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The Collegiate Course of the Faculty of Medicine of McGill University hegins, in 1S90, on Tuesday, September 22nd, and will continne until the begiming of June, 1897.

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Through the telephone. Mrs. Me-rony-"Is that you, doctor?" Doc-tor-"Yes; who is it?" Mrs. Merony-"Mrs Merony. O doctor! what shall I do for the baby? He has swallowed a dime." Doctor"Well, you surely don't want to spend $\$ 2$ to get a dime, do you?" And the telephone ceased to work. -Newman Independent.

Ir has been lecided by the Supreme Court of Illinois that the health authorities have no right to require physicians to report contagious diseases or births without remuneration. While the physician is morally bound to warn the community of clanger when this can be done at a not unreasonable expenditure of time and labor, it is unjust to compel him to do so, and even to force him, under pain of imprisonment or a fine, to pay the postage on such notification. Of course, the State cannot afford to pay a large fee for such service, and neither would the physician demand it, but it would seem as though a compromise might be effected whereby the physician would receive twentyfive cents for each notification of a case of infectious disease or a birth. Such a plan is, or was, in existence in Connecticut, and we believe worked satisfactorily to both the State and its medical benefactors.-New York Medical Record.
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Meconium and Sepsis.-Remy (Rev. Med. de l'Est,) insists that the membranes should never be broken before complete dilatation without very special reasons. When the waters escape meconium is mixed with the liquor amnii, the uterine cavity is soiled, and if labor be prolonged and antiseptic precautions impracticable, the fluid mixture decomposes rapidly and septic infection becomes certain. Remy distinguished the above conditions in seven labors under his observation. The mortality was 42 per cent. Hence antiseptic precautions are especially needed in cases of premature rupture of the membrancs. -Brit. Med. Journ.

A Case of Cerebro-Spinal Meningitis Complicating Gonorrhgea Treated by Antikamnia. -The concluding remarks from the
above article, by G. S. Leggatt, M.R. C.S., England. L.S.A., taken from the Lancet (London) are interesting from both therapeutic and physiological standpoints. "Remarks.-I. This is a rare complication of gonorrhoe, and, as far as I can find, is not mentioned in any of the books which refer to the subject; but bearing in mind the similitude of structure between the meninges and the joints there seems no reason why they should not be occasionally attacked in a manner similar to the latter. 2 . Antikamnia is a remedy said to pos-• sess analges:c, antipyretic and anodyne properties. Its dose is three to ten grains, and it will be observed that the doses I gave were large ones; but the symptoms were extremely urgent, and it is interesting to note that there was no depression. During its exhibition the pulse improved in force, and the administration of the

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drug reduced the temperature to normal, and seemed in this respect to be greatly superior to that of phenacetin. 3. As to the diagnosis it is difficult to know how the symptoms, which were of a most pronounced kind, could be accounted for on any other supposition than involvement of the fibrous textures of the spine and cranium. That the disease did not more definitely and more permanently attack the pia mater and arachnoid is probably due to the prompt administration of the antikamnia and salicylate combined, which seemed to me to prevent the optic neuritis and other more obvious and scrious consequences of an established meningitis."

Serumtherapy in Puerperal Fever. -Butin (Journ. d. Sc. Med. de Lille) gives details of two cases of puerperal fever treated successfully
with Marmorek's antistreptococcic scrum. In the first instance the treatment was not begun till more than a week after the commencement of the fever, and after sundry relapses and the injection on five occasions of the serum to the total amount of $90 \mathrm{c} . \mathrm{cm}$., the patient recovered. In the second the injections were made at once, and the disease was almost cut short. In both cases local treatment, consisting of sublimate intrauterine douches and iodoform crayons was, contrary to the advice of Marmorek and Roinx, continued throughout. It is, thercfore, impossible certainly to ascribe the recovery to the serum ; but it was noted that the temperature and the general condition greatly improved after each injection of the serum. In the first instance slight erythema and transient arthralgia were caused by the injections; in the second there were no troubles, either local or general.-Brit. Med. Journ.


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this is formed. In order to render the eyclid perfectly aseptic, it is well to wash the margins of the lid with one of the following solutions, hot :

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> Distilled water. . . . . . . . 1 pint.

Or, in place of this, if it is thought the individual will be susceptible to the action of the mercury :

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> Powdered calomel . . . . . .
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As a general rule, styes tend to return, owing to auto inoculation. Care, therefore, should be taken that the eciges of the lids are kept well cleansed, and if necessary a mild antiscptic wash should be used for some time after one stye has healed in order to

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prevent the coming of others. Careful attention should also be paid to the condition of the alimentary canal, and it is pointed out that Bouchard believes that auto-intoxication from the alimentary canal may result in the formation of styes, through the entrance of staphylococci into the sebaceous glands if the lids. Very often in these cases the administration of naphthol is of value for this reason. The following prescription may be employed :

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Comimetics of Castration. The esthetically inclined editor of the

Wedical Ricord suggested some time ago that the unsightly roid left by orcheotomy should be filled by a cellulenid testicle for cosinctic reasons. This suggestion (from a recent report of a discussion before the Chicago Medico-Legral Socicty) would seem to have fallen on fruitful soil. Discussing the quention of cartration of criminals, Dr. Gertrude G. Wellington remarked that a man castrated for discase wished something to take the place of the organ removed that would give him the semblance of manhoed. The only thing that could be found were some balls oí celluluid, but they each contained a little bell. She would advise that in habitual criminals and scxual perverts after castration, these celluluid balls with their jingling bells be inserted, so that as the man went about among women of the world the bells would proclaim him incapacitated.-Medical Standard.

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Pan ind Rest in Diphthenia - Rest is one of the sweetest words in our language, and in the management of no discase is this more true than in diphtheria. In kecping with the experience of Prof. T. E. Murrell, ex-Vice-President of the American Medical Association, and Dr: Pollack, of St. Louis, who have found antikamuia valuable as a reliever of the pain of nacturnal carache, it has also been found of great value as a slece producer in the-c cases. Given in doses of two and a half to five grains every two to four hours, there is no depression nor have other than satisfactory results obtaincd. Dr. Eggers, of Horton Place, St. Louis, reports in the treatment of an attack of diphtheria in a member of his own family, that, to obtund the pain consequent upon the injection of anti-toxin-scrum, which ordinarily lasts from three to four hours, he exhibited antikamnia internally, sccuring relicf
in a few minutes. In the treatment of any neuroses of the laryme, coughs, bronchial affections, la grippe and its sequele, as well as chronic neuroses, clinical reports verify the value of codeine in combination with antikamnia, the therapentical value of both being enhanced by combination.

Mescal Butrons--Prentiss and Morgan (Medical Reiord) report the re-ults of their researches into the physiological action, chemical constitution, and therapeutic uses of mescal buttons, the dried tops of anhalonium Lewinii. These buttons are chewed by the Kiowa and other Indians, and the resulting intoxication is associated with religious ceremonials. The authers administered them to eight young men who voluntecred for the purpose. Three buttons were usually sufficient to produce the characteristic effects, of which the most marked were brilliant


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hallucinations of vision, varying color phenomena predominating and being associated with hardly less remarkable figures and forms. The effect upon the mind was comparatively slight, but the muscular system was always more or less depressed. The pupil was invariably dilated, and there was in three cases partial anæsthesia of the skin. The heart action was at first slower and stronger, then rose to normal, and was never depressed. There was a sense of fulnuss in the stomach, with occasionally nausea and vomiting; a!l appreciation of the duration of time was lost, and the power of sleep remained in abcyance for twelve to twenty-four hours. In this last respect, as in the absence of any merry character from the visions, a sharp contrast is offered to cannabis indica. Thre: alkaloids have been extracted from mescal, namely, anhalonin, mes-
calin, and a third base discovered by Ewell, working in association with the authors. Anhalonin has an action upon guinea-pigs similar to that of steycinine, but a close four times that contained in enough mescal to produce complete intoxication has no appreciable effect in man: it cannot, therefore, be the active principle of the buttons. Mescalin also produces convulsions in small anima's, but of a different character, being accompanied by rapid and difficult breathing, and the symptoms of respiratory embarrassment. The general appearance is that of intense dyspnuea, and the type of the convulsions is obviously asphyxial. The constitutional effects therefore resemble those of cocaine rather than strychnine; the pupil is dilated, the muscular and respiratory systems depressed, and the heart unaffected. The third alkaloid produces a marked increase of reflex excitability, and in

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large doses tetanic convulsions; its physiological action is exactly similar to that of strychnine, the effects upon the heart and respiration being entirely secondary to those exerted upon the muscular system. The pupil was not markedly affected. Of the other ingredients of the buttons the most important is a resinous substance, which may be the active principle. The writers have used the powdered buttons and extracts and tinctures made from them in the treatment of various conditions depenclent upon nervous irritability, and with considerable success. In therapeutic doses ( 7 to I 5 gr.) it does not produce insomnia, but frequently removes its cause, and so conduces to natural sleep; it has been of most use in symptomatic treatment, as in cases of nervous hcadache and cough, active
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Acts more vigorously on starch than does Pepsin on proteids.

## RELIEVES

## Starch Dyspepsia <br> We are now able to relieve a large number of persons suffering from faulty digestion of starch, and can aid our patients, during convalescence, so that they speedily regain their weight and strength by the ingestion of large quantities of the heretofore indigestible, but nevertheless very necessary, starchy foods. We trust that the readers of the Gazette will at once give this interesting ferment a thorough trial, administering it in the dose of from 1 to 5 grains, which is best given in powder, or, if the patient objects to the powder, in capsule.-The Therapeutic Gazette. <br> Pepsin is of ${ }^{I n}$ ailments arising from Faulty Digestion no Value of Starch. <br> PARKE, DAVIS \& CO., <br> BRANCHES: <br> NEW YORK : 90 Maiden Lane. <br> KANSAS CITY: 1008 Broadway. <br> BALTIMORE : 8 South Howard St. <br> NEW ORLEANS: Tchoupitoulas and Gravier Sts. <br> BRANCH LABORATORIES: <br> LONDON, Eng., and WALKERVILLE, Ont. <br> Manufacturing Chemists, DETROIT, MICH.



Vol. VII.
TORONTO, DECEMBER, 1896.
No. 6

## ORIGINAL ARTICLES.

[No paper published or to be published elsewhere as original, will be accepted in this department.]

## TAPEWORM.*

By Alex. Bethune, M.D., F.R.C.P.S.R., Seaforth, Ont.
Mr. President and Gentlenen,-The subject of this paper is one in which you are well versed, but at the same time it is an interesting one, and my object in bringing it before you to-day is to ascertain the frequency of the occurrence of tapeworm in your practice and your method of treatment. It seems to me that some medical men, who have been in practice for several years, have never had a case of tapeworm, while others who have only been a short time in fractice, have treated several cases. A confrere of mine who had been in active practice for over thirty years, asked me to visit a case with him, in the city of Toronto, and he stated that this was the first case he had ever treated, and that he knew several other practitioners who said they had never treated a case. Now, it is a question whether certain localities, or certain methods of living as regards diet, water, etc., have anything to do with the occurrence of tapeworm. There is no doubt in my mind but what they have.

About twenty-five years ago I treated three brothers, Englishmen, who were married to three sisters, German women, in the city of Buffalo, within three months of each other, and they all passed tapeworms, while their wives were not affected, although one would naturally have supposed that they would have been affected also, as they all used the same diet and drank the same water. Within the last three years I have treated seven cases of tape-

[^5]worm, and two within the last three months, and these are the specimens I now present to you. The first specimen I am not exactly sure of, whether it is a tapeworm or not, but I think it is what is decribed by writers as Tania flavopunctata, and of a species which is very rarc. Others again say, "that this species is more common than might be supposed, and from its small size and harmless character, has generally escaped notice." The man who passed this had no idea that he was troubled with worms at all, but as he had not been feeling well for several days, on August toth he took a large dose of castor oil in whiskey in the morning, and drove several miles pretty rapidly over a rough road, and about noon, when the oil operated he observed the worm, which he preserved and brought to me. He said it was alive when he saw it first.

The second specimen is a Tenia saginata, or Tenia medio-canellataBecf tapeworm, which is the most common species found in man, and. although the Trenia solium was supposed to be always solitary, yet it has been proven that there is often more than one in the same person, and that the Beef tapeworm is generally solitary. Once only have I seen two Beef tapeworms passed at the same time by the same person. The man who passed this tapeworm, is a butcher, eighteen years of age, and consulted me with regard to worms, as he thought he had worms, although he said that he never passed any that he knew of. I gave him three powders of santonine and hydrargyri sub-murias and a jalap powder to work them off, and next day he brought to me about six inches of tape-worm, which he had passed. I then told him to fast for twelve hours, and after that I gave him a bottle containing ol. telix. mass. 3 iss., olei tighi gtts. ij., olei terebinth. 3 ij ., and glycerine 3 iij .-told him to shake the bottle well and take one-third of the medicine immediately, and so on every four hours, until he finished the bottle or passed the worm. In an hour after he had taken the second dose the worm came away; in all it measured about fourteen feet; the head is not there. I suppose it must have separated when he washed away the freces. My experience has been that it is very difficult to find the head, as it is so small and tender that it is generally separated from the body in passing, but when you find the small segments, to which the head is likely to be attached, you may be almost certain that the head has come away also ; my reason for saying this is that if the head remained the worm would be almost certain to grow again, but in nearly all the cases I have treated there has scldom been a recurrence. Now it would be superfluous in me to dilate on the cause and origin of tapeworm in the human system, as you are all conversant with that ; but there has been a difference of opinion as to the length of time that ;it takes for a Beef tapeworm to come to maturity. Pepper says that rarely more than a single worm infects a person at the time. The species is of rapid growth. According to Penoncito, quoted by Cobbold, a mature worm was reared from a beef measle, swallowed by a student, in fifty-four days. As this paper is already lengthy enough, I will conclude with the hope that we will all derive some benefit from the discussion of it.

## REPORT ON CONTAGIOUS DISEASES FOR THE QUARTER.

## To the Chairman and Members of the Provincial Board of Health.

Your committee begs leave to report that, during the past quarter, while the Province has been remarkably frec from epidemic diseases of the more infectious character, evidence was brought io it that, as is common at this season of the year, typhoid fever has been prevalent in many country districts, and indeed in those towns and cities where well-water is still more or less used.

The absence of any epidemic due directly to a polluted public water supply is a most gratifying statement to be able to make of a Province where over one hundred public water supplics exist, and point yet more strongly to the wiscom of other towns and villages at once instituting works of a public character, if they are to maintain thcir commercial position.

Reports regarding outbreaks have been received from Keppe! township. also from the village of Bayfield, where typhoid prevalence illustrates once again the common mode of its propagation where the wells of a village are in a sandy soil or clay, and not more than ten or twelve feet deep.

Local pollution from privy pits and manure heaps is, as usual, the presumed cause. The Board in this, as in similar cases, supplies sterilized bottles for samples and analyzes them, and recommends closing of wells on the result of analysis.

A report from Etobicoke, in the village of Islington, a place where for ten years similar cases have occurred, illustrates the same conditions and methods of propagation.

The existence of typhoid is reported from the lumbering district of Sault Ste. Marie, where the Mayor of the town complains that such men are sent out to the town for treatment from camps, and become a charge as paupers on the town. The need of an hospital in such a centre, where the per capita grant of the Government would, in some degree, serve to recoup the town for such extensions, is greatly needed, and illustrates the need which the Board has before referred to for similar hospitals in the several town centres in the sparsely settled new districts.

The city of Belleville, as reported at a previous meeting, has been more than usually a sufferer from typhoid this year; and while there is public water, it is not under the charge of the city and is limited in its use, with the result that old town wells from polluted springs are still in use in the main street, and wells similarly dangerous exist in other parts. of the town. The town has been strongly urged by your Secretary to purchase the works, and adopt filtration of the bay water, as is being carried out in Deseronto.

The disease is also reported as existing in Gravenhurst. A severe outbreak occurred among mill hands at Utterson, in Muskoka, where the water supply used was with reason suspected, the condition of the cottages where the mill hands were forced to live being most unsanitary. Action was advised in the matter by correspondence.

Similar unsanitary conditions resulting in fever in the villages of Warren, in Algoma District, are similarly reported, and the people urge this Board to give power to appoint a Local Board of Health. Such action as the Board can take is strongly advised.

A serious outbreak in the town of Renfrew is reported. Your Secretary has been aiding the Local Board to trace the causes, as usual, to wells, by having bacteriological analyses made, which results will be reported upon by Mr. Mackenzic.

During the summer diphtheria has been present only in very limited amounts in most districts, but during the last six weeks, since the damper weather, and the opening of the public schools, more cases have occurred, and antitoxin has to some extent been in demand. Owing, however, to supplies being kept by druggists in many towns, the Board has not any accurate idea of the extent to which it is being used.

Outbreaks have been reported from Whitney, in the unorganized territory, in Renfrew, and membrane examinations have been made in cases as reported from Madoc, where it has broken out in the public school. Membrane cxaminations have been made in the Board's laboratory also from Rawdon township. Within three weeks fifteen cases were reported from Watford, in Lambton county, and the Local Board have been advised as to the measures to be taken, and examination of membrane advised.

A dispute on the utilization of a school-house in Minden, during the holiday season, as an hospital, was reported, and action to be taken in the circumstances was advised.

A severe outbreak has occurred in Durham viilage, witis a very considerable number of cases, and a notable number of deaths.

An outbreak has also been reported from Osprey township, near Durham, the Local Board sceking information and asking for supplies of literature.

The most recent and serious outbreak reported is that at pecsent in St. Thomas. The circumstances attending it atc now being investigated.

In connection with these outbreaks of disease, it is with much satisfaction that your Sccretary can state the important assistance he received from the Registration Act, which requires monthly returns of deaths from contagious disease. These returns have been the first notice, in several instances, that we have received of the prevalence of these diseases, and he has thereby been enabled to take action through the Local Board of Health for their limitation.

The following report of work done in the laboratory is submitted as a part of this report. All of which is respectfully submitted.

$$
\text { (Signed.) } \quad \text { P. H. BRyCE, M.D. }
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## Laboratory Report.

## Mr. Chairman and Gentlemen,-

During the preceding summer the laboratory has been called on to investigate many problems of a sanitary character in connection with the health of the Province.

Along certain lines there has been .iarked increase in the amount of work sent in ; along! others the increase has not been so great as the importance of the work should lead us to expect. On the whole, however, the work has increased.

Ihater Analysis. A large number of samples of water from various parts of the Province have been cxamined bacteriologically. In all, from May ist, 108 samples have been examined. In addition to these some twenty-nine samples were sent in, but not examined on account of my absence from Toronto, either for holidays or on work for the Board. Thus in all about 137 samples of water were sent in for bacterinlogical examination.

These samples came from the following localities, viz.: lirantford, Bellevilie. Guelph, Port Hope, Woodstock, Walkerton, Rockwood, East Zorra, Beavertori, Renfrew and Oshawa.

The number of samples sent in was more than all those received during the preceding year.

From the results of these bacteriological examinations it was possible to come to safe conclusions in a majority of the cases as to the potability of the water, whilst in some cases the results were doubtful.

As far as possible the quantitative examination of the number of colonies per c.c. present in a sample was amplified by a qualitative cxamination of the forms present, and especially by an examination for Bacillus coli comrunis.

A record has been kept of the individual species of bacteria appearing in these waters, so that in time it is hoped that by a survey of a large number of results, we may by a qualitative inspuction come to some conclusion as to potability. So far, certain species have been noted as being practically universally present in all waters examined. For instance, there appears in practically every sample of water examined, a form known as Bacillus punctatus (Frankland), and in some cases it forms quite a percentage of the colonies pre:ent. Another form that is always found is that called Bacillus fluorescens liquefacions. These forms seem to be common in European waters, and are likely world-wide in their distribution, and normally present in all natural waters. If a water is allowed to stand they are found to multiply rapidly.

On the other hand there are certain forms which are apt to be associated with polluted waters, and when a sufficient number of observations have been collected, no doubt we will have a valuable aid to the valiation of a water supply.

This spring there was published a new method for the isolation of the typhoid bacillus from water, called Elsner's method, depending upon the use of a special jelly containing potassium iodide, which scems to inhibit the growth of all forms except Bacillus coli and l3acillus typhosus.

This method I have tried frequently during the past summer, but not yet with success. I found a tendency for many forms to develop from a water which, the originator of the method claimed, would not grow in the jelly, and of course the larger the number of species which grow in the jelly, the less likelihood is there of isolating the typhoid.

Latterly, however, I have modified the method somewhaf with certainly the development in one ease of a large number of colonies of Bacillus coli, and I again have hopes that the method may lead to something. If it even gives us a quantitative enethod of estimating Bacillus coii, it will be a decided step. 1 will be able to report more fully upon it at the end of the year.

Perhaps the most intercsting serics of bacteriological examinations are those in comection with the Brantford water supply. Samples of the public water supply and of private wells were sent to the laboratory every month. The public supply shows the same purity as was found for it last year, and bacteriologically has practically remained the same throughout the summer, in spite of marked variations in the water of the canal and river. On the other hand the private wells were constantly worse than the public supply, some of them being exceptionally bad. An important adjunct to the examination of the Brantford well-waters was a determination of the chlorides, in which it was foi:ed that the purer the water the more nearly it approached the chlorine of the city supply, the normal chlorine for the water-bearing strata beneath the town being between cight and ten parts per million. The obscrvations in regard to the impurity of Brantford wells has been repeated practically for wells throughout the Province. There seems to be in all parts of the Province a very large number of very bad wells. In towns with a public water supply there are few wells with as good water as the public supply.

As a rule the bacteriological samples were sent to the laboratory so carefully packed that no material change in the number of bacteria in the water occurred. This was when the instructions sent out by the Board were carefully followed. Occasionally this was not done and quite unreliable results obtained.

Chemical analyses were made of nineteen samples of water, coming from Goderich, Salford, Ingersoll, Woodstock, Descronto, Hamilton, Brockville, Penetanguishenc, and Guelph.
E.raminations of Sputum. Examinations have been made of forty-three samples of sputum since May ist, with the following results: Bacillus tuberculosis present in twenty-eight, absent in fifteen.

Examination of Diplutheria Exudate. Examinations have been made of eighteen samples of suspected exudate with the following result: Bacillus diphtheria present in ten samples, absent in eight.

This department of the work has not increased as it should; amongst the medical men sending in samples for examination there are very few new names, the same men continuing to send month after month.

I would suggest in this connection that a new circular be sent out in regard to this work.

Other Investigations. Two outbreaks of suspected anthrax were investigated during the preceding summer, and in both cases lic post-mortem reports led one to strongly suspect anthrax. The first one was from Dr. J. Hugo Reid, of Guelph, which came in June 1oth. Bacteriological examination by cultures and by the infection of animals, showed the anthrax bacillus to be
absent. On Junc 22nd, another sample was sent through Dr. Kitchen, of St, George. In this also, cultures and iaculations of animals proved anthrax to be absent. What the cause of these peculiar deaths in animals was, is difficult to decide. In Dr. Reid's case these was isolated a bacillus of the Bacillus coli group which was exceedingly pathogenic, but the suspicion was great that its presence was duc to post-mortem injection of the tissues. In Dr. Kitchen's case no specially pathogenic form was isolated.

Tubcrenlosis in Animals. There are four cases of tubercular tissue from animals sent in for diagnosis.

A very interesting diphtheria case of a special character came to the laboratory on June 26th. This was the fauces and larynx from a girl who had died of mumps ( $($ ) under Christian Science treatment. The body had been buried about fourteen days and had been embalmed before burial.

In spite of this cultures of a bacillus believed to be Klebs-Leoffler bacillus were made from the tonsils, and in order to make certain, two animals of the same weight were inoculated with the same dose of the bacillus; one, however, received I c.c. of antitoxic scrum. The one which received the bacillus without the serum died in forty-eight hours with all the symptoms of laboratory diphtheria, the other was not ill and had not even a lump at the point of inoculation, conclusively proving the contention that the disease was diphtheria. It is also interesting as throwing light on the efficacy of embalining to prevent contagion.

Specific Ty'phoid Reaction. At the Buffalo mecting of the American Pubiic Health Association, Du Wyatt Johnston, of Montreal, called attention to a new diagnostic method for typhoid, discovered first by Prof. Pfeiffer, of Berlin, and elaborated by Widal, of Paris, and Dr. Johnston himself.

This consists in a peculiar specific action of the blood serum of a typhoid' patient upon the typhoid bacillus, causing them to lose their mobility and run together into clumps.

Since returning from Buffalo, I have tried it in sixty cases, some of typhoid, some not typhoid, and have"found the method confirm the clinical diagnosis in all except six cases In three of these six cases, it is possible that there is some other explanation than the failure of the test.

This test, if it proves to be what we expect from it, will be of importance in public health work, and will be another line along whici the laboratory of the Board may be of assistance to the Medical Health Officer.

Already the Provincial Board of Montreal has seni sut circulars to the men of the Province of Quebec, offering to examine blood samples from cases of typhoid, to assist in diagnosis.

Before closing I beg to call the attention of the Board to an important point, and that is, the need of an assistant in the laboratory.

As I said above, twenty-nine samples of water were spoilt on account of - coming whilst I was absent, and a number of samples of diphtheria exudite could not be reported on for the same reason.

If the work of the Board is to go on increasing, some assistance must be
given in the laboratory work, and I would suggest that the matter be seriously considered.

The work of the laboratory might Le indefinitely extended and should be cxtended especially along chemical lines. Every laboratory of a similar character has a chemist as well as a bacteriologist, and if a chemist were appointed to your Board, his time could be kept fully occupied not only with the systematic examination of public water supplies already in use, but also with other chemical work which might be taken hold of. In addition to this, he could attend to any routine bacteriological work which might come in during my absence. I would carnestly suggest the consideration of this matter.

Respectfully submitted, (Signed.) John J. Mackenzie.

## CLINICAL NOTES.

## By C. H. J. Chapman, Ottawa.

Though some eminent surgeons may considur lithotrity a preferable operation to lithotomy in vesical calculus, there are occasions when the cutting operation proves to be the best. In any case it is a classic operation-one demanding good anatomical knowledge, sound judgment and manual dexterity.

A patien ${ }^{2}$-male, aged 59-presented himself to Dr. Wright some time ago with all the symptoms of calculus. Examinations at first did not yield satisfactory results. Under an anæsthetic, however, positive evidence of what was believed to :e a calculus was obtained. On September ioth the lateral operation was performed, but instead of a stone about six inches of soft rubber tubing, crusted over with phosphatic deposit, and quite a lot of small concretions of phosphatic matter, were obtained.

Strange to say, the patient, while he admits he was using a soft catheter about a year ago for a month, never remèmbers having broken it in any way, and has no idea how it could have got into his bladder.

Dr. Rogers (Vice-President Ontario Medical Council) the other day removed a vascular growth from the female urethra by dissection and the actual cautery. Urethral caruncles and vascular growth in the above situation give rise to a great deal of bladder trouble, and consequent suffering from loss of health.

Bladder troubles in females are apt to be very intractable, and require absolute rest with careful local and general treatment. Boracic acid, gr. x. internally, and regular washing out of the bladder with boracic acid, and gradually increasing strength of argent. nit. every day or two (two to eight grains to the ounce) will often work wonders.

Among the affections in connection with the knec-joint, often not easy of diagnosis, and apt to give rise to considerable pain and more or less lameness, are loose cartilages in the joint. A case of a young man who had been suffering morc or less for some twelve years, was sent in for relief. He had
been unable to fully extend the left leg for a length of time, and was obliged to walk with it in a semi-flexed position. Careful examination led to the diagnosis of a loose cartilage, which was removed under careful antiseptic precautions. It was circular in shape, over an inch in diameter, and about a quarter of an inch thick in the centre, tapering towards the edges. The synovial membranes were brought together with fine catgut sutures, and the external-incision by silkworm gut, and the wound being dressed the limb was placed on a McIntyre splint. A favorable result is anticipated.

## THE SURGICAL TREATMENT OF RETRO-DEVIATIONS OF THE UTERUS.* <br> By Dr. Augustin H. Goeletp, of New York.

I believe that many of the operations desiyned for retro deviations of the uterus are unnecessary and irrational. The objection to Alexander's operation is the time it consumes and the prolonged convalescence it entails. Both ventro fixation and vaginal fixation substitute an abnormal position and leave the organ fixed. When the uterus is movable, opening the peritoneal cavity to overcome a displacement is not justifiable if a cure can be effected without it. This should, he thinks, be reserved for those cases where the organ is fixed in an abnurmal position by firm adhesions which cannot be otherwise overcome, and in these cases the uterus should be suspended from the anterior abdominal wall not fixed to it. This secures the organ in a nearly normal position of anteflexion, and it is fairly movable.

Vaginal fixation has been given undeserved attention in this country. Its originator, Mackinrodt, has abandoned it. When it is more generally known that the fixed abnormal position which results offers a serious impediment in pregnancy when it supervenes and complicates labor, it will cease to be recognized as a legitimate procedure.

Vhen the uterus is movable, Goelet dilates carefully, curettes the cavity and inserts a straight glass drainage tube, which serves the purpose of a splint and keeps the uterus straight. The vagina is then tamponed with iodoform gauze in such manner as to throw the organ temporarily into a position of anteflexion. Subsequently, a vazinal pessary is made to take the place of the tamponade. The tube is retained in the uterus for a week, during which time the patient is confined to bed, but it is removed every day and the cavity is irrigated to remove mucus and clots which may be retained. When the patient is permitted to get up, the tube is permanently removed and a vaginal pessary is employed for a whir to maintain the uterus in a correct position until the normal tone of its walls and supports is restored.

When the adhesions are not very firm or extensive they are broken up by manipulations under anæsthesia without opening the peritoneal cavity, and the case is then treated as one of movable displacement.

This seems a rational procedure, since it aims at a cure of the metritis and endrometritis, the maintaining cause of movable displacements, re-establishes a normal position of the uterus and leaves it movable. It is entirely free from risk if thorough asepsis is observed, and requires only a week's confinement in bed.

The uniform success which this plan of treatment has afforded in his hands leads him to believe that the other more hazardous and complicated operations designed for retro-deviations are generally unnecessary.

[^6]Reports of Societies.

## HURON COUNTY MEDICAL ASSOCIATION MEETING.

The regular quarterly meeting of the Huron Medical Association was held in the Council Chambers, Clinton, on the 2 ist October. Dr. Shaw, the President, in the chair. Dr. Krausman, Secretary, pro tem.

Among those present were Drs. Bethune and Burrows, Seaforth; Taylor and Thomson, Goderich ; Agnew, Lond sbboro'; McAsh, Belgrave ; Kennedy, Wingham; Stanbury, Bayfield; Armstrong, Brucefield; Gunn and Shaw, Clinton.

After the minutes of the last meeting had been read and adopted, Dr. Gunn read his paper on "Hernia." He gave histories of cases in practice, laying special stress on the case of a child which he presented, showing result after operation and by photo the case before operation. In this case he was sent for late at night and diagnosed stranguiated hernia. He operated :mmediately; found the bowel somewhat gangrenous. The doctor then proceeded to explain the different steps in the operation for a radical cure, which he did not get in this case on account of the patient contracting whooping cough, it being in the house at the time of the operation. The child wore a truss till he was about three years old, when the hernia completely filled and distended the scrotum, reaching half way or more to the knees, as could be seen from the photo passed among the members, and this time he succeeded in having a radical cure. A point the doctor wished to lay special stress upon was that in persistent vomiting, after supposed reduction, it was then best not to delay longer but to operate immediately.

Drs. Bethune, Burrows and Kennedy all congratulated Dr. Gunn on: his very instructive paper, each citing
some special cases hep had met with.
Dr. Bethune read his paper on "Tapeworm" (see page 593), and thought the commonest class of cases are sometimes the most easily overlooked, and at the same time most instructive. After going into detail on treatment he passed around some specimens, some of which were very rare.

Dr. Gunn thought it showed good judgment on Dr. Bethune's part in introducing the subject, as there were sometimes many symptoms, both from the alimentary tract and nervous system which complicated some cases and made them very interesting.

Dr. Taylor read his paper on "Diphtheria," with histories of cases out of the ordinary, and his experience with antitoxin both curative and preventative. He thought it was a success, especially if used early enough, but here is where the difficulty lies. He thought Toronto too far away to get the supply from, and that the Ontario Government or the County Council should bear the expense of kceping a fresh supply at some central point in the county, in order that the doctor may get it early and not lose valuable time in waiting for a supply from Toronto, and he made a motion to that effect which was carried unanimously.

The meeting then adjourned, members to be notified of time and place of next meeting.

## NEW BRUNSWICK MEDICAL SOCIETY.

The sixteenth annual meeting of the N. B. Med. Society was held in Moncton, July 2ist and 22nd. The president, Dr. G. E. Coulthard, occupied the chair, and over forty members were present. After the reading of the minutes of last meeting, the President delivered an address on his first one thousand cases of midwifery. The doctor had the cases in tabulated
form showing different positions, presentations, etc., which he distributed among the members before delivering his address, thus enabling them to notice every detail. This was a very interesting subject, and showed how comparatively few cases of septicremia now exist under the careful use of antiseptics; also of an increasing use of atresthetics during labor without a single fatal result. It was a very interesting and instructive address, and for which the doctor received a hearty and unanimous vote of thanks.

## Report.

## Mr. President and Gcntlemen of the

 N. B. Medical Society:Again it becomes my duty to present to you the annual report from the Council of Physicians and Surgeons of New Brunswick.

The year just passed has been uneventful, matters medical having, with few exceptions, passed along smoothly and with little or no friction. The change in the manner of collecting the annual fees, foreshadowed in my last report, has been accomplished with much less than the expected trouble, and the fees are now paid in advance as the law directs.

I have again to call the attention of the Society to the fact that many members of the profession neglect to pay the annual fees at all. The number of names on the register this year is about two hundred, and the number of practitioners in the Province is much in excess of that. These men seemingly forget that they are making illegal practitioners of themselves, and therefore cannot collect any bills which may be protested, besides laying themselves open to various other penalties.

Last-winter the St. John Medical Society very kindly informed the Council that a movement was on fcot among the dentists of Si. John to get a bill through the Legislature, repealing the clause of the Dental Act which prohibits the administration of
anresthetics by any person except a duly licensed medical practitioner. Realizing the importance to the public and the medical profession of such a change, the Council at once caused a memorial to be drawn up for presentation to the Legislature, showing why such a law should remain on the Statute book. A committee of the Council was also appointed to watch the matter, and to appear before the House Committee in opposition to the proposed change. I am pleased to be able to inform you that success attended the efforts of the Council and that the Legislature refused to repeal the clause referred to, although strongly urged by an influential delegation of dentists. The Act was, however, so far amended as to allow dentists to administer nitrous oxide gas, which seems not unreasonable.

Since my last report seven students have passed the matriculation cxamination, and thirteen names have been added to the Medical register, as follows: Chas. McI. Avard, E. M. Copp, Geo. F. Inch, C. C. Alexander, A. B. Atherton, H. T. Knapp, A. P. Crocket, H. W. Keith, A. F. Best, Stewart S. Skinner, E. M. Brendige, A. W. Clark and Ed. H. Saunders.

My last report informed you that reciprocity in registration had been accomplished between Nova Scotia, Prince Edward Island, Manitoba and New Brunswick, and I may now state that the larger question of Dominion registration is receiving the attention of the Council. Delegates have been appointed to meet similar delegates from the various Councils of the Dominion, and a committee of the Canadian Medical Association at Montreal, in August next, when it is hoped this important question wiil receive an impetus towards a successful issue.

$$
\begin{aligned}
& \text { (Signed.) G. H. COBURN, M.D., } \\
& \text { Registrar C. P. \& S., N.B: }
\end{aligned}
$$

Drs. W. W. White and Vanwart were appointed a committee to exam-
ine the Registrar's books at the suggestion of the Registrar himself.

The quastion as to who should prepare the programme for future mectings was brought up by Dr. McCully, and was discussed at length. Drs. Atherton and Coburn thought a special committee, rather than the Local Committec of Arrangements, should have this matter in hand. A motion of Dr. Morrison, seconded by Dr. Botsford, that the Secretary, assisted by the President, arrange the programme, was carried.

Meeting adjourned at 12.30 to mect at 2.30 p.m.

## Afternoon Seshion.

Election oiofficers: President, Dr. A. J. McCully, Moncton ; ist VicePresident, Dr. F. H. Wetmore, Hampton: and Vice-President, Dr. E. J. Gaudet, St. Joseph ; Secretary, Dr. J. McNichol, Sussex ; Corres.-Secretary, Dr. G. C. Vanwart, Frederiçton; Treasurer, Dr. T. McFarlane, St. John; Trustecs, Drs. J. W. Daniel, B. Travers and W.W. White. Members of Council, Dr. G. T. Smith, Moncton; Dr. W. W. White, St. John; Dr. Jas. Christie, St. John; Dr. G. R. J. Crawford, and Dr. G. E. Coulthard, Fredericton. Committee of Arrangements for next meeting, Drs. Jas. Christie, H. Geo. Addy, W. W. White, St. John.

A discussion arose as to mode of election, and the following motion was put and carried:
"The members receiving the majority of ballots cast be declared clected; that the lowest man be dropped, and election ,proceeded with until five are elected."

The above five were elected on the first ballot.

Dr. Atherton, of Fredericton, then read a paper on Appendicitis. He strongly advised early operation in cases severe from the outset. Dr. White complimented the doctor on his excellent paper, after which Dr. Mar-
ven, of Hillsboro', presented some cases on which he had operated for hare-lip. He read a short paper on this interesting deformity and showed photographs of some of his cases before and after operation. The doctor obtained better results by operating in infancy than in grown subjects. It was discussed at some length by Drs. Atherton and Walker.

A paper entitled "The Empirical in Thcory and Practice" was read by Dr. Moore, of Salisbury. Dr. McIntosh read a paper on "Some Slight and Serious Eye Troublrs," which was an instructive and practical one, and was well received. Dr. Morrison emphasized some of the principal points, and cspecially cautioned the members not to use atropine when eserine should be used and vice versa.

Evening Se:sion.
At the evening session, Dr. G. G. Melvin, of Alma, read a paper on the Provincial Board of Health. In this paper the doctor criticized severely this report, particularly in the classification of causes of death, and suggested the Board be more particular in investigating such matters, and that the members be medical men.

The paper was discussed by Drs. Walker, Christie, Coulthard and White. Dr. Walker suggested that the Secretary of the Provincial Board urge upon the local boards the necessity of having medical men for their secretaries. Dr. Coulthard thought the fault was larçely with the physicians themselves in not sending in their monthly reports, and that the Government would shortly take the matter in hand and have the work done more satisfactorily. Dr. White thought the medical men should be more particular in their diagnosis when reporting.

On motion of Dr. Walker, it was decided to hold the next meeting of the Society at St. John, as the Maritime Medical Association meets there at that time.

Dr. Moore, of Stanley, then read a paper on "Hercdity and Environment."

Dr. T. Walker gave notice that at the next meeting of the Society he would make the following motion:
"The President, immediately after the reading and disposing of the annual address, shall name a Nominating Committee of seven members of the Society, in the selection of which committee due regard shall be had to a representation of the clifferent sections of the Province. It: shall be the duty of such committee, at the afternoon session of the first day of meeting, to report a nomination for each office in the Society, but such report shall in no way deprive any member of the right of nominating for such offices. In the years in which elections to the Council are held, such committee shall in like manner nominate for such members of Council."

## Second Day.

Meeting called to order by President at io a.m.

Dr. Vanwart read a paper on " Some Remarks on the Treatment of Typhoid Fever." Thedoctordwelt particularly on the thorough disinfecting of the excrementitious materials and liquid and nourishing foods. The medical treatment which he most preferred was the nitrate of silver as an internal antiseptic. For the fever cold water should be used instead of the coal-tar products so generally in use. Dr. Stevens thought that chickenbroth should never be given, as in his practice he found that it fermented and caused diarthœa. Drs. McFarlane, Addy, Christie and Nugent spoke on this paper and heartily endorsed the full and free manner in which this important subject was handled by Dr. Vanwart.

Dr. Wetmore then showed to the members a boy with transposed viscera. He was perfectly healthy, yet the liver, spleen and heart were dis-
tinctly located in their abnormal positions.

The last paper was a most valuable one on "Chronic Seminal Vesiculitis," read by Dr. Foster McFarlane. The doctor said that authors generally had thus far given little or no space in their works to these important organs -the seminal vesicles.

He showed two diagrams, one from Gray's Anatomy, of the vas deferens, seminal vesicles and prostate drawn from theory, and another which differed materially but was true to nature. In Gray the duct of the sem. ves. and vas deferens united to form a commonductwhich thedoctor claims is incorrect, as a bristle would pass easily into the vas deferens but it was impossible to pass it into the seminal vesicles as there was no connection. The anatomy and physiology of the parts was gone into fully, after which the doctor mentioned the causes of disease of these organs and the pathological conditions which ensue. Gonorrhoea was accountable for sixty-four per cent. of all cases. The chief symptoms are constant discharge from the urethra, frequency of micturition, enlarged prostate, etc. Rectal examination is very important in making a diagnosis. The treatment consisted in "Stripping the Vesicles" or relieving the organs of their contents by pressure or massage.

Dr. W. White spoke at some length on this paper, and considered the subject a very important one and worthy of consideration. He termed the paper as "original and almost revolutionary."
A vote of thanks was given Dr. Coulthard for the able and impartial manner in which he filled the office of President.

After the thanks of the visiting members to the members of Moncton, meeting adjourned sine die.

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\begin{aligned}
& \text { J. MCNICHOL, M. D., } \\
& \text { Secretary. }
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-Maritime Medical News.

British Medical Association Column.

## MONTREAL MEETING.

It has been determined that there shall be at least twelve sections, viz: Medicinc, Surgery, Obstetric Medicine and Gynæcology, State Medicine, Pharmacology and Therapeutics, Pathology and Bacteriology, Anatomy and Physiology, Psychology, Diseases of Children, Opthalmology, Laryngology and Otology, Orthopredics and Dermatology. These will meet in the buildings of McGill University and the surrounding theological colleges. All these are within three minutes' walk of each other, and it is doubtful if ever the Association has met in a series of halls and theatres so close to each other, or so admirably adapted for the needs of the various sections.
Soas toguard against the unsatisfactory crowding and confusion resulting from having too small a reception room, it has been determined to erect a temporary building of large size, about 100 by 50 feet, in the grounds of McGill, which will serve not only for the issuing of tickets and daily programmes, for letter delivery, post, telegram and telephone offices, but also during the meeting will contain the secretaries' and enquiry offices. The general meetings and addresses will be held in the well-known Windsor Hall, which is capable of seating three thousand, and is in every way adapted for this purpose. The museum (instruments, therapeutical preparations, etc.) will, in all probability, be housed in the Victoria rink close to the Windsor Hall, between it and McGill. It is hoped this museum will be one of the features of the meeting, and every endeavor will be used to make this attractive to the profession and to the public.

It is aiready recognized in Montreal that those intending to be present at
the mecting will have to make their arrangements for rooms at an early date. In the begimning of Seprember in any year, Montreal is full of visitors. The Hotel and Lodging House Committee have already had reserved for them accommodation for over a thousand members-much of this with the proviso that unless this is taken up before the end of June, at the latest, the rooms will no longer be considered as retained for the Association.

The Exccutive has been greatly pleased by receiving offers of help from the Presidents of the Canadian Medical, Ontario, Maritime Provinces, Nova Scotia, New Brunswick Medical Socicties : as also from the President of the Halifax branch of the British Medical Association, the oldest branch in the Dominion.

In our next number we hope to be able to announce the names of the deliverers of addresses, and of the chairmen of the various sections appointed by the Council of the Association in London.

We would again advise those members of the profession in Canada who are not members of the Association, and who wish to be present at the meetings, to send in their applications immediately, so that they may start their membership and receive the journal from January ist. We gave in our last issue full details of the steps to be taken in order to become members of the Association.

The Excursion Sub-Committee are busily arranging for both short and long tours in connection with the meeting. The Chairman, Dr. G. E. Armstrong, I,127 Dorchester Street, Montreal, and the Secretary, Dr. H. S. Binkett, 123 Stanley Street, Montreal, will be glad to receive any suggestions of those willing to make the excursions successful.

List of chairmen and secretaries of the various sub-committees for the Muntreal meeting of the British Medical Association, 1897 :
Reception Sub-Committee : Chair-
man, Sir William Hingston, M.D.; Secretary, Dr. R. F. Ruttan.

Finance Sub-Committee: Chairman, Dr. E. P. Lachapelle, Secretary, Dr. F. G. Finley ; Treasurer of the Branch, Dr. J. Alex. Hutchison.

Excursion Sub-Committee: Chairman, Dr. G. E. Armstrong ; Secretary, Dr. H. S. Birkett.

General Purposes Sub-Committee : Chairman, Dr. A. Proudfoot; Secretary, Dr. F. E. Devlin.

Museum Sub-Committee: Chairman, Dr. J. Perrigo ; Secretary, Dr. J. W. Stirling.

Printing and Publishing Sub-Committee : Chairman, Dr. J.G. Adami ; Secretary, Dr. J. A. Macphail.

Dinner and Luncheon Sub-Committee : Chairman, Dr. James Bell; Secretary, Dr. F. A. L. Lockhart.

Soiree Sub-Committee : Chairman, Dr. F. J. Shepherd ; Secretary, Dr. G. G. Campbell.

Local Entertainment Sub-Committee: Chairman, Dr. G. P. Girdwood; Secretary, Dr. K. Cameron.

## the value of antistrepTOCOCCIC SERUM IN THE TREATMENT OF SEVERE PUERPERAL SEPTICEMIA.

By John D. Williams, M.D.Edin., B.Sc., Cardiff; Freeland:Barbour Fellow, University, Edinburgh, 1888.90 ; and Thesis Gold Medallist.

The subject of serum-therapeutics has since its discovery made such rapid advances that it is now receiving the serious consideration of most of the leading European and American practitioners, and the onward march of its progress promises well oo mark a distinct epoch in the history of medicine. Although the use of antitoxic serum in the prevention and cure of disease in the human subject has called forth from certain quarters adverse criticism, yet there can, I thirk, be no question about
the scientific basis underlying its application. In the words of Professor Klein, " The scientific basis for the application of antitoxin serum is as firmly founded and as thoroughly established as the use and application of any known drug."

The few notes which it is my privilege to communicate to this Scction are entirely of a clinical value, and refer only to the use of antitoxin serum in the treatment of puerperal septicrmia as met with in private practice. I purpose submitting, first, a brief record of a series of sin cases of severe puerperal septicæmia which were treated by subcutaneous injections of antistreptococcic serum ; secondly, a series of eight cases treated by antistreptococcic serum collected from literature; and, thirdly, remarks suggested by my own experience and a critical digest of the recorded cases of others.

## History of Six Cases of Severe Puerperal Septicamia.

Case l.-Mrs. G., aged 24, primipara, was confined of a full term baby girl on December 14th, 1895. The child was exceptionally large, and weighed nearly io pounds. The presentation was normal and the labor instrumental. All the placenta came away easily and completely by the method of Crede. The mother was in labor for fifteen hours. The perineum was slightly torn but not sutured. She made a good progress until the seventh day when she felt hot and thirsty, and shivered. On the evening of that day the temperature was $10 I^{\circ}$, and the pulse 110. Quinine cachets (5 gr.), a diaphoretic mixture, and an enema were prescribed. The patient felt better on the following day (eighth day), the temperature had fallen to $99^{\circ}$, and the pulse to 100 , the evening temperature being $\mathrm{ror}^{\circ}$, and the pulse rio. On the ninth day the temperature was $103^{\circ}$, the pulse 125 , and the lochia scanty but not offensive. I
saw her in consultation on the elewenth day; when her enndition was much worse. The temperature was 104, the pulse 135 , and the respirations 3 . Her tongue was dry and bightly furted. The uterus and appendages were normal. The lochia were scanty and acid in reaction. The patient was deaf from the effect of strong doses of salicylate soda. The vagina and uterus had been douched daily with perchloride of mercury lotion ( 1 in 4,000). Lactation was in abeyance. There was no abdominal tenderness. At 5 p.m. 10 c.cm. of scrum was injected into the arcolar tissue of the abdominal wall. At 11 p.m. the temperature was $102^{n}$, the pulse 125 , and the respirations 32. The skin was moist, and the patient had become restful and sleepy. On the twelfth day at 10 a.m. the temperature was $103^{\circ}$, the pulse 130 , and the respirations 34 , and the skin moist. Twenty c.cm. of serum were now injected. At 5 p.m. the temperature was normal, the pulse 110 , and the respirations 28 . At in p.m. the temperature was $99.6^{\circ}$, the pulse 112 , and the respirations 28. From this time onwards she made a smooth recovery, and was able to leave her bed on the twenty-second day. No bacteriological examination was made. The serum was obtained from the l'asteur Institute, Paris.

CASE $2-$ Mrs. C., aged 2S, primipara, of a delicate constitution, with a phthisical family history, was confined on January 29th, 1 Sg6. Labor was normal. Perincum was slightly torn but was not sutured. For the first two days her condition was satisfactory, and as her doctor lived some six miles away, he did not again visit her until the fifth day, when he was sent for. On his arrival he found his patient very ill, and suffering from febrile symptoms. He prescribed the usual local and general remedies, and personally administered the perchloride of mercury uterine douche. He persevered until the eighth day,
when her condition' was worse. At his request I saw her in consultation with him, and found her delirious, with a temperature of 104 , a pulse of 130 and a respiration of 36 ; the skin hot and burning, the tongue dry and thickly coated with a brownish fur, the teeth covered with sordes, the bieath offensive, the lochia and lactition suppressed. There was no abdominal tenderness, but the uterus was tender and the appendages normal; $30 \mathrm{c} . \mathrm{cm}$. serum was injected at 3 p.m. On the ninth day, at 12 noon, the temperature was $101.5^{\prime \prime}$, the pulse 100 , and the respirations 25 . The skin was moist and perspiring. She had obtained a little sleep but had a headache; the bowels had acted naturally. On the tenth day the morning temperature was $103^{\circ}$, the pulse 120 , and the respirations 30 , and the evening temperature $104 . \mathrm{S}^{\circ}$, pulse 130 , respirations 30 . The patient was restless and had a headache. On the eleventh day the morning temperature was $102.5^{\circ}$, and the evening $103^{\circ}$. There was a foul vaginal discharge. The uterine perchloride douche was administered daily ; diarrhoa was troublesome; she passed stool and urine under her; a small bed-sore was beginning to form on the right buttock. On the twelfth day the diarrhoea was still troublesome; the patient was restless and sick, and the temperature was $102.5^{\circ}$. At 12 noon $30 \mathrm{c.cm}$. of serum were injected. At Io p.m. the temperature was $103^{\circ}$, pulse II5, diarrhoea less marked. At 12 noon on the thirteenth day the temperature was $99.2^{\circ}$, pulse 108 , and respirations 20. The patient had slept and felt refreshed, but had occipital headache. The skin was moist, and the lochia free and not offensive. Between the fourteenth and seventeenth day the patient's condition varied considerably, but the temperature never once rose above IOI ${ }^{\circ}$; she was restless at nights; there was no abdominal tenderness; she still passed her stool and urine under her; a bed-sore was forming
on the other buitock. On the seventeenth day the temperature was $103.8^{\circ}$, pulse 108, respirations 38. The face was flushed; herpes had formed at the angles of the mouth, and there were physical signs of patciny pncumonia in the base of both lungs. On the nineteenth day the temperature was $103^{\circ}$, pulse 124, respirations 40 On the twenty-first day the temperature was $106^{\circ}$, pulse 130, respirations 38 . On the twentysecond day the temperature was $103.8^{\circ}$, and on the twenty-third $103^{\circ}$, pulse 134, and respirations 40. On the twenty-fourth day the temperature was $108^{\circ}$. On the twenty-fifth day the iemperature was $99^{\circ}$, pulse IIO, respirations 28 . From the twenty-fourth to the twenty-ninth day the temperature varied between $100^{\circ}$ and $102^{\circ}$. On thirtieth it was normal; from this time onwards it never rose above $100^{\circ}$. Control over micturition and defecation returned on the twenty-fifth day. The bedsores gradually healed, but the patient lost her hair during convalescence. It was feared that the serum had caused the pneumonia. No bacteriological exaimination was made. The serum was obtained from the British Institute of Preventive Medicine.

Case 3.-Mrs. P., aged 22, primipara, was confined Early in February, 1896, and was delivered instrumentally of a fine healthy boy. The presentation was normal, and the labor lasted fourteen hours. The placenta came away easily. The perineum was slightly torn but not sutured. Until the eighth day she made such a good recovery that she was only visited three times by her doctor. On the eighth day she shivered. felt cold and chilly, was sick and vomited. The temperature was $104^{\circ}$, the pulse 115 , and the respirations 30 . He prescribed salicylate soda, and douched the vagina. On the ninth day she felt better; temperature $102^{\circ}$, pulse 120, respirations 32 ; she was sick. On the tenth day the pulse
was 110 , respirations 30 , temperature $100^{\circ}$. She felt better, but was troubled with diarrhoea. On the eleventh, twelfth and thirteenth days she was very much worse, and was restless and delirious at nights. Onthe fourteenth day when I first saw her she was in a very low state; temperature $104.4^{\circ}$, pulse 140 , respirations 40 ; there was sickness and diarrhoua; the tongue was dry and covered with a brownish fur ; the lips were parched' and the teeth covered with sordes; the skin was dry and hot ; the abdomen tympanitic, slightly distended, but not tender; the lochia were scanty, but not offensive: lactation was in abeyance; the vaginal discharge was alkaline in reaction, and the perincal rupture bathed in pus; the uterus and appendages were normal. At 12 noon $35 \mathrm{c} . \mathrm{cm}$. of serum were injected. At 6 p.m. the temperature was $104^{\circ}$, skin dry ; at midnight it was $105^{\circ}$, skin moist; at 6 a.m. $102^{\circ}$, skin moist; at $2 \mathrm{a} . \mathrm{m}$. on the following day $99.2^{\circ}$, and the pulse 108. On the fifteenth day when I saw her the temperature was $99.4^{\circ}$, and the pulse ro8. From this time onward' she made a rapid recovery. A bacteriolngical examination of the lochia was made by Dr. Ruffer, who detected streptococci in abundance. The serum was obtained from the British Institute of Preventive Medicine.

Case 4.-Mrs. E., aged 24, aborted in her first pregnancy at the end of the third month, on February 22nd, 1896. The uterine contents were expelled naturally, and on examination. were found to be complete. The vaginal douche was not used. On, the previous day, owing to profuse hæmorrhage, the vagina was plugged with antiseptic gauze, which was left in situ for sixteen hours. On the first and second day after abortion the temperature varied between $500^{\circ}$ and $101^{\circ}$. On the third day the temperature was $103^{\circ}$, the pulse F 4 O , res. pirations 30 . Quinine cachets ( $x$ gr.), diaphoretics, saline purgatives, and the perchloride uterine douche formed.
the treatment. On the fourth day the temperature was $103^{\circ}$, pulse 145. respirations 30 . The same treatment was continued. On the fifth day when I first saw her, the temperature was $103.8^{\circ}$, pulse 140 , respirations 30. There was sickness and diarrhoea but no abdominal tenderness. The reaction of the vaginal discharge was alkaline. The uterus was tender but the appendages were normal. At 2 p.m. $30 \mathrm{c} . \mathrm{cm}$. of serum were injected. At io p.m. che temperature was $103^{\circ}$, pulse 140 , respirations 30 . On the sixth day at 10 a.m., the temperature was $99^{\circ}$, pulse 100 , respirations 20. There was slight diarrhow. The patient had slept, and she felt refreshed but complained of a headache. At 10 p.m. the temperature was $101^{\circ}$, pulse 120 , respirations 28 ; patient was restless. On the seventh day the temperature was $102^{\circ}$, pulse 130. At 12 noon $30 \mathrm{c} . \mathrm{cm}$. serum were injected. At io p.m. the temperature was $100^{\circ}$, pulse 110 ; patient complained of headache, and she had an erythematous rash on the face, chest, abdomen, and inner aspect of the thighs. On the eighth day, at io a.m., the temperature was subnormal, $98^{\circ}$, pulse 100 , respirations 22 . The crythema was present. The headache and diarrhœa had disappeared. The patient had slept soundly and felt refreshed. From this time onwards the temperature never rose above $400^{\circ}$, and the patient made an uninterrupted recovery. No bacteriological examination was made. The serum was procured from the British Institute of Preventive Medicine.

CASE 5.-Mrs. W., aged 22, primipara, was confined of twins, June 5 th, 1896. The first infant was delivered instrumentally ; the second was born uaturally. The placenta was completely expelled. The perineum was torn and sutured. For the first three days after confinement she progressed favorably, but during the second three days febrile symptoms appeared. The usual local and gen-
eral treatment was'persevered with until the seventh day, when her condition had become very grave. On this day at 6 p.m. the temperature was $104.8^{\circ}$, pulse 140. The skin was dry and burning ; the tonguc was dry and angry-looking, and but little furred. The lochia and the lactation were suppressed, there was diarrhwea, and the uterus and appendages were normal. Twenty-eight c.cm. of serum were injected, and half an ounce of brandy with 5 minims of tr. of stro.. phanthus were given as the heart's action was weak. On the eighth day at 9 a.m. the temperature was $100^{\circ}$, pulse 120 ; the patient had slept and she felt refreshed and brighter, although she had a slight headache. At 9 p.m. the temperature was $100^{\circ}$. An erythematous rash had appeared on the abdomen and facc. The lochia had reappeared. On the ninth day the temperature was $: 100^{\circ}$, and she rapidly improved from this time onwards. No bacteriological examination was made. The serum was procured from the British Institute of Preventive Medicine.

Case 6.-Mrs. I., aged 30, primipara, was confined in May, 1896. Labor was normal and attended by a midwife. The patient was seen for the first time on the sixth day after the confinement, when symptoms of septicæmia had decidedly set in. The lochia and lactation were in abeyance. Twenty c.cm. of serum were injected on the tenth, eleventh and twelfth days. The pulse ranged from 140 to 160 , and the temperatuie from $102^{\circ}$ to $104^{\circ}$. Diarrhcea and vomiting were prominent symptoms throughout. She died on the fourteenth day. As far as her doctor could judge the serum produced no benefit. No bacteriolcogical examination was made. The serum was procured from the British. Institute of Preventive Medicine.

For notes of the foregoing cases I am gratefully indebted to Drs. Degruchy, Hughes, Joness and Price.

## Eight Cases Collected from

 Literature.Gaulard ${ }^{2}$ records two cases treated by Marmorek's serum towards the end of 1895 . The first was that of a rickety woman who had a prolonged labor. The perineum was torn and sutured. On the seventh day the temperaturc rose to $105^{\circ}$, and remained there for four days. On the eleventh day the temperature was still $105^{\circ}$, the pulse 140 . The perineal wound was suppurating, and the patient suffered from diarrhæea. He curetted the uterus and perincum, and packed with gauze. On the twelfth day the temperature was $102.7^{\circ}$, and on the thirteenth dayit rose and her general condition became very grave ; io c.cm. of Marinorek's serum were injected into the abdominal wall. On the fourteenth day the temperature was lower, and 2 ccm . serum were injected. From this date the temperature fell slowly, and the patient was soon well. His second case was that of a multiparous rickety woman delivered instrumentally. On the second and third day the temperature rose to $104^{\circ}$. The uterus was swabbed with an antiseptic and packed with gauze. On the fourth day cultures of streptococci were got from the vaginal discharge. The temperature was $104.9^{\circ}$; $10 \mathrm{c} . \mathrm{cm}$. of Marmorek's serum were injected. On the fifth day a second injection was given, the temperature rising. On the sixth day a third injection was given; temperature $102.9^{\circ}$. On the seventh day a fourth injection. On the eighth day, temperature ioI. $5^{\circ}$, the general condition was satisfactory and recovery was hoped for. On the evening of the ninth day, temperature normal, she was seized with bilious vomiting and meteorism. The next day her condition was much worse ; she developed uncontrollable vomiting and became semi-comatose, and died on the eleventh day. The author had never before seen a case of puerperal fever die during defervescence.

After post-mortem examination he attributes the death to the use of too much serum, and bel:eves that to have been the cause of the vomiting.
Vinay ${ }^{3}$ has treated four cascs of puerperal septicemia with serum. In two of the cases the injections were not made until the twentysecond and twenty-fifth days, and he considered they were of no bencfit. In the others the injections had an immediate effect in lowering the temperature and improving the general condition, but they were of no avail against organic lesions already estab. lished. He believes early intervertion to be a condition of success.

Angus Kennedy's ${ }^{4}$ case of a primipara, aged 28, whose labor was instrumental, and whose perincum was torn, shivered ori the fourth day, and her temperature went up to $103^{\circ}$. On the fifth day temperature was normal. From the fifth to the sisteenth day her progress was not favorable. On the seventeenth day she had two rigors, and on the eighteenth day the temperature was $104^{\circ}$, pulse 130 and feeble. The tongue was clean, abdomen tympanitic and distended. There was no tenderness. The distention disappeared after a copious motion. On the nineteenth day, temperature $103^{\circ} ; 30 \mathrm{c} . \mathrm{cm}$. of se:um were injected. In six hours the temperature fell to $100^{\circ}$, and the patient feit nucin clearer. Fourteen hours later the temperature was $102^{\circ}$, pulse 120 . On the tiventicth day, $45 \mathrm{c} . \mathrm{cm}$. of serum were injected. Six hours later the temperature was $99^{\circ}$, and in twentyfour hours was normal. From this time onwards she convalesced and made a slow recovery.
Leask ${ }^{5}$ mentions a primipara, aged 23, whose labor was irstrumental, and whose condition was satisfactory until the seventh day, when she shivered and developed a condition closely simulating an influenzal attack. There was no abdominal tenderness and no foetid lochia. The temperature steadly rose until on the
eleventh day it reached $105^{\circ}$, with a slight laceration on the anterior vaginal wall. Four c.cin. of Burroughs \& Wellcome's serum were injected at 10 p.m. On the twelfth day the temperature was $100^{\circ}$, pulse 96, and the patient had slept soundly all night. She was much brighter, and felt happier and stronger. She made a speedy recovery. The serum was prepared by Mr. Bokenham, and supplied by Messrs. Burroughs $\mathbb{E}$ Wellcome.

## REMARKS.

a. Nature of the Cases submitted to Serum Treatment.- Including the eight collected from literature, we have under considerativis fourteen cases of severe puerperal septicaemia treated by antistreptococcic scrum. Tiwo of them ended fatally, eight were primiparous women varying in age from twenty-two to thirty years ; one was a case of abortion, and one a multiparous woman with a rickciy pelvis. In Vinay's cascs no information is given as to age, character of labor, and the number of pregnencies. Excluding his cases we have left ten in which there is a definite record of the patient's state before and after the use of the serum. The laborwas instrumental in six cases, lingering in one and normal in two. In all the placenta came away easily and completely. Information as to the integrity of the perineum is furnished in seven cases; it was torn but not sutueed in four, torn and sutured in two, and uninjured in one. The sutured perineum in cain 5 healed by first intention, but in Gatiaru': case it was curetted and resutured. In six cases the lochia was scanty and suppressed in twis. The reaction of the vasinal discharge was ascertained in three cases ( 1,3 and 4). Once it was found acid and twiec alkaline. My investigations into the reaction of the vaginal discharges in cases of puerperal septicemia during past years scem to indicate that alkaline reaction most frequently accompanies septic
intoxication-sapracmia; and acid reaction, septic infection-septicamia. With the former reaction the lochia were usually found free and foetid, and with the latter scanty or suppressed. In the ten cases referred to, symptoms of the disease set in from within a few hours of labor to the cighth day. The use of constitutional agents, combined with local and instrumental treatment, was tried in all the cases before the serum injections were resorted to, for a period varying from two to fifteen days. The carliest day after labor on whicls the serum was used was the fifty day (case 4), and the latest the nineteenth day (Kennedy's case).

The serum was not injected in a single case without a previous thorough trial of the usual constitutional and local remedies. The state of the pelvic organs was ascertained in nine cases, and with two exceptions (cases 2 and 4) where there was uterine tenderness, they were found to be normal. The cases were characterized by severe febrile symptoms, and in some there was diarrhcea and vomiting. It must, of course, be admitted that puerperal infection may be independent of streptococci, but the conjunction of certain symptoms. rigors, high fever, and a rapid breaking up of the general condition permit us to affirm a probability in favor of infection due to streptococci. Certainty is only to be obtained by a bacteriological examination, such as we.s made in case 2 and Gaulard's second case, which proved beyond doubt that these were two cases of true streptococcic infection-puerperal streptomycosis.
b. General Effect of the Serum.Following each injection the previously hot, diry and inactive skin passed into a state of moisture and active perspiration, the parched lips and dry tongue became moistened, suppressed lochia and lactation reappeared, delirium, isomnia, and restlessness passeci of into a refreshing sleep, from which the patient awoke
feeling better in body and clearer in mind. Headache and mental torpor were usually dispelled, but exceptionally the headache remained for hours, the patient otherwisc fecling much relieved. The headache, which was descrited as "peculiar," was sometimes frontal and sometimes occipital. In three casss, however. no bencfit resulted from the injections, namely case o and Vinay's first and second case. Vinay believes the injections to be more effective and more immediate in their action when they are made early and at the tinue of the evening when there is a spontanenus rise in the temperature. Local treatment, curctage, and antiseptic washings are not to be neglected.
c. Effect on the Timperature and Pulsi--In evcry case, with the exception of three (case $\sigma$ and Vinay's first two cases), the degree of temperature and the frequency of the pulse were reduced after each dose of scrum. The reduction of temperature and decrease of frequency of the pulse were effected in from six to twentyfour hours. The temperature in case 1 fell from $104^{\prime}$ to $102^{\circ}$ in six hours after $10 \mathrm{c.cm}$. of the serum (Pasteur Institutc), but it rose to $103^{\circ}$ eighteen hours later. A second dose of 20 c.cm. reduced it to normal in ten hours, and it remained so. In case 3 the temperature followed an exceptional course. After a single dose of $35 \mathrm{c} . \mathrm{cm}$. (Ruffer's serum) the temperature fell from ro4.4 to $104^{\circ}$ in six hours. At the twelfth hour (midnight) it rose to $\mathrm{r} 5^{\circ}$, but at the eighteenth hour it fell to $102^{\circ}$, and at the twenty-fourth hour to $99.2^{\circ}$, and remained under $100^{\circ}$ from this time onwards. This was the only instance in which a rise was observed after an injection. In three cases (case 4, Kennedy and Gaulard's cases) the temperature fell to normal in twentyfour hours. The pulse-rate varied with the temperature.
d. Complications and Fatalities. Two of the cases, case 6 and Gau-
lard's second case, proved fatal. The former reccived a daily injection of $20 \mathrm{c.cm}$. (British Institute) for three consercutive days, with ton observed bencit. The patient died on the fourtenth day; the fever remaining high to the last. With regard to this case I cannot help fecling that if it was a case of strepto-infection, and a larger initial dose had been administered, a different result might perhaps have been obtained, but if of coursc it was one of staphylo-infection no bencfit was to be expected. This shows the supreme importance of a bacteriological diagnosis. The latter case, however, stands in a different light. Here a bacteriological examination had been made, and the case undoubtedly proved to be a true example of strepto-inicction-streptomycosis. A dose of to c.cm. of scrum (Marmorek) was injected on the fourth, fifth, sixth and seventh days after confinement, and by it the temperature was reduced to normal on the ninth day. On the evening of this day, however, she was seized with bilious vomiting and meteorism. The next day she was much worse, devcloped uncontrollable vomiting and became semi-cumatose, and died on the eleventh day, the temperature remaining low to the end. The serum was effective in reducing the temperature, yet the patient died two days later during convalescence. Gaulard after the post-mortem examination attributes her death to the use of too much serum. The total amount injected wa; $40 \mathrm{c} . \mathrm{cm}$. (Marmorek), spread over four days. In view of my own experience I feel I cannot agree with him, as in case 4 I injected $60 \mathrm{c.cm}$. (British Institute) during three days, and Kennedy used $\$ 5 \mathrm{c} . \mathrm{cm}$. in two days, both recovering.

There may, of course, be a difference in the strength of the fluids used. This emphasizes the desirability of bacteriologists adopting a uniform system of standardizing their serum. An crythematous rash appeared on the chest, abdomen, and extremities
in two cases. It was of a flecting character, and disappeared in the course of a few days without calling for any treatment. Patchy pncumonia of the base of each lung complicated case 2. The first and second injections of $30 \mathrm{c.cm}$. were made on the eighth and twelfth days respectively. The temperature fell after each. On the seventeenth day there were signs and symptoms of pneumonia. During this attack the temperature ran a fluctuating and an exceptionally high course, it being $106^{\circ}$ on the twenty-first, and $108^{\circ}$ on the twenty-third day. Her doctor looked upon the serum with suspicion, and feared it was the cause of the pneumonia. The serum used was supplied by Dr. Ruffer. Is it possible that the serum, through defective filtering or otherwise, contained living streptococci? Might a serum containing living germs, or the antitoxin found in an efficiently filtered and germ-frec serum, give rise to a patchy pneumonia in a puerperal patient with a decided phthisical family history, such as case 2 was? Finkler ${ }^{6}$ regards the streptococcus as the primary cause in the pathogenesis of certain cases of croupous pneumonia. Weichselbaum ${ }^{7}$ describes a streptococcus pneumoniæ which, according to Mosny, ${ }^{8}$ is identical with the streptococcus pyogenes. Elarbitz ${ }^{3}$ describes five cases of nontypically coursing cases of croupous pneumonia, in four of which he found the streptococcus in pure cultures. Builloch ${ }^{10}$ states that it is a frequent associate of other specific organisms in lung disease.
e. Mode of Administration.-The serum was administered by subcutaneous injection into the areolar tissue of the abdominal wall; to avoid septic troubles, it was deemed essential to purify the skin as well as the syringe. In the foregoing cases these precautions were carried out as follows: the skin was washed with Johnston's antiseptic ethereal solution of soap, and then for two minutes with perchloride of mercury lotion I
in 1,000 and finally dusted with boracic acid powder. The syringe was Debove's, of the capacity of io c.cm. It was taken to pieces and placed in a pic dish, which was boiled in a clean saucepan for fifteen minutes at the patient's home. Ten c.cm. were injected into each puncture, three such punctures being made for a dose of $30 \mathrm{c} . \mathrm{cm}$. In no instance was there local trouble.
f. Dosage.-The question of a maximal dose beyond which it is unsafe to go has not yet been settled, nor indeed are supplies of serum derived from different sources or from the same source at different times guaranteed to be of the same uniform strength. In the interests of clinicians it is desirable that a uniform system of standardizing should be adopted by bacteriologists, and when this is accomplished, clinical observers will be better able to agree as to what the maximal and submaximal doses should be. At present the practitioner ha: to rely for guidance upon the instuactions which accompany each supply, and these vary with their source. The largest dose which 1 injected was $35 \mathrm{c.cm}$. (case 3) ; Kennedy mjected $45 \mathrm{c} . \mathrm{cm}$. The serum used in each case was Ruffer's. Better results were found after a large than after a small initial dose. My experience encourages the use of a maximal initial dose, to be followed, if necessary, by smaller doses at intervals of twelve or twenty-four hours. The British Institute of Preventive Medicine fixes the initial dose at 20 $\mathrm{c} . \mathrm{cm}$., followed by another $20 \mathrm{c} . \mathrm{cm}$. if the temperature has not fallen. Bulloch ${ }^{11}$ states that much larger doses can be given with safety. Ten c.cm. of his serum injected into rabbits caused no bad symptom.
g. What Cases are Suitable.-Puerperal infection may be independent of s'reptococci. According to Bulloch $^{10}$ recent research shows that a puerperal fever ir.ay be set up by the gonococcus (Krınig), ${ }^{11}$ the bacillus coli communis ( $\mathrm{Ma}^{2} \mathrm{armorek}^{12}$ ), the Ta-lamon-Fraenkel coccus, and the sta-
phylococcus. In the majority of instances, however; puerperal fever means infection of the genital canal, and ultimately of the whole system, with the streptococcus pyogenes. There is produced a septicæmiausing the term in the sense in which it was originally employed by Koch -namely, a condition of microbic blood infection where the microbes multiply in the blood, and cause a rapidly fatal disease. The microbe at work most commonly is the streptococcus pyogenes, and the type of infection or septicæmia induced is called puerperal strepto-infection or strepto-septicæmia, or in the language of the bacteriologist, strepto-mycosis. It is in this class of cases only that the antistreptococcic serum is of value, the serum is specific against the streptococcus only, and attempts to cure staphylo-septicæmia or infection saused by any other germ, will not be successful. The combination of symptoms found in cases of severe puerperal septicæmia point to a strepto-infection, but in the absence of a bacteriological examination one cannot be certain. The strepto-infection is at first essentially a local disease; it is later that it becomes a blood infection. Therefore local treatment, antiseptic douches, and curettage cannot be dispensed with, but must be carried out in conjunction with the serum which comes into play, when the germs have passer into the general circulation, by annulling their action and toxin, and obviating the organic degenerations which are beyond our control.

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## conservative gyneeCOLOGY.*

At the last annual mecting of the American Medical Association, Senn, of Chicago, in his Address on Surgery had more than one word to say concerning the methods of the presentday zynæcologist. He claimed, and with reason, that "the frequency in which women are castrated i : one of the most flagrant transgressions of the limits of the art of surgery." In the same connection, Goodell, that great leader in gynæcological work, shortly before his death one year ago, said: "This trend of the profession to appeal to the knife as the great panacea for woman's diseases is seen everywhere. It prevails alike in city, town, village, and hamlet. It asserts itself in every medical discussion, and stands out in bold relief upon the pages of every medical journal. This, in my opinion, is the g.sat medical error of the nineteenth century." That this charge is well founded we all know, for there are but few of us who have not seen healthy adnexa sacrificed in a score of instances entirely without justifiable reason. Ovaries presenting nothing abnormal, except small follicular enlargements upon their surfaces, and congested, but otherwise healthy, tubes have also been removed, unsexing the woman when less radical measures would have been attended by beneficial rather than baneful results.

[^7]- It would seem that the widespread unfavorable criticisms are bound to bear fruit, for a more conservative spirit is being manifested in the treatment of pelvic conditions demanding operative interference, and commendable progress is noticeable all along the line in the way of preservative rather than destructive methods. The time is fast passing when the only relief afforded to a suffering woman is in connection with the addition of a portion of her genital apparatus to the overcrowded jars of the pathologir museum. The ablation of an organ having in health a useful function to perform is always a confession on the part of the operator of inability to restore the organ in question to its normal condition, or to a condition approximating the normal to that degrec that the restoration of function is accomplished without disturbance of the general economy. In the case of disease of the adnexa, the more radical operations were justified when they were the only known means of affording the patient necessary relief, but in the light of recent investigation and experience the operator in many instances will not have this excuse to fall back upon.

Extensive experiments have been made in the resection of tubes, and ovaries, instead of being removed entire, are also resected, and the range of cases in which this appears to be possible of successful and satisfactory accomplishment will, in the near future, probably be largely increased. Great credit is due Pozzi, of Paris, for his work in this direction, and especially in connection with the ovaries. His experience secms to indicate that, providing the tube be healthy, the diseased conditions of the ovary amenable to conservative surgical treatment arc sclero-microcystic ovaritis, diffuse or xedematous ovaritis, and megalo-cystic ovaritis. Donnct (Annals of Gynecology and Pediatry, Vol. ix., No. S) writes of Pozzi's method of treating these conditions as follows:
" If if be sclero-micro-cystic ovaritis
characterized by small ovaries with a lumpy surface, in certain places irregular folds, in others filled with small cysts, all these cysts should be burst open with a platinum point (cautery) and the internal surface cauterized well for two seconds. This treatment attacks the entire lesion better than when resection is done. For diffuse ovaritis, ignipuncture is also to be employed, but the cauterization should be deep. In megalocystic ovaritis the large follicular cysts should be emptied and their internal surface cauterized. If you are dealing with a cyst of the corpus luteum lined by a sort of dead pulp, this should be removed by scraping before cauterization. If oozing should take place, the little wound is quickly united by catgut."

It cannot be denied that this method is a distinct advance in the right direction, and in all these cases the feasibility of ignipuncture should be considered before recourse is had to the knife.

Another commendable advance in gynæcological methods is that concerned in the treatment of pus collection in the pelvis. No more brilliant results have been obtained during the past two years than by Pryor, of New York. As is well known, he advocates and practises attack of these conditions, when of true pelvic location, from below, and attributes his great success not only to the fact that the patient is placed in a modified Trendelenburg position and the vaginal walls widely retracted with specially devised retractors, thus enabling the operator to see the contents of the pelvis and every step of the operation, but also to the employment in every instance of a Mickulicz drain of sterilized iodoforrn gauze prepared after a formula of his own devising. So much importance is attributed to the preparation of the gauze that he insists upon the details being carried out to the minutest detail. This formula, in his own words, is as follows:
"The gauze selected should have
fine meshes, and the best for the purpose is that known in the market as 'purified mull.' It is best to purchase it in five-yard rolls. The gauze is first put in a steam sterilizer with six towels and two shcets, and sterilized for one hour. Glass anatomical jars of one quart capacity are procured, each of which is capable of holding five yards of gauze. A solution of iodoform crystals in commercial ether, ten per cent. strength, is put up. Each five yards of the gauze will require one pint of the solution. The hand basins, nail-brushes and the jars are placed in tepid water and allowed to boil for twenty minutes. When the stcrilization of the gauze is completed, it is taken from the sterilizer, the iodoform solution is poured into a sterile basin, and the gauze run through it. After the gauze has been thoroughly soaked in the solution, it is laid upon a sterile towel or sheet and the ether is allowed to evaporate. It will then be found that the gauze has turned blue.giving the well-known starch-iodine reaction. In this state it is unfit for use, owing to the presence of free iodine. When all the ether has evaporated from the gauze, it is dipped in a boiled I to 4,000 bichloride of mercury solution, when the beautiful golden color of iodoform returns. It is kept in this solution for a moment oniy, is wrung out as dry as the clean hands can wring it, and then packed into the glass jars. The mouth of each jar is covered with eight layers of sterilized gauze and a towel, which are tied around the neck, and the jars are then placed in the steam sterilizer with their mouths down and steam sterilized for one hour. The sterilizer should not be opened until the jars are thoroughly cooled lest they break. With each five yards of gauze, a fresh solution of bichloride should be used.
"Made in this way the gauze is permanent and non-poisonous, and may be left in wounds without changing for about three times as long as other dressings. I have
ceased using the stronger gauzes, because they are unflecessary, and have reduced the strength of the iodoform solution to ten per cent. and five per cent.
"This is the only dressing which I have ever found consistently antisep. tic and of general application. In fact, I do not think that I would be willing to do my cul-de-sac work in many instances unless I had this dressing. Prepared as I have described, the iodoform is not free in the meshes of the gauze, but the hollow bast-cells of the cotton fibres are filled with it. The bichloride is used merely to act as a mordant, or fixing agent. When the fluids of the tissues change the bichloride into calomel, as they always do, the iodine again becomes free. In other words the iodoform is broken up when in contact with the discharges-just when it is most needed."

In the treatment of uterine displacements by radical cperation, new methods are constantly being devised. Alexander's operation of shortening the round ligaments, has always been open to objection on account of the difficulty in finding the ligaments, and the ever-present possibility of their being too small at the external ring to permit of sufficient traction being made to raise the uterine body and maintain it in its new position. Ventrofixation, no matter what the technique followed, has always unfavorably influenced subsequent pregnancies, and even its most ardent supporters are forced to admit that the principle involved is an incorrect one. Mackenrodt's operation of vaginal fixation for a time promised good results, but even though sufficient data has not yet accumulated upon which to base reliable opinion, it is pretty generally admitted that it will not fulfil first expectations. Wertheim's new operation of shortening the round ligaments through the anterior vaginal cul-de-sac and anchoring them to the edge of the incision ippears to be practical and a way out
of the difficulty that has stared the gynaecologist in the face for so long, and if a wider experience with the method satisfactorily demonstrates its value it will undoubtedly displace the other operations.

The procedure to claim the most recent attention, although employed with marked success by its author for the past twenty-five years, is that of the galvano-cautery in the treatment of uterine cancer. To Byrne, of Brooklyn, belongs the credit of this method, and a comparison of his results with those obtained by other operators, who employ the knife, is startling, to say the least. The American Medical Surgical Bulletin for September 20́, i896, in commenting on Byrne's work, says: "Right in the forefrort of the gynæcological world has worked carefully, consistently, and conscientiously a man who, unless it be claimed that his records are lying ones, has accomplished more as regards the cure of uterine cancer than can be claimed by any other operator by any method. This man stands to-day facile princeps in his results and alone, practically, in advocacy of procedure and in utilization of method. . . it is nearly a quarter of a century since Byrne began experimentation with the gal-vano-cautery in case of uterinc cancer. Repeatedly since he has publisined his results and described his method. His cases have been carefully followed by himself and others, and witnesses by the score are now living who can testify to the truth of the records."

Byrne, himself, in the Brooklyn Medical Journal (ibid.) in relation to the method, says: "During the last decade, vaginal hysterectomy for malignant disease of the uterus seems to have become a surgical craze. I have taken a great deal of pains to search the records of Europe and this country, and I have no hesitation in stating that the vast majority of all cases in which vaginal hysterectomy has been performed for cancer of the uterus would have lived longer and
suffered less if they had been let alone. . . The average longevity in cases of well-marked carcinoma of the uterus is not less than twenty-fourmonths, and yet the rast majority of those who had been operated on by ablation of the diseased organ do not enjoy anything like twenty-four months of existence ; much less, freedom from recurrence. Hence I say, if there is not some better surgical method of meeting cases of that class than the removal of the entire organ in the ordinary manner, they would better be left alone. Any case of well-marked cancer of the cervix uteri, but with no evidence whatever, so far as can be discerned, that the disease has invaded the corpus, will have ten chances to one by high extirpation or excision with galvanocautery, than it will have by total extirpation in the ordinary manner. In the one case you have many dangers to encounter, the most serious of all being traumatic infection, because, no matter how aseptic you may try to make your operation, there is grave danger of infecting outlying structures. Again, I have seen several well-known French operators as well as others do this operation over and over again, and I was always struck by the closeness with which they kept to the uterus itself, slmost invariably a portion of the uterine tissue being included in the stump of the broad ligament.
"In the method of operating which I have adopted, you avoid traumatic iniection absolutely, and hæmorrhage also, if the operation is properly done. But this is not all, because what little of the disease you cannot, or fail to, remove, you utterly destroy by heat, and without injury to healthy parts. Hence I say, you do more than remove the part that is excised by the cautery knife ; you destroy morbid processes in the cells of outlying parts by this intense heat; and it is this which secures the patient against recurrence. I know at this moment at least four cases in this city, one nine
years operated on, and an apparently hopeless case, too; another eleven years; one fourteen years; and one I think-but I merely guess in this case-must be between fifteen and sixteen years, since operation was done: all now enjoying perfect health."

The Bulletin furthermore says: "It has become the distinct duty of every man to test this method of Byrne's, and we would call special attention to the fact that the American Gynæcological Society has appointed a collective investigating committee to whom all experimenters should report. The following claims of the method for wider recognition are commended to the profession : It is aseptic and nearly bloodless; postoperative shock is absent; it has no primary mortality; its ultimate results challenge any and every other method; its action extends beyond the immediate field of operation, thus probably killing or rendering inert the cancer elements which are not accessible to the knife.
"Let us face honest facts after an honest fashion, and proceed to give all unfortunates suffering from uterine cancer the same measure of ultir.-.te hope which Byrne for twenty-five years has shown is feasible."

If this advancement in gynæcological work continues as it has begun, many of the charges laid at the door of the gynæcologist will become back numbers and not only will womankind be the gainer, but the methods of conservatism will redound to the credit of the operator, in his own eyes as well as in those of his neighbor.

## SURGERY OF THE APPENDIX.

There is perhaps no topic at the present time which has greater interest to those who practise medicine and surgery than that of the surgical treatment of diseases of the verniform appendix. This subject was considered in the Section of Surgery at the annual mecting at Carlisle, and a
very interesting and important discussion tool: place. Every practitioner, as he stands by the bedside of a patient suffering from what he believes to be a severe attack of appendicitis, must have felt the grave responsibility of having to decide whether an operation should be performed. The question as to the desirability of early operation was the chief point under discussion, and all the surgeons who took part in it scemed to agree that early operation was most essential in many cases, and indeed gave the patient his only chance of recovery ; and many warnings were uttered not to leave the operation until too late.

Several attempts were made to answer the very difficult question in what cases, and at exactly what time, we should operate. The practice of some American surgeons-Murphy of Chicago, and Morris, of New York -is to operate on all severe cases of appendicitis, for they consider that it is impossible to be sure that a case of what seems like appendicitis only may not be already one of general peritonitis from appordix infection, or that a collection o" pus may not exist far earlier in the case than the examination of the abdomen can cliscover, and may rupture into the general peritoneal cavity and set up fatal peritonitis. Their statistics of more than two hundred cases of appen-dicitis-all of which were operated on-give a mortality distinctly lower than that of the disease under medical treatment; and they strongly maintain that the patient's safety lies in the isolation and removal of an appendix which may start fatal peritoneal infection at any moment. Mr. Morton's plea for operation in all severe cases was based on the experience of Murphy and Morris, and Dr. MacDougall and other speakers, although they did not advocate operation in all severe cases, went so far as to advise operation in some in the very early stage, before the mass of adherent bowel around the collection
of fus could be adherent to the abdominal wall.

Most of the speakers advocated operation at an cariier period than that advised in one of the latest standard text-books of surgery in this country. On the other hand, some expressed a feeling almost of incredulity as to the results said to be obtained by Amcrican surgeons. Several cases, however, were related, or referred to, of patients lost because early operation had not deen undertaken, and the effect of the discussion will doubtless be to stimulate practitioners to greater watchfulness for urgent symptoms in all cases of appendicitis, however trivial at the onset, and may perhaps lead some surgeons to give more consideration to this most important question, When should we operate in appendicitis?

Mr. Southam and Mr. Rutherford Morison agreed that operation should be undertaken in relapsing cases after the second attack, and attention was called by other speakers to the fact that a recurrent attack of appendicitis is sometimes fatal. This is not surprising if we remember that in several of the cases of relapsing appendicitis operated on by Mr. Treves the appendix was found full of pus, or custard-like material was found around it, which must have been the result of old abscess formation.
A subject which has recently been debated at an American surgical society by Professor White and Dr. McBurney and others, was also under discussion at Carlisle. We refer to the removal of the appendix in cases in which on operation pus is discovered and evacuated. Nearly every surgeon who took part in the discussion at Carlisle agreed with Dr. MacDougall that if the appendix could be readily found and easily removed it should be done, but that if it were necessary to risk the rupture of those adhesions around the pus, on which the safety of the general peritoneal cavity depends, it would be far
better for the patient to leave the appendis alone. The American surgeons, in the debate referred to, arrived at the same conclusion.British Menizal Journal.

## THE X RAYS AND THEIR AP. PLICATION TO PRACTICE AND DIAGNOSIS. (Concluded.)

By Sidney Rowland, B.A.
So in these cases the practical rule must be obscrved that the skiagraph should be tah n immediately before operation. Much hope was at one time held out that the process might be of considerable utility in the early diagnosis of extrautcrine gestation. These hopes, however, have not only not been fulfilled, but at the present there is very little prospect of their ever being so. In the same way, it was at one time thought that the process would materially assist in the rezognition of malpresentations ; but until we have means in our power of producing $X$ rays in far greater quantity than is at present possible, all such procedures must be confined to the laboratory.

## Diagnosis of Stone in the Kidney.

Of the possibility of applying the process to the diagnosis of renal or vesical calculus it is at present too early to speak with certainty. The evidence that a skiagraph can furnish is one-sided; for if there is no sign of a shadow on the plate in the region of the kidney, this is not evidence that no stone exists, for we may have failed to get the rays to traverse the thickness of the body; on the other hand, if a decided shadow is obtained, this is proof positive that some foreign body is present. So that in some cases a positive diagnosis can be
given, and in any case the information afforded cannot fill to be susgestive.

## Uses in the Limbs.

Coming now to the extremities, we reach the region in which so fir the process has prored itself of most value. A prier: it might be seen that the limbs would prove themselves most adaptable to skiayraphic purposes, for in them there is the greatest proportion of opaque bony tissue to transparent flesh, and in them fractures and dislocations, for the elucidation of which the process is particularly, useful, are most frequent.

Taking the joints and bones of the extremities in order: As to the shoulder, I have had cases brought by: surgeons of rhcumatoid arthritis and displaced epiphysis, in both of which great assistance was afforded by the use of the $\mathcal{X}$ rays. But it is in the clbow-joint that the greatest use will probably be found for the skiagraph in surgery. Owing to the complexity of its structure, this joint offers more conditions of difficult diagnosis than perhaps any other in the body. Fractures, separated epiphyses, epicondylar fractures, and many other intricate combinations of lesion which occur in or around this joint, can all be revealed with the greatest clearness by the use of the X rays. The joint is one very easily skiagraphed even in the most muscular subject ; owing too its mesial position in the extremity, any view or serics of views can be obtained. Nor is it too deep to allow of the successful use of the fllurescent screen without elaborate precautions. We may therefore confidently expect that, as regards this region of the body at least, the systematic use of the X rays will leave no more cases to suffer from the evil effects of erroneous diagnosis.

In the forearm and wrist the applications so far are practically limited to the diagnosis of fractures and the recognition of the position of foreign bodies. Unfortunately it is not a
simple matter to diagnose a dislocation of the metacarpal bones with the sid of a skiagraph, us here a sille view is dificult, and an anteropensterior view dees not give us all the information we desite, and it is in this direction that displacements most ocelr.

## Hur Dishass:

In the case of the lower extremity: the consideration of the practical applications is necessarily more or less a repetition of what has .already been stated with regard to the upper; there ate one or two points, however. which require notice. The hip-joint, like the shoulder-joint, with which it is of course homologrous, presents several conditions in which aurly and decided diagnosis is invaluable. But, lise the shoulder, it is in many cases a very cliffecult point of which to obtain a satisfactory skingraph. This is due to the large catent with which it is surrounded with dense muscular tissue. In very woll developed and athletic men I have, after several attempts, not been able to obtain successful negatives.

In the vast majority of caises, however, it presents no difficulties, and fortunately it is just those cases in which the use of the $X$ rays are of the greatest use that are the easiest to skiagraph. In carly tuberculous discase a decided diagnosis is invaluable, and as this is most frequent in children, no serious difficulty ever presents itself. Dr. Macintyrc has obtained some very beautiful pictures of this condition. In cases of congenital dislocation, too, the process can give us information as to the extent of the acetabular rim, which cannot be obtained in any other way.
The above are the applications which, so far, the discovery of Professor Roentgen has found in the domain of practical medicine. How much further the discovery is likelyr to be of use it is not possible to foresce, but if the promise of develop-
ment which late physical researches hold out are fulfilled, we may expect very great advances at no very distant future. With the rays as they are at present available, however, no great advance is to be expected, for their practical utility depends directly on their physical capabilities; and, as these are known more or less accurately, it is quite possible to predict in what condition applications will be found. But it is not too much to imagine that other rays of a similar nature may be discovered, rays that camot pass through carcinoma, and can through all other tissucs, just as the $X$ rays cannot pass through bonc, but can through the remaining constituents of the body, Should such or similar forms of energy be discovered, it is a curious speculation to realize what the routine of physical examination will become ; but for the present we must be content to pursue our investigations quietly without undue speculation, and to be thankful that we live in the age when the tangent of physical research is nearir:g its point of contact with the circle of the art of medicine.-Brit. Med. Jour.

## THE JANET ABORTIVE TREATMENT OF GONORRHGEA.

In a second communication on this subject, published in the Centralbiatt fur innere Medicin for Ou wber IOth, Dr. Berthold Goldberg, of Cologne, expresses his conviction that the carly treatment of gonorrhœea by means of frequent injections of a solution of potassium permanganate is a trustworthy means of aborting the disease. He gives a table of fourteen cases, in all but one of which he succeeded in curing the affection within so short a time as to justify the use of the term abortion.

Six of the patients were suffering from a first attack of gonorrhœa, five
werc affected with a second attack, two had their third attack, and one was in his fourth. The treatment was begun in two days after the infection (twelve hours after the first symptom) in one case, in threc days after the infection (twelve hours after the first symptom) in two cases, in six days after the infection (one day after the first symptom) in two cases, in seven days after the infection (one day after the first symptom in one case and an unnoted length of time in the other) in two cases, in eight days after the infection (one day after the first symptom in two cases and six days in one case) in three cases, in nine days after the infection (two days after the first symptom) in one case, in ten days after the infection (three and four days respectively after the first symptom) in two cases, and in twelve days after the infection (seven days after the first symptom) in one case.

Five injections sufficed to effect a cure in one case, six in three cases, seven in one case, eight in one case, nine in one case, eleven in one case, twelve in one case, thirtees in two cases, fourteen in one case, and fifteen in one case, while about thirty were employed in the case which, although finally cured, in about a hundred days, was not aborted. In thit case the patient went from the seventh to the tenth day without treatment. As a complication, he had follicular prostatitis. The only complication in any of the other cases was bacteriuria in one case, which did not interfere with a prompt cure. The deep urethra was involved and had to be irrigated in six of the cases. The gonococci disappeared in one day in two cases, in threc days in two cases, in five days in one case, in six days in one case, in ten days in one case, in eleven days in two cases, in twelve days in one case, in fourteen days in one case, in about fourteen days in one case, and in about a hundred days in one case-the one that was not aborted. In one case this detail was not re-
corded, but in that cesse all traces of the disease had disappeared in four days. In almost all the cases the urine ceased to show any signs of a discharge coincidently with the disappearance of the gonococsi, but in three of the cases not until after a period of from three to six days; the urine was examined at intervals of from two to a hundred days after the subsidence of the discasc. All the patients were allowed to go about as usual during the treatment.

When it was practicable, Dr. Goldberg gave the injections himself twice a day, but several of the patients were unable to present themselves so often and consequently used the syringe themselyes for a portion of the time, employing a solution of the strength of from I to 2,000 to I to 4,000 and injecting only the anterior urethra. Moreover, in several of the cases the treatment by the author himself had to be intermitted for as much as three days. All things considered, this seems to be a remarkably good showing for the Janet treatment. - Newu York Medical Journal.

Chlorosis no Contraindication for Marriage.-The question which is often put to the physician as to whether a chlorotic girl ought to marry, has been fully discussed in a monograph by Grosset (These de Paris, Steinheil, I896Medical News). His conclusions are: (I) The physical and spiritual excitement which marriane offers a chlorotic girl can have only a favorable effect upon her disease. (2) The sterility of chlorosis is only a temporary one in most cases, the rare instances of infantile genitals being excepted. (3) Chlorosis does not predispose to abortion. (4) The children of chlorotic women are likely to be chlorotic, but seem to show little tendency to become tuberculous. Chlorosis, therefore, is no contraindication for marriage.

## The Physician's Library.

An American Text-Book on Physiology. 1,052 pages, fully illustrated. Edited by Willim H. Howell, Ph.D., M.D., Professor of Physiology in Johns Hopkins University. Price, cloth, $\$ 6.00$; sheep, $\$ 7.00$; half morocco, $\$ 7.00$. For sale by subscription only. New York: W. B. Saunders.

Mr. Saunders has made himselt famous on this continent as a medical publisher, chiefly by his claborate system of text-books, and the result is that his acquaintance is made by the student, to be continued into friendship by the doctor. This last work from his press is a distinct gain, both to the Amcrican student and professional man. The editorship alone is a guarantec of the valuc of the work, but when in addition to this we find the different departments to be the work of such teachers in the profession as Warren P. Hubbard, who writes of Gencral Physiology of Muscle and Nerve ; W. H. Howell, the editor, takes charge of Secretion, Chemistry of Digestion and Nutrition; Movements of the Alimentary Canal, Bladder and Ureters ; and Blood and Lymph Circulation, by Curtis and Porter; Respiration and Animal Heat, by Reichert, of the University of Pennsylvania; Central Nervous System, by Donaldson; Special Senses, by Henry P. Bowditch and Henry Sewall; Reproduction, by Frederic S. Lee, and Chemistry of the Animal Body, by Graham Lusk -there can be only one word to say, and that of highest commendation. It is a work of a class that no professional man who wishes to be abreast of the very latest teachings in this most important science can afford to be without.

Essentials of Plyssical Diagnosis of the Thorax, by Arthur M. Conwin, A.M., M.D., Demonstrator of Physical Diagnosis in Rush Medical

Colle;te; attending physician to the Central Free Dispensary, Department of Rhinology, Laryngology and Diseases of the Chest. Second edition, revised and enlarged. Philadelphia: W. B. Saunders, 925 Walnut Street. 1896.
The first edition of this hook was published under the title of "Outlines of Physical Diagnosis of the Thorax." Its rapid distribution has necessitated a second and larger edition, which has added to it a section setting forth the signs found in each discase of the chest. Every practitioner will find the book a very great aid in the cliagnosis of the various chest conditions he finds and runs across almost every day in the practice of his profession.

The Mrdical Nezus l'isiting List for 1S97. Weekly (dated, for 30 patients) ; Monthly (undated, for 120 patients per month); Perpetual (unclated, for 30 patients weekly per year) ; and Perpetual (undated for 60 patients weekly per year). The first three styics contain 32 pages of data and 160 pages of blanks. The 60 -patient Perpetual consists of 256 pages of blanks. Each style in one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Philadelphia and New York: Lea Brothers \& Co.

The Medical News Visiting List for 1897 has been thoroughly revised and brought up to date in every respect. The text portion (32 pages) contains the most useful data for the physician and surgeon, including an alphabetical table of diseases, with the most approved remedies, and a table of doses. It also contains sections on examination of urine, artificial respiration, incompatibles, poisons and antidotes, diagnostic table of eruptive fevers, and the ligation of arteries. The classified
blanks ( 160 pages), are arranged to hold records of all kinds of pionessional work, with memoranda and accounts. The selection of material in the text portion and the arrangement of the record blanks are the result of twelve years of experience and special study. Equal care has been bestowed upon the mechanical execution of the book, and in quality of paper and in strength and beauty of binding nothing scems to be left wanting. When desired, a ready refarence thumb-letter index is furnished, which is peculiar to this visiting list, and which will save many-fold its smali cost ( 25 cents) in the economy of time effected during a year. In its several styles the Medical News Visiting List adapts itself to any system of keeping professional accounts. In short, every need of the physician seems to have been anticipated in this invaluable pocket companion.

The Fifteenth Edition of Bausch \& Lomb's catalogue of microscopes and allied supplies is a work of art, and reflects the energy and prosperity of the well-known firm. The catalogue is a cumplete treatise on the mechanics and optics of microscopes, and any information desired can be found by reference to the pages of this catalogue. All microscopical accessories are figured and their use described. The catalogue is, in fact, an instructive text-book of 264 pages, and will make a valuable addition toany library. The book can be had by addressing the firm at Rochester.

Manual of Life Insurance. We are in receipt of the second edition, " Manual of Life Insurance Examinations," by Jas. Thorburn, M.D. Edin. This little work has been revised and corrected, and is full of points of interest to medical examiners for life insurance. Dr. Thorburn is a veteran in this line of work, and is an authority on the subject.


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## IMMORALITY IN CANADA.

It was Johnson who said, on rebrking a fricend, "If you look close enough to the ground you may see dirt." It is our painful duty to impress this fact upon no less an authority than the editor of the Neru York Medical Record, which aims to be the prototype, on this side of the Atlantic, of the English Lancet. We would not recklessly provoke the Great Thunderer on the other side, nor Little Thunder on this side, but " to err is human," and we take heart of grace by knowing that the editor of Little Thunder, in this respect, is very human. We would not for one moment discuss his sweeping assertir ss on "Immorality in Canada," founded on an editorial in our September issue, did we not feel that he is just as far out on this question as he was on Dr. Edson's famous consumption cure. In our editorial
of September we stated, and restate here, that "fcmale bicycle riding must be locked into and care excrcised in its indulgence." Our reason for that statement was, first, that a woman pedalling on the bicycle is subject at least to all the disadvantages of the old double treadle sewing machine; seconid, that her position astride the common leather bicycle saddle is not liable to lessen those disadvantages; third, that there is a generally prevalent opinion that bicycle riding too often produces in women considerable erethism, at times to the point of orgasm.

At the time of writing we were, and still are, believers in the general truth of these three propositions. We did, as averred by the editor of Little Thunder, call attention to the question of bicycle riding for women, and we propose to still further call attention to the same. Just what in all this could excuse the editor aforesaid
in writing a sensational editorial stating that any section of the women of Canada were given over to bestial practices, is something we fail to perccive. Just why it is that a medical subject camot be discussed fiom a medical standpoint, but some crotomaniac immediately perverts the whole matter, and tries to twist it into a shape where it is on the same plane and in harmony with his own discased mind, surpasses us. We know that there is much mock modesty at present in the world, and its presence is much to be regretted, but we did not know that it was so far reaching in its cffects as to peivert the minds of medical and scientific men, until, to-diay it would scem, that to satisfy the delicately constructed nervous systems of these gentlemen, we must needs put pantalettes on medical terms. The morality of the women of Canada needs no defence at the hands of any one, especially from men who, to satisfy personal spleen without roproducing the facts, quote such silly editorials as the one in Little Thunder. We made no charge against the morality of the women of Canada, or cven inferred such. We disclaimed in our editorial any desire to deal with the moral or immoral aspects $n f$ the question. We stated, and we hope strongly enough, that the construction of the bicycle and the position of the rider was sufficient to produce certain effects, that in too many cases it did produce those effects. If the editor of Little Thunder was so desirous to start moral house cleaning, he should have lent Dr. Parkhurst a hand in his native town, before starting out to reorganize the balance of
the contincont. For a gentleman in the centre of Parkhurstian scandals to discuss the immorality of his neighbors, makes it possible that after a similar moral spasm Sodom held up its hands and thanked God that it was not as Gomorrah was. We were not discussing the immorality of the question in our cditorial, we werc drawing attention to a fact, from a purely medical standpoint, which we believe certainly needs attention drawn to it: but, had we been discussing the morals of the case, ard its effects upon women, who in the main must be ignorant of the reason why this particular form of excrcise may be harmful to them, we would have sought evidence for this, not in Canada, but from the reports of the President of the Woman's Christian Temperance Union of Washington, the home of the politics and fashion of the great republic to the south of us, of which the editor in question is so dis. tinguished a citizen. To reiterate once more, we would ask that the moral phase of this question be laid aside, and that it be discussed from a purely medical standpoint. First, consider the position in riding a bicycle, compare it, as we said before, with the old double treadle sewing machine.

If there is any gentleman in New York who does not know where to look for information on this subject, we would refer him to the volumes of the State Board of Health of Massachusetts. He will there find that the most distinguished physicians of that State took it in hand, that there was no mock modesty about its discussion, there was only a united effort to
better the condition of affairs, and the result was that the foot power sewing machine was done away with in the factories, and machine power introduced.

Since writing our editorial we have been commended for it from quarters where cormendation was of value, we have been condemned for it by bicycle manufacturers and those influenced by them. That these men devote their encrgy and capital to reducing the weight of their machines instcad of̂ producing a proper saddle, is no reason why we should stand idly by, if the health of only one woman in the country be risked. On the other hand there is another phase to the question, and the following editorial from the Boston Medical and Surgical Journal serves to show the present status of this controversy:

[^8]"As in our climate the bicycle is used nine months in the year, and as the modern girl walks less and less, while more abuncant nutrition. both intellectual and animal, is supplied, increasing the size of the foetal skul?, her prospects for instrumental delivery, symphysiotomy and celiotomy increase. It is yet too early to verify this prediction, but for years the very large increase in the number of cases in which the forceps has been used by the masters in obstetrics demonstrates the evil effects of the lack of walking.
"When nature increases the size of the foetal head, it increases the capacity of the mother's pelvis, but such increase may be frustrated by art. Through laziness man is said to have worn his tail off by much sitting; and through the fashion of not walking, woman will add to the inconveniences, if not the impossibilities, of natural labor.

For centuries the horse has been utilized, but the teachings of both amatony and propricty have prohibited the woman from bestriding his soft back. The fact is that the seraddling attitude is unnatural in man, and only became popular through the chase and through war, and surgical injuries are sufficiently common on account of sur $h$ attitude. The parts traversing the male perincum are sensicive and important and lie superficially. But they are slightly grotected from pressure by broad and comparatively tong ischial tuberositics which are near togeflicr. In addition, the perineum of the male is moderately protected by liair. In the female perincum the tuberosities are smaller, sharper and avider aport, and it is comparatively without hair. As shown by its tissuc, physiology and function, the perincum of woman is a kind of supplemental werus. It is padded with connective tissuc, prolonged pressure upon which must cause condensa; tion and atrophy, thus adding 'atrocious' pains to the second stage of labor and much hability to rupture.
"Dr. Evans calls attention to the fact that until after puberty the pelvic bones readily yield to mechanical influences, and thinks it probable that during this yielding period the narrow saddle will press the ischial tubcrosities upward and inward, the distortion being beater the younger the girl, thus adding a scrious complication to the flattened pelvis, which is the most common pelvic deformity in Europe and America. He thinks that the slight forward inclination of the body while on the bicycle may tend to increase the pelvic flattening.
"'The difference,' says Dr. Evans, 'between the shape of the child's and the adult's pelvis is most largely due to pressure and counter-pressure through living levers, the body and lower extremities. This is well proven in the exaggerated development of the side of the pelvis used by a youth with one leg.'
"Dr. Evans, in concluding, expresses the opinion that the bicycle will predispose to placenta previa, the basis of the contention being that all the cases of placenta previa which be has seen have been in hard-working and active women.
"While we must admit that the pressure of an improper saddle upon the pelvis of a growing girl might have a tendency to deform it, we cannot see that Dr. Evans has advanced any cogent arguments against the use of the bicycle with a suitable saddlethat is, one which throws the weight of the body upon the ischial tuberosities and not on the perineum. The direct downward pressure upon the ischial tuberosities ought not to force them either inward or outward, and the vigorous play of the muscles in the exercise of riding ought to have a favoring instead of a retarding influence upon the
development of the pelvis. On the other hand, too much can hardly be said against the use of improperly constructed bicycles by women whether growing or grown, and Dr. Evars' contention that the bearing of the zueijht upon the perineume might tend to puil the ischial taberosities inwoard is a sound one. It should not rank, however, as an argument against the use of the bicycle by growing girls, but rather as an additional reasmn why they should not ride on improperly constructed saddles. By the simple precaution of choosing a proper saddle, it is to be hoped that our growing girls may escape the instrumental deliveries, symphysiotomies and celiotomies which Dr. Evans thinks are threatening them as a result of the pleasant and healthful exercise of bicycling."

We agree with the Boston Medical and Surgical Journal where it says that " While we must admit that the pressure of an improper saddle upon the pelvis of a growing girl might have a tendency to deform it, we cannot see that Dr. Evans has advanced any cogent arguments against the use of the bicycle with a suitable saddlethat is, one which throws the weight of the body upon the ischial tubercsities and not on the perineum." As stated in our editorial note on Dr. Walters' letter in our November issue, "the sweeping statements that no such trouble arises are absurd in the face of actual evidence, and both Dr. Walters and the cycle manufacturers contradict their own statements when in the same letters they draw attention to the new forms of saddle devised to overcome this condition." It will be noticed that the editor of the Boston ITedical and Surgical Journal draws attention to the same point in regard to the saddle. As we have previously stated, there is no doubt that in many cases bicycle riding is of immense advantage to women, but bicycle riding with a properly constructed saddle, as the editor of the Boston Medical and Surgical Journal
suggests. The whole subject of cycling is of too recent a growth to accurately determine just what the ultimate advantage will be, but we certainly see points already that require closeattention, and if not remedied are sufficient to condemn the whole business. If our contemporaries, instead of looking at the erotic side of the question, will stop to consider the scientific side of it and let us have proper investigation, everybody will be benefited thereby, the health of many women will be saved, and the bicycle and its parts so arranged that it may become a legitimate health factor; but this result will not be accomplished if men who are presumed to be medical scientists get the sort of moral spasms that you would expect from an hysterical old maid.

We are pleased to see things moving more harmoniously with some of the local medical journals, and are glad that the combination has once again got into smooth working shape. We think if they will take sides on this question they will have abundant opportunity for the exercise of their peculiar talents. This is a large question, and we know that we will meet with much opposition ; that not only is there sentiment, but as many interests are affected, and these large corporations, there will, in all probability, be lots of money in it for the defence.

## CONSERVATIVEGYNAECOLOGY

The article on this subject was one which appeared as an editorial in the New York Polyclinic Journal, and was written, we presume, by Dr. Hawley Bortensbaw, lecturer on Operative

Gynæcology in the New York Polyclinic. We have given the editorial the above heading, as that expresses, we think, the tenor of the article. There can be no doubt that for the past few years the profession have been attacked with what might be termed, laparotomania. In this journal we have given very little place to the long lists of papers that have been constantly read, describing how the writer had just performed his first hundred successful laparotomies. It was just as great a fad for an embryo surgeon to do his first "century" in laparotomy as it is for the amateur cyclist to do his first "century" on a bike. However, in both cases they seem to be tiring of riding their hobby. As we remarked at a meeting of the Ontario Medical Association a year and a half ago, the tendency to remove ovaries in every event made one at first doubfful whether they were in a medical meeting or the potato department of a country fair.

Dr. Bortensbaw's article is most conservative and timely, and we fully agree with the remarks of Senn, of Chicago, with which. he opens his article: "The frequency with which women are castrated is one of the most flagrant transgressions of the limits of the art of surgery." In reading this article, we observe four distinct points of progress: I. The treatment of the diseased condition of the ovary, direct by cauterization, leaving the organ in situ. 2. The evacuation of pus collections, when of true pelvic location, from below, thus avoiding shock and dangers of laparotomy. The formula for the preparation of iodoform gauze in this connection should receive careful attention. 3 .

The treatment of uterine displacement by Wertheim's new operation of shortening the round ligaments through the anterior vaginal cul-de-sac and anchoring them to the edge of the incision. 4. Byrne's treatment of uterine cancer by removing diseased area with the galvano-cautery, which not only avoids the dangers of the removal of the uterus, and as usually performed the adnexa likewise, but destroys the disease by the intense heat in any portions which may have been beyond the incision. It prevents traumatic infection and gives the patient a greater chance than by any other method. Any case of cancer of the cervix which has not invaded the corpus, will have ten chances to one by this method over total extirpation.

## TYPES OF APHASIA.

In a brief paper read before the Society of Biology of Paris, Broca indicated the different types of aphasia.

The first type is loss of verbal auditive memory ; that is, loss of the recollection of the sounds of one's native language. A patient afflicted with a lesion of this nature listens to his native tongue as though it were a foreign language. He is affected with verbal deafness ; that is, though he hears sounds, he does not recognize the sounds of the language which is spoken. The memory of the sounds of language is localized in the first temporal convolution.

A second type is the loss of verbal visual nemory. The patient, though able to write before his illness, is, after recovering from an attack of
apoplexy, quite unabie to read his own writing. He is able to wiite, but cannot read his writing or the printed page either. He is affected with verbal blindness though his sight is good. The convolution, which presides over the memory of the forms of letters, is the second $\dot{i}$ arietal.

A third type is loss of motor graphic memory, aphasia of the hand, or agraphia. The patient is unable to write, though before his attack able to do so. The faculty controlling writing consists in the memory of the co-ordinated movements of the right hand and arm in writing. This faculty resides in the left second frontal convolution, disease of which results in loss of the power of writing with the right hand.

Aphemic patients understand spoken language, write, read, use expressive mimicry, but cannot emit the regular sounds of conversation. Frequently some monosyllable used in familiar exclamation is all that remains of their stock of words. They have lost motor verbal memory. They cannot execute the series ofllmethodical and co-ordinated movements which correspond to the syllable they are desirous of expressing.

The faculty suppressed in them is localized in the posterior half of the third frontal convolution.

## DIGITINE.

This is a drug which Merck classes as therapeutically inert, yet if we are to believe a writer in the Medical and Surgical Reporter, Dr. Henry Beales, jr., of Philadelphia, it is one of the most valuable in the pharmacopreia.

The error seems to be in the dosage ; that recommended by Dr. Beales is from one-tenth to one-half grain several times daily. It does not disturb digestion as does digitalis, nor is it cumulative. It seems to have a peculiar sedative action on the nervous mechanisms in connection with circulation, stimulating these artively. Especially is this so of the governing centre and intra-cardiac ganglia; also the vaso-motor centre and vaso-constrictor, that either directly, or indirectly (through its action on the circulation) restores nutrition by stimulating metabolic activity of the cell structure, so that in cases of cardiac enlargement, etc., not only the distressing symptoms-cardiac, pulmonary congestion and passive hyperæmia of the cerebrum-but a general improvement in tone of the whole system occurs, due undoubtedly to, as stated before, its action in some way on cell metabolism. Its use may be continued over long intervals, and it certainly should receive a thorough trial in this class of cases. We all know the difficulties attendant on the continued use of digitalis, and if we can use digitine with such excellent results when digitalis must be dropped, we will be certainly greatly advantaged.

## REPORTING CONTAGIOUS DISEASE.

Section 80 of the Ontario Public Health Act enacts that "Whenever any physician knows that any person whom he is called upon to visit is infected with small-pox, scarlet fever, diphtheria, typhoid fever, or cholera, such physician shall, subject in case
of refusal or neglect to the penalties provided by Subsection 2 of Section ro6, within twenty-four hours give notice thereof to the local Board of Health or Medical Health Officer of the municipality in which such diseased person is, and in such manner as is directed by Rules 2 and 3 of Section 17 of Schedule A."

The penalty provided by Subsection 2 of Section 106 is a fine of $\$ 20$. Rules 2 and 3 of Section 17 of Schedule A provide for the issue of suitable blank forms for (a) reporting an infectious disease, and (b) reporting death or recovery from infectious disease.

It is pretty certain that physicians give notification of smali-pox and scarlet fever. Cholera does not exist in this country. Typhoid fever is common, and physicians most probably give notice to the local Board of Health, although a week or more may sometimes elapse before the attending physician feels sufficiently sure of his diagnosis to pronounce the disease enteric fever. Diphtheria causes grave difficulties to local Boards of Health and to physicians. Frequently it is so plain in its manifestations that no great skill is required to diagnose it. The layman who knows how to look for it can give a shrewd guess as to its nature, as well as the average physician. Occasionally it is not apparent at the first examination; it may be confined to the nasal cavities, not appearing in the pharynx. Again, it may not present any gross characters in either the nasal cavities or the pharynx ; but may be present in the form of laryngeal or tracheal diphtheria, commonly called "inflammatory croup." A physician neglect-
ing to report an ordinary case of diphtheria in which the gross characters are well marked would be justly subject to the legal penalty. An Ontario physician who is unable to diagnose a suspected case of pharyngeal, nasal or laryngeal diphtheria should take a culture-a smear on a cotton swab-from the suspected region and forware it immediately to the bacteriological department of the Provincial Board of Health. A reply by telegram or telephone will be sent him in from twenty-four to forty-eight hours, and he will then be enabled to report or not, as the case may require. In the meantime, the patient should be isolated.

Some physicians in Ontario, when called upon to treat diphtheria, are influenced by conceit rather than a true love of science. Unable to make a bacteriological examination of the suspected exudate themselyes, they will not acknowledge their deficiency, but give an imperfect opinion founded an imperfect data. This is unfortunate for the family, friends and neighbors of the patient, and is degrading to medical science, which by the pronounced opinions and actions of unenlightened mecical men, is placed on the same level as quackery or Christian Science.

Others there are-though, thanks to the saving grace of an honorable profession, few indeed-who wickedly coincide with deluded parents in cloaking up diphtheria, miscalling it tonsillitis. Then, after a death has occurred, a false certificate of death is made out, stating that the patient died of serous effusion of the glottis.

We are satisfied that at the present time diphtheria is by far the most
rapidly fatal contagious disease the Ontario practitioner is called upon to treat, and feel confident if the first cases in any outbreak were isolated the contagion would cease to spreai.

One thing is necessary in order to place practitioners in a position to pronounce on cases of sore throat, viz., a bacteriological examination of the exudate. City practitioners are availing themselves of this method of arriving at truth, and no good reason can be advanced why country physicians should not imitate their excellent example. By so doing they will do the best thing possible for their patrons and help the public to the conclusion that medical science is quite able to distinguish tonsillitis from diphtheria.

## THE BRITISH MEDICAL ASSOCIATION.

Under the British Medical Association column we print a report of progress to date. It can readily be seen what an amount of work is falling on the shoulders of the profession in Montreal, and undoubtedly the least we can do is to give them all the assistance we can.

We are sure that in no form will assistance be so well appreciated as in that which increases the membership.

It is a membership in the greatest and most honorable professional body in the world, and we here, who consider ourselves the best of those dependencies which go to make up the British Empire, should join in with a will and give the home breth-
ren a reception which will astonish them in point of numbers. Upon the Canadian profession depends the opinion which will be formed of our country. We have a profession second to none in the world for its standard of education, and the individual training and ability of its members.

Let our British brethren take away an impression of Canada and Canadians of which we and they will be proud. Aside from all matters of sentiment, just now, when Canada's turn for development is coming on, the impression produced, of the chatracter of our resources, of the integrity and ability of our people, before these two great British associations will greatly depend the influx of capital which will start upon the high road to prosperity the country and the individual.

If any of our readers wish any information in regard to attaining membership in the Association, or wish to offer any suggèstions, we shall be only too glad to assist them in any way. We feel that there is presented an opportunity in this meeting, which has never before occurred, for us to get in touch with the fountain heads of our knowledge, and to meet the acknowledged leaders in the noblest of professions.

## SERUM DIAGNOSIS OF TYPHOID FEVER.

The Boston Medical and Surgical Journal, November 5, 1896, describes the work done by Widal in finding a simple test for typhoid fever. He has simplified his methods. At first he
drew blood from a vein of the forearm with a sterile syringe, decanted the serum, and after mixing with ten or fifteen times its volume of fresh bouillon culture of typhoid bacilli, left the mixture twenty-four hours in the thermostat at $37^{\circ} \mathrm{C}$. Later he found he could get equally good results by using a few drops of blood taken from the ear or finger in the ordinary way. A single drop of the serum of this blood is added to ten or fifteen drops of the bouillon culture and then a drop of this mixture is at once examined between a slide and coverglass with a one-twelfth oil-immersion lens. If the case be one of typhoid, the bacilli clump together within from two to sixty minutes. No other disease has been thus far found which gives this clump reaction. Widal's next discovery was that a few drops of blood dried on glass or paper would answer as well as the fresh blood serum, provided the dried blood is mixed with a few drops of water when ready to make the test. Such dried specimens can be sent through the mails and will keep their power and produce the reaction for at least six months.

Dr. Wyatt Johnston, of Montreal, has carried out this method with entire success, and the Board of Health of the Province of Quebec announced (September, 1896) that it will furnish a diagnosis free to any physician who will send a few drops of blood dried on paper.
J. J. Mackenzie, B.A., Toronto, of the bacteriological laboratory of the Provincial Board of Health of Ontario, has also carried out this method with entire success, and we have had much pleasure in looking at a slide exhibited
at his laboratory, in which the clump reaction was well brought out.

In the majority of cases this serum reaction does not appear earlier than the rose-spots and diazo reaction; on the other hand it persists for several weeks (at least) after defornescence. It shows considerable qualitative variations in different cases and grows more marked in the later weeks of the disease-possibly it may turn out to be of prognostic as well as diagnostic significance. It is present in the milk, in the tears, in the serum from a blister, in the peritoneal and pericardial fluid and the fluids of odema, and in the urine, but not in the gastric juice, saliva, or bile, of typhoid patients. Widal's serum reaction is certainly a valuable method of diagnosis in the later weeks of typhoid; but even in the earlier stages it has been possible to obtain the reaction.

## THE RABIES CASES IN PAFis, ONT.

Our readers will remember the report in the daily papers where a supposed rabid dog had bitten several people in Paris.

The patients consisted of two children and a man, who were bitten; also a child, upon whose face were abrasions, and which, though not bitten, had been licked by the dog. These were all sent to the Gibier Institute in New York. A number of other dogs bitten were all destroyed. The Council passed an ordinance making the townspeople shut up all dogs. Mr. J. J. Mackenzie, Bacteriologist to
the Provincial Board of Health, made a subdural inoculation on a rabbit on Tucsday, November 3 r . . On the night of the 16 th the animal began to show symptoms of irritability. On the 17 th there was partial paralysis with hyperasthesia of lower extremities, more marked on right side. Temperature on evening of 17 th was 102.6. On morning of 18 th all symptoms aggravated. Temperature subnormal, $89^{\circ}$, and continued fallirg all day until death ensued. Mr. Mackenzie therefore reports the case as one of undoubted rabies.

## SALOL DANGEROUS IN

 NEPHRITIS.Dr. James Tyson reports two cases of nephritis in which the administration of salol in combination with bismuth to check a too free diarrhœea was followed by suppression of urine -in one case causing death, in the other very serious symptoms. He therefore considers it advisable to warn the profession of the possible danger of administering this drug for any purpose to patients suffering from nephritis.

The American Association of Obstetricians and Gynæcologists, at its ninth annual meeting held at Richmond, Va., elected the followingnamed officers for the ensuing year, namely: President, James F. W. Ross, M.D., Toronto ; Vice-Presidents, George Ben Johnson, M.D., Richmond, and John C. Sexton, M.D.,

Rushville, Ind.; Sécretary, William Warren Potter, M.D., Buffalo ; Treasurer, Xavier O. Werder, M.D., Pittsburg. Executive Council: Charles A. L. Reed, M.D., Cincinnati : Lewis S. McMurtry, M.D., Louisville ; A. Van der Veer, M.D., Albany ; J. Henry Carstens, M.D., Detroit ; and William E. B. Davis, M.D., Birmingham. The next annual meeting was appointed to be held at the Cataract House, Niagara Falls, N.Y., Tuesday, Wednesday, Thursday and Friday, August 17th, 18th, 19th and 20th, 1897.

The Health of the Queen.For several years the Queen's eyesight has been to some extent impaired owing to changes in the eyes incident to advanced years, and this partial diminution of vision naturally causes Her Majesty a certain amount of inconvenience. We are, however, glad to be in a position to state that there is good reason to hope that the measures recommended by her professional advisers, combined with due precaution not to overtax the weakened eyesight, will enable Her Majesty to continue, as at present, to perform the multifarious duties pertaining to her exalted station.

Dr. Ernest Sands, a graduate of Trinity College, Toronto, and son of George Sands, of Sudbury, Ont., died of phthiṣis at El Paso, Texas, last month. He was thirty-two years of age, and had practised at Cold Springs, Ont.

## Obituary.

## DR. BERGIN, M.P.

Dr. Bergin was born in Toronto on the 7th September, 1826 . He was the son of the late William Bergin, C.E., who was a native of Roscrea, Ireland, and who in 1820 left his home for Canada and settled in Toronto, where for some time he carried on a mercantile business. Dr. Bergin's mother was Mary, daughter of the late John Flanagan, of Charlottenburg, County of Glengarry, Ontario. Wm. Bergin died in 1850, leaving surviving him his wife, a daughter, the subject of this sketch, and another son, John, who is now Collector of Customs in Cornwall, Mrs. Bergin died in ISSI. After attaining the necessary knowledge to permit of his entering Upper Canada College, Darby Bergin became a student in that institution, where he had for his classmates young men who afterwards rose to positions of distinction in various walks of life.

## MEDICAL EDUCATION

Deciding to adopt the medical profession, Mr. Bergin matriculated at McGill College, Montreal, and immediately entered upon his studies, which were prosecuted with unremitting zeal and marked success. In April, 1846, he passed his examination before the Lower Canada Medical Board, and obtained license to practice when little more than nineteen years old. The following spring, in 1847,
he completed the curriculum of McGill College, but not having attained his majority, he was consequently unable to graduate until he became of agc. He received his degree of M.D.C.M. in September, 1847, a special convucation being held for that purpose. The young doctor settled in Cornwall, where he soon secured an extensive practice, and attained to a distinguished position.

## MEDICAL APPOINTMENTS.

In I84S, in conjunction with the late Dr. Roderick McDonald, he had charge of the emigrant typhus fever hospital at Cornwall, and a few years later, when small-pox broke out in the Indian village of St. Regis, he was sent by Lord Bury, SuperintendentGeneral of Indian Affairs, to look after them. For this service he received the thanks of the Department. Dr. Bergin's career as a medical practitioner was eminently successful, and his standing among his professional brethren high, as the following facts will prove: He was first president of the Eastern District Medical Association, and afterwards president of the St. Lawrence and Eastern District Medical Association. He was examiner in midwifery and general surgical anatomy, for the Ontario College of Physicians and Surgeons. Upon his election as the representative of the St. Lawrence and Eastern Medical Association, he was elected vice-president of the Council of the College of Physicians and Surgeons, and the following year president, to which position he was
re-clected for a number of years. Dr l3ergin was for many years physician to the Cornwall gaol.

## MILITARY CAREER.

When the recent rebellion in the North-West broke out, it became necessary to organize a medical department connected with the militia scrvice. That work was entrusted to Dr. Bergin, who reccived the rank of Surgeon-General. The success of his labors was remarkable, considering the short time at his diposal to select his staff and to arrange all the minute details. Dr. Boyd, of London, England, who was sent to Canada with medical stores by H. R. H. the Princess Louise, declared that the arrangements, as made by Dr. Bergin, were complete, and in every respect satisfactory, and that he had never known of a more thoroughly equipped medical field service than that sent out under the direction of SurgeonGeneral Bergin. For many years Dr. Bergin was actively identified with the volunteer force. At the time of the Trent difficulty, when war between Britain and the United States seemed imminent, Dr. Bergin took command of a company raised for active service. He served in the 3rd Provisional Battalion at Laprairie from December, 1863 , to May, 1864, as Captain, and during the Fenian raid of I866, as Major, having been promoted to that rank. In r 869 he organized the 59th Stormont and Glengarry Battalion, of which he became Licutenant-Colonel.

## PARLIAMENTARY.

Dr. Bergin was first returned to the House of Commons for Cornwall in 1872, by acclamation. At the general election of 1874 he was defeated by Mr. A. F. Macdonald, by a majority of twenty-three. Mr. Macdonald having been unseated, a new election took place in September, with the same result, Mr. Macdonald's majority being forty. At the general election of 1878 , Dr. Bergin defeated

Mr. D. B. Maclennan.' Having been unseated, a new election took place in January, 1880, when Dr. Bergin again defeated Mr. Maclennan by an increased majority. He was reelected at the general election of 1882 for the new constituency of Cornwall and Stormont, defeating the late James Bethune, Q.C., and has been re-elected at every general election since.

## II.LNESS AND DEATH.

The primary cause of his demise was due to injury from a fall.

Dr. Alguire and Dr. Harrison remained with him to the last, but he was beyond human aid and gradually sank until the final summons came and he passed peacefully to his rest. From the first there was very little hope of his recovery. For the past year or more he had been failing, and altnough he was apparently getting back to his usual health the last couple of months, his constitution had become too weak to withstand the shock which overtook him on the night of the 1 8th September. It may be truly said of him that he died in harness, for he had only left his Parliamentary duties that day at the request of a number of his constituents in order to secure them a speaker for the entertainment that was given by the Cornwall St. Patrick's Society.

## The Best Salt of Quinine.-

 This, according to S. Solis-Cohen, is the double hydrochlorate with urea; it is always to be preferred to the- treatment of malarial affections. It may be used once daily hypodermatically, in doses of fifteen grains, dissolved in from twenty to thirty minims of pure water, and deeply and carefully injected; or by the mouth fifteen grains night and morning, which is ordinarily the maximum dosage for the adult. If special conditions call for increased dosage, it may be used with due caution.Me.lical Age.


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The Publishers will be pleased to receive at any tinie, local or personal items from physicinas which will frove of interest to the profession generally.

Dr. J. A. Sutherland has moved to Illicillewaet, B.C.

Dr. J. W. Smuck has removed from Binbrook to Toronto.

- Dr. Geo. Warren has taken up house at 205 Gerrard Street East.

Dr. John S. King broke his arm in a recent bicycle accident, but is able to be about.

Dr. J. F. Cattermole has moved from London to Toronto, and settled at 27 Carlton Street.

Dr. N. A. Powell returned two weeks ago after a most enjoyable shooting expedition in Muskoka.

Dr. Bruce L. Riordan has opened a branch office on King Street West, near Jamicson Avenue.

Dr. A. C. Sinclair, of Port Elgin ${ }_{r}$ has located at Rossland, B.C.

Dr. RUDOLF, of Bengal, India, has moved to Toronto and settled. at 40 Carlton Strect.

Dr. J. F. W. Ross has been elected. President of the American Gynæcological and Obstretric Association.

Dr. Iohn Taylor FotheringHAM, of Toronto, has been appointed Surgeon to the 12th Battalion, York Rangers.

Dr. George A. Peters has invested in a full cathode ray apparatus, and is making rapid progress. The doctor has already made some very good plates.

It is rumored that the Hon. Dr. Borden will succeed the late Dr. Bergin as Surgeon-General of the Canadian Militia. The appointment would be a most popular one.

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## Important Change of Time Taking effect NOVEMBER 15, 1896.

## mmmmons

Leaving time of following trains has been changeci.
MAIN LINE EAST.- $5.00 \mathrm{p} . \mathrm{m}$. will leave at $5 .{ }^{\prime}$ '
MAIN LINE WEST.-7.40 a.m. will leave at $\& \quad$.. $\quad$ t. 30 p.m. will leave at 5.30 p.m. 6.17 p.m. ranceicd.
SOUTHERN DIVISION.-7.25 a.m. will leave daily at $7.35 \mathrm{a} . \mathrm{m} . ~ 7.35 \mathrm{a} . \mathrm{m}$. will leave at $7.45 \mathrm{a} . \mathrm{m} .4 .25 \mathrm{p} . \mathrm{m}$. will leave at $4.20 \mathrm{p} . \mathrm{m} . \quad 10.20 \mathrm{p} . \mathrm{m}$. will leave daily at 10.30 p.m.
N. \& N.-W. IIVISION.-12.20 p.m. will leave at 12.30 p.m. 1.45 p.m. will leave at 1.40 p.m.
MIDLAND DIVISION.-8.20 a.m. will leave at $8.05 \mathrm{a} . \mathrm{m} . \quad 2.50 \mathrm{p} . \mathrm{m}$. will leaveat 2.40 p.m. 4.35 p.m. will leave at 5 p.m.

Toronto and Weston Suburban Service Train, leaving Union Station at 6.45 a.m. and 4.55 p.m..; leaving Weston at $7.18 \mathrm{a} . \mathrm{m}$. and $5.40 \mathrm{p} . \mathrm{m}$. are all cancelled.

Dr. W. J. Chapman has moved from Thedford and located at Rat Portage.

Dr. W. N Robertson, the bicyclist, of Stratford, has moved to Wallaceburg, and Dr. J. Ogden, of Toronto, will take his practice.

Dr. Mason, who for years has resided on Sorauren Avenue, Parkdale, has left the city to take charge of the hospital at Saltcoats, Assiniboia, N.W.T.

We had the pleasure lately of an angel's visit from Dr. Octavius Weld, who is now so cornfortably settled in Vancouver. B.C. The doator reports business as flourishing in the west. Dr. Weld received the appointment of C. P'. R. Surgeon for a large section of the country about a year ago. He spent a week with his relatives at London, Ont., on his way home.

Dr. J. Algernon Temple has taken charge of the Department of Gynacology and Obstetrics for our contemporary the Canaua Lancet

Dr. W. J. Fletcher has moved to the corner of Garden and Sorauren Avenues, Parkdale, the house until lately occupied by Dr. Mason.

## Marriages.

Murtun-looster - On Thursday, the 12 th November, at St. Thomas' Churcih, Shenty Bay, by the Rev. Canon Reiner, M.A., rector of Trinity Church, Barrie, assisted by the Rev. J. E. Cooper, incumbent, Francis George, second son of Edward Deane Morton, M.D., to Emma Ellen (Emel), eldest daughter of the late Edward Charles Colley Foster, captain H. M. I2th Regiment, and stepdaughter of Henry Hatton Strathy, Q.C.

## in the West Indies

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## ROBT. WALTER, M.D.

Walter's Park, Pa.

Comparative Toxicity of the Digitalin Group.-M. Piotrowska (Thide de Genive) reports the results of a study of the comparative toxicity of the substances of the digitalin group according as they are administered hypodermically, intravenously, or by the gastro-intestinal canal. The substances experimented with were different digitalins (Homolle and Quevenne, Nativelle), fluid extract of convallaria, convallamarin, strophanthin, coronillin, and helleborein. The experiments were made on frogs and on certain mammals (rabbits, cats). The following are the author's conciusions: Fluic extract of convallaria is seven times less toxic in frogs when given by the gastro-intestinal canal than when administered hypodermically. Convallamarin in the frog and the rabbit is six times less toxic by the gastro-intestinal canal. Digitalin (Homolle and Quevenne) in the frog is three times, and digitalin (Nativelle)
one and a half times less toxic bur the gastro-intestinal canal. Strophanthin is six times, coronillin thirteen times less toxic by the gasiro-intestinal canal. Helleborein in the frog is seventeen times, in the rabbit tiventysix times less toxic by the gastrointestinal canal. In order to determine whether the liver plays a part in attenuating the toxicity of the poison introduced into the gastrointestinal canal, the author investigated in the frog the modifications which extirpation of the liver produces, and in the rabbit the difference in toxicity of the substance introduced into a peripheral vein (jugular.femoral, auricular), and into a vein of the portal system (mesenteric). The results of the experiments in mammals did not always agree with those on frogs. Frogs from which the liver has been extirpated are six times more sensìtive to extract of convallaria, twice more sensitive to corunillin, and eight

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#### Abstract

The attention of the medical profession is respectiully drawn to the uniform suocess attending the treatment of Alcoholism and Morphine addiction at 0 , rille. A prominent medical man in Turonw has, within the last iew weeks, paid a glowing tribute to ${ }^{\text {sen }}$ gfficacy in the case of one of his patients who had long since lost his susceptlbility to the ordinary form of treatment employed, and whose life seemed to hang in the balance. Muny come to Oakville in the last stages of the malady, yet of these but two ases in four years have proved to be beyond reach of our treatment, a record well deserving the thoughtful consideration of the profession.

Far terms, otc., apply to


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Patients will be admitted for Surgical Operations, Confinemerts, Massage, Electrical -reatment, and all non-infectious diseases.

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Both male and female patients will be received.
The Institution wili be made as. comfortable and home-like as possible, and is pleasantly situated close to the Horticultural Gardens, and easily reached by the Carlton Street or Belt Line Cars.

Particulars can be obtained from Dr. Lowe, Medical Superintendent, or Miss Dover, Graduate of Toronto Training School, at the "Home."

Medical men and others interested are cordially invited to call and see the Institution.

The charges for Rooms, Nursing, and Medical Attendance, will be $\$ 25.00$ per week in advance.

For Rooms, Nursing, etc., without Medical Attendance, the charge will be $\$ 6.00, \$ 10.00$ and $\$ 12.00$ in advance.

For Massage, Electrical Treatment, etc., without resideuce, the fee will be $\$ 1.00$ per treatment.

References given when required.
TORONTD. September $4,1893$.
times more sensitive to helleborein than in the normal state. Frogs in the fasting state are more sensitive to the action of fluid extract of convallaria, coronillin and helleborein. In the rabbit the liver does not appear to lessen the toxicity of convallamarin or helleborein. Coronillin, on the contrary, is three times less toxic when injected into a mesenteric vein ; its toxicity, therefore, seems to be attentated by the liver.

The Administration of Quinine to Children.-Binz (Deut. med. Woch.), mentions certain preparations of quinine which he has found convenient in the treatment of children who u.ually exhibit a great repugnance to the taste of the drug. They were tested during the epidemic of whooping-cough: (I) Quinine pearls, gelatine capsules containing gr. jss were taken readily by children over three years, while younger chil-
dren could be taught to swallow them. (2) Quinine chocolate ; each piece contained gr. jss, and the bitter taste was so well covered that infants of nine months would take them; they did not produce gastric disturbance. (3) Suppositories made of cocoa butter, and containing various doses up to gr. vjiss. (4) A hypodermic solution of one part of hydrochlorate of quinine in four parts of water. With proper precautions the injections were not followed by abscesses, and were found valuable in cases of whooping-cough in wiich quinine could not be tolerated by the mouth. (5) Quinine may be given in enema; the quantity of solution used should not exceed $Z^{j}$. (6) Tannate of quinine, which in powder is almost tasteless, was a fairly satisfactory substitute for other preparations, but the dose given must be double that of the sulphate, and the effect was not produced so rapidly or certainly.


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Spirit of Turpentine in the Treitment of Burns. - H. L. McInnis (New York Medzcal Recerd) says that spirits of turpentine applied to a burn of either the first, second or third degree will almost at once relieve the pain. The burn will heal much more rapidly than by any other treatment in the author's experience. He applies the turpentine as follows: After wrapping a thin laycr of absorbent cotton over the burn, he saturates it with the common commercial turpentine, which is generally found in every house, and then handages. Being volatile, the turpentine evaporates, and it is therefore necessary to keep the cotton moistened with it.

When there are large blebs, he opens them on the second or third day. It is best to keep the spirit off the healthy skin if possible, as sometimes pain is produced by its action.
"Dear wife," said a dying husband, "if you do marry again, wait at least until the grass is growing on my grave." The widow promised faithfully that his wish should be respected. About two weeks after the funeral the widow visited the grave, and pressing a gold coin in the sexton's hand, said: "Can't you have this grave sodded without delay?"Texas Suftings.

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Traumatol.-Ladevie (Allgem. W'ich. med, Zeitung) records a large number of observations made by himself and others upon the antiseptic and therapeutic properties of this new drug. It appears to have been used with great success in the treatment of varicose ulcers, eczema, metritis, gonorrhoeal vaginitis, soft chancres, and wounds both infected and surgical. Bact iological rescarches also prove its antiseptic power. The author states that in contrast to iodoform, which is both irritating and poisonous, traumatol is absolutely harmless and non-iritating, both locally and generally, properties which he considers sufficient to give it a high rank in the long list of antiseptics. Internally, its antiseptic action on the respiratory tract is as potent as that of creasote or iodoform. Furthermore, it exerts a most favorable influence on that ordinary intractable complaint tuberculosis diar-
rhoea, a property which is said to be shared by no other drug hitherto tried for the purpose.-Brit. ${ }^{\prime}$ Med. four:

Delivery in the Moribunid. -Decio (Annali di Ostel. el Gincc.) tabulates eightecn labors where women, apparently in a dying condition, were delivered per vias naturales ix children, including one of a pair of twins, seem to have lived, five were born dead, the remainder expired scon after delivery. Turning, after various methods, was exclusively the means employed in the eighteen cases. In six the mother had eclampsia, five recovered, including the twin labor case ; three had cerebral apoplexy, two recovered; two with advanced phthisis survived for a few weeks; four underwent the operation for flooding from placenta previa, three being saved; one with pulmonary congestion recov-
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[^9]ered, and one bleeding from an internal wound was saved; lastly, one, injured by a fall, died. Decio has also collected mineteen cases of Casarean section on dying women ; all were graver cases than in the first table, and none recovered. In thirteen cases the child was alive, making fourteen children saved, as one labor was gemellat: In only two was the os more or less open.-Brit. Med. . Jour:

Cancer of the Cervis at Thiery.-Pillict and Dclaunay ( $B u$ Letin. de la Socictic Anatomique de Paris) were consulted on November 21 ist, 1995 , by a lady in her thirtyfirst year. She had borne two children. The youngest was eleven, and since its birth hypogastric pain had been almost constant. For the last year the periods had appeared at unusually short intervals, and a foetid discharge of a reddish watery fluid
gave her trouble. Yet her general health was unusually good, and she gained thirty pounds in the twelve months in question. On examination a typical hard cancer of the cervix was discovered. There were signs of a probable (sic) laceration of the cervix representing injury at the labor cleven years previously; to this injury the authors trace the malignant discase. A week later the utcrus was amputated; within that short space of time the growth had distinctly grown larger--Brit. Mcd. Jour.

Flossic is six years old. "Mamma," she called one day, "if I get married will I have to have a husband like pa?" "Yes," replicd the mother, with an amused smilc. "And if I don't get married will I have to be an old maid like Aunt Kate?" "Yes." "Mamma,"-after a pause -"it's a tough world for us women, aint it?"


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Treatment of Rupture of the Kidney. - Kecn (Annals of Surgery), in concluding an claborate paper on the "Treatment of Traumatic Lesions of the Kidney," based on tables of one hundred and fiftyfive cases, discusses the indications for operative intervention in cases of subcutancous rupture of this organ. Of one hundred and eighteen cases of this injury that have been published since 1878 , fifty were fatal. On excluding twelve cases of associated injuties of other organs, two cases in which death occurred very soon after the injury, one case in which the patient possessed a single kidney, and an uncertain case, thirtyfour cases are left, in fourteen of which the fatal result was due to primary, continuous, and secondary hæmorrhage combined with shock, whilst suppuration, including peritonitis, destroyed sixtcen. In four cases only was death caused by coma,
anuria, and nephritis. These figures support the view held by the author, that the dangers of rupture of the kidney are especially hæmorrhage and sepsis. A more frequent resort to primary nephrectomy would, it is held, have avoided a number of deaths from both of these causes. The duty of the surgeon, it is pointed out, seems clear. Where the symptoms are threatening, particularly if there be decided evidence of hemorrhage, or probable danger of sepsis, an exploratory operation should be performed without delay. The great mass of recnveries in rupture of the kindey are the slighter cases; the graver cases do not recover unless an operation is done. In any case, therefore, with severe or dangerous symptoms, the surgeon should lcan towards exploration, and in severe leceration towards carly nephrectomy. Hæmaturia is regarded as being valuable only as a symptom showing the fact


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of rupture of the kidncy, but not as at symptom by which to decide on operating. Not the visible loss of blond by the bladder, but the easily overlonked, but far more dangerous bleeding into the perinephric tissues, or into the peritoneal cavity, should receive the chief attention. If, then, a tumor form quickly in the lumbar region, an exploratory operation in the loin should be immediately made, and if the kidncy be found hopelessly: destroyed, or the hemorrhage such as to require ligation of the renal vessels, nephrectomy should be practised. -Brat. Med. Jour.

Tetany in Cuildren.-Hauser (Borl. kith. W'och.) has investignted a number of cases of tetany, spasm of the glottis, and other discases accompanied by spasm. In six cases of tetany with spasm of the extr mities, the disease exactly resembled that of the adult. Spasm of the glottis occurred in all the cases, but was not
necessarily severe or frequent. Fits werc only once completely absent. As regards Erb's symptom, the author agrecs that the increased gralvanic irritability is the most constant and important symptom of tetany. Trousscau's phenomenon was not absent in any case. It persisted longer than the spontancous spasm. This sign may be absent, but when present it is pathognomonic. Chvostek's symptom was marked in all cases except one, where it was seen only in slight degree. The author says that this symptom is not pathognomic, and may be present in other children, but in its most pronounced form it is only present in tetany. Muscular irritability was increased in all but one case. The knee-jerks were mostly exaggerated. Most of the children were excitable, but the intelligence was unimpaired except in one case, where there was a slight degree of idiocy. A rise of temperature was only once noted. In only one casc

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of genuine tetany was the child well nourished. Rickets were generally present. There appeared to be a connection between the appearance of gastro-intestinal symptoms and that of the tetany. Hence the resemblance between infantile tetany and the tetany in gastric dilatation of the adult. The author accepts the view that there may be tetany without spasm of the extremities. In such cases Erb's and Trousseau's phenomena are present. Such cases he puts down as latent tetany. Spasm of the glottis has nothing to do with tetany. As far as our present knowledge goes, treatment can only be radical where more or less marked digestive symptoms are present. A rapid emptying of the alimentary canal is here inclicated.-Brit. Med. Jour.

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[^11]Gonococcus Pydmia. - Singer (Wien. med. Presse) gives an account of some cases of general gonococcus infection, including one of endocarditis which terminated favorably. Comparing this micro-organism with streptococci, he considers it, as would be expected from the results of experiment, much less virulent in nature, so that the demonstration of the gonococcus in a disease having the appearance of pyamia is to be taken as a favorable sign. He points out, also, that the resemblance of gonorrhoxal to rheumatic arthritis is much closer than has generally been held. He holds that the extragenital complications of the gonorrhœal process (affections of the heart, joints, tendori sheaths, iris, etc.) arise from dissemination of the gonococcus through the circulation, and are really to be classed as metastases. These metastases are comparable to those of pyamia, and
may occur a long time after the primary gonorrhœal infection. In rare cases the clinical picture of the resulting discase shows a perfect similarity to that of ordinary pyamia to such cases the name gonococcus pyemia should be applied. Furthermore, gonorrhoual arthritis is very often (contrary to the general opinion) multiarticular, resembling in this, as in many other respects, true joint rheu-matism.-Brit. MCed. Jour:

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Thiroliodine. - Lépine (Sem. Méd.) reports on recent investigations of the active principle of the thyroid gland, especially in relation to l3aumann's discovery of thyro-iodine. For the production of thyro-iodine Baumann employs several methods, of which the best is the treatment of the gland with a solution of sodium chloride. The globulin is precipitated by a current of carbonic acid, and the solution acidified and boiled when a precipitate of albumen and thyroiodine falls. The latter is an organic substance combined with nitrogen and iodine ( 10 per cent.). Clinical obscrvations show that thyro-iodine is very active, patients suffering from goitre and myxœdema having been cured by it. Baumann maintains that the entire active substance remains on the filter after coagulation
of the albumen. Fraenkel has obtained from the filtered portion a crystallizable extremely hygroscopic substance precipitated by the reagents of alkaloids having the formula $\mathrm{C}_{n} \mathrm{H}_{11} \mathrm{~N}_{: 3} \mathrm{O}_{n}$, which he has named thyro-antitoxin. He has found this substance active in the treatment of obesity and productive of certain other effects; but it exerts no influence on nutrition comparable with that of fresh thyroid or thyro-iodine. Thyroid treatment results in a marked increase in the excretion of uric acid, but in spite of the nitrogenous denutrition obvious improvement has been obtained from its use in cases of recently atrophied muscles. Hertoghe finds that thyroid treatment exerts a marked inhibitory action on the uterus and ovaries, together with a stimulating effect on the mammary glands, of great value

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in checking the reappearance of menstruation during lactation, and improving the quality of the milk. - Brit. Micd. Jour.

A New Methol of Artmicial Resirination:-Calliano (Gazz. degli Osped.) describes a new method of artificial respiration which he has practised with success in cases of asphyxia. The patient is placed in Sylvester's position, and the arms are then drawn up so as fully to expand the thorax, and then fixed above and behind the head by tying the wrists together. In this position respiration is induced by simply pressing with the hands on the thorax some cighteen or twenty times a minute. The advantages claimed for this modification of Sylvester's method are, (I) Its greater simplicity; (2) the much smaller amount of labor required, and lessened fatigue of the operator; (3) the ab-
sence of danger from contusion of the shoulder joints; ( 4 ) the easc with which such a method could be taught to and practised by uneducated and untrained people.-Brit. Mled. Jour:

An Original Communicition. -The following note was received by a Mississippi physician from one of his colored clientelc: "dR: mi wif hav lost hur recompence to me \& is given hur distutions to a nuther man $\& i$ wants you to sen me sum poders for to put in hur coffy to rehabilify hur desires for me agin. your Truly." -Memplis Mícdical Monthly.

A Suggestive Advertinement. -The following is a copy of an inscription ornamenting a hedge in Kent, England: " Notis. If any man's or woman's cows get into these here oats his or her tail will be c.at off as the case may be."-The Midical Age.


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keep the disease in check, two or three times that amount ought to cure it : and the child sank in a heap after taking the larger dose, and became an imbecile, but improved when bromide was withdrawn. Of two childrin taking bromide of lithium, one lost all memory of words, the other ail idea of time. Suicidal tendencies and melancholia occurred at the menstrual epoch in a lady who had been taking a drachm of potassium bromide daily for four years, but these disappeared when the drug was withdrawn, and only reappeared when she resumed it subsequently. Do not deluge patients with bromides, especially in cases of epilepsy.-S. Weir Mitchell.

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Henet Themareutis-1 must warn against the too common exhibitimi of digitalis. True, it prolongs the diastole and thus rests the heart, but this good is counterbalanced by the high arterial pressure which it induces and the consequent straining of valves already weakened by inflamunation. One must select his remedies from the list of cardiac depressants, and among these I give priority to aconite, veratrum viride, and chloral. In practice I use aconite in doses of one to three drops every four hours, combined with ten to twenty grains of citrate or acetate of potash, with continuous counter-irritation and poultices to the precordium. Veratrum viride I have not used, but, reasoning from its unparalleled power of lowering bloodpressure and reducing the pulse rate, it ought to be even better than aconite, were it not for its tendency to produce vomiting, especially in chiidren ; in adults this could be casily
watched and the doses reduced on the superveation of the least signs of nausea. It should be given in doses of one or two drops every hour. and n nt in the doses of five to ten or fiftec:n drops named in the B. P. Ci:loral best fills the indications however, for it lessens the fibrinity of the blood, and also reduces bloud-pressure and pulse rate. Its administration along wih anti-rheumatics, like potash, shouid be followed by good results in acute endocarditis, Bever theless its use in practice does not always come up to what on rational grounds might be expected. I mention it rather by way of contrast, for the purpose of combating an irrational faith that would prescribe digitalis in every case of heart discasc.-Chisholm.

Mencal Studi. - Dr. Watson Cheyne declares that the "amount the medical student has to learn is appalling."-The Mcdical Age.

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Disease of the Upier Air Passaces due to Inhalation of Flour.-Lublinski (Centralbl. f. inn. Med.) relates the following case analogous to one recently recorded by Gerhardt: A baker, aged ninetecn, complained of hoarseness, which was at first relieved by the expectoration of whitish-grey, gummy masses. Dyspnoea was also present. The pharynx was dry, and here and there small whitish patches were seen on a slightly reddened base. A similar condition was found in the nares and larynx, and even in the trachea. With iodine the sputum gave the characteristic reaction of starch, and painting the pharynx, nares and larynx with iodine solution produced a number of blue patches. The microscope showed the presence of starch granules. The treatment consisted of avoidance of the flour, and
inhalations with Ems water, as well as painting the parts with a four per cent. zinc chloride.-Brit. Med. Jour.

Beware of Cmitations.-Jones -" If Brown has never studied medicine how does he happen to be so well posted on diseases?" Robinson -" Because he's a professional writer of letters from grateful women out in Michigan who have suffered untold agonies until told by a friend of the wonderful properties of Dr. Pillgarlic's nervine and blood-purifier." Judge.
"Doctor, my daughter seems to be going blind, and she's just getting ready for her wedding, too. Oh, dear me, what's to be done?" "Let her go on with the wedding, madam, by all means. If anything can open her eyes, marriage will."

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Mental Symptoms after Oper-

ATIONS ON WOMEN. -Jacobs (La Policlinique) states that mental disturbance, developing soon after operation, seldom proves serious, whilst, when it appears a few months later, the prognosis is usually unfavorable. He relates five cases: (1) Hysterical mania in a patient aged thirty-six, three days after colpo-perineorrhaphy and curetting. The symptoms vanished slowly. (2) Mental depression in a woman, aged thirty-four, beginning six months after vaginal hysterectomy. Death within four weeks. (3) Nymphomania the day after vaginal hysterectomy, disappearing in eight days. (4) Mania on the day after vaginal castration in a hysterical subject. Death. (5) A very fat woman, aged forty-one, underwent curetting for chronic leucorrhœa, with obstinate eczema of the pudenda. Three weeks later melancholia developed, ending in aphasia and death.Brat. Med. Jour.

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Hunting A Lost Ball．－The Roentgen ray and the location of bullets brings to mind an old army story about a general officer，wounded in the flesy part of the leg，where the surgeons made many incisions．At last，growing tired and worn with pain，he asked if they were nearly through dressing his leg．＂I am looking for the ball，＂said the operat－ ing surgeon．＂Why the devil didn＇t you say so before？＂roared the officer； ＂I have the ball in my pocket！＂－ Journal of the American Medical Association．

Irrigation Beds and Healtif． —Weyl（Berl．klin．Woch．）investi－ gated the truth of the statement that irrigation beds are open to the sus－ picion of spreading infective diseases． He investigated the health of those persons living near the Berlin irriga－ tion beds，which are the largest of the kind in the world．He says：＂The
irrigation beds have cither caused no disease or but slight disease anongst the persons living near and working upon them．＂He further says that properly managed irrigation beds are no source of clanger to health，and that，＂up to the present they are by far the best method of dealing with the sewage of towns．＂The method is not complete，since it docs not lead to the destruction of all pathogenic micro－organisms as was at first ex－ pected．Drain water may contain bacilli of typhoid，etc．，and therefore ought not to pass on the beds without previous disinfection．－Brit．Mred． Jour．

Flora is three years old．In play－ ing about the house she struck her hand and rubbed up the skin．Away she went to her mother，crying，＂Ow， ow！boo，hoo！mamma，I＇ve knocked the peelin＇off my hand．＂

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    Potent" NG.1, (z30 anits to oasoh ce.) In viais of 500 units, $\$ 1.25$; No. 2,1000 units, $\$ 2.25 ; \mathrm{No}, 3,2000$ units, $\$ 4.00$

[^1]:    Gold Medal Awarded
    HEALTH EXHIBITION, LONDOH
    Flrst Class Award
    ADELAIDE, I887, AND MELBOURNE, 1888

    The Lancet describes it as "Mr. Benger's admirable preparation."

    The London Aredical Record says: "It is retained when all other foods are rejected. It is invaluable."

    The British Stedical Journal says: "Benger's Fond has by its excellence established a reputation of its own."

    The Illustrated Jfedical N'ews sais:-' Intants do remarkably well on it. There is certainly a great future before it."

[^2]:    J. E. AUSTEN
    

    > Tilf Tinaitio Meverill
    

    Awarded SILVER MEDAL, Toronto Industrial Exhibition, 1895; Also SILVER and BRONZE MEDALS, 1896. -if Are the best machines manufactured for

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    And rearing all kinds of Domestic HATCHING Poultry.

    Send for descriptive circular and mention this paper. Address the manufacturer,

    ## T. A. Willitts,

    542 Manning Ave., - TORONTO, CAN.[^3]:    The Lancet.-"This is a good, pure and wholesome spirit."
    The Scotsman, -"Singunaly mellow, thoroughly matured, and of the most delicate flavor."
    The Iractitioner.-" $1 t$ has all the marks of a pure and well-matured spirit."
    Who London Medical Iecor or.-"It is an excellent spirit, and we can with conflence recommend it as a choice spirit for medicinal purposes."
    Medical Press. -" A well-matured spirit, with a captivating flavor and a bland laste."
    The 1 lospital.--"Weil matured, free from fusil oil and exceedingly wholesome."
    The Sanitary Record. "It is an excellent sgirit of fire flavor, is frec from all deleterious compounds, and cail be safely recommended."
    The Con-try Brewers' Gazette.-"Is of the best we have ever tasted."
    terthshive constitutionall. - "Of exceptionally good quality: a long way ahrad of ans of its rivals."
    Searboroush lost.-" IRemarkable for aroma, purity and the mellowness which age alone can give."
    IEaster", Anstralian and South African Journal of Cominerce.-"An excecdingly fine Old
    Ifighan Whisky." IMighland Whisky."
    The Colonies,and India.-"Old, soft and mellow, pleasant to the palate and invigorating to the sy'stem."

[^4]:    "Now is the Winter of our Discontent made Glorious Summer" by the warm and comfortable

    ## RIGBY RAIN-PROOF CLOTHING

[^5]:    * Read at the meeting of the County of Huron Medical Association, Clinton, October 21st, I896.

[^6]:    * Paper presented at the New York State Medical Society.

[^7]:    * Editorial by Dr. Howley Burtenshaw in New York Polyciinic Journal.

[^8]:    " Dr. T. R. Evans, of Mt. Carbon, W. Va., writing in the American Journal of Oustetrics, draws a inarrowing picture of the effects of the bicycle saddle upon the plastic pelvis of the growing girl. 'Walking,' he says, 'is necessary to the proper moulding of the semi-cartilaginous bones of the girl's, pelvis in reference to natural child-bearing,' while a girl riding a bicycle makes a counter pressure of only four pounds against the weight of the head and trunk, balanced upon a too narrow and rigid surface. Dr. Evans further says:

[^9]:    
    Yours
    for Health

    The
    Salt River Valley
    of Arizoria and the various health resorts in New Mexico
    are unrivalled for the cure of chronis lung and throat diseases. Pure, dry air; an equable temperature; the right altitude; constant sunshine.

    Descriptive pamphlets issued by Passenker Department of Santa Fe Route, contain stich complete information relative to these regions as invalids need.

    The items of altitude, temperatme, humidity, hot springs, sanato iums cost of living, medical attendance, social advantares, cte., are concisely trented.

    Physicians are respectfully asked to place this literature in the hands of pationts whoscek a change of climate.

    Address G. T. Nicholson,
    CHICAGO
    G. P. A., A., T. \&S. F. By.
    

[^10]:    P.S. - I wish to draw the attention of all Medical men to the fact that I am Making a Specialty of Dispensing Doctors' Prescriptions, and that I use only the Purest Drugs. I can be reached any heur, day ol night, by door bell for telephone, when prescriptions can be dispensed and sent out proniptly.

[^11]:    N.B.-I respeotfally solicit the Patronage of the Aedical Profession.

[^12]:    Members of the profession who are visiting New York for a day or tro, will he heartily welcomed at the Post-Graduate School, and if they desire to attend the clinics, a visitors ticket good for two days will be
    furnished them on application to the Superintendent.

[^13]:    0000
    For information weritc to
    D. S. WAGSTAFF, General Northern Agent, DETROIT, MCH.

    WALDO, General Manager. D. G. EDWARDS, Pass. Traffic Manager

