rate gradually decreases with the age. It is worthy of note that, in one-half of the cases, the treatment was not instituted until after the third day of the disease.

On admission into hospital, 77 patients presented albuminuria, and 15, symptoms of septicæmia; in several cases there were also signs of laryngeal stenosis. In 22 cases, the laryngeal stenosis was checked and recovery brought about without any local intervention. In 108 cases, intubation was resorted to, and in 51 cases, tracheotomy; among these 108 cases, there were 57 recoveries. Statistics of the last five years show that, in a total of 1,075 operations, the proportion of recoveries was 43 per cent.

Among 130 subjects in whom preventive injections were resorted to, being brothers or sisters of patients sent to the hospital, there was only a single case of diptheritic infection. At the hospital 110 preventive injections were practised, and of these children only one subsequently had an attack of diphtheria, from which he rapidly recovered. Of 188 children in the country subjected to preventive injections, 5 subsequently developed diphtheria, which was also of a mild type.

The serotherapy was not associated with local treatment of any kind, the only other remedies given being digitalis, strophanthus, or strychnine in a small number of cases, in order to combat symptoms of weak heart-action.

Bronchitis and catarrhal pneumonia were of rather frequent occurrence at first, but the injurious influence of too dry an air was recognized and since the evaporation of water in the wards, this complication is met with much less frequently than before.

THE WILD FLOWERS OF CANADA.

This Dominion will soon be covered with wild flowers as with a carpet. It is interesting to hear that splendid prizes are to be given to those who know the Wild Flowers of Canada by name, form and color. European and American judges of floral nature say Canadians should be so carried away with the beauty of their own native bloom as to ensure an acquaintance with the Wild Flowers of Canada by every man, woman, boy and girl in the Dominion.

In this connection the *Montreal Star* is coming in for much praise for a splendid work it is publishing, entitled "The Wild Flowers of Canada," in portfolio form, sixteen flowers in each portfolio, three hundred plates in all, natural colors and natural size, the whole forming an invaluable treasure for the library. For a limited time these valuable portfolios may be obtained from the *Montreal Star* or local newsdealers at 15 cents each. Amazingly cheap.

Maritime Medical News.

JUNE, 1895.

Communications on matters of general and local professional interest will be gladly received from our friends everywhere.

Manuscript for publication should be legibly written in ink on one side only of white paper.

All manuscript, and literary and business correspondence to be addressed to

DR. G. M. CAMPBELL,
9 Prince Street, Halifax.

EDITORIAL.

AMBULANT TREATMENT OF FRACTURES OF LOWER EXTREMITY.

More than sixty years ago, Baron Seutin of Brussels, introduced the use of starched bandages in the treatment of fractures. Various other materials were used in this method of immobilising fractures and in 1852, Mathiesen, a Dutch surgeon brought forward plaster-of-Paris, the best medium hitherto found. The illustrious Russian surgeon, Pirogoff, used this extensively and many leading surgeons in Europe and America advocated this treatment. But professional opinion fluctuated : in the words of Hamilton *(Fractures and Dislocations)*, "from the day in which this practice was first recommended to the present moment it has been constantly experiencing the most extraordinary vicissitudes in the public favour." Hamilton himself, one of the greatest authorities on fractures was not very favourable to its use. Stromeyer stigmatised it as "a lazy makeshift." And yet we think we are on safe ground in saying that this is one of the most valuable methods at the disposal of the surgeon. And this above all in the treatment of fractures of the lower extremity.

The question is not so much one of immobilisation ; it is doubtful if any apparatus can absolutely immobilise a limb, or that such a condition would be an unmixed advantage The great point in the use of the plaster bandage is that in many cases confinement to bed is unnecessary.

Nothing can be more striking than the difference between the subject of a fracture of the humerus, or of the bones of the forearm and a case of fracture of the thigh or leg. In the first case the patient is generally able in a few days to move about, take exercise in the open air, and enjoy in many ways his enforced holiday. The other, confined to bed for weeks, it may be for months, perhaps confined to a small ill-ventilated room, loses appetite, deteriorates in health and in tissue, and on release from his splint and bandages is anything but fit to resume his occupation at once.

The great majority of such cases may, through the use of a skilfully applied plaster-of-Paris dressing, be enabled to go about, enjoying fresh air and sunlight during the whole course of treatment.

Again, what practitioner among us does not know the worry and annoyance caused by a restless patient treated in the ordinary way by splints and extension. Frequent visits are required to readjust the apparatus, often causing a great deal of unnecessary fatigue with the rigid apparatus, after the first two weeks are safely past almost all is done, and those who have carefully employed this method can testify to the immense saving of trouble and anxiety to the doctor as well of avoid-

ance of weary confinement and risk of deformity to the patient.

There can be no doubt that the evil repute into which this treatment has sometimes fallen is owing to want of care and skill in applying the bandage. Faulty union, undue shortening, pressure sores, and even gangrene have occurred; they have also occurred under treatment by splints and extension. All fractures are not suited for the plaster-of-Paris treatment, one must discriminate.

When we consider the enormous advantages accruing from this method, whenever applicable, it seems strange that it has not been employed more extensively. Some eminent surgeons have used it for many years, and yet have appeared to recognize only a part of its usefulness, its immobilising power. It was found a more convenient comfortable and effective treatment than any other, but patients were still confined to bed. Some however realised its greater advantage, none more so than Sir John Erichsen who has used it for years. It has also been used by some Continental surgeons but does not appear to be in favour in America. Though the late Dr. Sands used the plaster bandage most of his countrymen appear to have agreed with Hamilton in an attitude of mistrust. In the *Text book of Surgery by American Authors* there is no allusion to the "ambulant" treatment.

From an editorial in the *Annals of Surgery* for February last, we learn that at the German Surgical Congress of 1894 no less than four papers were contributed dealing with fractures of the lower extremity and their treatment by the "walking-bandage." Von Bardeleben, one of the leading surgeons of Berlin narrates in his paper how "over thirty years ago he sustained a fracture of the malleolus and "dislocation of the foot, and walked "about on the first day, and never "allowed the accident to confine him "for any length of time."

He has treated 116 fractures of the lower extremities at the Charite Hospital in Berlin, during the last two years, by this method, the patients being able to go about during the process of consolidation. Out of this number 22 were fractures of the femur, 5 being compound, namely 2 accidents and 3 osteotomies for genu valgum. Five were of the patella, and the remaining 89 "fractures of the leg." A case was shown by one of the speakers in which ten days previously the patient had been run over and received a compound fracture of the left leg and thigh. He was put up in the "walking-bandage," and was able with the aid of a crutch and cane to walk before the audience. Krause has been trying the method for seven years and reports 98 cases including osteotomies. Like the veteran Von Bardeleben he has had the opportunity to test the treatment upon himself. He sustained a fracture of both malleoli and had the plaster-of-Paris bandage applied. In a week he was able to go about his duties free from pain. He could climb stairs and walk for hours. In four weeks the fracture was firmly united and he was able to dispense with the dressing. He thinks highly of this method in fractures of the leg especially in its lower portion as at the malleoli, and also in supracondyloid fracture of the femur, but evidently doubts its applicability in obligue fractures of the femur, and as these constitute the great majority of fractures of this bone, he would apparently limit its use here to cases of osteotomy.

The method has been tried on a small scale in the hospital service of Dr. L. S. Pilcher, of Brooklyn, U. S., by Dr. Warbasse; six cases are reported, which gave great satisfaction.

In the 7th edition (1877) of his *Science and Art of Surgery*, Erichsen says: "with such an apparatus as this I have treated many fractured thighs both in adults and in children, without

confinement to bed for more than three or four days."

The following appear to be the chief practical points in carrying out this treatment:

1. Cases must be selected; every case of fracture is not to be treated in this way. While a compound fracture, or a simple wound is no bar, it is evident that much laceration or excoriation of the skin will make it difficult of application.

2. Competent assistance must be at hand to maintain the limb in proper position during the application and stiffening of the bandage.

3. Whatever plan of applying the plaster is used it must be fresh and well-dried. A small quantity should be experimented with, being mixed with water into a thin paste, it should "set" hard in from eight to fifteen minutes. Crinoline or book-muslin bandages freshly rolled in dry plaster and soaked just before use, are probably the best medium.

4. The limb should be first bandaged smoothly over with soft flannel, and a thick pad of wool should be placed on the sole of the foot, underneath this bandage.

5. The plaster bandage should be evenly applied *without using force;* and the toes should be left exposed.

6. Where a wound exists, as in a compound fracture an antiseptic dressing is applied before the gypsum bandage is used, and when this has hardened an aperture is cut in it through which the wound may be dressed. If complaint is made of pain at any point, as for example, on heel or ankle or head of fibula, an aperture should also be cut and the part examined.

7. The limb must be carefully watched, the colour of the toes will give warning of any interference with circulation, and careful attention to this and to any feelings of uneasiness will prevent the occurrence of pressure sores or such a calamity as gangrene.

8. If there has been much swelling at the time of application of the bandage, displacement of the fragments is apt to occur as the swelling goes down. Where there is any reason to fear this the plaster should be removed in from 8 to 14 days, when any deformity can still be rectified, and then reapplied. In the 10th edition of Erichsen's *Surgery*, he states that as a rule it is better not to apply the bandage (in the case of the femur) before the end of the second week. This will allow all swelling to subside.

9. The patient should be seen, or report himself frequently. On first beginning to walk, the limb may be partially supported by a strong band round the shoulders, but this can soon be dispensed with, and the crutches also, soon be exchanged for a staff.

The time required for union of a fracture in this way is said by some to be less than in the ordinary way treated by splints, but whether this is so or not, it is amply proved that patients are much sooner able to return to their occupations. A business man, with "Pott's fracture" loses in one case perhaps six weeks, in the other not as many days.

MARITIME ASSOCIATION MEETING.

The number of papers announced for the meeting of the Maritime Medical Association is already large and everything points to a successful and enthusiastic gathering, (see 2nd page). The time of year finds Halifax at its best, and apart from the scientific programme the opportunities for relaxation and recreation for the visiting brethern are unequalled.

The medical profession of Dartmouth and Halifax are making preparations to entertain a large number of visitors. All those intending to be present should notify the Secretary as soon as possible, so that the Committee can

make suitable arrangements for their entertainment. Hotel accommodation will be secured for those wishing it.

There is no better way for a hard worked professional man to begin his vacation than by coming to the Convention.

In addition to the papers there will be an Address by the President, Dr. Farrell; and an Address by the President of the Nova Scotia Medical Society, Dr. A. P. Reid. Dr. Reid's Address will be on the "Germ Theory and Sero-Therapy."

THE titles of the following papers have been received so far for the meeting of the Maritime Medical Association:—

Insomnia and its Treatment; W. H. Hattie, M. D., Assistant Superintendent of the Nova Scotia Asylum for the Insane.

Therapeutics of Cardiac Affections; M. Chisholm, M. D., Halifax.

Insufficiency of Internal Rectus Muscle or Exophoria and its Treatment; S. Dodge, M. D., Halifax.

Benign Stenosis of the Pylorus and the Exhibition of the Gastrodiaphane as a means of Diagnosis; Foster MacFarlane, M. D., St. John.

Tuberculosis; J. F. MacDonald, M. D., Hopewell, N. S.

The Management of Whooping Cough; G. Carleton Jones, M. D., Halifax.

Report of a Case of Myxœdema; Chas. J. Fox, M. D., Pubnico, N. S.

Our Profession; J. A. Coleman, M. D., Granville Ferry, N. S.

Two Cases in Obstetric Practice with Treatment; M. L. Angwin, M. D., Halifax.

Appendicitis; J. F. Black, M. D., Halifax.

A Visit to Some London Hospitals; Wm. Norrie, M. D., West Branch, River John, N. S.

Nursing Schools in connection with Hospitals for Insane; Geo. L. Sinclair, M. D., Supt. of the Nova Scotia Hospital for the Insane.

Scarletina or Rotholn; D. C. Allan, M. D., Amherst, N. S.

(a) A Case of Strangulated Hernia—perforation—suture—recovery.

(b) Notes on a case of Acute Inversion with prolapse of Uterus, immediate reposition and recovery. Dr. R. A. H. McKeen, Glace Bay, C. B.

"Biers method of treating local tubercular affections." Dr. John Stewart, Halifax.

CANADIAN MEDICAL ASSOCIATION.

There with be a meeting of the Canadian Medical Association in Convocation Hall, Queen's University, Kingston, on Aug. 28th, 29th and 30th next. This, owing to a number of circumstances, promises to be one of the biggest conventions ever held in Canada.

Dr. Jas. Stewart, of Montreal, will deliver the address in Medicine; and Mr. J. H. Cameron, of Toronto, the address in Surgery. It is intended to have a Skin Clinic at which several interesting cases will be presented, and these will be discussed by several prominent Dermatologists. There will probably be other Clinics as well.

Another pleasure partly expected is that of having the First President of the Association, Sir Charles Tupper, at the meeting.

DR. WM. BAYARD the present President of the Canadian Medical Association, was the first President of the Maritime Medical Association. We hope to see him in Halifax during the coming meeting. He celebrated his eightieth birthday last year while the association met in St. John. He bears his years well and would worthily

wear the honors of knighthood if such were conferred on him.

THE programme of the Fifteenth Annual Meeting of the Ontario Medical Association has been received. The meeting will be held this year in Toronto on Wednesday and Thursday, June 5th and 6th. The programme is well filled and no doubt the attendance will be large.

DR. WILLIAM H. HINGSTON, of Montreal, has been honored by Her Majesty by being knighted. He has been President of the Canadian Medical Association, Vice-President of the British Association for the Advancement of Science, and two or three years ago delivered the Address in Surgery before the British Medical Association. Sir William Hingston is a polished and effective speaker, and will wear his new honors with becoming dignity. He is at pressnt Professor of Clinical Surgery of Laval University.

ST. JOHN MEDICAL SOCIETY.

1ST MAY, 1895.

VENESECTION :

A paper on this subject was read by Dr. J. Boyle Travers. Reference was made to the abuse of venesection in the past, which was followed by its employment being almost entirely discontinued.

The reader advocated bleeding in certain cases, in certain people and at certain times as a resource of great value; three cases of double pneumonia were related, the patients were all males, ages 25, 27 and 35 years, weight of each about 180 pounds, florid complexions and full blooded. The symptoms which called for venesection in these cases were urgent dyspnœa, profound cyanosis and almost imperceptible radial pulse. From eight to twelve ounces of blood was taken, this had the effect of relieving these symptoms in the three cases, a return of of the symptoms in one case however, required a further venesection (twelve ounces) three days later, all the cases terminated in recovery.

Selections.

ANTISEPTICS IN MIDWIFERY.—Under the headings of "Comparative Studies." the *Practitioner* for March reviews the antiseptic methods employed in certain lying-in hospitals and those recommended by leading authorities. At Queen Charlotte's Lying-in Hospital, London, the following measures are adopted; The patient on admission to the hospital, before entering the labor-ward, is washed from head to foot and clothed in garments provided for the purpose. On entering the ward, before any vaginal examination is made, the vulva and surrounding parts are thoroughly washed with soap and hot water, and, the soap having been removed with plenty of water, the vagina and vulva are irrigated with a solution of perchloride of mercury 1 in 2000. Any rings worn by the obstetrician are removed and the hands well washed with soap and water and scrubbed with a nail-brush. The hands are then immersed for not less than one minute in a solution of perchloride 1 in 1000. As a lubricant vaselin and perchloride 1 in 1000 are used, and the jar containing it is kept permanently immersed in a basin of 1 in 1000 perchloride solution. When delivery is completed, a warm vaginal douche of 1 in 2000 is given to all patients. Forceps and other instruments before being used are boiled in water in a vessel resembling a fish-kettle in shape. The solution of perchloride of mercury is made from ordinary tap-water, and no acid or other substance is added except some coloring material.

At the General Lying-in Hospital, London, where the antiseptic methods adopted have met with so large a measure of success, the rules are much the same as those above mentioned. The vulva is cleansed and a vaginal douche is given before and after delivery. The lubricant employed consists of glycerin and perchloride 1 in 1000, a small quantity of hydrochloric acid being added to the mercurial solution.

At St. Mary's Hospital and Manchester and Salford Lying-in Institution the methods are as follow: The nurses are taught to thoroughly cleanse the hands with soap and water and turpentine, and then to soak them in a solution of perchloride of mercury 1 in 1000 for five minutes. The vulva is always cleansed with soap and water, and then with the mercurial solution 1 in 1000; but a vaginal douche is only given before labor in cases where there is evidence of septic discharge, as, for example, where there is profuse leucorrhœa or vulvitis. It is, however, given in cases where operative measures are to be undertaken. The lubricant used is glycerin and perchloride, 1 grain (0.065 gramme) to the ounce (31 grammes). After delivery a douche of perchloride of mercury 1 in 6000 is given in all cases.

At the Rotunda Hospital, Dublin, the following plan is adopted: The vulva is washed with soap and then with lysol solution at the commencement of labor. It is believed that this hardens the tissues less than corrosive sublimate. A vaginal douche is not given either before, during, or after labor in uncomplicated cases, nor during the puerperium. Four vaginal examinations are all that are allowed during the entire course of a normal labor. The hands are carefully scrubbed with soap and water and a nail-brush, and the latter is kept constantly immersed in a creolin solution, and, as an additional precaution, is boiled once a week. All soap having been washed off, the hands are soaked and scrubbed with a special brush for one minute in a solution of perchloride of mercury, 1 in 500, to which some tartaric acid has been added. The hands are not dried before examining, and no lubricant is used under ordinary circumstances. If, however, the hand has to be passed into the vagina, then soap is the lubricant preferred. Carbolic soap is usually employed, but no stress is laid on this, as ordinary soap, when once its surface is melted off by hot water, may be regarded as an aseptic substance. Before obstetrical operations the vulva is scrubbed with sterilized tow, soap, and 2-per-cent. creolin solution. The vagina is scrubbed out in the same way with soap and the 2-per-cent. creolin solution.—*Univ. Med. Journal.*

Excision of the Tonsils.—Dr. Arthur Ames Bliss discusses this subject in the *Therapeutic Gazette* for March, calling attention to a type of hypertrophied and diseased tonsil in which the tonsillotome cannot surround the mass to be excised, but simply presses against the free surface. A certain amount of the tissue may engage in the ring; but even where the free, projecting mass of the tonsil can be planed away more completely, the parts shielded by the faucial pillars remain still to annoy the patient by inflammatory attacks, while the pressure exerted upon the soft palate and pharyngeal wall is scarcely, if at all, relieved. The cold snare is more effectual, but the lateral masses escape its grasp, being protected by the adherent faucial pillars or the capsule which covers the tonsil in such cases. Not infrequently the anterior pillar of the fauces has become a thick, broad, fibrous band, which completely envelops the anterior half of the tonsil, and, by a process, apparently of contraction, has pressed and rotated the gland backward, so that whatever may remain of its free surface presents toward

the posterior wall of the pharynx. Such type of tonsil is most active in its tendency to take on inflammatory processes and to produce constant irritation, which affects the neighboring parts of the respiratory tract. The tonsillotome and snare are here quite useless. The process of destruction by electro-cautery puncture is very slow, tedious, and painful, and it is not rare for attacks of general tonsillitis to arise during the course of this method and to interrupt its continuance. Dr. Bliss has had the best results from the use of a scissors adopted from Teet's nasal cutting forceps, in conjunction with Farnham's crocodile-jaw forceps. The special features of the scissors are its long, powerful handles; the relatively-short, strong blades, and a socket into which the shank of the lower blade falls as the scissors closes. This socket arrangement presses the blades together and prevents them from being sprung apart when cutting through thickened tissue. The two instruments—forceps and scissors—readily serve as a tongue-depressor while the operator is at work, but in trimming out tonsils under cocaine the patient can, of course, assist by holding the tongue-depressor himself, when one is required. The tonsil-tissue is grasped firmly by the jaws of the forceps, which will not slip away or tear out, as the volsella so often does. The scissors are then passed beneath the parts thus raised and pieces of varying size, measured precisely as the operator desires, are thus trimmed away. Portions of the growth lying hidden beneath the anterior pillar of the fauces can be pulled out and excised with precision, thoroughness, and care. Upon adults this can be done without ether, a 5-per-cent. solution of cocaine, applied on pledgets, being sufficient to cause local anæsthesia. He has frequently been able to use this method with quite young children, but, where post-nasal adenoids, exist, he completes the post-nasal and faucial operation at the same time under ether.

In employing the tonsil-scissors, it is necessary to hold them in the hand nearest to the tonsil to be operated upon; for instance, the operator's right hand when excising the left tonsil of a patient. He has never had a dangerous hæmorrhage or even an alarming one following the use of this method; and, from an examination of the ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES for six years, he concludes that hæmorrhage is an unusual complication.

Dr. Bliss has found it advantageons to use a position in operations under ether which he has not seen described. The patent, having been etherized in the recumbent position, is carefully raised by the trained assistant to a sitting posture. The assistant, standing close by the right side of the couch or table and resting his weight upon his right foot, places his left knee upon the couch, pressing the knee and leg firmly against the sacrum and back of the patient, who thus rests against the assistant's leg, abdomen, and chest. Thus the assistant has firm support, while he is enabled to hold the patient securely, giving by his own body firmness and easy movement to the otherwise limp and relaxed patient; he can also hold the mouth-gag in position with one hand, while the other is free to support the patient's head or chest, or to hold napkins with ether, during the short intervals when etherization can be maintained. By flexing his own body forward on his thighs, he can also, when necessary, throw the patient's body well forward, so as to favor the free escape of blood from the mouth or eares. At the same time it gives him power, simply by sinking back into a sitting position himself, instantly to bring the patient into a recumbent position at a moment's warning. Dr. Bliss would not use the position in chloroform anæsthesia, in cases of serious cardiac or arterial disease, or in the aged.—*Universal Medical Journal.*

THE TREATMENT OF INOPERABLE MALIGNANT TUMORS WITH ERYSIPELAS AND PRODIGIOSUS TOXINS.—In an article on this subject in the *Medical Record* for January 19th, Dr. W. B. Coley gives the following summary of his results: Up to May 31, 1894, he had treated with mixed toxins twenty-five cases of inoperable sarcoma, eight of inoperable carcinoma, and three of sarcoma or carcinoma. In carcinoma he had noted marked improvement in a number of cases, but no cures. They were all very advanced recurrent tumors. In sarcoma he stated that there were six cases in which he considered there was a reasonable hope of permanent cure. Six months have passed, and none have shown any recurrence. Of two others which were merely mentioned among the tabulated cases as improving, one has gone on to entire disappearance of the very large tumor and promises to be a cure, and the other, a six-times-recurrent sarcoma of hand, is in perfect health at present, nearly two years after the beginning of the treatment. Since May 31, 1894, he has treated twenty-four cases of malignant tumors, all inoperable and mostly recurrent, with the mixed toxins. Of these cases thirteen were sarcoma and eleven carcinoma. In many cases of carcinoma the injections had an undoubted retarding influence, and in some the improvement was extraordinary, but in none did the tumor entirely disappear. In the cases of sarcoma the effect was far more marked; and although in a number of them the disease was so far advanced that there could be no possible hope of recovery, still the powerful controlling influence of the toxins was demonstrated. In three of the thirteen cases the sarcomata have entirely disappeared, and although no great length of time has elapsed, the results in his older cases make it improbable that relapse will occur. Of his total of thirty-eight cases of inoperable sarcoma, therefore, nine promise to be permanently successful.—*Boston Medical and Surgical Journal.*

OPIUM IN EPILEPSY.— This is the treatment suggested by Prof. Flechsig, of Leipsic. The patient is first given one-half to one grain of Opium, and this is rapidly increased until at the end of the first week he is taking fifteen grains or more a day, in doses of from one to four grains. At the end of six weeks the Opium is entirely suspended, and Sodium Bromide (one-half drachm four times daily) substituted. After these large doses of bromide have been continued for some time, the amount is gradually lowered until the patient is taking less than forty grains a day. It is important the bromide should immediately follow the suspension of the large doses of Opium.

The plan, however, is not a specific in the treatment of epilepsy, but in almost every case in which it has been tried there has been a cessation of the fits for a greater or less time. A relapse generally occurs in a period varying from a few weeks to a few months.

The frequency of fits after the exhibition of Opium is, for the first year at least, lessened more than one-half. The attacks occurring after the relapse are much less severe in character than those that the patient had been accustomed to.

This treatment is particularly valuable in ancient and intractable cases, but in recent cases of idiopathic epilepsy it cannot be recommended. It is an important adjuvant to the bromide plan as ordinarily applied.

The Opium acts symptomatically, and merely prepares the way for and enhances the activity of the bromides and other therapeutic measures; it also permits the use of any other substances which have a beneficial action in epilepsy.—DR. COLLINS, in *Medical Record.*

TRIONAL IN THE INSOMNIA OF CHILDREN.—In a paper on this subject Claus concludes (*Therapeutic Gazette*):

1. Trional, in the dose of one-third to twenty-two grains, according to the age of the child, is a brilliant hypnotic. On the following morning neither headache nor heaviness of the head was noticed. Physiological sleep was favored. Patients do not become accustomed to it. Sleep occured in ten or fifteen minutes after its administration.

2. Trional has no very pronounced effect upon insomnia the result of pain.

3. Trional leaves the intellectual, respiratory and circulatory functions untouched, and it has a favorable effect upon digestion.

In toxic insomnia, particularly that caused by alcohol, chloral seems to be more active.—*Atlanta Med. and Surg. Journal.*

HOT WATER DOUCHES.— Doctor Baldy teaches that *vaginal douches of* hot water, as commonly employed in pelvic or uterine inflammations, are positively harmful,—hot water used by the patient in the crouching position simply adds congestion to an already inflamed part. To derive benefit from the hot water, the patient must be reclining, and use not less than a full gallon at a temperature of 105° to 110° F. Experience teaches that it is impossible to get dispensary patients to observe these rules, and consequently douching is not ordered except for cleansing purposes.—*Philadelphia Polyclinic.*

INCONTINENCE OF URINE.—

℞ Benzoate soda, } aa grs. xv.
Salicyate soda, }
Ext. belladonna, grs. xxx.
Cinnamon water, ℥iv.

A teaspoonful four or five times a day.—*La Revue Medicale.*

SLOCUM in the treatment of leucorrhœa in young married women, has had good results from the use of cantharides. The formula he employs is as follows:

℞ Tincture of cantharides, 96 minims;
Tincture of ferric chloride, 160 minims;
Diluted phosphoric acid, 160 minims;
Syrup of lemon, 2 fluidounces;
Water, sufficient to make 4 fluidounces. M.
Dose: A teaspoonful, in water, after meals.—*Philadelphia Polyclinic.*

FOR acne the following is recommended:

℞ Sulphur sublim, 7 grms.
Napthol B, 2 grms.
Storax ointment, 2 grms.
Fresh lard, 50 grms.

Rub in every night for a week. Omit a week and repeat. Cure is usual at the end of a week.

FOR ECZEMA.—

℞ Salicylic acid, drams j.
Zinc oxide, drams iij.
Powdered starch, drams iv.
Wool-fat cerate, ounces j.

Make ointment and apply.— *The Practitioner.*

FISSURE OF NIPPLES.—

℞ Aristol, ℥iss.
Liquid vaseline, ℥i.

S.—Apply after each nursing.— *Archives of Gynecology.*

AT Brompton Hospital for Consumption a favorite prescription for stimulating the appetite is as follows:

℞ Soda bicarb. gr. xv.;
Fl. ext. ipecac, ♏x.;
Liq. amm. acet., ♏xv.;
Aquam, q. s. ad ℥i.
Sig. *T. i. d.* ante cibum.
—*Therapeutic Gazette.*

ACUTE DISEASES OF CHILDHOOD.—In the treatment of acute affections of childhood, the physician is often confronted with the problem of how to reduce high temperature rapidly and effectively, and without discomfort and injury to the patient.

Among all the remedies hitherto proposed, phenacetine still maintains its position as the most eligible antipyretic in pediatric practice. Its popularity is based upon its possession of marked sedative and anodyne properties, aside from its power of reducing fever. Under its influence the restlessness disappears, pain, if present, is relieved, and the child often drops into a refreshing sleep.

In an interesting article in the *Archives of Pediatrics*, March, 1895, Dr. C G. Jennings states that, among the coal tar antipyretics, "Phenacetine has given by far the most satisfactory results." Clinicians generally agree that powerful effects like cyanosis and dangerous cardiac depression never occur with this drug in reasonable dosage. The beginning dose of phenacetine should never be larger than one-half grain for each year of age. This dose may be repeated every hour for two or three doses. Guided by the thermometer or the relief of the distress and the breaking out of a gentle perspiration, the administration of the drug can be arrested when the result is accomplished.

In the treatment of nasal and pharyngeal catarrh, tonsillitis, laryngitis, bronchitis, pneumonia and pleurisy in the first stages, the author advises the combination with aconite of one, two or three doses of phenacetine at hourly intervals, at the height of the pyrexia. After the period of engorgment in pneumonia or any grave inflammatory disease, however, aconite should have no place in its therapeutics and antipyresis should be accomplished by the bath, or phenacetine administered with very great care.

In the pyrexia resulting from the absorption of ptomaines, and the acute indigestion of children, phenacetine in Dr. Jennings' opinion, is par excellence the remedy. It can be administered with calomel, bismuth, or salol, to suit the necessity of the case.

He also states that in the acute inflammation cerebral and spinal meningitis, leptomeningitis, and cebro-spinal meningitis, phenacetine will be the antipyretic to administer, as it promptly relieves the agonizing headache and neuralgic pains, and induces quiet and refreshing sleep. He has found it very serviceable in exanthematous fevers. In measles, the high fever attending the onset and acme of the eruption stage, can be well and safely controlled by phenacetine, while in scarlatina of a mild and moderately severe type, the administration of one or two doses when the pyrexia becomes uncomfortable is good treatment. The same experience was obtained in the treatment of variola. Finally in malarial fevers and typhoid fever of a mild type, phenacetine, in the author's practice, has best answered the purpose of an antipyretic.—*St. Louis Med. & Surg. Jour.*

TREATMENT OF SURGICAL TUBERCULOSIS.—In common with most German surgeons Dr. E. Mirmisson is opposed to the operative treatment of surgical tuberculosis, especially in childhood. He regards as the chief objects of treatment the immobilization of the affected parts and the use of appropriate hygienic measures and medicaments for improving the general health. If suppuration has occured injections of iodoform are extremely serviceable. In two cases of large subperiosteal abcesses of the thigh communicating with the knee joint the results were extremely favorable. In the first case, a boy of five years, two injections sufficed to produce a cure; in the second a boy of fifteen, three injections

were required, 5 grm. of a 10 per cent iodform ether being injected. In case. of spondylitic abscesses the author employs after irrigation injections of iodoform ether in amounts of 5, 10 and 15 grm. In a few cases a cure was effected by one injection, in others it has been repeated in three or four weeks, until puncture showed the presence of only a yellowish fluid which absorbed. The injection of iodoform solutions has certainly proved a decided acquisition to the therapeutics of tuberculous disease of joints. —*Therap. Montash.*, Jan., 1895.

PRACTICAL POINTS AS TO PERITONITIS.—Dr. Cole. in a paper on this subject, stated that peritonitis was the result of injury to the peritonæum itself or to neighboring structures, or of disease of one of the organs which it covered, or of the extention of disease to it from other structures. He believed it always bacterial, and he thought that no single variety of microorganism was alone concerned in the inflammatory process. In cases of intestinal origin the colon bacillus was present, the *Streptococus pyogenes* in puerperal peritonitis, the *Staphylococus pyogenes aureus* or *albus* after laparotomy, and the *Amœba coli* in some cases of amœbic dysentery, and the *Diplococus pneumoniæ* was sometimes found. The symptoms were pain, intense, cutting, piercing, griping, intermittent, diminishing as the disease extends, with or without chill; vomiting, increasing, intractable as the abdomen became more distended, until intestino-peritoneal septicæmia completed the scene and destroyed the patient. As to diagnosis, the previous history, the possible origin, extent, condition, and surroundings of the patient, the determination of present or past kidney diseases, the latter having a special bearing on treatment, were all matters of grave import in making the diagnosis and directing the course to be followed. The speaker gave the following conclusions:

1. Peritonitis was palpably and practically always a symptom demanding surgical consideration, not necessarily operative inteference; and in any case a man who was unable to meet any surgical aspect that might arise, did himself and his patient an injustice in not having in consultation from the outset some one who was able to do it. 2. In localized cases of pelvic origin, we should use saline cathartics, hot douches, and hot applications (cold in exceptional cases), followed later by appropiate and necessary operative treatment by the abdomen or the vagina, preferably, where practicable, the later. 3. In cases originating in disease of the vermiform appendix the possibility or probability of perforation should be considered, also of the existence of intestinal paresis and of the limitations of the process, and then we should make an immediate decision as to operation. Emptying the lower bowel was in all cases advisible, but salines should be used cautiously, if at all, before an operation. Morphine in small quantities was permissable if one were well assured of the existing condition. In a considerable proportion of these cases early operative inteference offered the best chances. 4. In circumscribed cases, of whatever origin, where the process simply resulted in an abscess, it should be dealt with as such and surgically. 5. Rectal and vaginal examinations were not to be overlooked as important avenues leading to a diagnosis. If aspiration was permissible and desirable, an incision was demanded. 6. In a general septic peritonitis, of whatever origin, an operation alone gave any hope.—*New York Medical Journal.*

TREATMENT OF GONORRHŒAL RHEUMATISM.—Lilienthal (*Boston Medical and Surgical Journal*, January 24,

1895) states that at present our knowledge of treatment consists mainly in knowing what not to do. He prefers oil of wintergreen and sodium bicarbonate as drugs, with considerable attention to the use of alkalies. The diseased joint should be splinted at once and gentle pressure over a dressing of twenty per-cent, ichthyol ointment applied. The uretha or other focus of infection should be carefully treated and the discharge decreased. The bowels should be regulated and a minimum quantity of opium used. If the disease seems to be manageable, gentle massage is valuable during convalescence; but if anchylosis is believed inevitable, it should be assisted by fixation in plaster-of-Paris. Tonic and stimulant treatment is indicated from the first. If possible, all operative procedures should be avoided. Abcesses must of course be evacuated, but the surgeon should not be deceived by appearances, and thus be led to intefere in the acute stage when there is no abcess to evacuate.—*Therap. Gazette.*

Respectfully dedicated to our City Bug-hunter.

BY S.

Where schizomycetes grin in glee,
Where microbes dig their holes,
Where germs feel free, to splint in thee,
And delight in their septic souls;
Where the small, still sobs of the spores endure
And blue bacilli bore,
Where of cultures pure, an adjacent sewer,
Will always furnish a score,—
Some certain cocci, duplex and small,
(They were born at Woodlawn the previous Fall
And by agile turn and twisting flight
Had escaped the maw of the phagocyte),
Were mourning each to the other twin
"What sort of a place is this we're in?"

Time was when they lived where their fathers died;
In a giant columnar cell,
Then woe betide that Devil they spied
As they frisked in Bocaccio's hell.
Now, 'twas "Oh! for a lodge in the vestibule
Or some other place near kin,
As was the rule in the Skene's tubule,
For we can't grow in gelatine."
And 'twas "Oh! for the grim and fierce delight
Of the duel to death with a leucocyte;
Once again to laugh in specific pride,
At the impotent chemical and germicide,
And to mock at the organisms they defied
The bacilli, spirilli, side by side."

And 'twas "Oh! to infect the fresh, fresh youth
And his giblets old and gray;
And the jay uncouth, as with Sal and Ruth
He sports in the new mown hay.

And 'twas "Oh! to breed in the infant's eye
And make them greatly swell,
As the poor kid cried the thing defied
It raised a merry—(WELL)!"
'Twas the same where'er they did go
They infected everything, nearly so;
Nary a spore grew weak or lean,
The venom departed as a new ptomaine,
And whatever spot they smote
No one found an antidote.

Let the staphylococcus laugh long and loud
At the sounds of the helpless wail,
Though our heads be bowed, no putrid crowd
Such honor as ours assail.
We've snapped many a streptococcus' chain,
Hushed many a bacillus' bray,
And his search be vain, who will look for a stain
On the record we hold to-day.
Come death to us, not a bit,
Excepting that storming, steaming pit,
And never will our words belie,
As long as our bug-hunter is handy by,
But neither in culture, in mucus, or pus,
Has Bissell, himself, found "flies on us."

—*Buffalo Med. and Surg. Journal.*

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HALIFAX, NOVA SCOTIA.

Twenty-Seventh Session, 1895-96.

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(Pass in Inorganic Chemistry, Botany, Histology and Junior Anatomy.)

2ND YEAR.—Organic Chemistry, Anatomy, Practical Anatomy, Materia Medica, Physiology, Embryology, Pathological Histology, Practical Chemistry, Dispensary, Practical Materia Medica.
(Pass Primary M. D., C. M. examination.)

3RD YEAR.—Surgery, Medicine, Obstetrics, Medical Jurisprudence, Clinical Surgery, Clinical Medicine, Pathology, Bacteriology, Hospital, Practical Obstetrics, Therapeutics.
(Pass in Medical Jurisprudence, Pathology, Materia Medica and Therapeutics.)

4TH YEAR.—Surgery, Medicine, Gynæcology and Diseases of Children, Ophthalmology Clinical Medicine, Clinical Surgery, Practical Obstetrics, Hospital, Vaccination.
(Pass Final M. D., C. M Exam.)

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One payment of	$250 00
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The Twenty-Seventh Annual Meeting

— OF THE —

NOVA SCOTIA MEDICAL SOCIETY

will be held at Masonic Hall, Halifax, **Wednesday, July 3rd**, at 9. a. m. sharp, for transaction of official business only. All papers will be read at the sessions of the Maritime Medical Association, which meets on the same day. Those intending to read papers should at once notify George M. Campbell, M. D., Halifax, N. S.

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