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PERMANENTLY SLOW PULSE.—Brissaud describes at length in the *Presse Méd.* of November 21, a peculiar case of facial paralysis with genital and prostatic lesions of probable tuberculous etiology, which establishes once more the exclusively bulbar origin of a morbid permanently slow pulse. He mentions the fact that Napoleon had only forty-two pulsations to the minute, but this was normal and does not come under the head of bradysphyxia, as the morbid condition is called.

A TRAINING School for colored nurses is about to be established in Charleston, S.C. One was recently founded in New Orleans.

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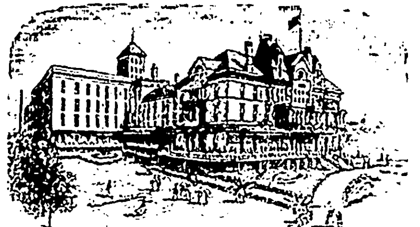

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Various Neuroses of the Larynx

In a "Note on Codeine," in the *Lancet*, Dr. James Braithwaite, of Leeds, says: "Codeine seems to have a special action upon the nerves of the larynx; hence it relieves a tickling cough better than any ordinary form of opium. One-half of a grain may be given half an hour before bedtime. It was in my own case that I first began to use codeine. For more than twenty years, usually once every winter, I have been seized with a spasmodic cough just before going to sleep, which becomes so severe that I am compelled to get up and sit by the fire. After an hour or two I return to bed and am free from the cough till the next winter. In other respects I enjoy good health. Many years ago I found that one-half grain of codeine, taken about two hours before bedtime, absolutely stops the attack and leaves no unpleasant effect the next morning. In cases of vomiting from almost any cause, one-quarter grain doses of codeine usually answer exceedingly well. In the milder forms of diarrhœa one-half to one grain of the drug usually answers most satisfactorily, and there are no unpleasant after-effects."

We find, however, that where there is great pain, the analgesic effect of codeine may not be sufficient, and a combination with antikamnia is required. It is best given in the form of a tablet, the proportions being 4¾ grains antikamnia and ¼ grain codeine. *Sometimes chronic neuroses may be cured* by breaking the continuity of the pain, for which purpose we have found this combination peculiarly suited.

Clinical reports in great numbers are being received from many sections of this country, which, while verifying Dr. Braithwaite's observations as to the value of codeine, place even a more exalted value upon the advisability of always combining it with antikamnia in treatment of any neuroses of the larynx, coughs, bronchial affections, excessive vomiting, milder forms of diarrhœa, as well as chronic neuroses; the therapeutical value of both being enhanced by combination. The tablets of "Antikamnia and Codeine," containing 4¾ grains antikamnia and ¼ grain codeine, meet the indications almost universally.—*The Laryngoscope.*

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A ONE-MAN MEDICAL FACULTY.—Dr. Dunglison writes in the *College and Clinical Record* that the late Prof. Robley Dunglison, of Jefferson Medical College, when invited by the representative of Thomas Jefferson, then rector of the University of Virginia, to leave England to assume the duties of a professorship—or rather a combination of professorships—in that school entered into a contract: "To teach to the best of his ability and with due diligence, anatomy, surgery, the history of the progress and theories of medicine, physiology, materia medica, and pharmacy." At the time he was invited to take upon himself this task he was but twenty-six years of age.

THE AMERICAN MEDICAL ASSOCIATION.—It is announced by the Committee of Arrangements for the fiftieth annual meeting of this society that, in addition to the regular order of exercises during the meeting, there will be, for a week preceding and a week succeeding the meeting, special courses and clinics given in the various teaching institutions of Philadelphia, without cost to visiting physicians. Information concerning these may be obtained from Dr. Edward Martin, 415 South Fifteenth Street, Philadelphia, chairman of the Committee on Hospital Courses.

A WORTHY CELEBRATION.—The *British Medical Journal* announces that the Lord Mayor elect, Alderman Faudel Phillips, proposes to signalize his mayoralty and commemorate the sixtieth anniversary of the Queen's reign by raising a national subscription to free the public hospitals from debt. It is estimated that the amount required will be from £800,000 to £1,000,000.

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One or more as required, on modern treatment of Diphtheria (Hospital for Infectious Diseases), Pelvimetry and Aseptic Midwifery (at Maternity Hospital), Mental Diseases (at Verdun Asylum), Medico Legal Autopsy Methods, etc., by Drs. J. C. Cameron, Wyatt, Johnston, Burgess, and others.

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For which a small extra fee will be charged to cover the cost of material, will begin in Operative Surgery, Clinical Bacteriology, Clinical Microscopy of Dejecta and Blood, Clinical Chemistry and Post Mortem Methods, by Professors Armstrong, Adami, Ruttan, Martin, *Wyatt Johnston* and others.

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On the Physiology of the Circulation and the Nervous System, Morbid Anatomy, Medical and Surgical Anatomy, Microscopical Methods, Urinalysis, Serum Therapy Serum Diagnosis of Typhoid, etc., by Drs. Wesley Mills, Ruttan, Wyatt Johnston, Martin, Elder, Morrow, Gunn, and others.

The above Course of Instruction is given wholly apart from the regular Lectures, Clinics, etc., for undergraduates in medicine.

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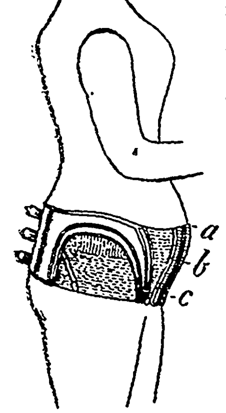

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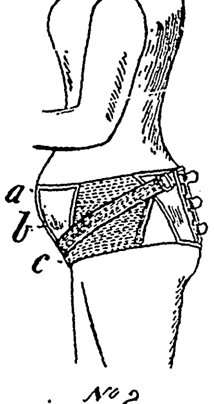

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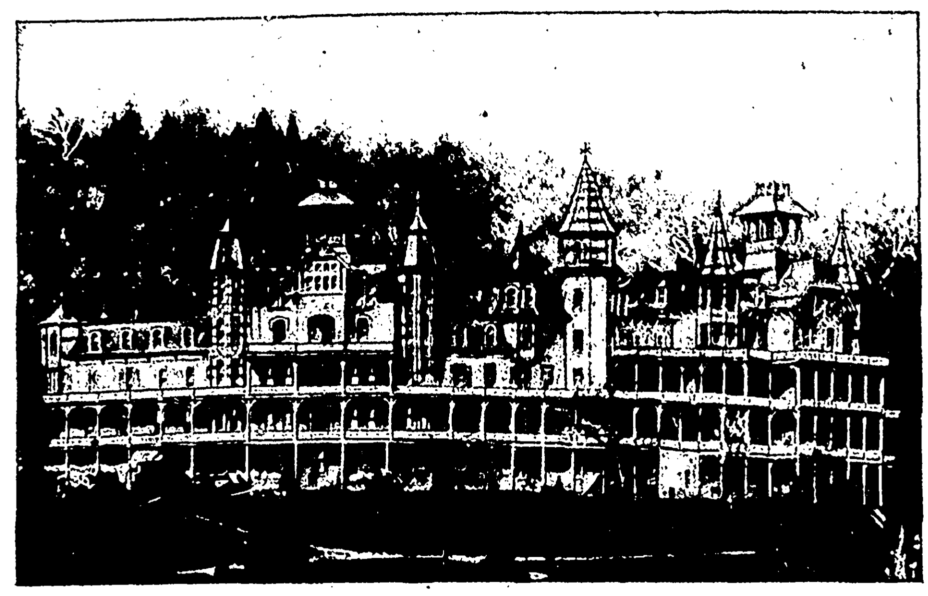

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THE VIRTUES OF SPINACH.—According to a lively French writer, Emile Gautier, in the *Petit Journal* (*Hom. World*), "two distinguished scientists—the German, Bunge, and the French veterinary surgeon, Gabriel Viaud—have clearly proved that spinach is the most precious of vegetables, on account of its medicinal and strengthing properties. . . . Long have been known the emollient and laxative virtues of spinach, owing probably to the salts of potash it contains. Nothing equal to it for scouring out the digestive tube, for expelling bile and slime, and as a consequence freshening the complexion. . . . For near a century it was well known that a dish of spinach was as good as a clyster. But it was not known that this was perhaps the least important of its physiological properties. . . . The richness of the blood, therefore the vigor of the subject, is directly proportional to the amount of iron it contains. This is why iron is the chief specific in all diseases which are attended by debility, depression, physiological misery—for example, in anæmia, chlorosis, pale complexion, neurasthenia—and also in protracted and tedious convalescence. But if iron is necessary to patients in order to secure their health, it is not less necessary to persons in good health who wish to preserve that health. It becomes exhausted after a time, just as the phosphates become ex-

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hausted in an over-cultivated soil. It is calculated that the loss of iron from the venous blood during its course amounts to 0.05 per diem. This loss must be made good if we do not wish any function to be impaired 'for want of manure'—that is to say, of iron. We have then to find iron in an assimilable form. That's the problem: Among the innumerable ferruginous preparations of the modern pharmacopœia, some are not absorbed and consequently are of no use, while others are only assimilated at the cost of blackening the teeth, or what is more serious, ruining the stomach. In fact, the remedy is worse than the disease. Hence it has occurred to M. Gabriel Viaud, already mentioned, to get from certain alimentary vegetables the iron—necessarily assimilable—contained in their tissues. . . Some vegetables contain a relatively large dose of iron. According to Boussingault, the proportion is 0.0074 of iron in 100 parts of French beans, 0.0083 in 100 parts of lentils, and spinach still more. The chemist Bunge (also alluded to above) has proved that spinach and yoke of egg are aliments proportionately richer in digestible and assimilable iron than all the most renowned 'martial' remedies. Hence it follows that a person subsisting entirely on yolk of eggs and spinach, with milk (which also contains iron) for his drink, would be internally fortified against all surprises—endowed with iron health, if I may so speak. M. Viaud goes still further. Imagining that spinach, like other vegetables and like man himself, sometimes requires a tonic, he has proposed to give it a preparatory course of iron. That is to say, he waters it with the salts of iron, and he soaks the stalks of the freshly cut leaves in rusty water, thoroughly communicating to them in a high degree the dynamogenic and galvanic virtues

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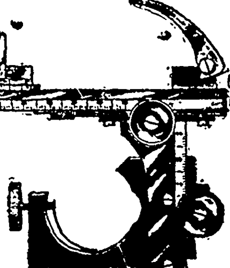

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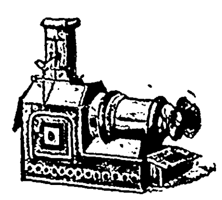

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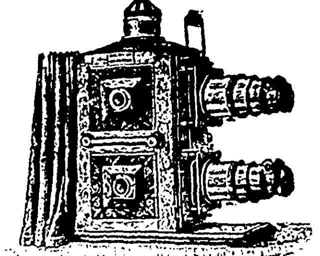

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ordinarily attributed to pharmaceutic preparations. Under the twofold forces of vegetative assimilation and of capillarity, iron, of which we may thus regulate the dose, just as we dose sugar mathematically by means of appropriate manures in the growing beet-root, iron fixes itself in the tissues of the vegetable and we absorb it unnoticed. Paradoxical as this may seem, this method is not illogical. It has, moreover, the merit of utilizing as nearly as possible the processes of nature, without changing anything in the habits or regimen of the patients."

BOILED MILK. — Practical and everyday experience, says the *Practitioner*, shows that when milk is boiled it is not only more easily digested, but that it has a nutritive value quite equal to the raw article. Experiments undertaken by Dr. C. Chamouin (*Canadian Lancet*), first with kittens and afterwards with infants, showed that after repeated and exhaustive trials the kittens fed on boiled milk were "twice again as fat" as those supplied with the raw milk, and that the boiling of milk is the means of preventing the loss of innumerable lives by gastro-intestinal disease. Not only so, but it is more easily digested, and agrees with a far greater percentage of cases than unboiled milk. There is ample authority for this view of the case, but certain points must be attended to, else the results will not be so favorable. First, all the vessels in which the milk is carried, boiled and afterwards kept, must be scrupulously clean. Nothing else but absolute freedom from dirt will suffice. Then it should never be boiled in an open vessel. This should have a close cover. Lastly, it need not be kept at 212° Fahr. for more than twenty minutes. This is sufficient to sterilize and cook it, and no further boiling is necessary.

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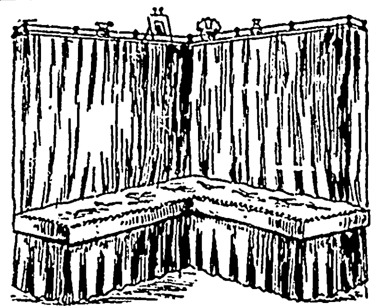

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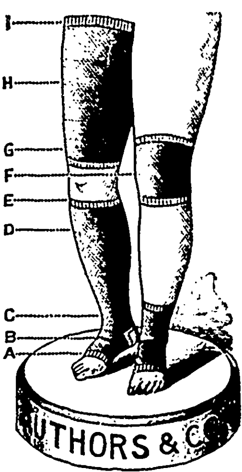

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SCIENTIFIC FOOD.—The "scientific food" theory has had a set back, having been "weighed in the balance and found wanting," says the *New York Tribune*. A detachment of fifty men of the United States army were sent out for a three days' march with "scientific rations" in their haversacks—little tablets of highly concentrated essences of coffee and bread—which, it was imagined, would be as serviceable as the bulkier drink and food in their usual form. At the end of the first day forty men were doubled up with cramps—their digestive organs could not assimilate the concentrated food, or were not satisfied with it, so the experiment was a failure. Man cannot exist on a chemical diet, for the plain reason that he is a man and has physical requirements and functions which demand food in other forms. Much may, of course, be done by science to improve food supply, to render it more wholesome, more efficient, perhaps more convenient and portable, but beyond such limits it can scarcely go. Bread is the "staff of life," and with meat, fruit, vegetables and other adjuncts, is apparently destined to remain so to the end of time.

THE GRAPE CURE.—According to Dr. I. C. Rosse, in the *Maryland Medical Journal*, the first physiological effect of grapes is the promotion of the secretions and excretions, without irritation of the intestinal canal, when the grapes selected are proper for the treatment and there is no contra-indication. Grapes are of great value in cases of irregular digestion. They also have an aphrodisiacal effect when taken in large quantities. The time of year at which the grape cure is most practicable at the Uval stations in Germany and Switzerland is from the middle of August to the last of October. The grapes

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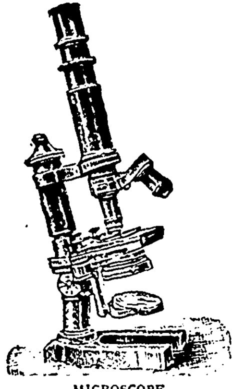

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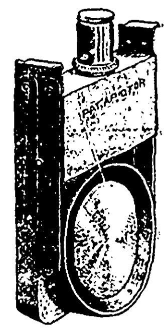

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No. 97.—Is a practice and property in village of 800 near Toronto. Finest country and pay, with one weak opposition, which is a great opening for any Methodist physician. He can do from $1,500 to $2,500 per year; cash, sure. Price of property only asked, which is $1,800. Terms, $650 cash; balance on mortgage. County of York.

No. 96.—$2,000 to $3,000 practice in village of 300 in *County of Leeds, with introduction*; road, stable, bed-room and office outfit; one opposition; very long drives; rich country; good pay. Price, $1,000. Terms, $600 cash; balance on time.

No. 94.—$2,500 practice and lovely home. Population 2,000 and weak opposition; full introduction. Price $4,000, which is less than cost of house; $1,500 cash; balance on time. An inviting opening.

No. 87.—Is a big practice in Hamilton which the doctor will hand over to purchaser of his home at really a bargain. Price $6,000; easy terms.

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are eaten preferably in the open air, before breakfast, and on an empty stomach, but if the stomach is weak, a small crust of bread may be taken with the first portion, between 7 and 8 in the morning. The second portion should be eaten one hour before dinner; the third in the afternoon, between 3 and 5 o'clock, two hours after dinner, and a fourth may, sometimes, be eaten just before bedtime. The grapes must be eaten fresh and ripe. They are to be crushed between the tongue and the palate, not the teeth. Beginning with from one to two pounds, the quantity is to be daily increased half a pound until the prescribed quantity is reached, and then slowly decreased. The treatment requires from one to six weeks, during which all the heavy and greasy dishes, also all food that causes flatulence, are to be interdicted. As a rule, the grapes especially suitable to bring about a therapeutic modification are those that contain a large percentage of grape sugar. When the stomach will not take the grapes by eating, the freshly expressed juice may be used. They may also be bottled by a special process (*procede Appert*), and employed at any time of the year. Externally, grapes have been used in the form of baths, which are provided at some of the European grape-cure stations for persons who want to be plunged into the mash of the grapes, while it is in a state of fermentation. These baths, used principally for rheumatism, were formerly recommended by Tissot in peripheral paralysis. The grape regimen, as an after-cure, is regarded in Germany as indispensable to the completion of a thermo-mineral treatment. Whether used as a principal or as an accessory resource of treatment, in order to be well tolerated and successful, it requires the concourse of adjuvant hygienic influences, which may

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lead to the supposition that success has been obtained rather by such influences than by the grapes themselves. Dr. Rosse, however, has obtained the happiest results, aside from climatological influence, in patients who lived in town and used the grapes methodically at home, while from Maine to California numerous persons, prompted to try the cure, after reading his first paper on the subject, have written him most encouraging results from its use.

RANVIER'S THEORY OF CICATRIZATION.—Some recent experiments on rabbits have confirmed Professor Ranvier's assertion a while ago, that the union of wounds is not due necessarily to a multiplication, a proliferation of the epithelial cells, but to the fact that they become hypertrophied and slide down into the V-shaped space left by the incision, and in this way the union of the two edges of the wound is effected. Incisions in the cornea of rabbits show the process in the most interesting manner, and owing to its simple structure the various steps in the process can be watched and closely followed. As he remarks, the deeper cells of the corneal epithelium are like soft elastic balls compressed in a sack. If the wall of the sack is cut open at any point the balls will escape. When an incision is made into the epithelium of the cornea the cells are at first pushed back by the entering knife and then slip back again into their places, seeking the lower level until the wound is entirely closed by them, while the adjacent tissue is correspondingly depleted. They frequently show a number of nuclei in the course of twenty-four hours. The *Bulletin Méd.* of January 6th contains a detailed description of these interesting experiments.

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A good and well made powder of pleasant flavour. CONTAINS NO TRACE OF ANY IMPURITY.—*The Lancet, London, Eng.*

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ORIGINAL ARTICLES.

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

THE RELATION OF THE PHYSICIAN TO THE PUBLIC.*

By A. MACLEAN, M.D., Sarnia, Ont.

If we were to judge public sentiment by the tone of the correspondence and the editorials of a portion of the newspaper press along with the amendments of the *Ontario Medical Act* which certain politicians have proposed during the last two sessions of the Provincial Legislature, we should come to the conclusion that the Act in question was exceedingly unpopular and deserved the heroic treatment which the promoters of the amendments in the shape of two very drastic bills contended it should receive. We should also come to the conclusion,

That there was at the same time a conflict and clashing of the interests of the medical profession and the interests of the general public.

That the profession had acquired undue privileges from the Legislature, and had strained, if not abused, those privileges in the administration of the Medical Act to an extent which was really a grievance demanding redress and removal by such amendment as the bills introduced into the Legislature were intended to secure.

With a view to enquiring candidly into the merits of the grievance which I assume exists honestly in the minds of those who complain, I have chosen the subject announced in the notices of this meeting as one possessing some interest to the members of the association, and I have endeavored to view it from various standpoints and to consider it as impartially as it was possible for me so to do. What is known as class legislation is looked upon with considerable jealousy by large sections of the people. Close corporations created by legislative enactment in recent times are generally restricted in their powers and scope. In more remote times

* Read at annual meeting of the Lambton County Medical Association.

the guilds which existed by virtue of charters from the Crown, granted in return for services or for valuable consideration to the sovereign or to the State, were generally monopolies in trade or commerce, and had no doubt a tendency to abuse the privileges which had been conceded to them. For example, the guilds or burghs in Scotland and England had stringent by-laws to the effect that no one who was not free of the borough or guild should be allowed to keep a shop for the sale of merchandise, or work at certain trades within the borough. Those exclusive privileges were finally withdrawn and abolished in Great Britain as being contrary to public policy in the tenth year of the reign of Her Gracious Majesty Queen Victoria.

The objection to the Medical Act can scarcely arise or be due to a disbelief in the efficacy of medicine or in the advantages of medical or surgical science, for such a disbelief has never been found to exist among mankind in any country or at any period of the world's history. The objection would appear rather to arise partly from the jealousy which naturally exists of corporate bodies or individuals enjoying at the expense of the community special privileges of a valuable kind, or privileges to which they are not entitled, or for which they do not give sufficiently valuable services or consideration in return. And probably the greatest objection urged against the Medical Act is to its restrictive and penal features, the power of preventing the practice of any of the branches of medical or surgical science or of obstetrics for hire, gain or hope of reward, by all who are not specially authorized by the College of Physicians and Surgeons.

That the Act excludes the most accomplished physicians and surgeons of other countries from engaging in practice and deprives citizens of their rights and privileges to receive treatment and medicine from those who would be the physicians of their choice, and therefore trenches upon their liberty as British subjects.

That the Act permits a tendency towards monopoly by excluding a large class of well qualified persons, and by exacting exorbitant fees from candidates presenting themselves for examination it gives power to restrict the supply of the service and thereby lessens competition and increases the charges which the public have to pay.

The question to be met by the defenders of the Act is therefore as to whether it is in its entirety, with the features to which exception is taken, an Act in the interest of the public generally, the repeal or material alteration of which would be a public injury—materially and morally. If the question can be answered in the affirmative, the defence should not be difficult; if in the negative it would be hopeless. And the Act should either be amended or eliminated from the statute book.

Very few sane persons will contend that medical science, medical knowledge and surgical skill have not been of immense benefit to the human race; all, I think, will admit that the better acquaintance with sanitary laws and of the causes which produce or favor the development and propagation of disease, combined with a knowledge of the best and most effectual means of preventing and curing diseases, has added much to the sum total of human comfort, has saved millions of lives, has lessened the death-rate and lengthened the average duration of human life in all civilized countries. Even the few persons who obstinately oppose compulsory vaccination must admit that the application of Jenner's discovery has materially lessened the ravages of a loathsome and fatal disease, and at this moment the grand discovery of Pasteur, of what would appear to be a beneficent law of nature, is being applied in India as an antidote to the fearful bubonic plague raging in that famine-stricken country.

I take it that there are very few people to be found at the present time who condemn the use of chloroform to mitigate the throes of parturition on the ground that it is an interference with the penalty pronounced upon the mother of mankind. I do not believe there are many who will seriously contend that the inducement of anæsthesia in surgical or obstetrical operations can with safety or impunity be entrusted to an inexperienced or ignorant person. In this respect public opinion is advancing; it may be slowly but at all events perceptibly.

The benefit of educated medical skill to the individual and to the community is almost universally recognized in every rank and condition of life. Both rich and poor avail themselves of its usefulness in the various ailments of mind and body which afflict the human family from the cradle to the grave. It is considered indispensable to fleets and armies in times of peace not less than in time of war. During the prevalence of epidemics or the approach of plagues, or the pestilence which walks in darkness, the eyes of the community rest upon the medical profession as the best and indeed the only human agency to which they can apply for advice and assistance.

And it has come at length to be cordially admitted that the great teacher of antiseptic surgery whose cautious and patient investigations and final triumph over hospital gangrene and sepsis in its varied forms—after having been honored and applauded by his professional brethren and by the aristocracy of science in every part of the globe—is at length, in the evening of his days, considered worthy to be called to a seat in the House of Lords, the second estate of the realm, many of whose order are no doubt men of the highest character and splendid intellectual attainments, and not a few are men distinguished for neither character nor ability. The event is chiefly remarkable as being the first instance in the history of the British Empire in which a member of the medical profession has had what is considered so great a social and political distinction conferred upon him as to be called to a seat in the august chamber of the Peers; and the first time to partially illustrate from a national standpoint the Scriptural statement that it is better to save life than to kill.

While the service and benefits of the medical profession are conceded by the majority of persons, there are some who believe and take the ground that it is an unwarranted restriction upon the liberty of a subject to prevent his treating, or his being treated, medicinally or surgically by whomsoever he may choose to employ or whosoever may choose to employ him for that purpose. They say they are quite agreeable that men or women should qualify themselves if they choose by long and severe courses of special study and even receive deplomas from schools or colleges certifying as to their proficiency, but that neither State or any corporate body empowered by the State have any right to dictate in a free country who should practise medicine any more than they should dictate who may teach or preach religious doctrine, or carry on any particular trade or commerce. And it is difficult for the ordinary citizen to see the justice or equity of a law which could prevent the most skilful physician in Great Britain, or Ireland, or the United States, or Germany from practising in Ontario without the special permit of the Medical Council. The lay mind would raise no serious objection to debarring the ignorant pretender or illiterate quack from practising or administering medicine, but would draw the line at the educated graduate of a school of high standing though outside of the provincial limit.

The answer to those objections may be briefly stated.

That it is the duty of the State to defend its citizens against frauds and imposters who, by false pretences, would obtain the money or property of honest people without giving value in return.

If it is proper to prohibit the coining or passing of counterfeit money, or obtaining goods under false pretences, it is surely desirable to defend the community against the ignorant pretender who trifles with human life by claiming to be able to cure all manner of diseases, more especially those which all the doctors have signally failed to benefit or cure. There are credulous, unsuspecting people in every community, not always those who are called ignorant people, for illiterate people are often shrewd and quick in detecting imposture; but people who have the reputation of being comparatively intelligent, and yet give credence to the assertions of any fakir who claims to be able to perform miraculous cures.

For wealthy self-conceited persons who feel competent to judge and act for themselves in anything which concerns them or their families, and who choose to allow themselves to be imposed upon, we are apt to have little sympathy. But we know from experience that the victims of the imposture of rapacious quacks are frequently persons weakened in mind and body by chronic incurable diseases which have been so diagnosed beyond any doubt, and yet the sufferers cling to the hope of a possible chance of obtaining a cure, and so listen to the charlatan who assures *him* or *her* that he is quite able to effect a cure, and who takes the money which the poor sufferers and their families often pinch themselves to procure.

People would smile at an individual who would undertake to repair or adjust the mechanism of a atch, or a steam engine, or an electrical apparatus, who had no acquaintance with the structure and arrangement and functions of the different parts of the mechanism. They would naturally say that such a person, if entrusted with the repair or adjustment of the mechanism, would disarrange it more than before, if not entirely destroy it. And yet the same person would entrust his own corporeal mechanism, or that of one of his family, to a pretender who has little or no acquaintance with the structure of the human body, or of the functions and relative positions of its vital organs either in health or disease.

There is, perhaps, no art or profession in which imposture can pass undetected for a time so readily as in the healing art—probably due to the fact that medicine is not yet an exact science, although approaching to that position with steady strides. But so long as there are cases in which the diagnosis can only be made clear by a post-mortem examination, so long will there be room for a difference of opinion as to prognosis and the most suitable treatment. And when doctors disagree, disciple and patients are free to follow any advice or opinion, however absurd.

We may repeat that it is quite competent for the State to guard and protect its citizens against imposture or fraud of any kind, to suppress whatever is a menace to lives or property—even if in so doing inconvenience may accrue to individuals whose pleasure or advantage must give way to secure the general good. This is the principle upon which human society is organized, whether tribal or national; every member must surrender a part of his natural liberty to enjoy the advantages which are common to all.

It is to prevent loss of life and property that rigid laws have been enacted regulating the requirements of ships carrying passengers and merchandise. The navigation laws of all civilized countries make it conditional upon being allowed to engage in the occupation of carrying passengers that hull, boilers and appointments shall be of a certain standard; that the officers shall be duly qualified to pass certain examinations as to their knowledge and efficiency.

The laws regulating pilotage in this Dominion are similar in principle; the pilot must be examined as to his practical knowledge of the management

of ships or boats, and his acquaintance with the coast or channel for which he undertakes to guide the vessel, and unless he possesses a license neither master, owner nor underwriter will employ him. First, second and third-class marine engineers have to show proof of long periods of apprenticeship and of ability to follow their calling before they can receive certificates or be employed in that capacity; so with masters and mates of vessels. Surely no one will contend that those laws have been enacted for the special benefit of captains and mates of vessels, or marine engineers or pilots; or that the safety of hulls and boilers have to be assured, or that a Plimsoll line painted on the ship is for the benefit of the owner of the craft, but rather, in any case, for the safeguarding of public life and property. There may be engineers or mariners well qualified to undertake the charge of boilers and navigation of ships, but without certificates from the proper authorities they cannot be employed in that capacity under certain penalties. Yet no one raises a hue and cry that this class of persons have a monopoly which should be broken down. There does not appear to be any system which will exclude ignorant and incompetent persons which will not exclude many who are tolerably competent and qualified in those respective occupations. Even the qualification and training required of public school teachers may, and no doubt does, exclude occasionally persons from being employed by trustees who may have had large experience and much theoretical knowledge of the profession of teaching. Yet by no other means than by a uniform test of competency could the authorities be assured that public money might fairly be distributed among the schools, and a school tax imposed upon the ratepayers for their support.

If it is necessary that the persons entrusted with the command of ships and the management of marine engines should be trained and skilled in their respective callings, and pass rigid examinations before being certified as competent to discharge their duties, who will say that the person who undertakes to practise medicine or surgery should be allowed to do so without giving proof of possessing skill and experience and training adequate to assuming such a responsibility. No one will contend that such knowledge is intuitive even to the greatest intellect, but must be, and can only be, acquired by a prolonged application of all the powers of mind to mastering the problems and sciences, and investigating the laws peculiar to the animal system and the agencies which cause a departure from its normal condition. The skill and knowledge of the pilot who steers the ship freighted with valuable lives or costly merchandise through an intricate and dangerous channel has not been gathered in a day. The courage, the dexterity, the marvellous skill which guides the surgeon's knife has not been gained in a single afternoon. But how are the public to judge of the ability of either unless by the credentials of a competent and impartial examiner or examining body?

The system which obtained in this Province previous to the passing of the Medical Act in 1874 did not secure a uniform standard of qualification in the practitioners who were admitted to practice by license from the Governor-General, as all graduates in medicine from any college or university in Her Majesty's dominions, as well as members of the Royal College of Physicians and Surgeons, London; those holding the commission of surgeon in the army or navy; and also those who passed an examination before the Medical Board, were all equally qualified for license; and while the majority might be, and probably were, men well qualified, it is natural to suppose that not a few were slightly deficient.

By the present system of requiring all to pass through the same ordeal, the qualified and competent have nothing to fear from an examination of

their knowledge necessary to an intelligent discharge of their duties. And the various teaching bodies and medical faculties who, in a certain sense, confederated and surrendered the privileges which their degrees conferred upon students, felt they had no longer to compete with lax examinations or inefficient teaching when all candidates were required to come up to the same standard of proficiency.

The Ontario Medical Act cannot be accused of lowering the standard of medical education. Nor can it be accused of letting grossly incompetent candidates loose upon an unsuspecting community to trifle with their valuable time. While the Act does not provide any means of teaching, it provides ample machinery for testing those who are taught. Its penal clauses may press hard upon a few who are possessed of the necessary knowledge and experience to practise intelligently and have been unable to comply with the requirements of the Act. But it is better that the few should suffer than that many should be imposed upon. The British Medical Act has been a failure in preventing quackery and imposture. It merely deprives unregistered practitioners of the privilege of suing and recovering pay for their services or of holding appointments in the public service, and makes it punishable by fine to pretend to be registered without being so. It does not, however, prevent anyone from practising who holds any kind of degree from a medical college, whether foreign or domestic ; and with the well-known ease with which such degrees can be procured it is easy to avoid being fined. And if cheap, spurious degrees can be procured by unlicensed practitioners in England, how easy it would be to procure them in this country ; and how ineffectual a test of medical knowledge would the mere possession of a degree be, when degrees are advertised for sale at from $5 to $10 apiece !

From what we have seen in some parts of the United States, where quackery and highly-qualified medical and surgical talent flourish side by side, I believe that the public would be at least the chief losers, in a pecuniary sense, if anyone, however unqualified, were free to practise without let or hindrance ; for, in addition to supporting the imposter or the incompetent, educated skill and ability would always command and receive a large share of patronage in repairing the mischief produced by ignorance and fraud.

I believe, therefore, it may be clearly shown that while the repeal or amendment of the Ontario Medical Act, indicated by the bills introduced in Parliament, would be annoying and unjust to the medical profession, the greatest injury and loss would be inflicted upon the general public.

It is the duty and should be the aim of every medical practitioner to do his utmost to increase the confidence of the public in the medical profession —confidence in its beneficence, confidence in its loyalty to the interests of humanity, confidence that its chief aim is to exterminate disease, to lengthen the duration of life and make society better and happier.

That it is not a trades union organization, or combined for the purpose of securing the greatest possible remuneration for its services ; that the laws which regulate the course of study, the amount of general and special knowledge which every person is required to possess who proposes to practise surgery, medicine or obstetrics, are laws essentially in the interests of society, to protect it against ignorance and fraud.

While it is the obvious duty of the medical man to perfect himself in the knowledge of his profession to the very utmost of his ability and opportunity —for it is mainly by his qualifications in this respect that he can fulfil the primary object for which he has received a license—it is equally his duty to so deport himself as a man and as a citizen that his sense of honor and his public spirit, if not a pattern to others, shall be at least beyond reproach.

It goes without saying that it behooves every member of the profession in his intercourse with his professional brethren to observe the spirit, if not the letter, of the code of ethics, for nothing is more calculated to bring the profession into disrepute than unseemly rivalries and jealousies among the members. Upon this phase of the question it is not necessary to enlarge.

I think it fair to concede that the Medical Council, the executive body entrusted with the administration of the Medical Act, have, all things considered, administered the trust wisely and well, both in the public interests and in the interests of medical science. While the standard of admission to membership of the College of Physicians and Surgeons has been gradually raised to keep pace with discovery and advancing knowledge, it has not been raised too high to admit a goodly number of eligible recruits to the medical army in this Province, well prepared to grapple successfully with disease in every form. So that the citizens of this country, in city, town, hamlet or rural neighborhood, are within easy reach and have no reason to complain of either the quantity or quality of the medical service at their command. Neither have they any ground of complaint in the line of exorbitant charges; for, excepting the fees required by a few specialists in certain classes of disease, the charges are exceedingly moderate, even to persons in affluent circumstances; and the instances are not numerous where medical practitioners in long and extensive practice accumulate anything beyond a mere competence. And to the credit of the profession be it spoken, much of its most anxious toil and service is rendered without remuneration, and not unfrequently without thanks. There is in the profession much of the spirit of unselfishness that was so marked a characteristic in that favorite ideal drawn by the pen of genius—William McLure of Drumtochty.

I have long held the opinion, which grows stronger with the passing years, that the Medical Council would give a decided impetus to the study of medical science in this Province and raise the average standard of knowledge to a higher plane than it has yet reached by awarding annually one or more scholarships to the candidates who showed the greatest talent and proficiency in certain subjects, the scholarships or fellowships to take the form of the expenses of a post-graduate course in one or other of the famous schools of Europe or America. I believe that such an application of a portion of the revenues of the Council—which by the estimates of the Finance Committee for 1896-7 amounts to the large sum of $30,000—would have a tendency to remove whatever suspicion exists in a portion of the public mind, and in the minds probably of students, that high fees and difficult examinations are intended as much to prevent overcrowding and competition in the profession as to secure a high standard of medical education.

I cannot help believing, also, that such a measure on the part of the Council, combined with a disposition to curtail its own ordinary expenses, would be popular with the profession and largely remove the reluctance which so many members have shown to pay the small annual assessment, and who do not believe in the wisdom of some of the business transactions of the Council during the past.

At all events, I feel persuaded that the results of extended study and investigation, encouraged in the manner which I have indicated, would greatly redound to the standing and dignity of the profession both at home and abroad.

CASES IN PRACTICE.—RADICAL CURE OF INGUINAL HERNIA IN CHILD FIVE AND A-HALF MONTHS OLD.

By ERNEST HALL, F.B.G.S., Victoria, B.C.

T. H., male twin, five and a-half months old, suffered for some weeks with irregularity of bowels and flatulency. The conditions becoming suddenly aggravated, medical aid was requested. The usual symptoms of strangulated inguinal hernia (right) were present; under chloroform the bowel was replaced, a truss applied, and the child's condition continued satisfactory until the morning of the fifth day, when the hernia reappeared. Taxis under anæsthesia having failed, the nurse was ordered to take the child at once to the Jubilee Hospital and prepare for operation. After disinfection and anæsthesia, taxis was again attempted without effect. The hernia being congenital the usual operation was performed. Bowel normal, omentum darkly stained with extravasated blood. Heavy catgut was used in ligation of upper end of sac and closure of the pillars; no drainage. Dressings changed every time child urinated, and removed in twelve days. Canal firmly closed; cicratrix dense.

It is interesting in passing, to note that this child presented elongated prepuce with adhesions, a condition so often associated with prolapse of the bowel and hernia. In fact so frequent is this association that there cannot but be a causative relation between the irritation and muscular reflexes of the former and the displacement of organs of the latter. We do not always find what we look for, but rarely will a case of hernia or prolapse of the bowel be found among our little male patients without the indications for circumcision being also present.

British Medical Association Column.

EDITORIAL NOTES—BRITISH MEDICAL ASSOCIATION—MONTREAL MEETING.

Since our last issue there has been much accomplished in connection with the forthcoming meeting, but most of the work has been of a nature that, while useful, does not lend itself to being chronicled.

Most of all has been Dr. Roddick's journey to England, and its result. Attention has already been called to the warm welcome received by the President-elect, and to the dinner which was given in his honor in London—a dinner presided over by the President of the Council of the Association, Dr. Saunby, and at which were present many of the old Presidents of the Association, together with Dr. Barnes, of Carlisle, the present President of the Association as a whole; Dr. Wilks, President of the Royal College of Physicians; Mr. Macnamara, senior Vice-president of the College of Surgeons; Mr. E. Tegart, Master of the Apothecaries' Society; Mr. Butlin, President of the Pathological Society. Dr. Roddick made an excellent campaigning speech, which was published in full in the *British Medical Journal* of January 23rd.

Evidently the fact that the President-elect ventured to cross the Atlantic in the middle of winter, simply to attend a Council meeting of the Association, made a great impression.

Until the list of officers is officially declared we cannot, unfortunately, make public the names of those appointed as readers of addresses and as presidents of the various sections. This much, however, we can say, that the Council at home is determined that there shall be eleven sections: Medicine, surgery, gynæcology and obstetrics, anatomy and physiology, pathology and bacteriology, pharmacology and therapeutics, public or state medicine, psychology, laryngology and otology, and dermatology, and that the list of presidents of these various sections will comprise the names of a greater number of distinguished men than has been the case at any previous meetings of the Association, the meetings in London itself perhaps excepted. If we accomplish nothing more, Dr. Roddick, by his efforts in obtaining these presidents, made it certain that the 1897 meeting of the Association must, in this respect, be most memorable.

We are glad to note that the other colonies of the Empire, even as far away as Australia, are showing great interest in the forthcoming meeting, and that letters received from Australia and the Cape, not to mention British possessions nearer home, such as Bermuda and Barbadoes, show that we are assured that the profession there will help to increase the success of the meeting.

It is a matter of genuine satisfaction in Montreal that the efforts made by the local Executive to render the meeting national rather than local, and to associate the leaders of the profession throughout the Dominion in the work of the Association, is being so highly appreciated.

No steps have as yet been taken to ask for subscriptions outside of Montreal, and unless the meeting attains enormous dimensions it is probable that nothing more will be attempted. All the same, it was with genuine pleasure that the announcement was received at the last meeting of the local Executive, that a leading member of the profession in Manitoba had offered no less than $100 in aid of the expenses of the meeting.

We are asked by the secretary of Museum Sub-Committee to state that although many applications for space in the museum building have been received, spaces for which tenders are asked will not be allotted until March 27th, in consequence of the necessary

length of time required for correspondence with British exhibitors.

With most hearty appreciation of the good-will shown by the great Canadian railways towards the meeting, we announce that the Canadian Pacific and Grand Trunk railways have agreed to extend to Canadian members of the Association the privileges granted to foreign members and to guests, namely, half rates. So considerable a concession has never been previously granted, and is a sign of the great national importance attached by the companies to the meeting in August. In other words, to quote the words of a joint-letter received from Dr. W. E. Davies, of the Grand Trunk, and Mr. D. McNicoll, of the Canadian Pacific: "It has been decided to extend to Canadian members of your Association the same basis of rates to and from the Convention, and excursion fares, as we have already advised you we are willing to extend to visiting members from over the sea." Practically every Canadian member can thus attend the meeting and return at the rate of a single fare for the journey and can join the excursions at the same rate.

Reports of Societies.

THE LAMBTON COUNTY ASSOCIATION.

The annual meeting of the Lambton County Association was held at Wyoming, February 10th, 1897.

Among those present were Drs. McAlpine, Petrolia; Sander, Inwood; Fraser, Wilkinson, MacLean and Logie, of Sarnia; Newell and Gibson, of Watford; Newell and Harvey, of Wyoming; Brown, of Camlachie; Dunfield, Hodgins and Calder, of Petrolia; Hodgins, of Oil Springs. President, Dr. Fraser, in the chair.

Minutes of former meeting read and confirmed. Drs Newell and Logie were appointed scrutineers for election of officers.

Moved by Dr. Dunfield, seconded by Dr. Harvey, that Dr. Newell be President for the ensuing year. Elected by acclamation.

Moved by Dr. Harvey, seconded by Dr. Fraser, that Dr. Dunfield be Vice-President. Elected by acclamation.

Moved by Dr. Wilkinson, seconded by Dr. Dunfield, that Dr. Logie be Secretary-Treasurer for ensuing year. Elected by acclamation.

The following Committee on Ethics was appointed: Drs. Fraser, Harvey and MacLean.

Dr. Beattie Nesbitt was elected an honorary member of the Lambton County Medical Association.

A letter of regret was received from Dr. Bray, of Chatham, who urged that the petition sent out by the Council should be signed by everyone to prevent hostile Patron legislation. Letters were likewise received from Dr. Ovens and Dr. Fisher. It was decided to have the May meeting in Petrolia, May 12th.

Dr. MacLean then read his paper on the relations of the physician and the public. See page 217.

Dr. Fraser agreed with all Dr. MacLean had said, and thought that all present were agreed that the standard of medical education should be raised as high as possible. As far as the question of lack of competition was concerned in a profession as overcrowded as ours, it is ridiculous. He thought it most humiliating that the profession should object to the fee of two dollars, which was possibly the lowest fee exacted by any trade or guild in the world.

Dr. Gibson approved the tone of Dr. MacLean's paper. He said there were many who objected to the red-tapism of the Boards of Health. They had had considerable trouble with diphtheria. He was satisfied that when the people considered the matter carefully they would tend to

endorse the profession rather than the patients.

Dr. Harvey fully endorsed Dr. MacLean's paper, and especially the suggestion to expend some of the Council fund in scholarships. In the matter of the local Boards of Health, they had had somewhat the same trouble as at Watford. As far as wiping out the Board of Health was concerned, he thought that what we would lose in science we would gain in dollars and cents.

Dr. Snider said that the gentleman, who was largely interested in the bill, certainly could not, from his personal experience, complain of exorbitant fees on the part of the doctor.

Dr. McAlpine complimented the author very highly on his paper as being a thorough exposition of the relations of the physician and the public. He said in regard to the Council that it is not the annual fee the profession objected to but the expenditure of the money. This objection stands out stronger now than then. There was another point which he wished to mention. He considered there was nothing so degrading as for members of the profession to in any way cast reflections on their confreres. He thought it would be far better if medical men would try to impress upon the public how medical men agree, rather than how they differ. The profession in their lodge practice were really to blame for the estimation in which their services were held. The Patrons saw that the profession were willing to treat patients at a dollar a year, and proposed that it should be made general.

Dr. Dunfield thought Dr. MacLean, of all others in the County of Lambton, was most fitted to write just such a paper. It was so seldom that these questions were fully and impassionately discussed that he should like the paper to appear in one of our medical journals. He said that the leader of the Patrons was determined to bring all medical men down to a standard of $1.25 a day. Well, he had not so much objection to this if the Government would only guarantee the $1.25. He thought that the Boards of Health should enforce the rules most stringently. In the old days if a case got well it was not diphtheria, if it died it was. He was the first to placard in diphtheria in Petrolia. When the patient saw the card the conversation that ensued was neither polite nor profitable. He believed that in antitoxin we had a great remedy for diphtheria. Dr. Wilkinson inquired of himself, when Dr. MacLean was reading, what was the origin of the attack on the profession. He thought it originated alone with the desire for cheap groceries. The Patrons of Industry in Kincardine passed a resolution that all they used should come in free, and what they sold should pay duty.

Dr. Dunfield moved, seconded by Dr. Logie, a vote of thanks to Dr. MacLean for his valuable paper, coupled with the request that it be published in the DOMINION MEDICAL MONTHLY.

The President in putting this resolution expressed his high appreciation of Dr. MacLean's paper, and said that he was an out and out supporter of the Council, and thought it had done a great work for the profession. He pointed out a slight historical inaccuracy in the paper, for which Dr. MacLean expressed his thanks. He said that at present in Michigan they were trying to pass an Act analogous to the Ontario Act of 1869.

A short discussion then rose on the treatment of diphtheria. Dr. Harvey said that he and Dr. Brodie had both attended a number of cases. One patient died before they were called in. There were nine cases in all in the family. They used antitoxin and all recovered. In one case they performed tracheotomy. Another case, a lady of thirty years of age, sent for Dr. Brodie. The patient was cyanosed. He assisted Dr. Brodie to perform tracheotomy

and gave a full dose of antitoxin. They were surprised to see the next day the amount of casts from the bronchial tubes. On the second day she coughed up more, the fragments of which formed a perfect cast of the larynx. Recovered perfectly. On question of President, said aptitoxin used was P., D. & Co.'s. He was satisfied that some of these were just such cases as in ordinary circumstances would die. He had seen good results within twenty-four hours after administration.

Dr. McAlpine said the discussion was apropos, as there was so much of it in the neighborhood. He thought there was no case in Petrolia carried about through neglect, as the Boards of Health had been very active. In regard to antitoxin, he had not in cases of diphtheritic croup had much benefit from it, but thought the remedy was not administered sufficiently early to satisfy him of its value. On question of Dr. Harvey, whether he had performed tracheotomy, he said that one patient died twelve hours after administration, the other five hours. Drs. Harvey and Fraser both agreed that the antitoxin had no chance.

Dr. Hodgins said that they had had considerable diphtheria and he had not had success in membranous croup where it was used so late that the patients did not get the benefit of it; that in many cases he thought tracheotomy should be done with the administration of antitoxin. He thought it was a most valuable remedy.

Dr. Dunfield had not used antitoxin in all cases which he thought were diphtheria. In one case of a child three years of age he used his regular treatment, but the disease was gaining ground. He telegraphed P., D. & Co. for antitoxin, and administered the first dose one thousand units in the evening, temperature 104°, pharynx full of membrane. Next day temperature lowered and membrane loosened. Repeated five hundred units and child further improved, membrane coming away; on third day child was sitting up. He had four or five cases of what he considered true diphtheritic croup. Used antitoxin and patient recovered perfectly. Antitoxin is a perfectly safe remedy injected deep in gluteal muscles. He would not hesitate in severe cases to inject, in a child of five years, one thousand units in the morning, and a second one thousand units at night. He thought the safest way was, when in doubt give antitoxin.

Dr. Wilkinson had had a limited experience with antitoxin. In six cases treated recently with antitoxin all recovered. Of the six previous cases four died. One case of the former he saw in consultation with an old physician who said from the appearance of the patient it would surely die. Yet the patient recovered perfectly under antitoxin. In this connection Dr. Wilkinson made a most valuable suggestion, and that was that there should be a Medical Health Officer for each county, paid by the Government or municipality, whose duty it should be to do all forms of health laboratory work for the district, and who should be the authoritative health officer.

Dr. MacLean was very much struck with Dr. Dunfield's suggestion that when in doubt administer antitoxin. He considered that most of the failures were from too late administration. He impressed the necessity of a scholarship and the stimulation of excellence among the rising generation of the profession; that an Osler was certainly a greater monument to the profession than a pile of buildings in Toronto.

Dr. Fraser said that from his experience in a number of cases in which he had used antitoxin he would disagree with Dr. McAlpine in the value of antitoxin. In all forms of diphtheria he had found it of great value. It was necessary to remember that in children this form often comes on very insidiously. He mentioned a couple of cases in which the anti-

toxin had apparently cleared up the diphtheria, yet the patients subsequently died of diphtheritic paralysis. He pointed out the liability to mixed forms of infection and quoted Dr. Welch of Johns Hopkins to the effect that all these forms of pathogenic bacteria affecting respiratory tract were liable to be found in the mouth in perfect health.

Dr. Gibson said that along one line they had quite an epidemic of diphtheria. In his earlier cases, some twelve or fifteen, he did not consider it necessary to use antitoxin. In using antitoxin, every case in which he used it the patient had been benefited. He used it both for its curative and immunizing effect. His general experience was that after giving a good full dose the temperature was reduced from two to three degrees in twelve hours. In one case lately he had not used antitoxin, but regretted it, as the case had not progressed so favorably and quickly as the others.

The President in closing the discussion said in reference to the differential diagnosis of diphtheritic membranous croup and laryngeal diphtheria that he thought there was no difference. He thought that in some cases we have mixed infections and could not lay the blame on the antitoxin. He had seen a little child who, under all ordinary circumstances, would have died, recover under antitoxin. He was certain under another treatment it would have died. He thanked the members for the honor they had done him.

CEPHELINE.—An alkaloid occurring with emetine in ipecacuanha, separated by Dr. Paul. It is superior to emetine as a pure emetic, 1/6 grain acting promptly within an hour, and the arterial pressure is not lowered so considerably. As an antidote, however, it is not equal to emetine, as its action is too slow.—*Medical Times and Hospital Gazette.*

Special Selections.

THE EXPEDIENCY OF THE CHANGE FROM MUNICIPAL TO COUNTY MEDICAL HEALTH OFFICERS, FOR PROMOTING EFFICIENCY AND ECONOMY IN THE PUBLIC HEALTH SERVICE.

By P. H. BRYCE, M.A., M.D., Secretary Provincial Board of Health of Ontario.

To the President and Members of the Association of Executive Health Officers of Ontario:

Gentlemen,—I propose in my paper to urge some reasons for giving our medical health officers a special training in chemistry and biology; but before doing so I shall make some remarks concerning a phase of the problem upon which the practical results of any facilities made for the training of health officers must necessarily depend. This, as may naturally be supposed, is the position and present status of the medical officer of health in Ontario.

It will be remembered that at the annual meeting of this Association held in Trenton in 1891, Dr. J. Coventry, Medical Health Officer of Windsor, read a paper on "Auxiliaries to the Health Office," and, amongst the many apt remarks therein made, I quote the following:

"At the other end of the line legislators have been most lavish with the executive powers conferred upon him (the M.H.O.); but at this point they have deserted him at the mercy of the municipal council to remunerate him for his services."

And again, "the medical health officer should become familiar with the methods of examining foods and other articles of daily use, and his salary might be made contingent on his ability to pass an examination, a

reasonable time being given him to enable him to fit himself for the work.

"All the foregoing anticipates an increase of the burdens of the most overburdened and unremunerated of public servants, and I will breathe easier if I am assured that there is not present in the audience a member of the Society for Prevention of Cruelty to Animals, otherwise I might be ordered under immediate arrest.

"If you will bear with me for a few minutes I will tell you a tale of unrequited love. I have for a long time felt a great curiosity to know just what the medical health officer received for his services, and how long a so-called Christian people would stand by and see him grow fat on the east wind.

"For the purpose of getting information on this subject, I recently addressed a circular to thirty-five cities and towns in the Dominion having a population of 5,000 and upwards. Replies from twenty-seven of these give medical health officers' salaries ranging from zero to $3,000:

1	gives............	$3,000
1	"	2,400
3	"	1,000
1	"	800
1	"	400
1	"	300
1	"	250
4	"	200
1	"	120
4	"	100
1	"	25
1	"	1
7	"	0

"The last of these, no doubt, are men who have discovered some pabulum other than bread and butter on which to sustain life in this cold, cold world.

"The aggregate sum paid to medical health officers is $11,496. The inspectors fare a little better. There are more of them. Six manage to maintain the dignity of their office on no salary. The whole sum paid inspectors is $25,326. But it is the secretary who is the Crœsus of the health office. This officer has actually absorbed $2,725 of the people's money, and nineteen of them 'cut no figure at all' on pay day.

"The population on which these figures are based gives a total of 809,061, representing an assessment of $418,160,672. This would show five cents per capita, and one-tenth of a mill on assessment to sustain our present municipal health organization. If the public ever blushed, this statement should make its face scarlet."

These statistics sufficiently illustrate the situation as it existed in 1891, and which has not, so far as I am aware, improved since in any notable degree in the matter of increased grants as salaries to medical health officers, although a general improvement in the character of the work of local Boards can, I think, on the whole be seen.

Comparison of the health work of our municipalities with that of other branches of municipal work during the last ten years, may, I think, be made, and I believe it may be fairly asserted that progress in it is as great as in other directions; but we have only to examine into the details of the work in any except our cities and perhaps larger towns in order to see how little exact health work is done.

Let me summarize the work of a medical health officer as it exists in England and elsewhere.

(*a*) To inform himself respecting all influences affecting or threatening to injuriously affect the public health within the district.

(*b*) Ascertain causes and distribution of diseases actually existing within district.

(*c*) He shall inspect periodically, and as emergency may require, his whole district.

(*d*) He shall advise the local Board on all matters and supply data for prosecution wherever nuisances exist.

(*e*) Shall advise in the framing and execution of by-laws.

(*f*) On being informed of infectious disease, he shall investigate and take such action as shall limit its spread.

(*g*) He shall superintend the Inspector of Nuisances.

(*h*) He shall inspect meat, fish, vegetables, etc., personally if the occasion demands it.

(*i*) He shall examine into all classes of offensive trades within the district, as factories, dairies, cow-sheds, milk-shops.

(*j*) He shall report of all matters from time to time, giving such returns of outbreaks and causes as is possible.

(*k*) He shall report to the Central Board any dangerous outbreak, and annually on all matters, including schools.

In France the district Councils of Hygiene are charged in addition to such as above, specifically:

(1) With powers for formulating plans for the suppression of epizootic diseases of animals.

(2) The spread of vaccination.

(3) The care of the indigent sick.

(4) Local inspection of hospitals, asylums, prisons, etc.

(5) Construction of public buildings, as schools, prisons, reservoirs, sewers, cemeteries.

(6) Obtain statistics of mortality, morbidity, topographical conditions, etc.

This is certainly a very liberal bill of fare for a local health authority, and one cannot fail to think that if such matters demand public attention at all, they will demand not only all the time, but all the energies and intelligence of a medical officer of health with accomplishments of no mean order.

If we group the work we see that it includes:

1. General inspection. With regard to drainage, an officer must know accurately about soils and ground water; with regard to mill-ponds, standing water, and organic deposits and refuse, he must be in a position to positively state what conditions are and have been proved, scientifically, positively injurious and give his reasons.

2. Suppression of contagious disease. He must have method and nerve enough to see that dangerous contagious diseases are reported to him, whether of men or of animals, and have so thoroughly the confidence of his medical confreres and the public as to his disinterestedness, scientific attainments and practical abilities, as that all excuse from any standpoint for oversight on the part of practitioners or public will be removed. To dwell on this for a moment, we see that his work demands (*a*) medical experience; (*b*) training and skill to diagnose in the laboratory by microscope, bacteriological cultures and chemical examinations, the special cause and source of diseases, principally the following:—Diphtheria, typhoid, tuberculosis, actinomycosis, trichina, cysticercus (measles in hogs), hog chlorea, ptomaines in cases of poisoning from cheese, meat, milk, etc. It is needless to say that this work not only demands the highest skill, but it also demands laboratory facilities. (*c*) The isolation, and, where necessary, the removal of infectious disease to hospitals, the destruction of infected animals, and the disinfection of infected centres, whether houses, schools, workshops, stables, etc. This necessarily demands isolation hospitals, and sufficient assistance by inspectors to have work systematically carried out.

3. Inspection of foods, noxious trades, etc. This work, both difficult and constant, demands that slaughter-houses and their surroundings, cheese factories, cow byres, piggeries, knackeries, and other specially noxious trades be kept under the strictest supervision. The medical health officer must know, and have inspectors who know, diseased meat, and how diseased, must be able to accurately state what foods are injurious to milch cows, what stable surroundings are good and what bad, and be able to diagnose diseased conditions in cows.

He must be fully informed on the most recent appliances for testing milk as to quality, butter-fat, and its general fitness for children's food, and must know what to suggest for the reduction to a minimum of the effects arising from noxious trades.

4. Inspection of schools and public buildings as to dampness, plumbing, heating, ventilation, overcrowding, lighting, etc.

5. The regular supervision of the public water supply of the district, and the control of drains, sewers, as regards the direct effects upon health, from sewer-gas in streets, etc., and the disposal of excreta.

Enough then has been indicated to show that the work to be done is extended and of a most exacting character. At present we have this work distributed over the municipalities as given in the following table:

1894.—Table showing number of Boards of Health and health officers to population in Ontario:

Total organized municipalities in Province.	Total number of Boards reported organized.	Total M. H. Officers.	Total Sanitary Inspectors.	Total population.	Rates of population to number of M. H. Officers.
743	425	374	205	2,167,460	1 to every 5,795

Returns from reports received in 1894:

—	Total number of Boards reported organized.	Total M. H. Officers.	Total Sanitary Inspectors.	Total population.	Rates of population to number of M. H. Officers.
Cities	9	9	....	384,303	1 to every 38,700
Towns	58	50	....	189,190	1 " 3,780
Villages	87	87	....	81,431	1 " 1,000
Townships..	271	235	....	663,494	1 " 2,822

In England, by the Local Government Act of 1888, the population necessary for a county council (health district) was 50,000; but as the area of England, compared with that of the organized municipalities in Ontario is 32,554,880 to 23,154,551 acres in Ontario, while the population is 29,000,000 compared with 2,167,460. in Ontario, it is plain that the extent of area must, in a large degree limit the extent of population for which a medical health officer's services would be available. That 20,000 of a population seems to be a practical working limit in Ontario is seen in the following comparison:

Members of House of Assembly for Ontario numbered in 1893—94 in population of 2,167,460.

Inspectors of schools:

Cities separate from counties, 8 in 358,972 of population.

Towns, 7 in 35,694 of population.

Counties (less cities and towns), 60 in 1,772,794 of population.

Included in their respective county inspectorates are Brantford, Belleville, Stratford, St. Catharines and Windsor. Excluded from county inspectorates are Chatham, Forest, Collingwood, Oshawa, Peterboro', Waterloo, Welland and Niagara Falls.

I find that in 1894 there was expended upon our educational system $5,233,115; this includes $89,490 as salaries to county school inspectors.

Assuming then that we have some 550 organized townships in Ontario, it would mean that there are now nominally in office some 400 medical health officers in the Province in 750 municipalities. We have seen to what extent the public moneys are expended in matters of education, and by comparison with the following we shall be able to estimate what is spent specifically in an average county on public health work.

Under the heading, Local Board of Health, in the municipal returns made to the Department of Agriculture for the year 1893, from two of our oldest and most prosperous counties, we have the following:

The expenditure under local Boards of Health in the county of Oxford varied:

In 11 townships, from 0 to $97; total, $481.

In towns and villages, from $5.97 to $481.

In the county of Grey it varied:

In 16 townships, from 0 in 4 townships to $75, with a total of $286.

In towns and villages, from $6 to $344.

Roughly calculated, therefore, we may say, that, excepting the large cities, the total expenditure in the counties of the Province would amount, on the above basis, to some $50,000 per year, to which we may add some $2,500,000, assuming there are 2,500 physicians in the Province, and that they receive $1,000 per year.

Now, these figures mean either that almost no attention is given to public health in these districts, or that the amount of money thus expended have not been returned under the proper heading. As a matter of fact, both explanations are correct. With regard to the returns, I find in those for one of our largest villages, which I visited in 1894, on account of a serious outbreak of diphtheria, that the return under local Board was but $24, while under poor relief were charged sums for diphtheria, nurses, etc., amounting to $121.95. This will doubtless explain how in many places the amounts returned for public health work are too small.

When, however, I find $5 for the sanitary inspector and $5 for the medical health officer, in examining details of expenditure in a village, it must be concluded that the public health of such municipalities has been most satisfactory, or that local Boards of Health in many instances exist only in name. When I find such amounts set down, however, for townships where correspondence shows public funerals to have taken place in cases of diphtheria, and where schools finally were closed on account of the disease, it would seem a fair inference that, from the public health standpoint, improvements are not only possible but seem to be greatly needed.

From the figures and comparisons which have been made, it must be very apparent that, while the number of medical health officers in the Province is nominally very considerable, under existing conditions they are not in a position to effectively accomplish the work, the extended and scientific character of which has been briefly indicated. It is probable, however, that were the remuneration received by them sufficient to secure their active services, and the municipal grant enough to carry on their work, difficulties would arise, owing to the uncertain tenure of office under the present methods of appointment, which would seriously affect their independence of action. According to the usual interpretation of section 47 of the Health Act, the medical health officer is appointed annually at the time of the appointment of the local Board of Health. While it is difficult to frame a clause which would make such an appointment independent of the prejudices which too frequently affect the status of any official who has served under a council, succeeded by another hostile to it, especially politically, nevertheless it does seem possible that some court of reference should be appointed, such as a standing committee of this association, which might be called in instances where temporary feeling was liable to injuriously affect the independent action of an efficient officer. This might be supplemented by legislation to the effect that some per capita basis of remuneration of medical health officers be established, preventing the possibility of a hostile council reducing the salary of an officer to thereby force his resignation. A provision at present exists in the School Act whereby a county inspector cannot be dismissed by a county council without the assent of the Department of Education, without the danger of a withdrawal of the governmental portion of his salary.

We may now very properly discuss the desirability and possibility of a change in the appointment of medical

health officers, which has been provided for by the following amendment to the Public Health Act, contained in the Ontario statutes of 1891 :—

"Whereas it may be desirable, in the interests of the public health, that there should be instituted a system of health inspection more thorough than is at present practicable, owing to the expense attendant upon the appointment of an active and efficient medical health officer for every municipality, any county council may appoint one or more county or district medical health officers.

"Where a county council appoints a county health officer or officers, the powers now possessed by medical health officers within the county or portion of a county, for which such county health officer is appointed, shall be deemed to be thereby transferred to and vested in such county health officer or officers, and all sanitary inspectors within the jurisdiction to be defined in the by-law appointing a county health officer shall be subject to his direction and control."

From this it will be seen that while the change is purely voluntary on the part of the several municipalities in any county, its insertion in the Act is upon the assumption that public health work can in some, if not all, instances be made more efficient by transferring to one medical health officer the public health work of a number of municipalities. Assuming that a number of the larger cities be excepted from the general operation of the clause, as is the case now where a number of city and town inspectors of schools exist, we would say that, with the present political division of the Province, we have roughly the unit supplied of 20,000 of a population as a possible health district. At present, even with the paltry sums paid to medical health officers in the municipalities, we have a total expenditure in some counties equal to what would be a minimum salary for a medical health officer who would devote all his time and energies to public health work. It is to be regretted that all purely scientific work is at present so inadequately remunerated ; but I think we may, from experience, find grounds for the belief that a sufficient number of young, active and trained applicants for such positions could be found willing to accept opportunities as county or district medical health officers, with the hope of their salary being gradually supplemented, if the primary condition of permanency in the position were applied. Allow me to briefly summarize the advantages of such a change.

1. The position would be permanent during good conduct and efficiency.

2. The devotion of all his time to the studies of the position would serve largely to remove one of the greatest of existing difficulties to effective action on the part of medical health officers, owing to their being in general practice, and therefore professional rivals to other practitioners, who are naturally sensitive to interference on his part.

3. By being engaged in investigations in a laboratory equipped for the purpose, he would be brought into friendly intimacy with local practitioners, whose time and opportunities are too limited to enable them to satisfactorily prosecute microscopic, chemical and bacteriological work.

4. By being within easy reach of all parts of his district he could, without delay or expense, have sent to him specimens of diseased tissue, membrane, sputum, suspected water, milk, etc., and promptly determine the true nature of the disease, or its cause.

5. His laboratory would become a local depot of supply for vaccine, antitoxin, culture tubes, disinfectants, etc., and the means for their prompt and efficient use.

6. He would be within telephone call or an hour or two's ride of the several municipal sanitary inspectors,

who would be placed under his authority, and prompt action in any outbreak of disease would be possible.

7. He would systematically attend to and practise vaccination in all the schools of his district, and be in a position to attend the occasional cases of small-pox, which from time to time occur, to the great relief of the local practitioners, and the notable saving of expense, such as during the past year amounted occasionally to $20 per diem for attendance upon a single case.

8. He would gradually accumulate data for the preparation of a sanitary topographical map of the Province, in which the character of the soil, the drainage areas, the height above sea-level, the mill-ponds, and much other invaluable information, from the sanitary standpoint, would be supplied.

9. He would, through his inspectors, be able to obtain an accurate registration of mortality and morbidity statistics, and thus supply the only means by which we shall ever be able to adequately interpret local conditions in their effect upon the public health.

I am afraid to add further details, for fear that we shall not be able to find anyone to apply for such onerous positions: but surely enough have been supplied to illustrate what I believe the situation demands, and the many good reasons why this Association should lend all its influence to the attainment of the end in view.

Where, it may be asked, shall we now find men fitted to do this work, or schools provided with means for their instruction and training? On enquiry, I am led to the conclusion that none of our medical schools are supplying such training as would be required by such positions; but, in justice to them, it must be stated that there have not hitherto been any such positions to look forward to which young men could profitably devote their time in preparing for.

I learn that in two, at any rate, of the medical schools in Toronto, short courses of bacteriology are given; and I have little doubt but that special chemical courses in water analysis, etc., would be instituted if demanded. We have, in addition, in the provincial laboratory, a centre of work which could readily be made available for giving practical direction to such courses of instruction.

Remembering the starting point of our public health work, some thirteen years ago, and the achievements which, even under the imperfect conditions which we all have been familiar with, have been attained, I do not believe you will think me too sanguine if I look upon this work as an accomplished fact within this the second decade of organized public health work. Most here are more familiar than myself with the crude character of the educational system of the Province prior to our present system of county inspection and organization under a provincial department, and this, too, in a matter as old as the centuries. Have we not a right to expect not only that the public will assent to but demand that public funds, whether provincial or municipal, shall be devoted to the adeqate development of the practical means for controlling so much that is preventable in disease, of accurately diagnosing its character when present, and of supplying, at the earliest moment, the most scientific agencies for the successful treatment of it.

I believe this Association has a good right to look upon itself both as an educator and guide of public thought in health matters, and I would conclude by suggesting that in this matter we take the King's advice in "All's well that ends well."

"Let's take the instant by the forward top;
For we are old, and on our quick'st decrees
Th' inaudible and noiseless foot of time
Steals ere we can effect them."

MIDWIVES REGISTRATION BILL.*

MEMORANDUM.

The chief object of this bill is to enable the public, and especially such of the poor as are in the habit of employing midwives, to distinguish between those midwives who have been trained and have given evidence of being competent for their duties, and those who have not.

This bill provides that henceforth no woman shall call herself a widwife unless she has been placed on the midwives register, and that in order to be placed on the register she must produce evidence either (1) of having undergone a proper training and subsequent examination, or (2) of having (at the time of the passing of the bill) been in *bona fide* practice as a midwife for a specified number of years. It is not proposed to make it illegal for a friendly neighbor to render assistance to a lying-in woman in an emergency.

A system of examination and certification by various voluntary bodies has been established for several years in the chief centres of population. It is proposed to place the duties hitherto undertaken by these voluntary bodies in the hands of a duly constituted Board, acting under State control. It is further proposed to make provision for the efficient regulation and supervision of the practice of midwives under rules approved by the General Medical Council, and for the exercise of discipline amongst those who are enrolled upon the register.

See Reports of Select Committee on Midwives Registration, together with the proceedings of the Committee, Minutes of Evidence, Appendix and Index, ordered by the House of Commons to be printed June 17th, 1892, and August 8th, 1893.

ARRANGEMENT OF CLAUSES.

1. Short title.
2. Definitions.
3. Registration.
4. Provision for existing midwives.
5. Constitution and duties of the Midwives Board.
6. Fees and expenses.
7. Appointment of Registrar.
8. Supplemental provision as to Registrar.
9. Local supervision of midwives.
10. Notice of death of a midwife.
11. Penalty for obtaining registration by false representation.
12. Penalty for wilful falsification of register.
13. Prosecution of offences.
14. Appeal.
15. Act not to apply to medical practitioners.
16. Extent of Act.

A BILL FOR THE REGISTRATION OF MIDWIVES.

Be it enacted by the Queen's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Short Title.*—This Act may for all purposes be cited as the Midwives Registration Act, 1897.

2. *Definitions.*—In this Act

The term "midwife" means a woman who undertakes to attend cases of labor in accordance with the regulations to be laid down under this Act.

"Midwives register" means a register of midwives kept in pursuance of this Act.

"Midwives Board" means the Board constituted under this Act for the purpose of carrying out the provisions of this Act.

3. *Registration.*—(1) From and after the first day of January one thousand eight hundred and ninety ——, no woman shall be entitled to take or use the name or title of

* From *British Medical Journal.*

midwife (either alone or in combination with any other word or words), or any name, title, addition, or description implying that she is registered under this Act, or is specially qualified to act as a midwife unless she be registered under this Act.

(2) Any person who, after the first day of January one thousand eight hundred and ninety——, not being registered under this Act, shall take or use the name of midwife or any other such name, title, addition, or description as aforesaid, shall be liable on summary conviction to a fine not exceeding five pounds.

(3) No woman shall be placed on the midwives register until she shall have complied with the rules and regulations to be laid down in pursuance of the terms of this Act.

(4) The certificate of registration under this Act shall not confer upon any woman any right or title to be registered under the Medical Acts in respect of such certificate, or to assume any name, title, or designation implying that she is by law recognized as a licentiate or practitioner in medicine or surgery, or that she is qualified to grant any medical certificate, or any certificate of the cause of death.

4. *Provision for Existing Midwives.*—Any woman who, before the expiration of two years from the passing of this Act, claims to be registered under this Act, shall be so registered provided she produces evidence, satisfactory to the Midwives Board, that at the passing of this Act she has either been in *bona fide* practice as a midwife for a period of two years, or holds a certificate in midwifery from the Royal College of Physicians of Ireland, or from the Obstetrical Society of London, or such other certificate as may be approved by the Board.

5. *Constitution and Duties of the Midwives Board.*—On the passing of this Act a Midwives Board shall be constituted by the General Medical Council, and shall consist

(1) Of twelve registered medical practitioners, three to be appointed by the Royal College of Physicians of London, three by the Royal College of Surgeons of England, three by the Society of Apothecaries, and three by the Incorporated Midwives Institute, and

(2) Of six persons to be appointed for terms of three years by the Lord President of the Council.

One-third of the elected members of the Board shall annually retire, but shall be eligible for re-election after the lapse of one year. The duties of the Midwives Board shall be as follows:

(*a*) To make rules for regulating the conditions of admission to the register, and the mode of conducting the qualifying examinations.

(*b*) To appoint examiners.

(*c*) To decide upon the places where, and the time when, examinations shall be held.

(*d*) To frame for approval by the General Medical Council rules regulating the admission to the register of women already in *bona fide* practice as midwives at the passing of this Act.

(*e*) To prepare and publish annually a register of midwives.

(*f*) To frame for approval by the General Medical Council rules for regulating, supervising, and restricting within due limits the practice of midwives.

(*g*) To decide upon the conditions under which a midwife may be suspended from practice.

(*h*) To decide upon the removal from the register of the name of any midwife for disobeying the rules and regulations from time to time laid down under this Act by the Midwives Board or for other misconduct, and to decide upon the restoration to the register of the name of any midwife so removed.

(*i*) And, generally to do, subject to the approval of the General Medical

Council, any other duty which may be necessary for the due and proper carrying out of the provision of this Act.

6. *Fees and Expenses.*—There shall be payable by every woman presenting herself for examination or registration such fees as the Midwives Board may, with the approval of the General Medical Council, from time to time determine. All fees paid by midwives or by candidates for examination shall be paid to the Midwives Board. The said Board shall devote such fees to the payment of expenses connected with examination and registration, and to the general expenses of the Board. Should these fees not equal the expenditure of the Midwives Board, the deficiency shall be supplied from the respective local county funds, in proportion to the number of registered midwives resident in the county.

7. *Appointment of Registrar.*—The Midwives Board shall appoint a Registrar who shall be charged with the custody of the register, and shall also act as Secretary to the Board.

8. *Supplemental Provision as to Register.*—A copy of the midwives register for the time being shall be evidence in all courts that the women therein specified are registered according to the provisions of this Act; and the absence of the name of any woman from such copy shall be evidence, until the contrary be made to appear, that such woman is not registered according to the provisions of this Act. Provided always, that in the case of any woman whose name does not appear in such copy, a certificate under the hand of the Registrar of the entry of the name of such woman on the register, shall be evidence that such woman is registered under the provisions of this Act.

9. *Local Supervision of Midwives.*—Every local sanitary authority throughout England and Wales shall, on the passing of this Act, appoint its medical officer of health or other registered medical practitioner or practitioners, as the local supervising authority over midwives in the sanitary district. It shall be the duty of the local supervising authority:

(1) To exercise general supervision over all midwives practising within the sanitary district in accordance with the rules to be laid down under the provisions of this Act.

(2) To investigate charges of malpractice, negligence, or misconduct on the part of any midwife practising within his district, and, if he consider that a *prima facie* case is established, to report the same to the Midwives Board.

(3) To report at once to the Midwives Board the name of any midwife practising in his district convicted of a misdemeanor or felony.

(4) To keep a current copy of the midwives register, accessible at all reasonable times for public inspection.

(5) To satisfy himself, in the case of any midwife practising or desiring to practise within his district, as to the validity of her claim to be placed on the register.

10. *Notice of Death of a Midwife.*—The local supervising authority shall at once report to the Midwives Board the death of any midwife, or any change in the name or address of any midwife in his district, so that the necessary alteration may be made in the register.

11. *Penalty for Obtaining Registration by False Representation.*—Any woman who procures or attempts to procure herself to be placed on the register of midwives by making or producing, or causing to be made or produced, any false or fraudulent declaration, certificate, or representation, either in writing or otherwise, and any person assisting her therein, shall be deemed guilty of a misdemeanor, and shall on conviction thereof be liable to a fine not exceeding five pounds, or to be imprisoned, with or without hard labor, for any term not exceeding two months.

12. *Penalty for Wilful Falsification of Register.*—Any person appointed to keep the register of midwives, wilfully making or causing to be made any falsification in any matter relating to the register of midwives shall be deemed guilty of a misdemeanor and shall be liable to a fine not exceeding ten pounds, or to be imprisoned with or without hard labor for any term not exceeding three months.

13. *Prosecution of Offences.*—Any offences under this Act punishable on summary prosecution may be prosecuted, and any fine under this Act recoverable on summary conviction may be recovered, in manner provided by the Summary Jurisdiction Acts.

The expenses of any prosecution shall be defrayed out of the county fund of the district where the prosecution takes place.

14. *Appeal.*—(1) An appeal shall be allowed to the Privy Council should any disagreement arise between the General Medical Council and the Midwives Board respecting the carrying out of the provisions of the Act, or of any of them.

(2) Where any woman deems herself aggrieved by any order, conviction, judgment, or determination of or by any matter or thing done under this Act by any court of summary jurisdiction, such woman may appeal therefrom to any Court of Quarter Sessions.

15. *Act not to Apply to Medical Practitioners.*—Nothing in this Act respecting midwives shall apply to legally-qualified medical practitioners.

16. *Extent of Act.*—This Act shall not extend to Scotland or Ireland.

[The bill is backed by Mr. Tatton Egerton, Mr. Schwann, Sir Frederick FitzWygram, Mr. Skewes-Cox, Mr. Bonsor, Mr. Fenwick, Sir James Woodhouse, Mr. Harrison, Mr. John Wilson, Mr. Graham, Mr. Bill and Mr. Heywood Johnstone, and was ordered by the House of Commons to be printed, February 9th, 1897].

THE ACTIVE PRINCIPLE OF INDIAN HEMP.

In the *Lancet* for January 23rd, there is an article on this subject by Mr. C. R. Marshall, who remarks that the want of uniformity in the preparations of Indian hemp has so often led to serious consequences in practice that many practitioners have discarded the drug as worthless or dangerous. Others, finding it of benefit in certain diseases, have expressed a hope that some means of standardizing the preparations would be discovered or the active principle of the plant isolated. Of the two conditions, the isolation of the active ingredient is the more likely to lead to uniform results in treatment. Quite recently such a pure, active product has been obtained, and the mystery which has hitherto enveloped Indian hemp seems in a fair way to being cleared up. Many points still need investigation, the most important from a medical point of view being the gradual change which cannabis compounds undergo by keeping. Both by practical experience and by scientific experiment it has been shown that the active ingredient gradually loses its power, and at present we know of no means of preventing this. A very interesting case of this loss of activity is described by Thomas Smith. He found that cannabin, which, when freshly prepared, produced a narcotic effect in doses of two-thirds of a grain, after exposure to the air for three years became absolutely inert. In India, it is said, dealers in this drug refuse to buy the old crops after the new ones are gathered, and after two years the crops are publicly burned in the presence of an excise officer. The cause of this growing inertness is probably due, as Leib Lapin suggests, to the oxidation of the active ingredient. He mentions experiments in support of this view, but these are not sufficiently convincing.

Age, however, will not account in all cases for the uncertainty of commercial preparations. Oftener it is due to the more or less inert natural products from which these preparations are made. That the physiological activity of the hemp plant varies with the locality in which it is grown is well known, and it has been suggested that the *ganja* of Bombay and the Central Provinces, which is "infinitely inferior" to that of Bengal, finds its way into European pharmacy. "There is also good reason to believe that the Indian hemp merchants, who deal with the drug in the first instance as an article of excise consumed locally, are in the habit of supplying to the European drug exporter or his agents samples for which, owing to the partial or complete loss of activity, they can no longer find a native market."

The first European, says the author, to investigate with any degree of scientific accuracy the action of Indian hemp was O'Shaughnessy, in 1839. He used an alcoholic extract made by boiling freshly prepared ganja with rectified spirit in a Papin's digester and evaporating the spirituous extract to dryness on a water bath. The substance thus obtained was very active; half a grain produced a distinct effect, and a grain and a half was considered by O'Shaughnessy a large dose. In 1846 the resin in a state of comparative purity was obtained by T. and H. Smith, and they gave it the name of cannabin. It was extremely active; two-thirds of a grain produced narcosis, and a grain, decided intoxication. In 1848 De Courtive also isolated an active resin.

Notwithstanding the investigations of O'Shaughnessy, Smith and De Courtive, it was thought that cannabis might contain some alkaloidal principle. Preobraschensky, in 1876, obtained nicotine from a specimen of hasheesh procured in Turkestan and from the flowering tops of the plants. As cannabis preparations are usually smoked in combination with tobacco, Dragendorff and Marquiss suggested that the nicotine was derived from admixture with the substance—a supposition proved by Siebold and Bradbury (1881) and Kennedy (1886). Although Kennedy failed to obtain nicotine, he was of opinion that an alkaloid was present, and Siebold and Bradbury also isolated a varnishlike base which they termed *cannabinine*, which gave alkaloidal reactions. The substance had an odor of coniine, but was not identical with it. Only two grains were obtained from ten pounds of the drug. Arutinianz and Masing, on the contrary, obtained no alkaloid. In 1883 Hay discovered an alkaloid which produced tetanus in frogs, to which he gave the name of *tetanocannobine*. It was present in very small amount and its elementary composition was not determined. His results led him to believe that other alkaloids were present, but these do not appear to have been isolated. Denzel (1885) also abtained a tetanizing alkaloid from hemp, but Warden and Waddell (1884), working on large quantities of material, obtained no such compound. It is only fair to state, says Mr. Marshall, that the process employed was slightly different from Hay's, and a cat instead of a frog was used to determine its effect. A nicotine-like substance was obtained, but this proved to be physiologically inert. Jahns (1887) also states that *tetanin* does not exist. More recently (1891) H. F. Smith has isolated an alkaloid resembling coniine from Indian hemp, but in such small quantity (0.75 milligramme to the kilogramme) as to render it therapeutically unimportant. Still more recently (1895) Marino-Zuco and Vignola have prepared an alkaloid from various parts of *Cannabis indica* and *Cannabis sativa*, but neither alkaloid possesses the characteristic action of cannabis compounds. Physiologically, they are cardiac depressants, the alkaloid from cannabis indica being much the more powerful.

The most recent investigators, Wood, Spivey and Easterfield (1896), have failed to obtained any alkaloid from charas, and the bulk of evidence is therefore against the view that the effects of cannabis are due to an alkaloidal principle. In 1897 Jahns obtained a crystalline base which he subsequently recognized as choline. He pointed out that chemically this body would explain the alkaloidal base obtained by previous observers, but it differs in crystalline form and solubility in ether from Hay's tetano-cannabine; physiologically, also, their action is different.

Of the more recent investigators, Warden and Waddell seem to have begun upon the right lines. They argued that, as many of those addicted to the hasheesh form of intemperance obtained the intoxicating effects by smoking the plant in a pipe, it was to be expected that destructive distillation of the freshly prepared resin might yield up the active principle. They therefore made an alcoholic extract of the plant, added excess of caustic potash, and distilled. An amber-colored oil came over, which, by exposure to the air or by the action of alkalies, rapidly assumed a dark brown color. The oil contained ammonia, phenol, and other products of destructive distillation, and was "devoid of narcotic and irritant properties." A drachm administered to a cat produced no sensible effect. Leib Lapin (1894) isolated a substance which he termed *cannabindon*, and this appears to possess the physiological action of fresh cannabis preparations. He obtained it by warming the plant with milk of lime and extracting with ether. The ethereal extract he treated successively with acetic ether, alcohol, petroleum ether (twice), and water, the precipitate being rejected each time. The second and third fraction obtained by precipitating with water contained impure cannabindon; this he subsequently purified. Last year, Cowan Lees expressed a belief that watery extracts contained some active ingredient of cannabis.

As we should expect from its method of preparation, says Mr. Marshall, the resin is extremely stable. It yields monoacetyl and monobenzoyl derivatives and is unacted upon by alcoholic potash, and, below 150° C., hydriodic acid and phosphorus. It is insoluble in water, but soluble in alcohol, ether, benzine, and organic solvents generally. It appears to be the active constituent of the drug, and the authors have succeeded in isolating it from several cannabis preparations in the market—viz., from Smith's cannabine, eighty per cent.; Merck's cannabinon, fifty per cent.; Merck's ethereal extract, twenty-six per cent., and Merck's cannabis resin, twenty per cent. As the compound contains at least one hydroxyl group, the authors recommend the same *cannabinol* for it.

As previously mentioned, all samples of charas are not of the same quality. From a second sample of this substance, undoubtedly inferior to the first, Easterfield and Wood were only able to extract fifteen per cent. of cannabinol. Another sample of charas sent to Mr. Marshall by his friend, Surgeon-Lieutenant John Stephenson, I.M.S., and obtained in the cantonments at Peshawar, was of intermediate quality. Various other preparations of cannabis indica (Merck's, Bombelon's, Denzel's, Gastinelli's, etc.) are known, and even largely used, but as these have not added much to our knowledge of the chemistry of this body, Mr. Marshall does not mention them further. By oxidizing cannabis resin with nitric acid, Bolas and Francis (1868) obtained a crystalline substance, oxycannabine ($C_{20}H_{20}N_2O_7$), but the physiological action of this compound was not determined. Fluckiger failed to obtain it.

The author states that the substances isolated by Wood, Spivey and Easterfield were sent to him for a pharmacological investigation, which

he hopes to complete in time and give a full account of the pharmacology of this drug. He gives a detailed account of some personal experiments which he undertook merely to establish the activity of cannabinol and introduce it into therapeutics. During the action of cannabinol his pulse rose from sixty to ninety a minute, sensibility, determined by pinching, was blunted, and his appearance was described as ashy pale. The pupils were somewhat dilated, but throughout reacted to light and accommodation. He does not remember having had hallucinations at any time; no unpleasant after-effects were experienced, and he says the drug appears to possess no constipating action.

Cannabinol, continues the author, has been used in a few cases as a hypnotic, and with success, but at present he does not wish to discuss its uses as a medicine, or even to recommend it as a remedy. All that is maintained for this substance is that it is active and pure. Whether it will change by keeping or not time alone can tell.

A CASE OF VERY EXTENSIVE SKIN-GRAFTING AFTER THE METHOD OF THIERSCH.

Dr. T. S. K. Morton exhibited at the Philadelphia County Medical Society a case of very extensive skin-grafting after the method of Thiersch. A young man, twenty-six years of age, had the misfortune about a year ago, while walking in a boiler-room, to slip his left leg through an opening in the floor into a tank of boiling water. The member became caught in the tank, and remained in the water for a period of about thirty seconds before the man could be extricated by his companions. He was removed to the Polyclinic Hospital, and almost lost his life in the succeeding four weeks from exhaustion. The entire thickness of the skin sloughed from seven inches above the patella to the malleoli at the ankle, save a few small islets of epidermis, which remained upon the crest of the tibia. Before the sloughs had all come away, the leg had become flexed at a right angle with the thigh and was covered with very vascular granulation-tissue. At this time he was under the care of Dr. L. W. Steinbach, who, under ether, made forcible extension of the limb, and succeeded in bringing it out perfectly straight. The granulations, however, parted in the flexure of the knee-joint, and all of the ham-string tendons became exposed. Under the same anæsthesia grafting with the skin of frogs was carried out. These grafts were placed upon the top of the granulations, but all failed to "take."

Some eight weeks after the accident Dr. Morton determined to apply extensive grafting after the method of Thiersch. The granulations were sterilized as well as possible by spraying with hydrogen dioxide diluted one-half with normal salt solution (0.6 per cent. common salt in water), and were subsequently enveloped in gutta-percha tissue. When suppuration had been largely controlled by this method, a surface some ten inches long and two inches wide was scraped forcibly with a curette. Bleeding was free, but was easily controlled by the binding on of sponges while the grafts were being cut. The skin of the opposite thigh, shaved and sterilized, was greased with a little boiled olive oil Then, with a razor ground flat on the under side and similarly greased, strips of skin were cut from its upper surface, the integument being held tense and slightly humped up by a hand above and one below the field from which the grafts were to be cut. These strips were cut about an inch wide and as long as possible. They much resembled

wet tissue paper. The razor was propelled by a gentle see-saw motion and not permitted to penetrate beneath the papillary layer of the skin. If fat is exposed it is proof that one has cut entirely too deeply; only the superficial layers of the skin are required. The grafts, as cut, heap themselves up in long strips upon the razor-blade. These are then transferred, right side down, directly on the surface to be grafted, by seizing the end of the strip at the edge of the razor, bringing it to the edge of the wound, and then gently drawing the razor away from this point in the direction of the surface that the graft is meant to cover.

If it is more convenient to cut a large number of grafts before beginning to apply them to the wound, they may temporarily be placed in a bowl of the warm salt solution. It is essential that no antiseptics be used during the entire process of grafting and dressing, as such chemicals destroy the delicate cells of the grafts. Salt-solution alone should be used as an irrigant.

When the wound to be grafted has been gently covered with the strips of skin, slightly over-lapping each other in all directions, the entire area is roofed over with strips of Lister protective or gutta-percha tissue, and a copious dressing of gauze wet with salt-solution placed outside. Over the whole a sheet of gutta-percha tissue is wrapped, and finally a wet gauze bandage is applied with moderate firmness.

All bleeding must be stopped before the grafts are applied. Prior to placing the dressing, the grafts must be gone over with some flat instrument, like a spatula, in order that air-bubbles, blood-clots, or whatever might prevent contact of the grafts with the wound surface, may be squeezed out. The dressing is kept wet with salt-solution for forty-eight hours, when re-dressing should be done, and the surface sprayed gently with hydrogen dioxide in salt-solution (half and half), washed off with salt-solution and dressed as at first, save that now it is not necessary that the gauze should be kept wet.

By this process of Thiersch, repeated some dozen times in the course of a year by Dr. Morton and his colleagues, Drs. Roberts and Stearn, the entire area of burn was gradually obliterated, so that now a true skin covers the whole area that sloughed away. It is even movable freely over the underlying tissues at all points and much elastic tissue has developed, so that upon the thigh and calf the skin can be raised an inch from the underlying surfaces. As no hair, fat or sweat-glands are present in the transplanted skin, it is necessary for the patient to daily anoint the parts with a little purified lanolin or other unguent to prevent drying and cracking of the epidermis. Sensation has returned completely throughout the new skin. There is no contraction at the flexure of the knee-joint or elsewhere, and, so far as appearances go, the leg is in perfect condition. The surfaces from which the large quantity of grafts were derived comprised the opposite thigh, the thigh upon the injured side above the burn, and both upper arms. These regions, especially the thigh, were able to yield successive crops of grafts after intervals of about six weeks, and at present appear to be in normal condition, save for slight discolorations. The hair is growing over them all as usual, proving that only superficial layers of skin were taken away. The surfaces healed over, as a rule, after taking grafts, in about two weeks. These raw surfaces were covered by strips of protective and dry gauze dressing and bandage. Simple dusting with formaldehyd-gelatine, without other dressing, has also proved satisfactory.

Dr. Morton remarked further that this was the largest surface that he

had ever attempted to graft, and the largest area that had ever been successfully covered so far as he knew. The result proved that even extensive girdling ulcers of an extremity resulting from burn or other injuries present no insurmountable barriers to full healing. The case further demonstrated that great losses of integument can be repaired without being followed by disabling, painful or unsightly contractions. Dr. Morton believes that no large granulating surface should be permitted to close spontaneously, if by such healing contractions are liable to take place, for by the use of Thiersch grafts such results can usually be prevented.

Dr. J. K. Young said that it had been his privilege to see the patient in consultation with Dr. Morton and several other surgeons, and he viewed the result as in every way gratifying. At the time of the consultation there was a difference of opinion as to what was the preferable measure under the circumstances, and it was finally decided that grafting of skin by the Thiersch method should be tried. From personal observation in Rupprecht's Clinic, in Dresden, Saxony, Dr. Young was confident of the utility of this method, and he recommended the application to the wounds after the grafts had been applied by being washed off from the razor the dusting of a powder, consisting of equal parts of talcum, boric acid and zinc oxide.

Dr. Ernest Laplace said that the case demonstrated the superiority of the Thiersch method of grafting over other methods formerly in vogue. All that is required to check the granulating process is isolation of the surface from the air by means of epithelium, and this end is effected by means of the grafts. The case illustrates further what care and attention to detail and the correct application of true pathologic principles are capable of accomplishing.—*Medical and Surgical Reporter.*

THE PREVENTION OF TUBERCULOSIS.

After the publication of Koch's discovery of the tubercle bacillus in 1882, it was manifest that the chief source from which the infective material of tuberculosis is reinforced is phthisical sputum. Soon after Schill and Fischer published their research on the disinfection of phthisical sputum, in which they showed that, when dried, it may remain infectious for long periods. From this to the conclusion that such sputum, dispersed as dust, is probably the chief means by which tuberculosis is propagated is no difficult step. Nevertheless, before such an inference could be used with confidence for practical purposes it was necessary to know whether, as a matter of fact, such dust does present itself in the neigborhood of consumptives, and under what circumstances it can be shown to occur. A careful investigation was accordingly instituted by Dr. Cornet, of Berlin, into the dust of rooms and hospital wards in which phthisical persons were being treated, from which it appeared that if no particular care had been exercised in removing infectious discharges from the patient, the dust of such places was liable to contain sufficient infective matter to cause the disease when injected into guinea-pigs, while even that small degree of infectivity was absent if the discharges of the patient had been collected and taken away. Cornet also showed that the dust in streets obtained from places where consumptives were wont to spit might be neglected so far as any risk of tuberculous infection is concerned. It is clear that this important research enabled us to define with precision the circumstances under which one individual may be expected to infect another, and how such infection may be avoided.

A great impetus was thus given to

preventive effort, which in this country appears to have been specially active in Lancashire. So far, it has not gone beyond the stage of popular instruction, although that has been carried on with some measure of success.

There are several reasons why the prevention of tuberculosis has not been brought under administrative control. In the first place, factors which require to be well considered play a most important part in preparing the system to receive the disease. A marked and not unnatural disinclination, moreover, exists on the part of many medical practitioners towards any interference on the part of the sanitary authorities with their treatment of tuberculous patients. Other difficulties also exist which can be got over by the exercise of a little caution.

On the other hand, the conviction is steadily growing that, while the other variable though weighty elements in the production of phthisis must not be neglected, the destruction of great quantities of infectious matter, such as are now often accumulated in confined situations, cannot be without a marked influence in diminishing the number of those attacked.

As regards the relation of the sanitary authority to the medical attendant, that would, no doubt, be a matter for mutual adjustment. It must always be borne in mind that medical practitioners have it in their power to render inoperative any procedure which meets with their general disapproval.

Amongst those who have entertained considerable misgiving as to the interference of the sanitary authority, and even as to the dissemination of precautionary literature, the distinguished Medical Officer of Health for Glasgow has occupied a prominent position. We must, therefore, regard it as a sign of the times when we learn from the local press that a leaflet has been sent by the Glasgow Health Committee to every ratepayer in that city, explaining in the clearest manner the infectious nature of the disease, and giving brief but excellent directions for the avoidance of infection. There is little chance of tuberculosis being brought under direct administrative control until the public mind has been fully educated in this manner.

Dr. Russell's leaflet differs from others which we have seen in this particular, that he prefaces his directions by a short account of the nature of the disease, as well as of its conditions and modes of propagation. He is probably right in thinking that his rules of conduct will receive more attention from thinking people on that account. Stress is laid perhaps rather too exclusively on discharge from the air passages. In other respects the leaflet is admirable, and, evidently, once begun the campaign is about to be pursued with energy. We read that "in addition to this leaflet there is kept on hand, and will be given gratuitously, on application to the medical officers (1) a detailed report on the prevention of tuberculosis for the use of medical men; (2) a synopsis of the above, giving a clear view of the modern doctrine of tuberculosis, for the use especially of nurses, district visitors, teachers, and others, etc."

There is no doubt that the prevention of the dissemination of tuberculosis is a matter which calls for special regulations in those health resorts to which persons suffering from consumption repair in large numbers. The "precautions" for the prevention of phthisis recommended by the Bournemouth Medical Society, along with their "recommendations as to the cleansing of rooms occupied by consumptive patients" are brief and good. But we may point out that expectoration is not the only form of discharge from which danger of infection may arise.

The experience of other health resorts has aroused a suspicion that consumptives may inflict serious harm on subsequent visitors, or even on

residents, unless preventive measures are adopted. The members of the Bournemouth Medical Society have, therefore, exercised a proper care in trying to secure that favorite resort of individuals against the possibility of such an imputation. We may add that the Bournemouth sanitary authority is honorably distinguished by the vigilance which it exercises in securing a pure milk supply, a matter of the utmost importance to the class of people for whose welfare it endeavors to provide.

Another aspect of the prevention of tuberculosis has been brought into prominence by Sir James Sawyer. The suggestion which he puts forward—that an effort should be made to have an intercommunication of ideas between scientific observers and agriculturists on the preventive measures which may be usefully and economically taken—is an excellent one. On the one hand, the pathologist and physician would be stimulated to appreciate and overcome the difficulties which beset the breeder and cowkeeper, and, on the other, the owners of stock would come to realize the advantages which would in a short time accrue from rational precautions. It would be necessary, in carrying out such a proposal, to have a clear idea of what has been demonstrated in regard to the facts of propagation of the disease. One or two points may be here indicated.

The recent experiences of Bang in Denmark have shown that where a sound stock is kept free from the intrusion of tuberculous individuals, tuberculosis does not arise. The infective element is, therefore, by far he most important consideration.

Nocard has called attention to the great faculty for spreading which tuberculosis possesses once it is introduced into a herd. But here again both Bang and Nocard show how easy it is, by proper and simple means of isolation, to save animals which are sound. The further inference may safely be drawn that tuberculosis once expelled should be easy to keep out, and an excellent subject for the interchange of ideas would, therefore, be how to remove, and having removed, how to exclude, the disease from herds.

It would be of advantage at the same time to show that not merely as a matter of ultimate profit, nor as a matter of human infection, but as a matter of pecuniary benefit to the farmer, the disease must be thoroughly dealt with. We are thus conducted back to the question of the condemnation of meat from tuberculous animals, and to the consideration of how far milk from a cow known to be suffering from tuberculosis in any form should be permitted to be sold.—*British Medical Journal.*

PUERPERAL ECLAMPSIA—ITS ETIOLOGY AND TREATMENT.

Dr. William Warren Potter, of Buffalo, read a paper at the 91st annual meeting of the Medical Society of the State of New York, Albany, January 26th, 1897, on the above subject.

He said, *inter alia*, that we seem to have arrived at the renaissance of eclamptic literature, that while the subject is being discussed in magazine articles and societies it would not answer for this society to keep silent.

Though the pathogenesis of eclampsia is still unsettled, we are certain that it is a condition *sui generis*, pertaining only to the puerperal state, and that to describe, as formerly, three varieties—hysterical, epileptic and apoplectic—is erroneous as to pathology and causation as well as misleading in treatment.

The kidney plays an important office in the economy of the eclamptic. If it fails to eliminate toxins,

symptoms are promptly presented in the pregnant woman. Renal insufficiency is a usual accompaniment of the eclamptic state. Overproduction of toxins and underelimination by the kidney is a short route to an eclamptic seizure. However, many women with albuminuria escape eclampsia, and many eclamptics fail to exhibit albuminous urine.

The microbic theory of eclampsia has not yet been demonstrated. The toxemic theory in the present state of our knowledge furnishes the best working hypothesis for prevention or cure.

Treatment should be classified into (*a*) preventive, and (*b*) curative. The preventive treatment should be subdivided into medicinal and hygienic; and the curative into medicinal and obstetric. A qualitative and quantitative analysis of the urine must be made at the onset. If there is defective elimination something must be done speedily to correct a faulty relationship between nutrition and excretion. One of the surest ways to control progressive toxemia is to place the woman upon an exclusive milk diet. This will also serve to flush the kidneys and thus favor elimination. Distilled water is one of the best diuretics; it increases activity and supplies material—two important elements. In the pre-eclamptic state, when there is a full pulse with tendency to cyanosis, one good full bleeding may be permissible, but its repetition should be regarded with suspicion. If there is high arterial tension—vasomotor spasm—glonoin in full doses is valuable.

When eclampsia is fully established, the first indication is to control the convulsions. Full chloroform anæsthesia may serve a good purpose. If the convulsions are not promptly controlled, the uterus must be speedily emptied. This constitutes the most important method of dealing with eclampsia. Two lives are at stake, and by addressing ourselves assiduously to speedy delivery of the fœtus, we contribute in the largest manner to the conservation of both.

Rapid dilatation, first with steel dilators, if need be, then with manual stretching of the os and cervix, followed by the forceps, is the nearest approach to idealism. Only rarely can the deep incision of Duhrssen be required. Cæsarean section should be reserved for extreme complications, as deformed pelvis, or to preserve the fœtus when the mother's condition is hopeless. Veratrum viride is dangerous, uncertain and deceptive in action.

In eclampsia of pregnancy, *i.e.*, prior to term, the aseptic bougie, introduced to the fundus and coiled within the vagina, may be employed to induce labor. Finally, to promote the elimination of toxic material, diuresis, catharsis and diaphoresis should not be forgotten; neither should the hot air bath, nor the hot pack be overlooked.

COCA WINE AND ITS DANGERS.

There is no doubt that the steadily increasing consumption of coca wine is a subject which calls for comment and investigation. We find that coca wine and other medicated wines are largely sold to people who are considered, and consider themselves to be total abstainers. It is not uncommon to hear the mother of a family say, "I never allow my girls to touch stimulants of any kind, but I give them each a glass of coca wine at eleven in the morning, and again at bedtime." Originally, coca wine was made from coca leaves, but it is now commonly a solution of the alkaloid in a sweet and usually strongly alcoholic wine. According to the Board of Trade regulations a wine containing a grain of any salt of cocaine in the ounce may be sold without a wine license; this may be the explanation of the frequency with which we see bottles of "coca champagne" exhibited in the windows of

the drug stores. Not long ago a physician reported that he had experienced considerable inconvenience from taking a glass of standardized coca wine which he had mistaken for an innocuous beverage. Still more recently we have been furnished with details of the case of a man who, thinking to abjure the use of alcoholic stimulants, drank coca wine so freely that he died of delirium tremens. School mistresses, as a rule, have a deep-rooted belief in the efficacy of the popular drug, and give it to their pupils on the slightest provocation, in complete ignorance of the fact that they a· establishing a liking not only for alcohol but for the far more insidious and pernicious poison cocaine. The child who is the innocent victim of cocainism is wayward in disposition, is restless and disturbed at night, and is incapable of prolonged application. The mania for taking narcotic stimulants is widespread, and is a distinct source of danger to the national health. It is difficult to say at present what steps should be taken, but it is obvious that at no distant date some restrictions will have to be placed on the sale of coca wine and its congeners.

CASE OF MARKED INTOLERANCE OF SALICYLATE OF SODIUM.

By David Wield, M.A., M.D., Stow-on-the-Wold.

On December 19th, 1896, a domestic servant was sent to consult me by her mistress, on account of severe pains in her feet, which prevented her doing her work.

On examination I found that the girl, who was aged nineteen, had lately suffered from acute rheumatism, and had had several subsequent subacute attacks.

On the present occasion her right ankle and the extensor muscles of her left toes were affected, and both slightly swollen. Her temperature was under 100° F., and but for slight anæmia she was otherwise well.

She told me that when she had rheumatic fever, nine months ago, she had not been able to take what she called "rheumatic medicine," and that it had to be stopped after a few days' trial.

I prescribed for her sodium salicylate gr. x., to be taken thrice a day, and sent her home to bed. Next day I was sent for, and found that the pains in her feet had all but gone, and that she complained of severe headache, ringing in the ears, giddiness and lightness of the head, all of which, she said, had come on shortly after she had taken the second dose of mixture, and had continued until she fell asleep. In the course of the night she had once awakened, dreaming that she was standing by a waterfall, and that the rushing of the water had made her so giddy that she was about to fall into the stream.

In the morning the symptoms had gone, and, after a light breakfast, she had a third dose, shortly after which the giddiness, headache and ringing in the ears returned as badly as ever.

I questioned her closely in case she should ever have been warned of the possible effects of an overdose, and have imagined all these symptoms, and she replied that she had never either heard of them or experienced them before—the reason for the "rheumatic medicine" having been stopped before, having been, she said, on account of weakness of the heart. She was not a hysterical girl—she had not taken more than the gr. x. dose, and later on I found gr. v. doses produced with her similar but less severe effects; so much so that the amount of the salicylate given in the twenty-four hours had finally to be reduced to gr. viiss., which nevertheless proved sufficient in the course of a few days to complete the cure of the arthralgia and muscular pain.

MUNICIPAL SUPERVISION OF TUBERCULOUS DISEASE IN NEW YORK.

The action of the city Board of Health in requiring physicians to report cases of tuberculous disease, taken by itself, meets with the general approval of the physicians of the city, we think. But this approval has been secured by the present Board's delicate and considerate action on such reports. The Board co-operates with the physician in attendance; it does not manifest offensive officiousness. But what guarantee have we that the Board as constituted at some future time will not act in a far different manner?

When the idea of a separate hospital for the tuberculous patients that are now treated in those of the general hospitals that are under municipal control was first talked about, it was generally understood that such a hospital, if it ever came into existence, would be managed by the commissioners of public charities, and the plan met with considerable favor with the profession. So far as we have been able to ascertain, the same can not be said of the new scheme of placing the hospital under the management of the Board of Health. There seems to be a general feeling that Boards of Health exist for the purpose of preventing disease, not for that of curing it. On the other hand, the New York Board's excellent pioneer work in assisting the practising physician in diagnosis and prognosis by means of its bacteriological examination of sputum, etc., is cordially appreciated; it is felt, however, that such a service on the Board's part should not be made a pretext for entering upon the field of therapeutics.

As yet, the idea of empowering the Board of Health, or suffering it to assume the power, to take possession of a tuberculous patient, whether he will or no, and force him away from his home, whether it is a tenement house or not, and into a hospital, has probably not been seriously considered by any great number of citizens. We hope it will not be acted upon hastily. The fact should not be lost sight of that, from the point of view of the public safety, there is a vast difference between a person affected with an acute infectious disease of a dangerous nature, such as small-pox, scarlet fever and typhus, and the victim of a chronic malady such as tuberculous disease, infection from which can readily be guarded against in most instances. All these considerations ought to be thought about seriously and deliberately, we think, before the tuberculous patient's home is invaded.—*Ed. N. Y. Med. Jour.*

COCAINE DEBAUCHERY.

Few people even in the profession of medicine know much about the cocaine habit, and to what extent it prevails in the lower walks of life in the large cities, writes Dr. E. R. Waterhouse in the *Eclectic Medical Journal*. The recent exposure of a "cocaine joint" disguised as a drug store in the business part of this city (St. Louis) has made public that which was only known to a few. The patronage was largely from the lower class of fallen women, men seldom using this narcotic.

This store had very well stocked shelves, but seldom was anything sold except cocaine; this was put up in packages which sold at a dime. The cocaine fiend was admitted into a dark back room, and taking a seat, snuffed the powdered drug into the nose. A sort of dreamy intoxication followed, When they regained consciousness, should they desire more of the drug, they touched the bell, and in came the clerk with another dose, or if satisfied, they stole quietly out the back door into the alley.

The effect of using the drug so strong is to paralyze the vaso-motor nerves of the nose, and as a result the

blood vessels dilate and the worst form of "rum nose" is seen. One poor unfortunate has a nose nearly as large as a man's fist, as red as erysipelas, and as sore as a boil, with large nasty ulcers extending down the upper lip. The grip the drug gets upon the poor victim is far greater than from opium or morphine, and the downward road is travelled faster.

The crowd which filled this man's coffers began coming as early as nine o'clock in the evening, and at two or three o'clock in the night his room was full. Some would recover in a few hours and go their way, while others would lie in a stupor for half the following day. A few days ago the proprietor of this den was placed under arrest, under the law regulating the sale of poisons, but has his place still at full blast.

Hundreds of people buy this drug and snuff it at home, and some law should be passed to meet this new state of affairs. I have treated two cases of this habit, and find it very difficult to handle. The poor victim, when once under its charms, will hypothecate anything he may own or be able to steal to get cocaine, and in this way unscrupulous druggists reap an increasing benefit.—*Medical Times.*

SERUMTHERAPY OF TYPHOID FEVER.—At a meeting of the Société de Biologie, on January 23rd (*Med. Mod.*) Chantemesse stated that in conjunction with Widal he had investigated the action of the serum of animals inoculated with typhoid bacilli in dead cultures. This serum is to a certain degree preventive, but not curative. To obtain a sufficient antitoxic power it was necessary to have active typhoid toxins; he had, therefore, modified the process of ordinary culture; then he sought to breed a microbe of intense virulence. He had long remarked that animals inoculated with Eberth's bacillus often retain for a long time that bacillus in a living state in the spleen and in bone marrow. Thinking that these must be favorable media, he prepared culture media of spleen, bone marrow and a little human blood. In these he sowed, after sterilization, a bacillus which had evolved for two years in successive animals, and which had preserved in a very marked degree the virulence which it had when he extracted it from the blood by puncture of the spleen. After thirty-six hours there is a film on the surface of this new culture medium, and towards the fourth or fifth day the production of toxin is at its maximum. About the fifteenth day it disappears. This toxin can only be kept in a tube sealed and covered from the light; it keeps well at the ordinary room temperature. This toxin is alkaline; if given to an animal by the mouth it is almost completely inactive; injected under the skin or into the blood, it is, on the contrary, very active. Twelve to fourteen centigrammes of dried residue of culture with toxin injected into a rabbit cause "enormous diarrhœa"; then the animal dies. After a smaller dose, the animal shows hypothermia or hyperthermia, and ends by dying in five to six days. A dose capable of killing a rabbit produces in a dog local reaction and hyperthermia. Five centigrammes of dry residue of filtered toxin injected into the veins of a sheep caused grave symptoms; then the animal recovered, and the dose could be repeated at successive intervals. On post-mortem examination of an animal which has died there are found yellow intestinal matters and marked intestinal congestion, but little in the spleen or the liver. By progressive injections in the horse, such as the author has been making for nine months past in the Pasteur Institute, a reaction is only obtained by the injection of 60 c.cm. of culture. The serum of these horses is definitely antitoxic, as has been seen in animals. In human patients the effects are favorable, but the experiments must be repeated on a much larger scale before a positive conclusion can be based on them.

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A MUNICIPAL PUBLIC HEALTH LABORATORY.

Dr. Wilkinson, at the Lambton County Medical Association meeting, made a valuable suggestion that should certainly be carried out. This was, that there should be in every county a county health officer, paid either by the Government or the municipality, with whom physicians could communicate promptly in cases of epidemic or outbreak, could send inoculations from suspicious cases and have them promptly examined. We would also suggest in connection with this office that the physician be independent of practice and that his be the dictum for the county. This would avoid much of the friction which at present exists between the public and the profession over placarding, cases of isolation, etc., because, as is usually the case, a physician in each municipality or village has to be the local health officer and at the same time depend upon practice, he is thus often placed in a very trying position and has to do his duty, which we are proud to say he always does, in the face often of much ill will and pecuniary loss. As Dr. Dunfield says, when he first placarded a house for diphtheria in Petrolia, the conversation that ensued with the patient was neither polite nor profitable.

Of course, nothing in this suggestion was intended to reflect in any way upon the present health arrangements of the Provincial Board and their laboratory. As far as we have met the profession at the various county meetings, they have always words of praise for the present health regulations and for the active and efficient management of the laboratory under the direction of Mr. McKenzie. The idea being that the local officers and local laboratories should be adjuncts to the central body, being depots where serum could be promptly obtained and

bacteriological reports could be more quickly received than the delay of sending from outlying counties to Toronto allows.

The subjoined editorial from the *British Medical Journal*, February 20th, bears very closely on this question.

A MUNICIPAL PUBLIC HEALTH LABORATORY.

The Dundee Sanitary Committee has at present under consideration the question of providing a bacteriological laboratory for the medical officer of health, the equipment of which will cost £60. The community is to be congratulated on the attention given to the proposal by its councillors, for there is little doubt that a certain diagnosis at the outset in cases of diphtheria and typhoid fever would often save an epidemic, and this even from a financial point of view would be an economy that would repay the cost of the laboratory every year. A bacteriological laboratory is the logical sequel to the notification of infectious disease, and where as in Dundee the medical officer is a competent bacteriologist, there is good reason for urging its establishment. The financial success of the privately managed research associations throughout the country shows that the individual citizen believes a sure diagnosis worth paying for. One idea is that this work should be done at the Royal Infirmary, but apart from the fact that the community has no right to lay such duties on a private institution, to place this work in the already too full hands of the hospital staff would scarcely secure that confidence in its results which is essential to its usefulness."

For further information on this question our readers are referred to the paper by the able Secretary of the Provincial Board, in this issue.

THE COMBATANT AND NON-COMBATANT STAFF.

In our editorial last month we mentioned incidentally that the British army was suffering severely in its medical appointments from the manner in which medical men were treated in the army.

There is no department which is more important, under the principles of modern warfare, than this. The idea which has pervaded the introduction of modern missiles for small arms is that they should check and retire or disable the enemies' force rather than kill, the object being to conquer not to slaughter. While we cannot commend too highly the introduction of these humanitarian principles by the gentlemen who conduct our human abattoirs, it is too bad to see their good instincts nullified by the absolute lack of means to save the lives of those whom they are so careful only to disable.

The Under-Secretary of State, in reply to Dr. Farquharson, as is usual with ministerialists, endeavored to evade and confuse the question. Dr. Farquharson wanted to know what were the actual (as apart from the officially notified) number of vacancies in the Army Medical Staff down to the end of 1896. The Under-Secretary said there might be some connection between the number of private practitioners engaged and the number of vacancies. The *British Medical Journal* says:

"Now, it is a perfectly well-known fact that districts and commands generally are seriously underhanded in army medical officers, and that the principal administrative medical officers know not where to turn for men to carry out the duties. Several of the larger commands are quite one-third short of their complement of full-pay medical officers. Leave cannot be obtained; and the War Office

is ungenerous enough not to allow any civilian practitioner to be employed with payment to enable a full-pay army medical officer to get leave under any circumstance. Such a state of things is simply intolerable. We must again repeat that there are not short of fifty to sixty actual vacancies, and it is now an accomplished fact that additional Army Medical Staff officers have been, so to speak, lent to the Government of India owing to the plague. Taking the probable result of the next examination into view with the present state of affairs, what is likely to take place if an Egyptian expedition is organized a little later on? Nothing can be more deplorable than the indifference shown by the War Office to army medical needs."

As we said in our editorial of last month, we do not want this sort of thing repeated here. Our medical men give their services everywhere and do everything for nothing; there is no charity that has not claims on them; the poor are always with them, and we would be very sorry to see the Minister of Militia, who is himself a physician, lend his countenance in any way to a reduction of a remuneration already too small.

EDITORIAL NOTES.

THE Board of Management of the Ontario Medical Library Association desire to acknowledge the receipt of Treves' "System of Surgery," and nine volumes of "Transactions of Association of American Physicians."

THE trustees of the New York Polyclinic Medical School and Hospital have decided to rebuild on the site of their former building, Nos. 214, 216 and 218 E. 34th Street. The work will be begun immediately.

The Physician's Library.

A System of Medicine. Edited by THOMAS CLIFFORD ALLBUTT. Vol. II., A System of Gynæcology, edited by THOMAS CLIFFORD ALBUTT and W. S. PLAYFAIR. London: The Macmillan Company. Toronto: Copp, Clark Company.

The name of Playfair in connection with obstetrics or gynæcology needs no introduction to English practitioners or students. In regard to this particular work in this system, it was decided to place the editorship more directly under the hand of a specialist. The choice could not have been better. As regards the method of handling the work, we will let the author speak for himself: "It is obvious that a collection of independent essays, written by men on topics which they have specially studied, must carry more weight, and be more useful than any work compiled by a single writer. An endeavor has been made to entrust the several subjects to thoroughly representative men; and it is hoped that the results of their combined labors will give an accurate exposition of gynæcology as it is taught and practised among us." The following list of contributors is sufficient guarantee of the material to be expected in the various departments, and it is only fair to add that it exceeds expectations: John Wm. Ballantyne, W. Balls-Headley, A. H. Barbour, Robt. Boxall, John Halliday Croom, Charles James Cullingworth, Alban Doran, Henry Gervis, Walter Griffith, Montague Handfield-Jones, David Berry Hart, F. W. Haultain, George Ernest Herman, Ed. Malius, Henry Morris, Robert Milne Murray, John Phillips, W. S. Playfair, Sir W. Priestley, Amand J. Routh, Alex. Russell Simpson, W. Japp Sinclair, Joseph Greig Smith, William J. Smyly, John Bland Sutton and J. Knowsley Thornton. We cannot close this review without emphasizing, as does Dr. Montague

Handfield-Jones (in his introductory, "The Development of Modern Gynæcology"), the eloquent words of Mr. Pearce Gould, in his recent address on the "Evolution of Surgery," when he said: "Although science knows nothing of nationality, and we rejoice in additions to our knowledge, and to our powers of combating disease and death, whether it comes to us from a French Pasteur, a Teuton Koch, from our western cousins on the other side of the broad Atlantic, or from a son of that eastern empire now rising above the horizon, we cannot help feeling a special pride in the fact that the name that shines with an unrivalled splendor on the page of surgical history is that of the Englishman, Joseph Lister."

The Year Book of Treatment for 1897. A Critical Review for Practitioners of Medicine and Surgery. Crown octavo, 488 pages. Cloth, $1.50. Philadelphia and New York: Lea Brothers & Co. 1897.

No practitioner of medicine, surgery or of any of the specialties, can afford to neglect this work, the value of which far exceeds its very modest price. The Year-Book of Treatment furnishes a critical and authoritative epitome of a year's progress in all branches of practical medicine. That it has performed this service acceptably is evident from the consecutive publication of thirteen annual issues, and it may truly be said that the possessor of the series enjoys the advantage of a connected view of medical advance, always fresh and brought up to the latest date by each new volume. The whole domain of practical medicine is thus annually covered in a series of twenty-five chapters, each being assigned to a recognized authority, who gives in full detail all that is both true and new, with a critical statement of the comparative value and special applicability of the various drugs, prescriptions and methods of treatment. The work is systematically arranged and well indexed, and is an elbow-consultant always ready for instant use.

A Manual of Syphilis and the Venereal Diseases. By JAMES NEVINS HYDE, M.D., Professor of Skin and Venereal Diseases, Rush Medical College, Chicago; and FRANK H. MONTGOMERY, M.D., Lecturer on Dermatology and Genito-Urinary Diseases, Rush Medical College, Chicago. Profusely illustrated. Double number. Philadelphia: W. B. Saunders, publisher, 529 Walnut Street. Price, $2.50 net.

This manual is intended as a thoroughly practical guide, and represents the latest knowledge of the venereal diseases which are included under the heads of syphilis, and gonorrhœa and its complications, with very complete instructions for their diagnosis and carefully prepared instructions for their treatment, cure and alleviation. The illustrations (some of which are colored) have been selected with the greatest possible care, and with the view of elucidating the text.

The American Year-Book of Medicine and Surgery, 1896. In one imperial octavo volume of nearly 1,200 pages, uniform in size with the "American Text-Book" series. Profusely illustrated with numerous wood-cuts in the text, and thirty-three handsome half-tone and colored plates. Philadelphia: W. B. Saunders. Prices: Cloth, $6.50, net; half morocco, $7.50, net.

"It is difficult to know which to admire most—the research and industry of the distinguished band of experts whom Dr. Gould has enlisted in the service of the Year-Book, or the wealth and abundance of the contributions to every department of science that have been deemed worthy

of analysis. . . . It is much more than a mere compilation of abstracts, for, as each section is entrusted to experienced and able contributors, the reader has the advantage of certain critical commentaries and expositions . . . proceeding from writers fully qualified to perform these tasks. . . . It is emphatically a book which should find a place in every medical library, and is in several respects more useful than the famous 'Jahrbücher,' of Germany." —*The Lancet.*

A Manual of the Practice of Medicine. By GEORGE ROE LOCKWOOD, M.D., Professor of Practice of Medicine in the Woman's Medical College of the New York Infirmary; Physician to the Colored Hospital and to the City Hospital, New York; Pathologist to the French Hospital, New York, etc. With 75 illustrations in the text, and 22 full-page colored plates. Philadelphia: W. B. Saunders, 925 Walnut Street. Price, cloth, $2.50 net.

In this number of the Saunders Aid Series, the author has presented the essential facts and principles of the practice of medicine in a concise and available form, adapted to meet the requirements of the student and the busy practitioner. Here will be found the essential and salient facts in regard to any given disease or condition, presented in a form at once succinct, comprehensive and readily available. Such a book is of especial value to the physician who is unable to purchase extensive treatises or to consult large libraries. A feature of the book is the introduction of a number of colored temperature-charts, and a number of excellent colored plates, notably one of the blood in leukæmia. The book is well written, and will unquestionably prove a valuable aid to the student and the physician.

The Physician's Vest-Pocket Formula Book, published by McKesson & Robbins, will be found very useful to the practitioner. It contains a table of weights and measures, antidotes to poisons, various tables of reference, and a very complete series of tables, showing the composition of foods and alcoholic liquors. These tables should prove valuable to the physician in cases where special attention to dietary is necessary. The book also contains an extended series of notes on some of the new pharmaceutical preparations and a complete list of formulæ of the McK. & R. Gelatine Coated Pills. A copy will be sent free of charge to any of our readers on application to McKesson & Robbins, 91 Fulton Street, New York.

"Military Cycling in the Rocky Mountains," by Lieut. James A. Moss, commander of the Twenty-fifth U.S. Infantry Bicycle Corps, is the title of No. 62 of Spalding's Athletic Library. It contains an interesting account of the trips of the first bicycle corps organized in the army, and besides a handsome portrait of Gen. Miles, is illustrated with views taken in Yellowstone Park and along the line of march. The book will be sent postpaid to any address in the United States or Canada on receipt of ten cents by the American Sports Publishing Co., 241 Broadway, New York.

AGAINST ILLEGAL PRACTITIONERS.—Since April, 1895, when the law providing for the criminal prosecution of quacks was restored, the New York County Medical Society has caused the arrest of eighty-three persons for practising illegally, and it has obtained convictions in fifty-one cases. These persons have paid $3,690 in fines, and a number of them have been sent to jail besides. The legal department of the society has a large number of cases pending.

PRACTICAL CONCLUSIONS BASED ON FIVE HUNDRED CASES OF CARDIAC DISEASE.—Dr. James K. Crook, of New York, regarding hæmic murmurs, says they were almost invariably systolic, accompanied by a venous hum, and usually transmitted into the large vessels of the neck. Of the organic cases, mitral stenosis was the most frequent, and aortic stenosis the next. He had observed the "water-hammer" pulse in every case of aortic regurgitation, and also in three other cases in which no murmur was present. He thought it was probably a more constant sign of aortic insufficiency than the murmur itself. One important reason for discriminating between the different murmurs was the effect on the prognosis. For example, aortic regurgitation had the gravest prognosis, because it was more quickly followed by dilatation and hypertrophy than any other lesion. While mitral regurgitation was the most frequent valvular lesion encountered, it was also the most tractable condition, and hence it carried with it the best prognosis. Dr. Richard Van Santvoord, of New York, thinks that, of course, the intensity of a murmur did not indicate its significance, and hence some other method must be relied on for giving this information. In this connection it was well to remember that the sphygmograph would indicate the amount of regurgitation or stenosis at the aortic orifice. In connection with the prognosis, it should not be forgotten that it was possible for a functional disorder of the heart to be associated with a valvular lesion. In illustration of this, the speaker cited a case in which he had treated a lady for a long time, with but little success, for symptoms which he attributed to a valvular lesion of the heart. It had then occurred to him that these particular symptoms might be due rather to the disturbances associated with the menopause, and a change in the line of treatment in accordance with this thought brought about a very speedy restoration to health. Dr. Eli H. Long, of Buffalo, says that where the heart was weak and the murmur diffused, it was often difficult to distinguish between a diastolic and a systolic murmur. By making intermittent pressure on the radial artery with the finger, one could determine whether or not the murmur was synchronous with its pulsation, and hence whether or not it was systolic.

STUDY OF THE RENAL CIRCULATION WITH THE ROENTGEN RAY.—By injecting preparations with metallic substances the circulation can be studied with cathode photography to an extent and with a precision never before attained. If the photographs are then mounted to examine through the stereoscope, wonderful exactness can be secured. Poncet and Destots, of Lyons, announce the following results of their study of the renal circulation in this way: 1. The arterial circulation of the kidney is lobar and terminal. It divides the kidney into an independent anterior and posterior kidney. The one exception is the artery of the superior lobe which sometimes divides into two branches, so that in injecting it the whole of the upper end of the kidney is injected. 2. The intra-pyramidal artery divides by false dichotomy at the level of the cortical substance, but it does not anastomose with the collateral; there are no true arterial arcades. 3. A multitude of capillaries issue directly from the arteries and proceed to the glomeruli without passing through the multiple intermediaries. In incomplete injections the capillaries are seen emerging directly from the arteries, like needles on a pine bough or hoar frost on a branch. 4. The pyramidal arteries proceed from the glomeruli. 5. The veins anastomose readily so that the entire kidney can be injected through one single small vessel.—*Bulletin de l'Acad. de Méd.*, December 20th.

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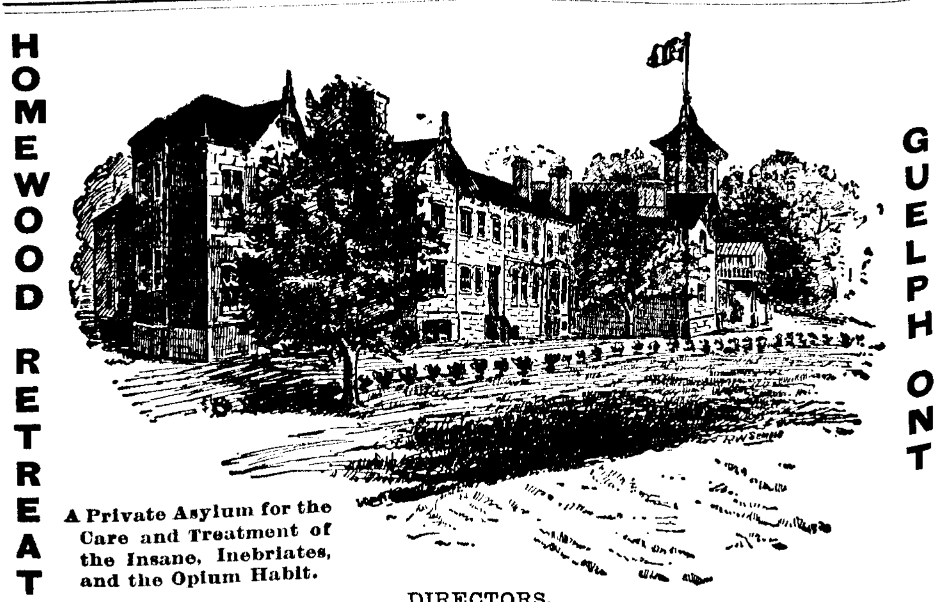
A revenue assessor in Ohio, asking the usual questions, inquired, "Did your wife have any income last year?" "Yes," replied the assessed, "she had twins—both girls."

To differentiate between a tumor of the right kidney and a tumor of the liver, inflate the rectum and colon. If the tumor is of the kidney the inflated intestines will lie in front of it, and there will be a tympanitic resonance; if the tumor is of the liver, it is rendered more prominent and dulness occur on spercussion.—*Pract. Med.*

The Present Prevalence of La Grippe.—"The following suggestions will be of value at this season. The pains of acute influenza are something indescribable, especially when associated with high temperature. To relieve these with some preparation of opium is only to increase the cerebral congestion and aggravate the extreme prostration. Sharp, darting pains are no more severe than are the dull, heavy and persistent pains in the muscles and bones which so often obtain in this disease. Clinical reports verify the value of antikamnia in controlling the neuralgic and muscular pains, as well as the fever. In fact, antikamnia may now be called the *sine qua non* in the treatment of this disease and its troublesome sequelæ. It seems hardly necessary to indicate the conditions, when the use of two such well known drugs as 'antikamnia and quinine' will be serviceable, nor the advisability of always exhibiting 'antikamnia and codeine' in the treatment of the accompanying neurosis of the larynx, the irritable cough and bronchial affections. Relapses appear to be very common, and when they occur



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the manifestations are of a more severe nature than in the initial attack. Here the complications of a rheumatic type are commonly met and 'antikamnia and salol' will be found beneficial. Antikamnia may be obtained pure, also in combination with the above drugs in tablet form. Tablets mark the most approved form of medication, especially as they insure accuracy of dosage and protection against substitution. To secure celerity of effect, always instruct that tablets be crushed before taking."—*Medical Reprints.*

HYPODERMATIC PURGATIVE—

℞ Caffeinæ et chloral . . . āā gr. viiss.
  Aquæ . . . . M lxxv.

Sig.: Inject fifteen minims.—*Ewald, Journal de Medecine de Paris.*

GIFT TO THE INSTITUT PASTEUR.—The Baroness de Hirsch has announced her intention of bestowing two million francs upon this institution, as a memorial to her late husband.

DR. EDWARD KERSHNER.—Dr. Edward Kershner, late of the navy, has received the important appointment of chief physician at the Randall's Island Hospitals, New York, going on duty there on January 4th. This item of news will be gratifying to many who watched the fight put up by Dr. Kershner on behalf of what he believed to be a sanitary principle against his sanitarily ignorant superiors of the "line." His friends will congratulate him that now he has nothing more malignant than the ward-heeler to fight against for the maintenance of his position.

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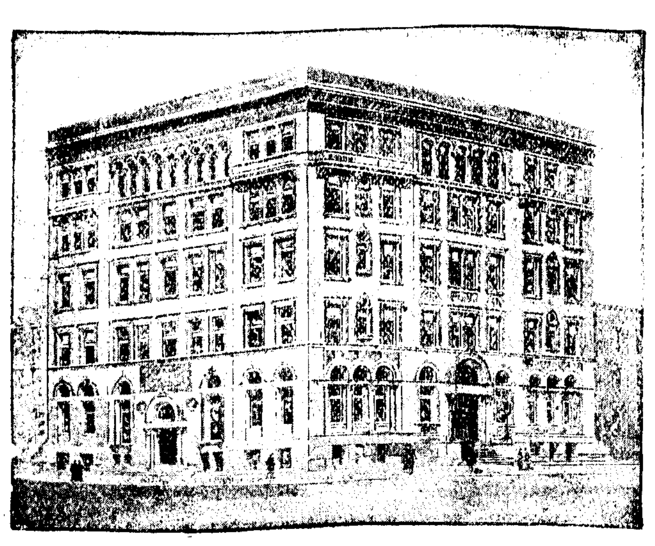

The Post-Graduate Medical School and Hospital is now permanently located in its new building, which has been erected to fill all the modern requirements for a hospital and medical school. It is an eight-story fire-proof structure, containing accommodations for 175 patients. The babies' wards, formerly in the adjacent building, are now an integral part of the institution under its own roof. The classes in the school have been so large in the last few years, and facilities for attending them so cramped, that this building has been erected, not only for the classes of practitioners, but also that more patients might be received, in order to form a great teaching hospital. This has now been accomplished, and every opportunity, both in the dispensary and hospital, is afforded in all departments of medicine and surgery. The great major operations are performed in the amphitheatre of the institution, which is fitted up in the very best manner to secure best surgical results. Pathological and Histological Laboratories are also a part of the school. The Faculty are also connected with most of the great hospitals and dispensaries in the city, where other clinics are held for the benefit of the matriculates of the Post-Graduate Medical School. Practitioners may enter at any time.

Members of the profession who are visiting New York for a day or two, will be 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.

D. B. ST. JOHN ROOSA, M.D., LL.D., President,

CHARLES B. KELSEY, M.D., Secretary of the Faculty.

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DR. H. I. JONES, of San Francisco, in an article on "Chronic Aural Catarrh," appearing in the February issue of the *Laryngoscope*, says:—"Lately I have been employing a vapor massage by means of the Universal Multi-Nebular Vaporizer. In those chronic cases with thickening and rigidity of the ossicles, have found excellent results. For the benefit of our readers who are interested in this important branch of therapeutics, we will say that the Universal Multi-Nebular Vaporizer is manufactured by the Globe Manufacturing Company of Battle Creek, Michigan. It is a recent production, but has already received the endorsement of many prominent specialists and brings to light new possibilities in respiratory and aural therapeutics

---

BELLEVUE HOSPITAL MEDICAL COLLEGE.—On January 20th this institution suffered a considerable loss by fire, which is believed to have originated from a defective electric lighting wire. The upper floor, containing the dissecting room, was entirely burned out and the lower floors were badly damaged by water. The laboratories were not seriously injured, and the college records were for the most part spared. No serious interruption in the lecture courses has resulted from the conflagration, the rooms of the Carnegie laboratory and the Bellevue amphitheatre having been put to use by the lecturing faculty.

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℞ Antipyrin.............. ʒ i.
Ammonium bromid .... ʒ iiiss.
Strontium bromid...... ʒ i.
Sol. of potass. arsenite.. m xl.
Extract of solanum carolinense.............. ʒ xss.
Water ....q. s. ad ℥ vi.

M. Dose. A dessertspoonful for more twice daily.—*Gaz. hebd. de Med. et de Chir.*, 1896, *No.* 19.

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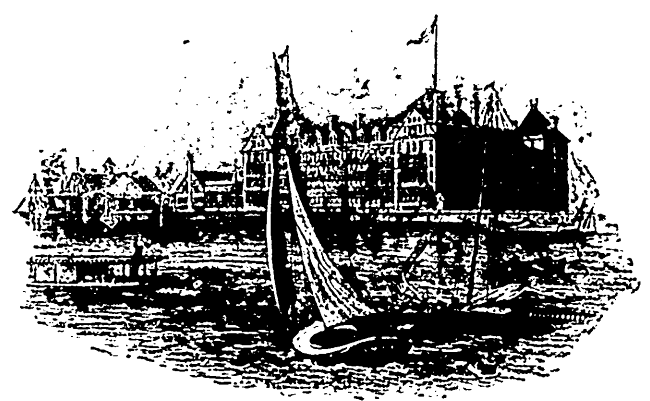

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A WARNING TO GIVERS OF TESTIMONIALS.—The vendor of patent medicines is as eager in collecting testimonials of "cure" as an Indian brave is in collecting scalps, and hangs them at his belt, so to speak, in the advertising columns of newspapers in proof of his therapeutic prowess. The manner in which these documents are obtained does not concern us here. That the giving of testimonials however, may sometimes be attended with undesirable consequences for the grateful patient is shown by the following case, which is reported in the American papers. A veteran living in the interior of Massachusetts recently gave a testimonial to a patent medicine manufacturer, stating that he had been entirely cured by his nostrum. He had been in receipt of a pension for the ailments of which he testified that the medicine had cured him, and when the authorities learned of his recovery his pension was withdrawn. It is, of course, possible that the veteran may unfortunately suffer a relapse; but it may be doubted whether in that case the authorities would see their way to renew the pension. They would, we imagine, be more likely to recommend him a further course of the patent remedy which had proved so efficacious before.

INTERNATIONAL HONORS.—The Emperor of Germany has conferred the decoration of the Kronen Orden of the second class upon Professor Roux of the Paris Institut Pasteur, and the French Republic has inscribed the names of Behring and Loffler upon the roll of the Legion of Honor. The Royal Society of London has also bestowed medals on Roentgen and Gegenbaur the anatomist (Heidelberg), and the Humphrey Davy Gold Medal upon Moissan, of Paris, distinguished for his chemic researches.

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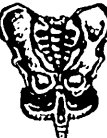
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Cod liver oil	5 ozs.
Yolk of one egg.	
Lime water	10 ozs.

This mixture is sufficient for four or five enemata, which may be given during the course of a day. In other instances the following may be employed:

Cod liver oil	5 ozs.
Yolk of one egg.	
Chloride of sodium.....	40 grs.
Water................	10 ozs.

This is also sufficient for four or five separate enemata. In still other cases, where it is desirable to use the hypophosphites, and the stomach will not retain them, the following rectal injection may be employed:

Cod liver oil	1 pint
Gum tragacanth	35 grs.
Gum arabic...........	1½ ozs.
Hypophosphite of lime.	35 grs.
Lime water, a sufficient quantity to make	1 qt.

From four to six ounces of this liquid may be used as an injection. For dysentery:

Sulphate of quinine	10 grs.
Powdered ipecac root...	5 grs.
Chloride of ammonium..	10 grs.
Tincture of opium......	12 drops.
Distilled water	1 oz.

Of this a small teaspoonful may be taken every four hours.—*American Druggist.*

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NITROGEN MONOXID IN OBSTETRIC ANÆSTHESIA.—The expense of the apparatus required to generate nitrogen monoxid has prevented its general adoption. But A N. Rakhmanov recommends it in high terms in consequence of his experience with it in thirteen cases. The pains were absolutely abolished; the contractions of the uterus were normal and much more regular than before its administration, while there were no accidents for either mother or child. He urges the installation of the necessary apparatus in every large maternity institution, as nitrogen monoxid is the most anodyne and the easiest to manage of all our anæsthetics.—*Bulletin Médical*, January 6th.

THE MUSSULMAN MEMBER OF PARLIAMENT IN FRANCE.—It seems that the new member for Franche Comté is not only a devoted Mussulman, but a popular and skilful physician, Dr. Grenier. Interviewed for the press he declares that he is charged with a prophetic mission, and hopes to see converts to his faith. The *Journal de Méd. de Paris* asks: Why not? The two principal features in which Mohammedanism differs from other religions are polygamy and the daily ablutions. It remarks that these would not be bad innovations in France. Polygamy would increase the birthrate, while rendering many people happy and reducing the number of old maids, and if every Frenchman were obliged to wash his face and feet morning and night, there would be a transformation, a regenerescence of the race, and Dr. Grenier would have accomplished more for hygiene than all the rest of the scientists.

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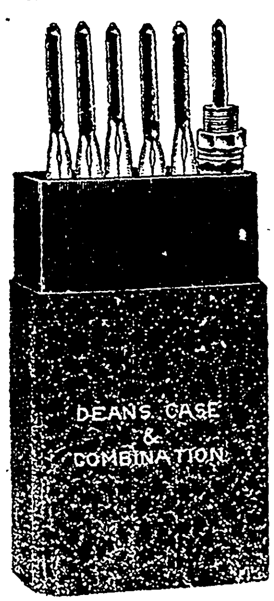

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A SURGICAL DOORKEEPER.—As an illustration of the overcrowded state of the medical profession, says the *Medical Times* (London), an evening newspaper states that at the present time the doorkeeper at one of our London workhouses is a pauper who holds the diploma of fellow of the Royal College of Surgeons of England. It is stated that at one time the "fellow" in question had an excellent practice, kept horses and carriages, and was chief medical officer of a county asylum. Now he wears workhouse fustian with brass buttons, and is glad to touch his hat to all comers. Our contemporary says that competition alone could not have reduced the man to such straits, for, it optimistically thinks, although the profession is much overcrowded, every well-educated and well-conducted doctor should not experience much difficulty in earning sufficient to live respectably.

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℞ Bism. subnit.
Magnes. sulphat.,
Cret. prepar.,
Calc. phos .... āā 10.

M. Div. in cachet No. xl. Sig.: One before each meal in dyspepsia accompanied with pains and flatulency.—*Dujardin-Beaumetz.*

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PAT'S CRITICISM.—

There's a story that's old,
But good if twice told,
Of a doctor of limited skill,
Who cured beast and man
On a "new-fangled" plan,
With the help of a strangely made pill.

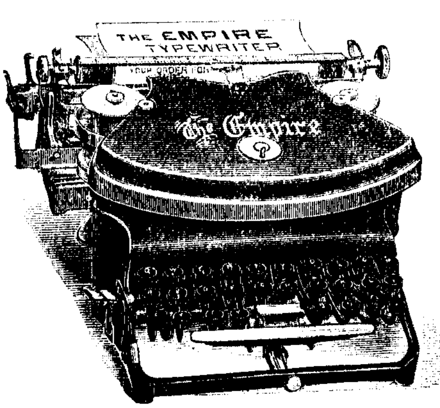
On his portal of pine
Hung an elegant sign
Depicting a beautiful rill,
And a lake where a sprite,
With apparent delight,
Was sporting in sweet dishabille.

Pat McCarty one day,
As he sauntered that way,
Stood and gazed at that portal of pine,
When the doctor with pride
Stepped up to his side,
Saying, "Pat, how's that for a sign?"

"There's one thing," says Pat,
"You've left out o' that,
Which, be jabers, is quite a mistake;
It's trim and it's nate,
But to make it complate
You should have a foine burd on the [lake."

"Ah! Indeed, pray then tell,
To make it look well,
What bird do you think it may lack?"
Says Pat, "Of the same,
I've forgotten the name,
But the song that he sang is 'Quack, [quack!'"

THE OBSTETRIC FORCEPS.—These are the offspring of the corset.—*Homœopathic Medical Recorder.*



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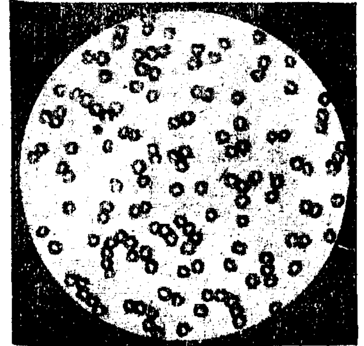

Micro-photographed by Prof. R. R. Andrews, M.D.

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VICARIOUS RENOWN.—The Health Commissioner of Chicago, Mr. Wm. R. Kerr, is now engaged in booming himself for Mayor of the city, on the strength of the excellent sanitary work performed by that well-trained sanitarian, Dr. Frank W. Reilly, the Assistant Commissioner of Health.

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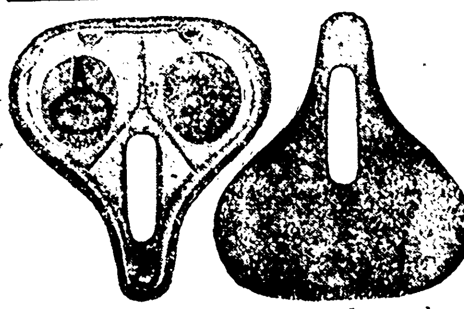

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