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(Index next page.)

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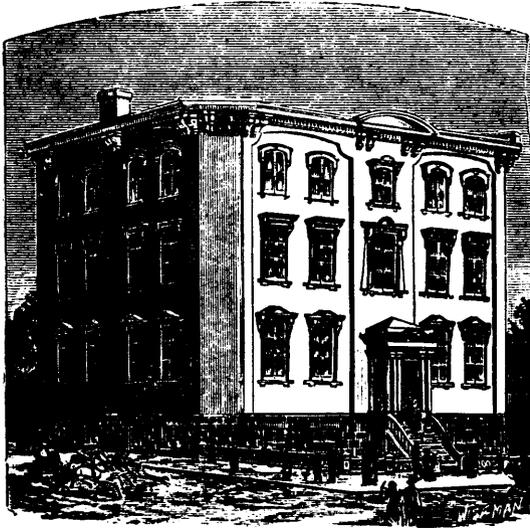
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VOL. XIV.

TORONTO, MAY, 1882.

No. 9.

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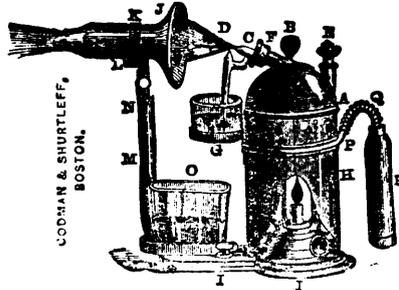
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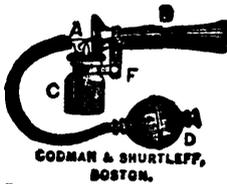
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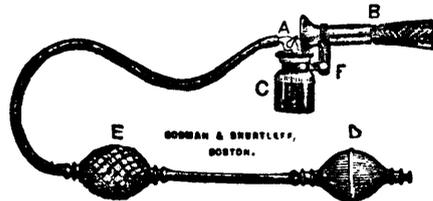


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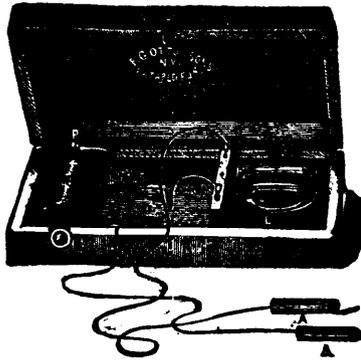
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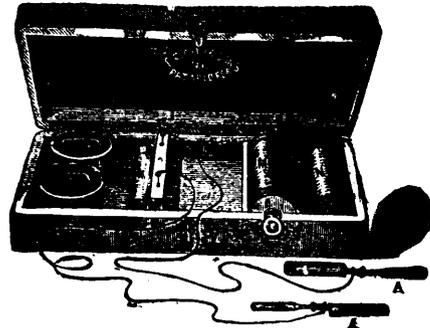
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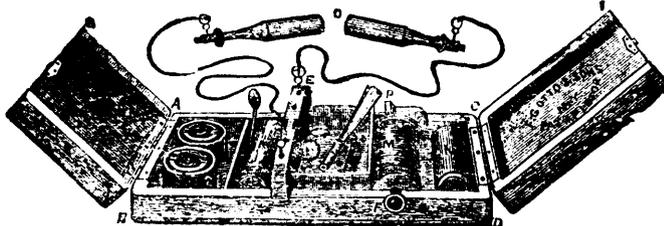
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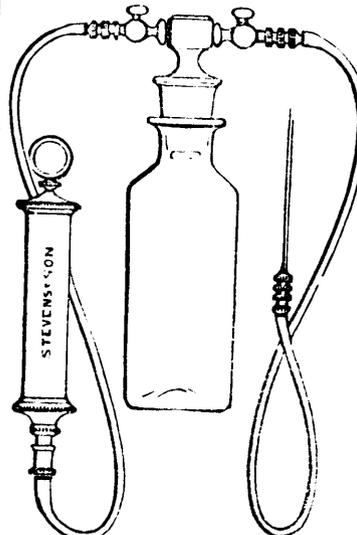
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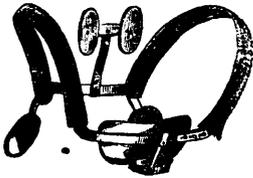
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23

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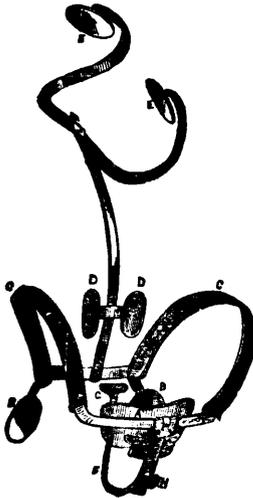
THE IMPROVED BODY BRACE
FIG. 8.



ABDOMINAL AND SPINAL
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FIG. 8.

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FIG. 19.



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2nd. Around the chest, close under the arms.

3rd. From each armpit to corresponding tip of hip bone.
4th. Height of person. All measures to be in inches Measure over the linen, drawing the measure moderately tight.

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THE CANADA LANCET,

A MONTHLY JOURNAL OF
MEDICAL AND SURGICAL SCIENCE.

VOL. XIV. TORONTO, MAY, 1882. No. 9.

Original Communications.

CLINICAL NOTES OF THREE CASES OF "TUMOUR," WITH ILLUSTRATIONS.

BY D. MACLEAN, M.D., ANN ARBOR, MICH.

*Professor of Surgery and Clinical Surgery in the
University of Michigan.*

CASE I.—J. H. S., æt. 57, of Milan, Mich. Patient came to the clinique June 4th, 1879, in the hope of having a tumour, which had long been a great burden to him, removed. He stated that the tumour first appeared twenty-two years previously *in the region of the groin*, and that it had gradually altered its position until it reached its present situation as shown in the accompanying cut. It will be seen that the tumour is attached by a broad base, and hangs over the left hip, the pedicle being nearly related to the crest of the ilium. Patient had no theory as to how or why the tumour had changed its position, but he was quite positive as to the fact of the change having occurred. The tumour measured twenty-eight and a half inches in circumference, and extended from the crest of the ilium to the middle of the thigh. It was not painful, but its weight caused serious inconvenience, to relieve which it was supported in a sac suspended from the opposite shoulder. During the last seven years the growth of the tumour had been much more rapid than formerly.

On examination, the tumor was found to be irregularly lobulated, solid, and very vascular. Enormous veins were visible on its superficial aspect.

Patient was extremely anxious for an operation, and as his health otherwise was good, and no contra-indication existed, I agreed to remove it.

Chloroform having been administered, I first transfixed the base or pedicle with a strong double ligature, in the hope of thereby controlling hæmorrhage.

It at once appeared, however, that no material advantage could be gained in this way. I then tried to empty the tumour of its blood by Esmarch's bandage applied to the growth itself. This expedient proving equally futile, I took an amputating knife, and, all hands being on the alert for hæmorrhage, with one sweep I divided the pedicle completely. Notwithstanding the fact that the track of the knife was instantly covered by compressing sponges, one gush of blood occurred, sufficient to blanch the patient and give him a very cadaverous appearance.

All bleeding points were ligated by cautiously exposing the surface of the wound in small sections. The lips were then approximated by a few stitches, and water dressing applied.

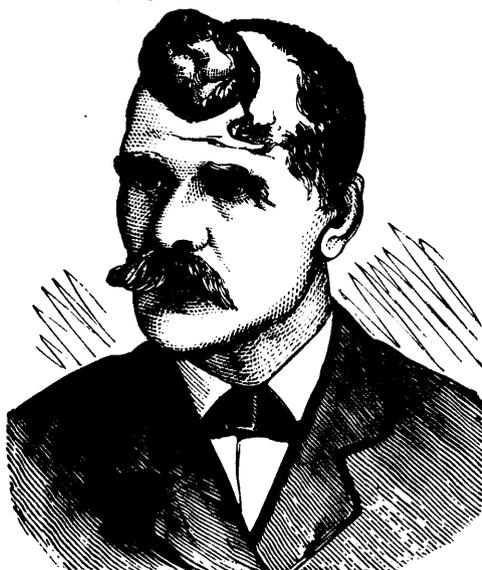


The symptoms of shock were very decided but not alarming, and patient made a rapid recovery, and was dismissed, *cured*, June 14th, just ten days from the date of operation. Three years have now elapsed since this operation was performed, and it is satisfactory to be able to report that up to the present time the patient has enjoyed excellent health, and as yet no symptoms of return have appeared.

The structure of the tumour was fibrous, degenerating at some points into fatty. Its weight, im-

mediately after removal was thirty-three and one-half pounds.

CASE II.—J. C., æt. 44, of Jackson, Mich. Admitted to the University hospital January 23rd, 1882, on account of a tumour of the forehead. The situation and relative size of the growth is well shown in the accompanying woodcut, copied from a photograph from life.



History.—Patient states that eight years ago a small lump, about the size of a peanut, was noticed over the vertex. After a blow this little tumour became irritated and grew rapidly, until it attained the size of a peach. It was then excised by a surgeon in Jackson, but before the wound healed, the tumour reappeared at the anterior margin of wound, and grew rapidly. This was two years ago. One year ago a second operation was performed by another surgeon in Jackson, but with no better result. By this time the tumour had developed in a direction towards the forehead, leaving the original site entirely free from disease.

On examination, the tumour was found to be firmly attached on its deep aspect. The superficial surface was ulcerated, and poured forth a pretty profuse discharge, composed apparently of water, pus and blood. The skin over the growth was disorganized and could not be utilized to close the gap made by operation.

Patient being a stout, vigorous man, in good health in other respects, and with a good family history, and being greatly alarmed about the tumour and willing to submit to any risk in the

hope of being relieved of it, I determined to operate. I took occasion to point out to the class two serious dangers which had to be encountered. First, the danger of speedy return, owing to the malignant appearance and history of the growth; second, the danger of osteitis, meningitis, etc., owing to the necessity of removing the pericranium, in which tissue it seemed most likely that the morbid structure had originated. Still, I had no hesitation in recommending the patient to take his chance and have the operation performed, and to this he eagerly assented.

Jan. 26th.—Chloroform having been given, I first of all removed the growth by a circular incision right down to the bone. I then peeled off the pericranium as far as it was exposed; and, finally, I applied pure chloride of zinc to the osseous surface.

A large number of vessels bled, and were secured by catgut ligatures. No attempt was made to close the gap, which was left to heal by the efforts of nature, aided afterwards by the introduction of many skin-grafts. The after treatment consisted in simple dressing to the surface of the wound, and its careful protection by cotton wadding. The bone at first appeared white and dead, but gradually points of granulation appeared and increased till the white surface presented the appearance of a healthy, healing sore.

Feb. 2nd.—Patient complained of a very severe pain in his head, and mercury was at once prescribed. The headache was relieved in a day or two, but it was not until the 22nd Feb. that it disappeared finally. At this time, also, a very thin layer of dead bone was floated up on the surface of the granulations, and was lifted off with the dissecting forceps.

March 3rd.—Wound nearly cicatrized, the islands of grafts having grown together all over the surface. Dismissed, cured.

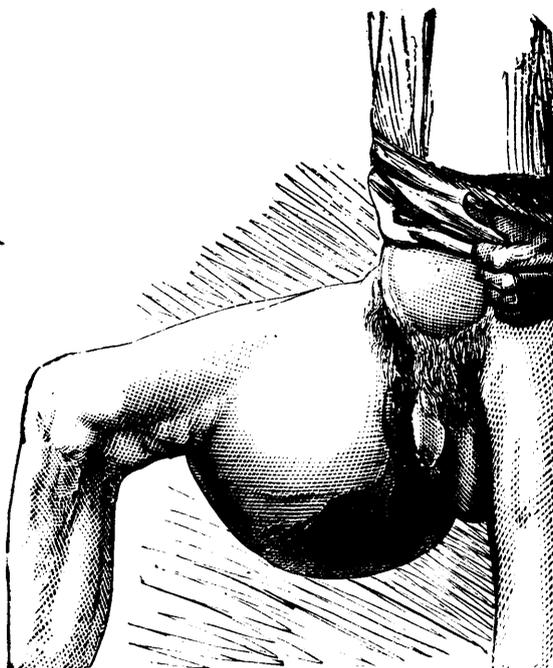
April 17th.—Latest report from patient completely satisfactory in all respects.

The specimen was sent to the histological laboratory, and was carefully investigated by Prof. Stowell, who found the structure to be that of "*spindle-celled sarcoma.*"

CASE III.—J. W. Y., æt. 72, of Lansing, Mich. Admitted to the University hospital March 13th, 1882, on account of a tumour of the right thigh. The dimensions and situation of this tumour are

accurately shown in the woodcut, which is copied from a photograph from nature.

It extended from the perineum to within four inches of the knee. At Poupart's ligament, it extended inwards nearly to the femoral vessels. The left thigh measured thirteen inches, the right twenty-nine. When the patient contracted the muscles of the thigh, the tumour felt as hard as cartilage; when they were relaxed, it felt much softer, and several experienced surgeons had diagnosed fluctuation.



The following is the patient's statement of the history of his case: Ten years ago he observed a small, firm lump on the inside of the thigh, about five inches above the knee. It was about the size of a hen's egg when first observed. It was not painful, nor has it ever been so. Patient thinks that the growth has been much more rapid of late, and he believes that it interferes somewhat with his general health, as he is losing flesh and strength. On the whole, however, his general health is very good for a man of his age, and he is exceedingly anxious to be relieved of his encumbrance.

My diagnosis, as stated to the class on the occasion of his first appearance at the clinique, was *fatty tumour*. Still, as a good many experienced surgeons had diagnosed *cystic fibroid* (some of my colleagues among the number) I was induced to

test the matter with an exploring needle. The result was negative.

The length of time the tumour had been growing, viz., ten years, was of itself sufficient to exclude the diagnosis of malignant disease, and therefore my original opinion seemed to be the more probable one. The only point which made me hesitate as to the propriety of operating was the size of the wound which would be left, and which, in a man of seventy-two, might prove to be too great a strain on his powers. However, the courageous spirit and vigorous constitution in this patient seemed to me to justify a hopeful prognosis, and I determined to accede to his urgent entreaties and perform the operation. The farther history of the case is soon told:

March 18th, 1882. In presence of the class I removed the tumour by one long, straight incision extending its whole length. Its fatty structure was at once demonstrated. The operation lasted but a few moments. A few small vessels required to be ligatured, which was done with catgut. Some redundant integument was then trimmed off, and the wound closed by nine hair sutures.

Very slight shock resulted; the wound healed very kindly, and within three weeks from the date of operation, the patient was dismissed, *cured*.

P.S.—For the histories of these cases I am indebted to my efficient clinical clerk, Mr. E. A. Christian, B.A.

THE ANTISEPTIC MANAGEMENT OF WOUNDS.

BY J. H. BARKWELL, M.D., ETC., BATTERSEA, LONDON.

The practice of antiseptic surgery, or Listerism, as it has been termed, *i.e.*, the keeping of a wound aseptic from first to last, requires not only a perfect understanding of the principles on which the treatment is based, but also a careful consideration of the means employed to gain that end, and a thorough knowledge of the difficulties to be met with. This can only be obtained by practice and experience; and gradually the slips and inaccuracies which may at first occur disappear, and we become educated up to the necessary standard of excellence, so that what we tried to attain formerly by unremitting attention and zeal we now gain almost

instinctively and without effort. For a full and elaborate account, we must seek the fountain-head in Lister's writings, or better still, attend the practical work under Lister himself, now of King's College, formerly of Edinburgh. Our first duty will be to consider the various antiseptics at present made use of. The main qualities required in an antiseptic are convenience, cheapness, and of necessity, efficiency. Carbolic acid so fulfils all these points, that it still retains its position at the head of the list, Mr. Lister himself having given up the use of thymol after a thorough trial. Carbolic acid, further, is volatile—a property essential to any antiseptic in use as a spray. The best form of acid to employ is the absolute phenol of Messrs. Bowdler & Bickerdike, price 6/9 per lb. Its advantages are, that it has no objectionable odor, is readily soluble, and does not irritate the operator's skin; while the more crude and impure forms met with are occasionally so disagreeable and harsh, that some German surgeons anoint their hands with vaseline before beginning work, in order to obviate this inconvenience. There are two watery solutions—strong and weak. The strong consists of one part of the acid crystals in twenty parts of water. It is used for washing and purifying the skin and instruments, for keeping sponges, drainage-tubes and horsehair soaking in and for the steam spray. The weak, which is half the strength of the strong (one in forty), is required for washing the sponges during an operation, for soaking the deep dressing in, and in dressing generally. The lotions should be filtered after being made, and had better be kept in large blue glass-stoppered bottles, properly and carefully labelled. An alcoholic solution of the strength of one part of the acid in five of spirits of wine, is employed for rendering those wounds aseptic which are seen a few hours after receipt of injury, and specially for those cases in which dirt and foreign matter have obtained access to the tissues. There are two oily solutions. The weak, of one part of the crystals in twenty parts of olive oil, is used for purifying and lubricating urethral bougies, sounds and catheters, immediately previous to their introduction; the strong, of one part crystals in ten of oil, may be applied to exposed dead bone in septic cases. A piece of lint soaked in the oil is laid on the necrosed part and covered with a piece of gutta-percha tissue. Antiseptic gauze is prepared by

charging unbleached muslin of open texture with crystallized carbolic acid one part, common resin five parts, solid paraffine seven parts. This last prevents adhesiveness. Paraffine does not blend at all with carbolic acid in the cold, and therefore simply dilutes the mixture of carbolic acid and resin, without interfering in the least with the tenacity with which the resin holds the acid. The carbolized gauze, as prepared in the Royal Infirmary, Edinburgh, costs the establishment a little under 1½d. per yard; in retail shops it is much higher. The prepared gauze is used for the superficial dressing, for bandages, and in loose pieces for padding and dressing irregular surfaces; and also when wet, wrung out of 1.40 aqueous, for the deep dressing. The acid is only given off in sufficient quantity when the gauze is moist and at the temperature of the human body. Mackintosh consists of thin cotton cloth having a layer of india-rubber waterproofing on one side. This should be evenly applied and continuous, so that the material is quite impervious. There must be no pin-holes in it. It is used to place over the superficial dressing of gauze, as shall be described hereafter. Protective is made of oiled silk, coated on both sides with a thin layer of copal varnish, which renders the silk impervious to the carbolic lotion. Over this again a fine layer of carbolized dextrine is laid, which allows the 1.40 lotion into which the protective is dipped immediately before use, to wet and so thoroughly purify the surface. The protective is neither aseptic nor yet antiseptic, hence the necessity for making it so before application. Its action is thus purely negative. It keeps the edges of the wound clean, moist and free from the irritating action of the antiseptic dressing employed; allows discharge to escape readily from under it into the dressing; does not adhere, and so is easily removed when necessary. Carbolized catgut is prepared by adding twenty parts of carbolic acid crystals to two parts of water, and to this mixture add one hundred parts of olive oil. Place this mixture in a flask, and in this put several skeins of catgut. These should be kept above the level of the watery deposit which falls, by means of a few glass marbles or rods. Seal the flasks hermetically and set them aside in a cool place. The gut should not be used for five or six months, and the longer it has been prepared the better. Carbolized silk is prepared by immersing

a reel of silk in melted beeswax, containing about one-tenth part carbolic acid. The silk is drawn through a dry cloth as it leaves the hot fluid, to remove the superfluous wax. All these various requisites should be kept by themselves, apart from all other business. The various forms of steam sprays employed are constructed on the principle of Adams' steam inhaler. On arriving at a patient's house, we fill the spray with boiling water, which should always be kept ready for the purpose; so as not to detain one whose time is so very precious. We light the lamp and judge that steam is up, if it escapes with great force, and if it has a distinctly blue color when we shut off all the carbolic acid, which is done by compressing the carbolic tube with the fingers, and so seeing steam alone. One has also the peculiar rushing sound, the smell and taste of the spray to guide them in ascertaining if all is in working order. The other antiseptics employed may now be discussed. A solution of chloride of zinc, forty grains to an ounce of distilled water, was introduced by the late Campbell de Morgan. It is chiefly used to brush over the cut lips of incisions and wounds in regions which we cannot hope to keep aseptic, as in excision of the upper jaw, or lateral lithotomy. We may leave our dressing of strips of lint soaked in this lotion unchanged for forty-eight hours, so potent is the salt; and in this way, thanks to its searching character and non-volatility, the pain and unrest of dressing is avoided, and a dangerous period, during which blood-poisoning from absorption might take place, is tided over. Considerable pain and smarting ensue after application, and this continues for a varying period, according to the temperament of the patient. Boric acid is used as lotion, lint and ointment. It is non-volatile, very unirritating, in fact the least so of all antiseptics, but is not at all searching. It may prevent, it can hardly eradicate putrefaction. The lotion, of one part of the crystals in thirty parts of water, is colored red with litmus, and thus at a glance we may distinguish it from other lotions. It is used for moistening the boric lint and for washing sores. The lint is prepared by soaking ordinary surgeons' lint in a boiling saturated solution of boric acid, colored red with litmus. It is allowed to cool, the lint is hung up to dry, and the remaining fluid poured off and used as boric lotion. The lint is of a pink hue and glitters with the soft flat mica-

ceous crystals. We moisten the boric lint with boric lotion before application, and this for the same reason as we also soak the deep dressing of gauze or the protective in carbolic lotion. The surface of the materials may be covered with germs of all kinds, because the antiseptic is not acting. We destroy these organisms by our active lotion, and as the aseptic discharge finds its way afterwards into the dressing, it dissolves and sets free quite enough of the stored-up agent to render it also antiseptic. Boric ointment may be prepared by rubbing up one part of finely levigated boric acid in five parts of vaseline. It acts as a sort of antiseptic protective, and is specially useful in the treatment of wounds in the face, where it allows the discharge to escape, keeps the wound sweet, and never adheres. An emulsion of salicylic acid in 1.40 carbolic lotion was introduced by Mr. Lister, for the purpose of checking the chemical changes which may take place under dressings which have been left unchanged for some time. These changes due to a chemical action between the gauze and the discharges under it, the sweat, etc., give rise sometimes to a troublesome irritation and eruption, formerly dubbed *ecrema carbolicum*. A very little salicylic cream smeared on the surface of the protective or deep dressing effectually disposes of this. In private practice one finds the carrying out of antiseptic details even less troublesome than in hospital. The spray is not so liable to get out of order, since it never changes hands. We do not make use of so many assistants, nor yet have we the convenience and benefit of bystanders to consider. The surgeon may carry in his spray bag a small supply of crystals of carbolic acid, so that he has practically a great quantity of lotion in a very small space; he has also sponges; but the dressings and lotion are usually found in readiness at the patient's house. While the patient is being anaesthetized, one gets the spray in order, arranges instruments and dressings. The spray during the operation stands on a small table, in a convenient position, and requires but little attention. Should the carbolic lotion in the spray bottle become exhausted, or should it be necessary to shift the position of the spray, then the surgeon merely lifts his guard out of the lotion, covers the wound with it, and then puts things to rights. Instruments may lie on a large plate or in a tumbler of water, their points being saved by coming in contact

with a cake of india-rubber laid over the bottom. Sponges of course are taken in hand by an assistant or nurse. The patient should be seen next day after operation, to see that all is going on well. The future dressings are managed as in hospital. A daily visit is not required, since by means of a post-card the patient may send word to the surgeon should discharge appear, or any discomfort be experienced.

DIABETES MELLITUS WITH ALBUMINUREA RESULTING FROM INJURY—RAPID AND FATAL TERMINATION.

BY J. ELLIS, M.D., MUSKEGON, MICH.

Mr. McC. consulted me, February 8th, 1882, regarding his daughter, a bright little girl of seven years and five months. She was suffering from marked dyspnoea from coming up stairs, and very weak, but felt well otherwise. From the father I learned that for two weeks past she had lost flesh rapidly, and was passing daily about a gallon of limpid urine; appetite and thirst both excessive. Having just come from the train from a visit to Canada, and the office temperature being in the neighborhood of zero, I simply gave a placebo and asked the mother to bring the child in the morning and some of the child's urine—suspecting diabetes. Next morning I was requested to see the child, as she was much worse; but as I could not attend Dr. Cook saw the case for me. The child was drowsy with flights of delirium; pupils dilated; labored breathing. He received two vials of urine which we examined separately—finding large quantities of sugar and albumen; specific gravity 1030. The microscope revealed large quantities of urates, with a few epithelial cells and tube casts.

Called at 12 o'clock—Child rapidly growing worse; difficult to arouse her; pupils would not respond to light, and widely dilated; respirations rapid; pulse small and irregular. 6 p. m.—passing into comatose state; marked serous effusions into pleura. Child died about midnight. The following interesting history was given by the mother. The child was always strong and healthy, never was sick except an attack of scarlet fever in November, 1880, which was mild, and to all appearances completely recovered from. Five weeks ago,

while playing at school, she fell on the ice on her face, knocking out two teeth. After the pain ceased she seemed all right. The mother noticed shortly after this that upon waking the child she seemed bewildered and could not collect herself for some time. Three weeks since she became dull and was not so playful, and now seemed much dazed upon waking. She began to complain of distress in the stomach, and lost flesh. Two weeks ago her mother noticed an increase of appetite and thirst; also increase of urine voided; these latter conditions gradually increasing, till now her appetite was voracious, drinking almost constantly and voiding about a gallon of urine per diem. During the last two weeks she complained of headache and lassitude, also was fretful and did not want to play with other children. She continued to attend school until within a few days past. The treatment consisted of merely palliative measures as her condition was considered hopeless as soon as the case was satisfactorily diagnosed. A post mortem could not be had.

QUERIES.—I. Was the albuminurea primary or secondary?

II. Were both or either caused by the fall producing some lesion of brain or nerve centres?

III. Does diabetes mellitus of itself ever run such a rapid course (five weeks from injury, and only two weeks from first diagnostic symptoms)?

Correspondence.

ELECTRICITY IN CHOREA.

To the Editor of THE CANADA LANCET.

SIR,—The following letter from Dr. A. D. Rockwell, of New York, dated April 7th, I am permitted to publish, although not written for publication. I will preface it with the single remark, that I know of no one who has had larger experience, and no one, at least on this continent, who is a more reliable authority in the domain of electro-therapeutics.

"While electricity is of value in the various forms of spasmodic diseases, it must be confessed that its effects are frequently somewhat capricious. At various times I have had the pleasure of witnessing recoveries follow its use in chronic forms of writer's cramp, torticollis and even in palsy agitans, an interesting case of which I published in the October number of the *New England Medical*

Monthly. In the general use of electricity, I think it may be said that too little attention is paid to *detail.* The diseases to which I have referred can undoubtedly, as a rule, be much ameliorated, but it is too much to expect that at present we can hope to cure the majority.

"In regard to chorea, however, the case is different, and I wish that the profession could be impressed with the value of electricity in this disease. I do not refer to recent cases where in a few weeks the symptoms spontaneously subside, aided perhaps by some form of tonic treatment, but to those of a chronic character which persist in spite of judicious medication.

"You may perhaps accuse me of undue enthusiasm, when I say that I have never known a case even of long standing, fail to recover, when the methods of central galvanization and general faradization were faithfully and properly carried out. At the present time I have under my care a lad of 10 years, who has for over a year suffered from a violent form of post-paralytic chorea. His sorrows began with an acute attack of articular rheumatism, followed by partial hemiplegia and ending in chorea of the paralyzed side. An unpromising case, certainly, as could be well imagined. He is recovering rapidly. I treat entirely by central galvanization,—covering the head almost entirely by large well-fitting sponge electrodes and using currents sometimes from as high as thirty (30) cells. I should be sorry, if through any such statement as this, some one should use through the head of a child a current from as many elements as this, without due precaution in the way of the position and size of the electrodes, and in gradually increasing and in as gradually decreasing the strength."

Yours truly,

A. M. ROSEBRUGH.

121 Church-st., Toronto.

April 18th, 1882.

MEDICAL BATTERIES.

To the Editor of the CANADA LANCET.

SIR,—With reference to the communication of Dr. W. Philp, of Hamilton, in regard to the need of improvements in the construction of medical batteries, I have to say that, with your permission, I propose at an early date to give the readers of the LANCET a full description of a new battery

recently made under my instructions, which gives me entire satisfaction. It is a modification of the McIntosh battery, but less complicated and much more convenient.

It contains 18 galvanic cells and a faradic battery, combined in the same case. The case is not much larger than the ordinary faradic battery and weighs when fully charged only 15 pounds, with electrodes and battery complete. I believe similar batteries could be supplied for about \$45 each.

Yours truly,

A. M. ROSEBRUGH.

Toronto, April 20th, 1882.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

Reported for the CANADA LANCET.

The regular quarterly meeting of this Board was held at Greenville, Michigan, on April 11, 1882, in connection with the Sanitary Convention held at the same time and place. The following members were present:—Rev. D. C. Jacokes, of Pontiac; J. H. Kellogg, M.D., of Battle Creek; Arthur Hazlewood, M.D., of Grand Rapids; Jno. Avery, M.D., of Greenville; and Henry B. Baker, M.D., of Lansing, Secretary. William Oldright, M.D., chairman, and J. J. Cassidy, M.D., member, of the newly appointed Provincial Board of Health of Ontario, were present and were invited to take seats in the meeting. In the absence of the president of the Board, Dr. Jacokes presided.

The Secretary presented the subject of inspection of immigrants, and stated that the National Board of Health had granted the request of this Board for an inspection service at Port Huron, and the system would go into effect on May 1, at which time the whole system, by coöperation of several State Boards of Health, would go into effect. He suggested that the health authorities of Toledo and Cleveland be invited to join in this movement. He stated that at the meeting of the Sanitary Council of the Mississippi Valley, at Cairo, Ill., April 19, this subject would be considered, and that it was desirable that this Board be represented at that meeting. By vote of the Board, Dr. Baker was requested to represent the Board at that meeting. Dr. Oldright spoke of the inspection of im-

migrants at Toronto, and of the importance of notification to other boards of danger to be feared from immigrants. He also said any movement made by this Board would meet with hearty co-operation by the Ontario Board. He said the work done by this Board for the restriction of scarlet fever and diphtheria was fully as important as that for the restriction of small-pox.

The following motion was carried :—

That the Secretary be instructed to correspond with the health authorities of the Dominion of Canada, and the several Provinces thereof, and of provincial and municipal boards of health where they exist, asking their co-operation in the proposed immigrant inspection service.

Dr. Hazlewood read a proposed document giving best household antidotes to be used in case of poisoning, while waiting for a physician or when one is not to be had. It was accepted and the committee authorized to modify it before publication in the Annual Report.

Dr. Hazlewood, in the committee on poisons, then presented a letter from Dr. Gordon, of Swartz Creek, relative to lead-poisoning by the use of a feeding-bottle (which was exhibited to the Board) in which the sinker keeping the supply pipe in the milk, was of lead and so arranged that all the milk had to pass over it before entering the infant's mouth. The Secretary was requested to notify the manufacturer of the pernicious character of the bottle, and the report was accepted, and ordered to be published in the Annual Report.

Circular 35, revised, relating to the duties of health officers, was presented, adopted, and 20,000 copies ordered to be printed.

Dr. Kellogg, one of special committee to prepare a circular on criminal abortion, made a report and read a proposed circular. The report was accepted, the committee continued, and the subject of issuing the circular laid over.

Dr. Kellogg was requested to represent the Board at the meeting of the American Medical Association at St. Paul.

The next meeting of the Board will be on Tuesday, July 11, 1882.

A MAN recently exposed to small-pox, took as a preventive, three quarts of whiskey. The coroner's jury after mature deliberation rendered a verdict of "death from excessive prophylaxis."

Selected Articles.

ABSTRACT OF CLINICAL LECTURES, DELIVERED AT THE LONDON HOSPITAL.

BY JONATHAN HUTCHINSON, F.R.C.S.

The Pre-cancerous Stage of Cancer, and the Importance of Early Operations.—The patient who has just left the theatre is the subject of cancer of the tongue in an advanced stage. As I demonstrated to you, the lymphatic glands are already enlarged. It is hopeless to think of an operation, and there is nothing before him but death, preceded and produced by a few months of great and continuous suffering. His case, I am sorry to say, is but an example of what is very common. Not a month passes but a case of cancer of the tongue presents itself in this condition. The cases which come whilst the disease is still restricted to the tongue itself are comparatively few; nor does this remark apply only to the tongue. "Too late! Too late!" is the sentence written but too legibly on three-fourths of the cases of external cancer concerning which the operating surgeon is consulted. It is a most lamentable pity that it should be so; and the bitterest reflection of all is, that usually a considerable part of the precious time which has been wasted has been passed under professional observation and illusory treatment. In the present instance, the poor fellow has been three months in a large hospital, and a month under private care. I feel free, gentlemen, to speak openly on this matter, because my conscience is clear that I have never failed when opportunity offered, both here and elsewhere, to enforce the doctrine of the local origin of most forms of external or surgical cancer, and the paramount importance of early operation. I have tried every form of phraseology that I could devise, as likely to impress this lesson. Nearly twenty years ago, I spoke to your predecessors in this theatre concerning the "successful cultivation of cancer;" telling them how, if they wished their patients to die miserably of this disease, they could easily bring it about. The suggestion was, that all suspicious sores should be considered to be syphilitic, and treated internally by iodide of potassium, and locally by caustics, until the diagnosis became clear. More recently, I have often explained and enforced the doctrine of a pre-cancerous stage of cancer, in the hope that, by its aid, a better comprehension of the importance of adequate and early treatment might be obtained. According to this doctrine, in most cases of cancer of the penis, lip, tongue, skin, etc., there is a stage—often a long one—during which a condition of chronic inflammation only is present, and upon this the cancerous process becomes engrafted. I feel quite sure that the fact is so. Phimosis and the consequent balanitis lead to cancer of the penis; the soot-wart

becomes cancer of the scrotum ; the pipe-sore passes into cancer of the lip ; and the syphilitic leucoma of the tongue, which has existed in a quiet state for years, at length, in more advanced life, takes on cancerous growth. The frequency with which old syphilitic sores become cancerous is very remarkable ; on the tongue, in particular, cancer is almost always preceded by syphilis, and hence, one of the commonest causes of error in diagnosis and procrastination in treatment. The surgeon diagnoses syphilis, the patient admits the charge, and iodide of potassium seems to do good ; and thus months are allowed to slip by in a state of fools' paradise. The diagnosis, which was right at first, becomes in the end a fatal blunder, for the disease which was its subject has changed its nature. I repeat that it is not possible to exaggerate the social and clinical importance of this doctrine. A general acceptance of the belief that cancer usually has a pre-cancerous stage, and that this stage is the one in which operations ought to be performed, would save many hundreds of lives every year. It would lead to the excision of all portions of epithelial or epidermic structure which have passed into a suspicious condition. Instead of looking on whilst the fire smouldered, and waiting till it blazed up, we should stamp it out on the first suspicion. What is a man the worse if you have cut away a warty sore on his lip, and, when you come to put sections under the microscope, you find no nested cells ? If you have removed a painful, hard-based ulcer of the tongue, and with it perhaps an eighth part of that organ ; and, when all is done, and the sore healed, a zealous pathological friend demonstrates to you that the ulcer is not cancerous, need your conscience be troubled ? You have operated in the pre-cancerous stage, and you have probably effected a permanent cure of what would soon have become an incurable disease. I do not wish to offer any apology for carelessness, but I have not in this matter any fear of it.

Empiricism and Specifics.—The patient whom we are about to discharge from the Talbot ward, cured of severe pemphigus, was admitted for a special purpose. He was sent in by my friend and former pupil Dr. Tom Robinson, in order that he might be cured. You will say that the hope of cure is the motive which brings most of our patients to us. True ; but in this instance there was something more than this. Dr. Robinson could easily have cured him himself, but he sent him here in order that I might work the miracle of cure under your eyes and thus claim your belief in the efficacy of drugs. You will remember his state when admitted ; he was covered from head to foot with bullæ ; the trunk was less severely affected than his limbs, head, and genitals ; on these there was nowhere a space as large as the palm free from bullæ, and on the trunk also there were a considerable number. He was in a miserable

condition from pain and irritation. The eruption had been out about ten days, and it affected the mucous membrane of the mouth as well as the skin. You may remember that we kept him in bed for a few days before we used the magician's wand, in order that all might see that there was no natural tendency to amelioration. More bullæ came out ; then, without making the slightest change in diet, we ordered a few drops of a tasteless solution of arsenic to be swallowed three times a day. The result was, at our next visit, most of the bullæ had dried, and there were no fresh ones. He continued to improve greatly for ten days, when suddenly a few fresh small bullæ seemed to threaten a relapse. We doubled the dose of our remedy, making the dose eight instead of four drops ; and, from that day, with the most trifling exceptions, the recovery has been uninterrupted. With such a fact before you, let me beg of you, gentlemen, to believe in drugs, and to treat empiricism with respect. In the prescription which I ordered, I availed myself solely of empirical knowledge ; I prescribed, just as any old woman might prescribe, that which I knew would do good. Concerning the nature of pemphigus, I knew nothing ; of its cause, absolutely nothing ; of its clinical relationship, but little ; of the *modus operandi* of arsenic, I knew scarcely more ; but this I did know as a fragment of assured conviction, that arsenic would cause the pemphigus eruption to disappear, and the patient to regain his health. Far be it from me to speak slightly of scientific work ; let us by all means work as hard as we can in the laboratory and microscope-room, and penetrate as far as we possibly can into the mysteries of disease ; let us never weary in our search after causes, or in our endeavor to find practical application for the facts of physiology. But, whilst doing this, let us remember that, as regards the relief of suffering, much of our usefulness must be based upon knowledge which is nowise scientific, but simply a matter of experience and memory. We have many specifics for many maladies, or rather for many symptoms, and he is the most successful practitioner who has stored in his memory the largest number of them. As years go on, we shall add many more to our list ; and I doubt not that there are those who now listen to me who are destined to give help in their discovery ; for discoveries in this direction are rarely made by single observers, but rather by the concurrent work of many experimenters, all keeping their eyes open, willing to try new things, and resolute to store faithfully the results of their operations. Iodide of potassium for tertiary syphilis, the bromide for epilepsy and as an anaphrodisiac, iodoform for phagedena and specific ulceration, balsam of Peru for scabies. So silently have these invaluable specifics been introduced into practice, that it

would puzzle most of us to say who first recommended them. I mention this fact, in order to show how important is the honest labor of all in the pursuit of therapeutics. We all prescribe, and we ought all, on system, to observe and record the results of our observation as to the effect of drugs. Five-and-twenty years ago, I believe that the case of pemphigus which you have seen cured would have been found incurable in all the medical institutions of the world, with one single exception. Much more recently than that, the disease was pronounced by Hebra to be invariably fatal. So, indeed, it would have been to this day, if we had not found out arsenic. I know of nothing else that will cure it. Our patient was already beginning to emaciate, and, in the course of a few months—possibly of a few weeks—he would have had to die, worn out by the constant discharge from his skin, had we not put arsenic into his blood. Never shall I forget seeing a poor wretched child carried on a bed into Mr. Startin's out-patient room at the Blackfriar's Hospital for Skin Diseases. It had been brought straight from the wards of one of our large hospitals, where, during three months, all had been done for its help that benevolence, aided by the science of the day, could suggest. Yet it was emaciated to skin and bone, and so covered with sores, that it was impossible to put his clothes on. A few minims of arsenic were prescribed, and in a few weeks the child was well. So much for empirical knowledge; so much for drug-specifics.

Prompt Amputation in Traumatic Gangrene: Importance of Amputation High Up.—In cases of traumatic gangrene, ought amputation to be performed without waiting for a line of demarcation to be formed? I believe that the reply of most surgeons to this question will be an unhesitating affirmative. Such certainly would be my own. We have recently had a very instructive case. A man aged more than fifty, but of good constitution, was admitted with a compound fracture of the lower third of the leg. We tried to save it, and the limb was put up in antiseptic dressing. The foot, however, became gangrenous, and, about the sixth day after admission, Mr. Tay amputated the limb below the knee, the man being at the time very ill. The amputation was done through perfectly sound parts, but it was presently followed by gangrene of the stump. The flaps became livid, and the man was in a most urgent condition. Mr. Tay and myself, in consultation, determined at once to perform a second amputation; and, within twenty-four hours of the first, this was done in the lower third of the thigh. The man did well, and the stump on the second occasion has made, as you saw the other day, a very good one. The main reason for prompt amputation in such cases is, that the gangrenous process is a very dangerous one. Whilst soft parts are dying, and the circulation still going on to some extent through them, the blood

becomes poisoned by the absorption of gases and fluids from the putrescent parts, and a most dangerous condition of septicæmia results. Of this state a rapid pulse, a sunken countenance, high temperature, and vomiting are the most constant signs. It is remarkable how quickly they are sometimes relieved by the removal of the dying part. It may be that the process of mortification is also attended by a shock to the nervous system, but I suspect that the chief part of the mischief is done through the blood. In the pyæmia which results from phlebitis, it is of no use to amputate after once the poisonous emboli have been shed from the inflamed vein into the blood. It is then too late, for the secondary abscesses will form, whether you remove the original focus or not. In the septicæmia from gangrene, however, the case is different. Here it seems to be easily possible for the blood to rid itself of contamination. I well remember the case of a young soldier who was under treatment some years ago for a damaged foot, the consequence of a Canadian frost-bite. He had also obliteration of the femoral artery. My junior colleague at the time amputated through the tarsus. The stump never healed, and, some time after, I amputated in the upper third of the leg at a great distance from the disease, for the whole of his leg looked at the time as healthy as yours or mine. I went high up, because I knew that the femoral artery was occluded. The result, however, was that the stump passed into gangrene, and very soon we had all the symptoms of the most severe form of that malady. The patient had frequent vomiting, a very rapid pulse, and was indeed in such a critical state when on the third day I decided to amputate again, that I did not dare to have him taken from his bed. The second amputation, performed high up in the thigh, saved his life. No ill symptoms occurred after it, and the stump healed well. I am inclined to believe that usefulness of amputation in gangrene will become more widely appreciated, and that this measure will be resorted to, not exclusively in traumatic gangrene, but in all forms which are attended by serious constitutional symptoms. If a part be simply passing quietly into a mummified condition, and the patient's health not suffering, then there is no reason for interfering until you see where nature is going to make the separation. There is, indeed, no reason for interfering at all, for you must let nature finish the work. If you amputate near to the line of demarcation, your stump is almost certain to slough, and all that you must dare to do in the way of help in such cases is just to saw through the bones when they are laid bare. The explanation of disappointment in amputating for gangrene, whether traumatic or otherwise, is, I feel sure, almost always from amputating too near to the disease. In all such cases, we ought always to go high up. If the foot be

concerned, go above the knee; if the upper extremity near to the shoulder. You must think rather of the patient's life than of the length of his stump. Adopting this rule, I have of late years more than once amputated for severe forms of senile gangrene with very excellent results.

Can a Man have Syphilis Twice?—The man whom we have just seen offers a remarkable example of the occurrence of a second chancre soon after the first. His second sore has been, as I have repeatedly demonstrated, characteristically indurated. He is quite candid, and makes no doubt that this sore was the result of contagion. Yet it is barely a year since he had his first chancre, and this was followed by an eruption of which he had scarcely got clear when this second sore occurred. The case is proof that a man may have an indurated sore on the penis within a year of a former one, but it is not proof that he may have syphilis twice, for this patient has not, as yet, had any constitutional symptoms as the result of the last chancre. If, however, you ask me for an answer to the general question, Can a man have true complete syphilis twice? then I must reply clearly that he can. Such cases are rare—as rare, perhaps, as examples of second attacks of small-pox—but they do occur. I am at present attending a gentleman who has a terrible phagedenic chancre and rupial eruption, and who unquestionably had complete syphilis, chancre, sore throat, and rash, seven years ago. I have also a second case under care, very much milder, but illustrating exactly the same fact, with almost precisely similar dates. Second chancres are, however, far more common than second attacks of constitutional syphilis. Many of them are the result of fresh contagion, but seem to have no power to produce constitutional symptoms; but others are not from contagion at all, but form in connection with a taint still remaining from the first attack. It is a most important fact that indurations may form in the penis in every respect exactly like Hunterian chancres, not distinguishable in any way, and yet that they may be merely recurred sores, and the products of constitutional taint. I have seen this over and over again; and M. Alfred Fournier of the St. Louis Hospital has written a very instructive paper on this form of sore. In the case of our patient, it is obviously impossible to say, after the statement I have just made, whether or not his present sore is the result of fresh contagion. It may be simply a relapse, or it may be a gumma. He, however, confesses to exposure; and, as the sore followed in due course, it is probably true that he was afresh inoculated. Second attacks of syphilis are sometimes, as in the case just mentioned, very severe. The same has, I believe, been occasionally noted in recurred attacks of variola. As a rule, however, they are mild, or even abortive. Third attacks may even occur; and so may, as we

are told, third attacks of small-pox. We must explain such facts, I expect, by reference to individual peculiarity and idiosyncrasy, but it is important that they should be known. The belief that syphilis can occur but once in a lifetime is very widely spread amongst a certain class of the public. I have watched with amusement the change in expression in many a young gentleman's face when he got my reply to his smiling suggestion—"A man can not, I suppose, have the disease a second time?"

Treatment of Lichen Psoriasis (Lichen Ruber).—We discharged recently from Sophia ward a middle-aged woman, who was the subject of lichen psoriasis. As I explained at her bedside, I much prefer this name to either of the others by which this disease is known. As you know, it has been named lichen ruber by some, and lichen planus by others. It is, however, essentially a form of psoriasis. It occurs to the same class of subjects, is curable by precisely the same means, and, like psoriasis, is liable to relapse or to recur after considerable periods of health. The case which we have just been studying was of much interest in reference to the points to which I have adverted. Although it certainly was an example of the malady known as lichen ruber, yet in parts the eruption was not distinguishable from common psoriasis. It conformed to the lichen type in that it began in little papules, which occurred in groups; and, when a patch was formed, it was by the coalescence of a number of small papules. This mode of spreading is, perhaps, the chief feature of distinction between the malady in question and common psoriasis. The latter begins as a point, which, spreading at its edge, becomes a papule, which, again enlarged at its border, becomes a patch, possibly a very large one. Thus, psoriasis patches are always almost round, nummular, *i. e.*, like coins or rings, whilst those of lichen ruber are irregular, in lines or patches. In the case in question, most of the eruption was arranged in this manner, but some patches were not. On the elbow-tips and over the ulnæ were patches which, in mode of formation and in accumulation of scales, could not be distinguished from ordinary psoriasis. Our treatment of the case was exactly that of the latter disease—tar externally, and arsenic internally. In nine cases out of ten, these remedies will cure lichen psoriasis pretty quickly. Some of you may remember a man whom we had under care six months, a splendid specimen of the disease. He had been sent to me by Mr. Forshall, of Highgate. It was a first attack, and occurred to a healthy young man. I prescribed arsenic and tar. Through Mr. Forshall's kindness, I had an opportunity of seeing this man again last week. He told me that about six weeks' use of the remedy quite cured him, and that he has, during the last four months, remained without treatment

quite well. In our last case, however, we have not been so fortunate. Our patient was of a very peculiar nervous system, in fact almost insane, and the influence of arsenic appeared to be to excite her. Several times we had to discontinue it on account of the irritable condition it appeared to produce, and finally she was discharged uncured, in consequence of the trouble which she gave in the ward. As a rule I have found lichen psoriasis more easily influenced by treatment than common psoriasis. The cure is also usually more complete. The periods of immunity are also longer, often not less than seven years; whereas psoriasis, however good the cure, usually relapses, I think, within the year.

Chronic synovitis, arthritis, or struma: Importance of the diagnosis. We have had lately a great many cases of synovitis of the knee-joint. I think you will have observed that, roughly, we may divide all the cases of chronic synovitis into two groups, those which are connected with struma, and those which are of an arthritic nature, in the conventional use of that term. This division is of considerable practical value. Under the arthritic head, I comprise all that are associated with gout, rheumatism, or rheumatic gout, and all gonorrhoeal rheumatism; and of all these, we may say that we expect them to get well. Sometimes there is stiffening, sometimes effusion is very long in disappearing; but still, in nearly all cases, in the end the patient again walks on the limb. It is very different with the strumous group. Here the tendency is to pulpy thickening of the synovial membrane, and to incurable conditions. It may be that destructive changes are warded off by long rest, but the patient is disabled, and the limb useless. We have half a dozen of this kind of knee now in our hands, not bad enough for amputation or excision, but still so bad as to prevent walking. In these cases, we are obliged to forbid walking, whereas in most of the arthritic cases, unless exercise causes pain, it may be permitted with impunity. A considerable variety of condition is presented in this group, and especially in the arthritic process, the older the patient, the more chronic and the less painful is rheumatism. You know that I am in the habit of insisting upon the importance of the patient's diathesis, even in cases of synovitis which is called traumatic. We admit a great many cases in which free synovial effusion has followed a sprain or contusion. In these cases, if the effusion lasts long, or if it is in excess of what its supposed cause will account for, you must suspect the arthritic diathesis. The patient is rheumatic or gouty. We have had numberless illustrations of this. Sometimes it is difficult to get at the exact facts. In the case of a man who has just left us, the synovitis persisted in spite of treatment, and relapsed after an apparent cure. It appeared likely that the case might end as hydrops articuli.

I had repeatedly taxed the man with being gouty, but we could get but little evidence. Last week his employer called on me; I then learned that the man had been for thirty years employed as a bottler in wine vaults, and that his habits of free wine drinking had often nearly cost him his place. I was told that no objection was made to a bottler drinking as much wine as was good for him, and that complaint only resulted when so much was taken as to interfere with his efficiency as a workman. It is not easy to imagine a position more likely to produce a gouty state of system. We have since let this patient leave the hospital, supplied with a knee-cap. He still has some fluid in the joint, but he can walk without any pain. Exercise, which would of course be most injurious if the disease were strumous, will not hurt him.—*British Medical Journal.*

ERB ON THE REFLEXES.

Notes from one of Professor Erb's Lectures on the Diagnosis of Diseases of the Nervous System.

Although physiologists have busied themselves extensively with the study of reflex action in general, that branch of the subject which is of practical diagnostic value has been comparatively neglected. There is room for much valuable work even on the healthy subject, upon the reflex movements brought out by the stimulation of various parts of the body; and to the practical physician the subject is one of great importance.

The principal reflexes of diagnostic value are the skin, tendon, pupil, palate, and sphincter reflexes.

SKIN-REFLEXES. These are limited in health to certain parts of the body.

The reflex movement produced by tickling the *sole of the foot* is best seen in children and in "nervous" people. It varies greatly within normal limits, and with these variations it is necessary to become familiar before drawing diagnostic conclusions. This reflex is best tested by drawing the finger-nail or the handle of a percussion-hammer quickly from toe to heel. The result, as seen on the healthy man used for illustration, is a contraction of the quadriceps extensor. A slight contraction appears also in the muscles on the front of the leg, so that the foot is flexed as well as drawn away. In the foot itself no reflex is seen. This is the only normal skin-reflex about the foot, except sometimes a slight contraction when the dorsal surface is pinched.

Cremas'er reflex. On stroking the anterior and internal surface of the thigh, a contraction in the cremaster muscle is seen to follow, by which the testicle is elevated. In a similar manner, the scrotal muscles contract when we pinch the skin of the scrotum. These contractions are, under abnormal

conditions, much decreased, and are normally more marked in boys than in adults.

The *abdominal reflex* is best tested with the patient lying down, as the abdominal muscles in the erect position are very tense. The abdomen should be unexpectedly stroked, and will immediately retract. This reflex is easily wearied by a few repetitions.

Mammillary reflex. In the normal subject, the nipple on being stroked becomes hard and elevated, that is, assumes a state of erection. At the same time the areola is drawn together.

Palpebral reflex is tested by approaching the eye quickly with the finger or by stroking the cilia. Under pathological conditions the conjunctiva may be touched to determine if palpebral reflex exist, though of course in health this stimulus is never necessary.

The foregoing are the only skin-reflexes found in the normal subject. In disease they may be wanting on the one hand or increased on the other, and new skin reflexes may be developed.

TENDON-REFLEX. The value of the tendon-reflex in diagnosis was discovered in 1876, since which time the literature on the subject has multiplied rapidly. This phenomenon is produced by the stimulation of certain tendons, for example, that of the quadriceps extensor femoris. That the reflex is produced by stimulation of the tendon, and not of the skin, is easily shown on animals by removing the skin over the tendon; on man, by pushing the skin over the tendon to one side and stimulating it. This reflex appears in the healthy subject on stimulation of the tendon of the quadriceps femoris, of the triceps, and of the tendo-Achillis.

Patellar tendon-reflex. This is by no means easy to demonstrate in all cases in which it exists. The knee of the leg to be tested is crossed over that of the other, and the leg allowed to hang down with no muscular effort on the part of the patient. This position is preferable to the recumbent, for in the latter position the tendon is relaxed, the reflex being in all cases best obtained when the tendon is slightly stretched. A short, sharp, light stroke is given with the percussion-hammer on the tendon, just below the edge of the patella. The result in health is a contraction of the quadriceps muscle. The great difficulty to contend against is involuntary muscular effort on the part of the patient. The phenomenon is in health almost constant; but, as it is wanting in $1\frac{1}{2}$ to 2% of normal subjects, its absence cannot be taken for an absolute sign of disease, which is an important fact to bear in mind. The patellar reflex may be, in disease, increased to such a degree that the least touch calls out a series of clonic contractions, or it may, on the other hand, be entirely wanting. It is wanting in *tabes dorsalis*, for example, and in atrophic paralysis, either of peripheral or of spinal

origin. It is generally increased in cases of spinal lesion in the dorsal region.

Reflex of the tendo Achillis is tested as follows: The foot is held at a right angle to the leg, in order that the tendon may be slightly stretched. The tendon is then struck lightly about $2\frac{1}{2}$ finger-breadths above the apex of the heel. A slight extension of the foot results in the normal subject; about the lower extremities there are no more normal tendon-reflexes, except sometimes a slight contraction of the abductors on striking the inner surface of the thigh.

Triceps reflex. This is called out by striking the tendon just above the elbow, the arm being held in a position of flexion. A slight reflex may be sometimes found in the biceps and in the flexors of the wrist, on striking their respective tendons. These reflexes are, however, very inconstant in health. In disease they may be very marked.

Here is a patient with an organic central lesion. He has a spastic gait, his legs are stiff, and he almost hops on his toes. In a patient with this gait we generally find exaggerated reflexes. On attempting to bend his knee we find a powerful resistance due to involuntary muscular contraction. We find an immense reflex following the slightest stroke on the tendon, not only below the patella, but even above it, over a triangular space which represents the spreading of the tendon. This reflex is in some cases so much exaggerated, that one stroke is followed by a series of clonic contractions.

In such a case as this one, the reflex of the tendo Achillis is best tested by holding the foot in the hand, with the thumb to the dorsum of the foot. The foot is now bent with a quick jerk towards the knee, and pressed firmly, though not too forcibly, upward. The result is a series of contractions, each relaxation being followed by a fresh stimulus as long as the foot is held firmly upwards. The fact that this stimulus is enough to keep up the reflex, is in itself evidence of a pathological condition. This phenomenon is in some cases best demonstrated by holding the foot in a position of abduction, in others of adduction. The phenomenon is almost never to be produced in health, though in persons with weak nerves two or three contractions may follow. When therefore, as in this case, a distinct series of contractions follow, a pathological state is almost surely diagnosed, probably an organic lesion in the cord or brain.

As we proceed in the examination of the case before us, we find that striking the inner surface of one thigh calls out contractions in the adductors of both thighs. A reflex also follows stimulation of the tendo tibialis postici as it passes the inner malleolus; also of the peroneal tendons as they pass under the outer malleolus; also that of the tibialis anticus as it passes over the ankle. Reflexes from the biceps and from the wrist flexors are

marked. In this patient the plantar, abdominal, and mamillary reflexes are well shown.

The number of muscles exhibiting the reflex phenomenon may be, in pathological cases, much increased; the deltoid, the scapular, and the dorsal muscles, for example, being included.

PUPIL-REFLEX is of great diagnostic value, and is exhibited in two ways: by narrowing on stimulation by light, and by widening on stimulation, for example, of the skin.

Pupil-reflex to light. The patient is placed facing a window, and the hand of the observer is placed over the eye. On the sudden removal of the hand, the slightest contraction of the pupil is noticed. The eyes should not be closed by the hand, or its removal may be followed by a contraction of the pupil, due to the effort of accommodation, which must not be confounded with the contraction due to the stimulation of the light. This accommodative effort of the pupil, which is not a reflex phenomenon, may be separately tested by directing the patient to look first at a distant, then at a near object.

Pupil-reflex to other stimulation than that of light. In sleep the pupils are very small. Let a person be suddenly awakened by a loud noise or other stimulus, and an extreme dilatation occurs. A similar dilatation may be brought about by a sharp stimulus to the skin. Let the patient look fixedly on a certain spot, say the observer's coat. If, now, the skin at the back of the patient's neck be pinched, a widening of the pupil ensues. The same reflex may be brought about by a strong faradic current, one electrode being placed at the back, and the other at the side of the patient's neck.

PALATE-REFLEX. While the patient is breathing as quietly as possible, with the mouth open, the palate may be touched with the end of a penholder. If the part is in the normal condition a retraction follows.

For the sphincter reflexes, we must depend in great measure on the history of the patient.

The reflex acts of coughing and sneezing may be tested if desirable, the former by powders blown into the larynx, or by observing the patient while choking, the latter by snuff or other irritating substances.

In pathological cases, a great variety of new reflexes appear, some following upon external stimuli, others upon natural acts of the patient. As an example of the latter, patients are seen in whom the passage of a stool is followed by clonic contractions in the muscles of the legs.

Among the many illustrations of reflex acts following external stimulus may be mentioned vaginismus, also micturition brought about by the pain of introducing a catheter. In one patient with decubitus, washing the sore always induced an act of defecation. An interesting example of abnormal reflex action was seen in the patient, who, though

paralysed from the neck downwards, made a movement with his arm to remove the catheter on every attempt at introduction.—*Lond. Med. Rec.*, Nov.

INFLUENCE OF ANTISEPTICS ON THE PERIODS OF AMPUTATION AFTER CRUSHING INJURIES.

CLINIC BY STEPHEN SMITH, M.D., NEW YORK.

The boy about to submit to amputation of the leg, entered the hospital about four days since, suffering from a crushing wound of the leg, received by the wheel of a street car. The statement of the boy, and of the bystanders, was that the wheel traversed the leg just above the ankle, and an examination proves that they are correct. The limb was completely crushed in all its tissues at that point. But it must be remembered that it is usual for persons falling before a car wheel, and receiving injuries, to suppose that the wheel passed over the limb, when, in fact, this rarely happens. Such persons are greatly excited and severely injured, and naturally have the impression that the wheel passed over rather than by the side of the injured part. The truth is, however, that the wheel usually pushes the limb before it, and crushes and lacerates its side and fractures the bones. You can determine the nature of the injury by examination. If the wheel has actually traversed the limb, it will be, as in this case, so thoroughly crushed that bones are comminuted, muscles reduced to a pulp, and arteries, veins, and nerves destroyed. The entire destruction of a limb when a car wheel passes over it on a rail, may be tested by experiment with the dead subject. In such a test you will find it somewhat difficult to make the car wheel mount over the limb; the tendency is to push the limb along on the track, and crowd it off upon one side. In this act the side of the limb will be lacerated and the bones broken, but the muscles, nerves, and arteries may be uninjured on the opposite side.

When called to a case of injury by the crushing effects of a car wheel, you should first examine to determine whether or not the wheel traversed the limb. If you are satisfied that it did pass directly over it, the limb cannot be saved; amputation is inevitable. If, however, you decide that the limb was pushed off the rail by the wheel, the question of amputation will be more or less doubtful, according to the nature and extent of the injury. In our time we can save limbs that surgeons formerly would not hesitate to amputate. As a rule, if the arteries and nerves are still intact, the limb can be saved. Disinfectants and plaster of Paris, judiciously used, will save the most unpromising cases of this kind.

But the question which chiefly interests us in connection with this question is this: Why was

the operation, when amputation was, from the first, inevitable, delayed to this critical period? It will be a sufficient answer to that question to state that the patient is in better condition for the operation to day than he has been at any time since the injury was received. In explaining this statement, I wish to emphasize the fact that antiseptics, efficiently employed in these cases, greatly modify our procedures. When it was decided that the injury necessarily involved the loss of the limb, the patient was profoundly under the influence of the shock of the injury. His surface was pallid, his pulse small and rapid, his respirations hurried; he was restless, and large drops of sweat stood on his forehead. The first indication was, therefore, to restore him from the shock, which threatened life immediately. Stimulants, dry friction, and external heat were employed. The second indication was to dress the limb. The appliances used were these, viz.: The limb was laid on a rubber cloth, placed on pillows, and so arranged as to make a trough, which inclined downwards towards and beyond the foot of the bed. Above the limb a bottle was suspended, containing a three per cent. solution of carbolic acid, from which common candle wicking depended; the wicking was so arranged that the carbolized water constantly fell on the entire crushed wound, and the water ran off into a vessel at the foot of the bed. The object of this irrigation was to prevent putrefaction and inflammation.

The patient slowly rallied, and at the end of eighteen hours was warm, and in a favorable condition. Formerly, this was the period for amputation, for the danger which the older surgeons feared was the impending inflammation, which usually began in about twenty-four hours. But no prudent surgeon has subjected such a patient to the second shock, which results from an amputation, without a feeling of keen regret, and with intense anxiety. Too frequently has he been arrested in his operation by the announcement of his assistant that the patient was pulseless. Artificial respiration, hypodermic injections of brandy, etc., have rallied the vital forces so that the operation could be completed, and the patient removed to bed. But the revival was momentary. The nervous centres were too profoundly damaged to maintain their functions and death was inevitable.

Since carbolic acid has become so generally used in wounds I have ceased to regard time as an element in amputations. My attention was first called to the power of this class of agents to prevent inflammation, many years before carbolic acid came into use. A crushed foot came under my care, and it was doubtful whether an amputation would be required or not. I suspended the limb, and irrigated the wound with creasote water for ten days, during which time there was not the slightest evidence of inflammation in the part, nor

was there any fever. At the end of that period it was apparent that the foot could be saved, and only the simplest dressings were required to perfect a cure.

It is now a matter of every day's experience that carbolic acid constantly applied to crushed tissues, as in irrigation, will arrest all tendency, both to putrefaction and to inflammation. This boy is a striking illustration of the power of this agent to protect a patient from those secondary evils which occur to injured parts. For four days this patient has been recovering from the primary injury, without being in the slightest degree damaged by the local conditions. There has been no other fever than that of reaction from nervous prostration, and that passed off on the second day. He has been taking food freely, his sleep is sound and refreshing, his pulse is nearly normal, and in every respect he seems to be fully restored. The shock of amputation will now be comparatively slight; certainly will not be dangerous in the sense it would have been if I had amputated within twenty hours of the injury. But to guard him against the possibility of harm, he has been taking two teaspoonfuls of whiskey with milk, every hour for four hours, which has caused moderate exhilaration.

It is not absolutely necessary to amputate to-day, so far as the limb is concerned, for we can maintain it in this inert state for many more days, but the patient's general condition is entirely favorable, and as amputation is inevitable it might better be done now, and thus diminish the total length of time required for recovery.

The lesson which I wish to impress upon your minds is this, viz.: In crushing injuries requiring amputation, treat the lacerated parts with carbolic acid water applied by means of irrigation, and delay the operation until the patient is in a favorable condition to endure the shock. I need scarcely say that the same treatment should be adopted in similar injuries which do not require amputation, during the period of impending inflammation. But to be useful, the solution must penetrate the injured tissues, and to effect that it is often necessary to make incisions through the skin.

The leg was amputated below the knee with but slight shock, and the patient made a good recovery.—*Medical News.*

EXCISION OF THE KNEE.

BY P. J. HAYES, F.R.C.S.E.

Nearly ten years have elapsed since I introduced the practice of excising the knee-joint for chronic articular disease, of progressive character, at the Mater Misericordiarum Hospital. Previous to the period of my connection with the hospital, excision

of the knee had been performed in one instance, but the result was so unfortunate that every member of the medical staff became in a measure prejudiced against the operation. My success induced my *confreres* to adopt the operation, and I can unhesitatingly state that our practice throughout has been eminently satisfactory.

Calculating all the cases of excision which I have had under observation, my experience extends to more than forty patients, but in the following table I enumerate cases which have been treated solely by myself, and put up in the apparatus which experience of other methods caused me to devise. From this table of fourteen cases it will be seen that eleven recovered with excellent limbs. In three cases—where I was induced to operate against my own desire and opinion—secondary amputation was required; of these, one recovered, one soon died of phthisis, and one died within a week after the second operation.

From time to time I have read in our leading journals observations condemnatory of excision of the knee, the fatality after operation being high, and even when life was preserved the limb remaining in an unsatisfactory condition. Again, I have observed suggestions emanating from surgeons who believe success can be almost insured by preserving the continuity of the soft parts in front of the joint. I can only say that in my large experience of knee excision the greatest measure of success seemed to be due to performance of the operation and retention of the limb according to the method which I have advocated as well as practised.

My former papers may have been either unnoticed or forgotten—hence to-day I venture to repeat, with certain modifications and additions, my description, in the hope that other operators will be induced to pursue a method which is, in my opinion at least, the most likely to afford satisfaction and success. The steps of the operation for excision of the knee are too well known to render any lengthened account of the procedure needful. I usually flex the leg moderately, and, having defined the posterior margin of the femoral condyles, I cut from one of them to the other, straight across the ligamentum patellæ and into the joint. At this stage the patella may be dissected from its attachments, but if fixed to the femur its separation will probably be postponed until after division of fibrous connections between the femur and tibia. I prefer cutting through the lateral ligaments before proceeding to the division of either the normal or abnormal structures occupying an intra-articular position; also, when dealing with the latter, I keep the leg strongly flexed and direct the cutting edge of the knife against the articular surface of the head of the tibia, rather than towards the ligamentum posticum. I never attempt to clear the posterior aspect of either the femur or the tibia before applying the saw. I sever the bone from

before backwards, and break through the posterior surface of each bone. This is done with the view to avoid injuring the posterior ligament and corresponding fibrous connections between the femur and tibia, it being an advantage to preserve, if possible, these tissues, as they not only assist to maintain contact between the sawn surfaces, but also, should suppuration occur in spite of antiseptic dressings they will in all probability prove a barrier against the entrance and burrowing of pus into the popliteal space.

As the *raison d'être* of this communication refers to my method of putting up the limb, I shall describe in detail the steps to be adopted. Presuming that the operation will have been performed under an antiseptic spray, the spray should now be directed across the region of the knee, so as to avoid any unnecessary wetting of lint, bandages, etc. Carbolized sponges are to be maintained in contact with the angles of the wound, so as to absorb all blood flow whilst the leg and thigh are being washed and bandaged.

The surgeon next applies a soft flannel roller evenly, but loosely, around the limb, from the toes to a point about two inches below the inferior lip of the operation-wound, and over this a second roller is to be adjusted, thus providing the leg with a sufficiently thick and soft covering. In like manner the thigh from the groin to about two inches above the wound is to be loosely encased with a couple of flannel rollers. The limb being ready for application of the splint, the patient is to be brought *thoroughly* under the influence of ether so as to produce complete relaxation of the muscles. The splint consists of two concave pieces of perforated iron—the one moulded so as to fit the posterior aspect of the leg, and the other adapted to receive the posterior surface of the thigh, connected posteriorly by means of a strong, flat, but narrow bar of iron, so bent as to form an oblique step about three inches long, and having the end to which the leg-piece is attached exactly one inch in advance of that fixed to the thigh-piece. This apparatus is to be provided with pads arranged for leg and thigh—the leg pad being made thicker below than above—and then it is to be carefully adjusted behind the limb. A soft pad is now to be laid in front of the thigh near its lower end, and on this pad a concave piece of iron about four inches long, by from two and a half to three inches wide, is to be placed. Sometimes I lay a square of poroplastic substance larger than the concave plate of iron between the latter and the pad. The next step is to firmly secure the thigh in the upper part of the splint. This is done by encircling the splint and limb with a strong strap which is to be tightly buckled across the upper part of the anterior small splint, whilst lower down the strap of a Petit's tourniquet is to be fixed, the brass of the tourniquet resting against the anterior

HYDROLEINE OR HYDRATED OIL AS
A THERAPEUTIC AGENT IN
WASTING DISEASES.

By W. H. BENTLEY, M.D., LL.D.,
VALLEY OAK, KY.

From *New Remedies*, September, 1881.

In October, 1880, I read an advertisement of Hydroleine in some medical journal. The formula being given, I was somewhat favorably impressed, and procured two pamphlets: One on "The Digestion and Assimilation of Fats in the Human Body," and the other on "The Effects of Hydrated Oil in Consumption and Wasting Diseases." They are ably written, and afforded an interesting study. Their doctrines are so reasonable, that I got up faith enough to have my druggist order a sufficient supply to thoroughly test the merits of the preparation.

I was ready to catch at anything to take the place of cod-liver oil. In my hands it has proved an utter and abominable failure in ninety-five per cent. of all my cases in which I have prescribed it since I have been engaged in country practice, and it never benefitted more than forty per cent. of my city patients.

The inland people, who seldom eat fish, can rarely digest cod-liver oil. Almost every week I am consulted by some victim of the *cod oil mania*, who has swallowed the contents of from one to twenty-five bottles, and who has been growing leaner, paler and weaker all the while, until from a state of only slight indisposition, these patients have become mere "living skeletons." Nearly all complain of rancid eructations, and an unbearable fishy taste in their mouth, from one dose to another. They not only fail to digest the cod oil, but this failure overloads the digestive organs to such an extent that digestion and assimilation of all food becomes an impossibility, the patient languishes and pines and finally dies of *literal starvation*. In the comparatively small number with whom I have found cod-liver oil to agree, it has proved very gratifying in its results. In my practice, by far the largest number receiving benefit from it have been children. Those who have, previous to their illness, been accustomed, to some extent, to a "fish diet," will be more likely to digest the oil, and more notably so in cold climates. Still the innumerable efforts that have been made in the shape of "pure cod-liver oil," "palatable cod-liver oil," "cod-liver oil with pepsin," "cod-liver oil with pancreatin," "cod-liver oil emulsions," etc., and so on, *ad infinitum*, attest the fact that the great *desideratum* after all is to render cod-liver oil capable of retention by the stomach, and digestible when it is retained.

As Hydroleine is partially digested oil, and this partial digestion is brought about by a combination of factors suggested by actual physiological experiments, these facts commend it to my confidence, and a trial of the preparation in seven typical cases convinces me that it possesses

a high degree of merit, and I feel that it is a duty incumbent upon me to call the attention of my medical brethren to the subject.

The first case in which I prescribed it was that of a married lady 28 years of age, a blonde, and the mother of four children, the eldest 9 and the youngest 1 year old. From the birth of this last child she dated her illness, for she made a tardy convalescence, remaining unable to walk for a month. Soon after she began to grow weaker, and soon resumed her bed, which she had not left to any extent since, not at any time being able to sit up longer than fifteen or twenty minutes. During all this time she was under charge of a skillful physician. He had tried many remedies to check the rapid emaciation; among these were several different brands of malt extract, cod-liver oil, and various mixtures of the oil. None of the oils and their mixtures agreed with her. In March, I was called and prescribed Hydroleine, a bottle of which I delivered at the time, directing her to commence with teaspoonful doses, to be gradually increased to twice the amount. It agreed with her finely, and by the time the first bottle was used she was greatly improved. She procured and used two additional bottles, and, at this writing, June 15th, is considered well.

The above case was one of general and persisting emaciation, unaccompanied by any cough or perceptible thoracic trouble. The ensuing case was one of diagnosed

TUBERCULAR PHTHISIS.

The patient a married lady, *æt.* 32, had been married about 14 years, and was the mother of six children, the youngest two years of age. Several of her sisters had died of the above mentioned disease. Her medical adviser prescribed cod-liver oil, and she had taken a full dozen bottles with plenty of whiskey. The oil had not been digested, although it had been retained by the stomach. Her cough had grown constantly worse, and she grew rapidly weaker, week by week. I prescribed Hydroleine for her, and she commenced to take it in April, about the 15th. It agreed with her finely. She rapidly gained weight and strength, her cough was relieved and has now nearly ceased. She has used nearly four bottles, and continues to use it, though apparently well.

I have prescribed it in three other cases, in two of which the results have been equally gratifying, but in the other case it produced nausea and greasy eructations.

From these trials I am led to think quite favorably of the hydrated oil, and I am led to believe that although it may not agree with all, it will be found of great and permanent benefit to a very large per cent. of consumption and other "wasting" diseases, and that it is destined, at no distant day, to very largely supplant the undigested oils.

HAZEN MORSE, 57 Front Street East,
TORONTO,
SOLE AGENT FOR CANADA.

TUBERCULOSIS RESULTING FROM DEFICIENT NUTRITION.

(From *The Medical Record*, New York.)

Various as are the opinions regarding the treatment of consumption, all writers concur in the belief that whatever measure is adopted, the strength of the patient must be husbanded with the greatest care, and the most efficient means employed to supply the system with that element which the symptoms indicate as being required to keep up the vitality while such course of treatment is being pursued as is considered suitable. The most striking indication of the presence of this dreadful disease is rapid loss of weight. The patient himself, prone as he is to disregard, premonitory warnings of this insidious malady, cannot but observe an extraordinary difference in the appearance of his form, as first the face, then the trunk and, lastly, the limbs become soft and flabby, and the once well-fitting garments hang loosely about him, his flesh seeming to melt away, so rapid is the change.

EMACIATION.

A natural course of reasoning as to the cause and effect of emaciation under these circumstances has developed the fact that the abnormal consumption of the tissues is the result of nature's efforts to supply the waste, through the blood from the fatty tissues of the body with the requisite amount of material whose oxidation is the source of heat and nerve force, the natural supply, through the assimilation of food, having failed in consequence of an unhealthy condition of the pancreatic secretions causing an insufficient supply of chyle, or a failure on the part of the lacteal tubes, through fever or some cause, to absorb sufficient nutriment.

TUBERCLE.

As the attack upon the tissues of the body progresses, not only fatty tissue is absorbed into the circulation from unnatural sources, causing loss of strength, but particles of albuminoid tissue are carried by the blood and being deposited in channels where the system has no provision for throwing them off, form desquamations centres of disease which, in their turn, throw off infectious matter to be absorbed into the general system. The immense extent of delicate mucous surface in the respiratory passages of the lungs exposed to the contents of the minute blood-vessels which permeate their entire texture, offers the greatest and most susceptible field for the reposition of a large amount of this effete albuminoid tissue. This deposit forms the tubercle whose establishment in the lung is the beginning of that train of circumstances which characterizes the progress of that fatal malady—consumption. Thus it is seen that tuberculosis is either due to the defective action of the pancreatic juice on the fatty elements of the food, or to the non-absorption of the chyle into the blood.

ASSIMILATION OF FATS.

Fatty matter, when introduced to the stomach, undergoes little change by the action of the gastric juice, but passes, together with

the chyme or digested fibrinous and albuminous matter, to the duodenum, where it comes into contact with the pancreatic juice, and is thereby transformed into chyle, which is a very delicate saponaceous emulsion or suspension of the oleaginous portion of fat. It is when in *this condition only* that fat is capable of absorption by the lacteals, thence passing directly to the venous blood which is supplied to the lungs through the right cavity of the heart; the lungs then absorb from that blood the hydrocarbons or fatty portion, and return the nitrogenous portion to the heart, to form the globulin of arterial blood before passing into the circulation.

This function of partly saponifying and partly emulsifying fats is enjoyed by no other secretion of the alimentary canal but the pancreatic juice, unless we take into consideration the action of the saliva, which is somewhat of that nature; but as the food in most instances is subjected to the action of the saliva in the mouth for so short a time, this feature in the economy is almost inappreciable.

TREATMENT.

The close relations of non-assimilations of the fatty elements of food to wasting diseases, and especially to consumption, is understood, and reason would indicate that if by any artificial means the absorption of fat could be assisted by supplying, as chyle, a proper amount of oleaginous or fatty matter, a nutritive progress would be established which would modify the unhealthy action of the pancreas, and not only relieve the body from the depleting effects of the disorder, but afford an opportunity for treatment and recovery. With the assistance of a thorough knowledge of the chemical process which fat undergoes from the time of its introduction into the duodenum to absorption, a preparation has been introduced and extensively used by the profession in England with highly successful results, indicated by the very flattering commendations of it from many physicians who, having given the treatment of pulmonary disorders their special attention, are peculiarly qualified to attest its efficacy.

HYDROLEINE.

This preparation, to which the distinctive name of hydroleine (hydrated oil) has been given, is not a simple emulsion of cod-liver oil, but a permanent and perfect saponaceous emulsion of oil, in combination with pancreatin soluble in water, the saponification producing a cream-like preparation, possessing all the necessary qualities of chyle, including extreme delicacy and solubility, whereby a ready and perfect assimilation is afforded.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonfuls, equal to 120 drops, contains:

Pure oil	80 m (drops)
Distilled water	35 "
Soluble pancreatin.....	5 grains.
Soda	$\frac{1}{2}$ "
Boric acid	$\frac{1}{4}$ "
Hyocholic acid	1-20 "

DOSE.—Two teaspoonfuls alone, or mixed with twice the quantity of soft water, wine or whiskey, to be taken thrice daily with meals.

The use of the so-called emulsions of cod-liver oil during the extremely sensitive condition of the digestive organs always accompanying consumption does not usually afford beneficial results. Those of the profession in this country who have under their care cases of consumption, diabetes, chlorosis, Bright's disease, hysteria, and, in short, any disease where a loss of appetite is followed by a rapid breaking down of the tissues of the body in its effort to support the combustion supplying animal heat, are urged to give this preparation a trial. It is supplied by the agent for Canada, Hazen Morse, No 57 Front Street East, Toronto, who will forward literature relating to the subject upon application.

That many of the diseases from which mankind suffer during infant and adult life are caused by malnutrition, there can be no doubt; and the extent to which non-assimilation of the life-giving properties of food interferes with recovery from severe illness, baffling the best directed efforts of the physician, points the necessity for an agent or combination of agents sufficiently potent to replace the deficient principle and aid nature in renewing the degenerated tissues.

Realizing this need, the science of chemistry produced pepsine. Richard Tuson, F. C. S. Professor of Chemistry, London, England, in the *Lancet* Aug. 13, 1870, speaks of this remedy as follows: "Since the introduction of Corvisart and Boudault's poudre nutritive into medicine, in the year 1854, Pepsine, obtained from the stomach of the pig, calf or sheep, in a state of greater or less impurity has been extensively prescribed in Dyspepsia and certain other affections. According to the testimony of some authorities of high standing, long experience in the use of this agent fully justifies Corvisart's predictions relative to its therapeutic value, which were based on physiological reasoning.

There are other authorities who express doubts as to the efficacy of Pepsine. This difference of opinion undoubtedly arises from the circumstance that pharmacutists supply medical men with various preparations, all bearing the same specific name of Pepsine, but differing very considerably in their digestive powers and other qualities. In fact, I find those who speak favorably of its employment in the treatment of disease have prescribed that prepared by the best makers, while those who express a doubtful opinion have been in the habit of prescribing those varieties or makes, which the experiments of myself and others have proved to be practically without any digestive activity, *i. e.* worthless. Under these circumstances it is *absolutely* necessary for the practitioner to be certain of the *make* of Pepsine he uses. *Pure* Pepsine, thoroughly triturated with finely powered sugar of milk (saccharated pepsine) will undoubtedly produce the best results.

Experience in diseases of the stomach, dyspepsia, etc. has demonstrated in many cases, the lack of other agents required to promote a healthy digestion beside Pepsine, namely Pancreatine and Diastase or veg. Ptyalin. Pancreatine the active principle of the sweet-bread or pancreas possesses the wonderful power of emulsifying the fats and oils of food, rendering them easily assimilated by the system not affected by pepsine in the slightest degree. Diastase or veg Ptyalin, as obtained from malted barley in the *dry* extract of malt, represents the saliva, and has the remarkable property of converting the insoluble starchy portions of food into the soluble glucose, thus rendering the indigestible and innutritious article starch into the nutritive and easily assimilated food glucose.

The value of these different ingredients and the difficulty of procuring them of the right quality led Hazen Morse, 57 Front Street East, Toronto, to experiment with various combinations during seven years' employment in the manufacture of Pepsine on a large scale and with the assistance of several prominent physicians he was finally enabled to present to the profession the following formula.

Saccharated Pepsine.....	10 Grains.
" Pancreatine.....	5 "
Acid Lactophosphate of Lime	5 "
Exsicccated Extract of Malt equal to one teaspoonful of Liquid Extract of Malt	10 "

Said formula has been registered at Ottawa under the distinctive name Maltopepsyn, thus giving the physician a guarantee of always procuring the same standard preparation and preventing their being imposed upon by imitations of inferior quality, and at the same time putting it at as low a figure (fifty cents for 1½ ozs.) as possible for such a formula to be compounded from the ingredients of the *best* possible manufacture.

Maltopepsyn has digestive power ten times greater than the best Pepsine in the market, as it digests Fibrin and Caseine, emulsifies the fat of food taken into the stomach, thus rendering it assimilable, converts starch into glucose, in fact it combines all the agents that act upon food, from mastication to its conversion into chyle, digesting all aliment use by mankind while Pepsine acts only on plastic food. Maltopepsyn also combines with the above the nutritive qualities of Extract of Malt, and the brain and nerve strengthening powers of the Acid Phosphates.

It has been found that a free acid, like Hydrochloric, does not combine well with a Saccharated Mixture, and renders it liable to decomposition, I therefore do not use it in my formula. It can be easily prescribed in solution, (say 20 drops of acid to 4 ounces of water) one half-ounce with each dose, in cases where its use is indicated.

For infants, however, Maltopepsyn will be found to yield the most satisfactory results, and the acid should be dispensed with. The necessity for the absence of acid which would tend to produce harmful results, will be recognized, when it is considered that even the slight acidity of most cow's milk, when used as food for infants, is sufficient to disagree with them.

With regard to the proper time for its administration, as before or after taking of food, opinions vary, but reason would suggest that about half an hour before eating will afford the ferment a sufficient time to combine with the existing condition of the stomach, and produce the most natural effect upon the food.

OPINIONS OF MEDICAL MEN.

46 St. Joseph St., TORONTO, Aug. 19, 1881.

I have tried both Maltopepsyn and Hydroleine in a large number of cases and have found very great benefit from their use. Maltopepsyn is one of the best remedies of its kind that I have ever prescribed when artificial aid is required for digestion. Hydroleine I have found to be one of the best, if not *the* best of its class. It is readily taken, is easily assimilated, does not produce nausea or disgust, and nourishes the body to a very marked degree. In all wasting diseases I have found it to be most satisfactory. I would strongly recommend both of these preparations to my professional brethren.

JAS. H. RICHARDSON, M.D.,
M.R.C.S., England.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have given a very fair trial to your preparations Maltopepsyn and Hydroleine. I found Hydroleine invaluable in all wasting diseases, where cod liver oil and other tonics are generally employed, and especially in treating some cases of chronic diseases of the skin.

Maltopepsyn has been used successfully in two cases of Dyspepsia.

Yours truly,
GASPARD ARCHAMBAULT, M.D.,
Physician to the Hotel Dieu and Professor of
Dermatology at the Medical and Surgical
School.

MONTREAL, Sept. 12, 1881.

Dear Sir.—I think I have employed Hydroleine since its first introduction here, and it has given far more satisfaction in my hands than any other Cod Liver Oil preparation, in cases of emaciation with cough and threatened consumption its use has invariably been followed by benefit and in many cases results have been truly remarkable. Increase in weight, improved secretions and better spirits usually follows its proper administration. In chronic diarrhœa I have found it very serviceable and for many convalescents it is invaluable.

Yours truly, W. B. BURLAND, M.D.

MONTREAL, Sept. 28, 1881.

Dear Sir.—I have used Hydroleine very freely and find it a very good tonic in all wasting diseases, principally those of the pulmonary organs.

Yours truly,
P. G. MOUNT, M.D.

Physician to the Reformatory Jail, Montreal.

690 Dorchester Street, MONTREAL, Sep. 29, 1881.

Sir.—I have much pleasure in adding my own to the mass of testimony you have already acquired in favor of Hydroleine, with the results of which I have never been disappointed. Its administration has frequently been attended with an increase in the patient's weight far out of proportion to the quantity of oil taken.

Yours truly,
A. LAPHORN SMITH, M.D.
M.R.C.S., England, F.O.S. Lond.,
Physician Montreal Dispensary.

531 Wellington Street, MONTREAL, Sep. 19, 1881.

Dear Sir.—What I have seen of Hydroleine is certainly to its advantage. In the first place you do not, as is done to my knowledge in other preparations, endeavor to cover up deficiencies of the oil by adding strong aromatic oils to the mixture, and again, I consider the formula more likely to secure a finer emulsion by reducing the size of the globules than is possible under other methods.

Yours truly,
CASEY A. WOOD, M.D.

MONTREAL, Sept. 7, 1881.

Dear Sir.—I have much pleasure in testifying to the excellence of your Maltopepsyn in cases of indigestion and the diarrhœa and the vomiting of children. Beyond question it is the most successful remedy we possess in the above class of cases, particularly so in young children, doing away entirely with the very objectionable habit of administering very powerful astringents, including opium. Your preparation in these cases is prompt in its action and above all harmless.

Yours very truly,
JOHN T. FINNIE, M.D.

MONTREAL, Sept. 19, 1881.

Dear Sir.—Having occasion to prescribe Maltopepsyn often, it is with the greatest pleasure that I inform you of its entire satisfaction to the relief and cure of all those troubles which accompany dyspepsia, gastralgia, pyrosis and flatulency; it has also cured costiveness. In all these complaints I am well pleased with the use of this wonderful remedy.

Yours very truly,
J. C. DANSEUREAU, M.D.

126 Bleury St., MONTREAL, Sept. 12, 1881.

Dear Sir.—I have used Maltopepsyn in a great number of cases with beneficial results and think that it is a very valuable preparation.

Yours truly,
R. A. KENNEDY, M.D.

NEW DURHAM, ONT, Oct. 1, 1881.

Dear Sir.—I prescribed Hydroleine to a patient afflicted with tuberculosis. She is wonderfully emaciated; nevertheless, from the use of the one bottle she has gained 1½ lbs., her cough has become less frequent, and she expressed a great desire to continue the use of the remedy. I write you for 4 (four) bottles to be sent immediately.

Yours very respectfully,
A. McCURDY, M.D.

UPPER BEDFORD, QUE., Sept. 28, 1881.

Dear Sir.—For the past 12 months I have used Hydroleine (Hydrated Oil) in *all* my cases presenting either a scrofulous or tubercular diathesis, and have found it answered better than any other preparation of cod liver oil. Notably with children (of all ages) do I find its *particular value*.

In suitable cases your Maltopepsyn has never failed me, and in certain cases of long standing dyspepsia, its use I found indispensable.

Yours truly,
DAVID A. HART, M.D.

splint. As both straps will have been drawn extremely tight, it is clear that one or two turns of the tourniquet will firmly press back the lower end of the femur, so as to render the anterior surface of that bone flush with the anterior surface of the tibia.

Entrusting the upper part of the limb to his assistants, the surgeon next proceeds to encase the foot in several turns of a gypsum bandage, which is to be carried upwards encircling the leg and lower part of the splint as high as the point at which the flannel bandage terminates. While this is being accomplished the foot must be held at right angles to the leg, lest extension of the ankle should occur and prove a source of trouble at a later period. When the operator will have satisfied himself that the limb has been properly arranged and secured, the wound is to be closed, while drainage is to be provided by having short, flanged tubes inserted, either at the angles of the original wound or through button-hole apertures which may be made still further back. After the application of antiseptic dressings the limb is to be swung by means of a loop of calico passed behind the leg-piece of the splint and tied to the bars of a strong and high fracture cradle. It will be seen that my apparatus forms a light, portable, but extremely secure, means for fixing the limb. A foot-piece is altogether unnecessary, as the gypsum bandage encircling the leg and splint constitutes a firm boot. Shortness of the thigh-piece, combined with suspension of the leg, enables the patient to assume a sitting posture and change position without risk or discomfort.

I have frequently encountered cases of articular disease where the morbid affection seemed limited to the soft structures, but where complete exposure of the bony surfaces disclosed the presence of localized caries and of suppuration in the osseous tissue. This fact alone would determine me against attempting to perform excision by making the comparatively small lateral incisions recommended by some surgeons. Moreover, an unwounded state of integument in front of the knee cannot prove of any real advantage to the patient, as the rule, in my experience, has been for the central portion of the operation wound to unite by the first intention, whilst at the time of putting up the limb the surgeon is enabled clearly to see as well as to feel, and of course to regulate, the respective positions of femur and tibia.

Whenever I have to deal with a cavity in the cancellous tissue of either the tibia or the femur, I scoop the space clear in the first instance, then by means of a small piece of fine sponge wetted with chloride of zinc solution (gr. 20, ad ℥ i.) I mop the cavity thoroughly—in many cases I have judged it necessary to drill the bone, so as to make a free counter-opening from the deepest part of the bone cavity in the track of the operation-wound.

I never sponge a wound in the soft parts with chloride of zinc solution, for I have found the salt to cause a considerable flow of blood-stained serum, calculated to prevent union by adhesion. I always arrest parenchymatous bleeding (which is sometimes inconvenient after the removal of Esmarch's bandages), by applying to the wound a succession of sponges squeezed out of *very* hot carbolic solution, after the method proposed by Dr. P. Browne. This proceeding will control oozing from the bone surfaces, as well as from soft textures, and it in no way tends to interfere with the early development of repair. I have never seen bleeding from a large nutrient artery in bone, but if the surgeon should encounter such, I think hæmorrhage could be at once arrested by plugging the canal with a pointed piece of decalcified bone cut from one of Neuber's drainage tubes.—*Dublin Journal Medical Science*, Feb.

ACUTE ABSCESS IN THE NECK.

CLINIC BY S. W. GROSS, M.D.

You will observe in this young man, who is apparently about nineteen years old, a decided swelling, which takes up a large portion of the anterior triangle of the neck, that triangle which is bounded in front by the median line of the neck, behind by the sterno-cleido mastoid muscle, and above by the body of the lower jaw.

As to the history of this tumor, the patient says it began two weeks ago, apparently without any assignable cause, and has continued increasing gradually in size till the present time. We observe that the overlying integument is markedly discolored, and of a dusky red appearance. He complains also of pain of a throbbing character, which is increased at night when in the recumbent posture. Upon examining the swelling we find that it is soft, that there is fluctuation, and that immediately over the body of the mass is felt a distinct pulsation, which is synchronous with the beats of the heart. Do not be led astray by this symptom of pulsation, it is merely the result of the coincident that the swelling immediately overhangs the carotid artery. This is not an aneurism, and why? The pulsation is conveyed to the swelling from below, and is distinguishable only by placing the hand over the body of the mass, but it is not felt when the fingers are placed upon its opposite sides, as would be the case were the tumor an aneurism. Then, too, the aneurismal thrill is absent, and the discoloration is not that of a bloody tumor.

In all cases of this kind, no matter how certain the diagnosis may appear, before recourse is had to the knife the exploring needle should be used. The most careful observer may at times be mistaken. Some years ago a prominent surgeon in

Edinburgh saw a tumor situated below Poupart's ligament, which had been diagnosed by other and equally prominent men to be aneurismal; but his opinion differed from the rest. He was confident that it contained pus. He plunged in his bistoury and found it as he had anticipated. Again, he saw a tumor in the anterior triangle of the neck, which others had also pronounced aneurismal, but which he conceived to be the same as the one first seen. He opened it and caused the almost instantaneous death of his patient, and he himself was found dead the next morning in his office, so great was the impression the case made upon him. Remember this story and never forget to use the exploring needle; it will some day reward you handsomely.

A very good way of opening an abscess in the neck is to introduce an exploring-needle, and then to pass in the bistoury upon its groove. In this manner you are pretty sure not to wound important structures, while at the same time a good, free opening is unhesitatingly made. The pus should be allowed to flow by atmospheric pressure.

The discharge from this abscess (which is a large one) is quite abundant, and the amount of suppuration which will take place in the next few days will give rise to considerable constitutional weakness. We will therefore put him on the tonics of quinine and the tincture of the chloride of iron, giving from seven to ten grains of the former, and from thirty to forty minims of the latter during the twenty-four hours. An emollient poultice will be applied for the double purpose of keeping up a free flow of pus and of preventing the opening we have already made from closing.—*Med. and Surg. Reporter.*

HYSTERICAL AFFECTIONS OF THE LARYNX.

Hysterical Aphonia is caused by paralysis of the muscles of the larynx. The muscles most commonly seized are the vocal muscles. Nevertheless, paralysis of the posterior crico-arytenoids is not absolutely rare, and we have known a case of this kind in which a hysterical female has been twice tracheotomized. A primary symptom of hysterical paralysis is that it is frequently bilateral, or else the paralysis is one-sided, but complicated with paresis or contraction of the opposite muscle. Thus hysterical aphonia is often complete. It is, besides, a common enough occurrence, this diffusion of hysteria in organs which are impaired, and which are not symmetrical, as the ovaries. A second symptom of hysterical aphonia is that it frequently gives a laryngoscopic image differing the one day from the other. A third characteristic is to leave the cough intact, which even gains in intensity and breaks forth into roaring. We have even seen some cases of hysterical aphonia where

the patient could sing, and some who could speak in their dreams.

SPASM OF THE LARYNX.

The hysterical laryngeal spasm has its characteristics which distinguish it from the spasm of infancy, from the spasm from an irritation of the vagus nerve or of the recurrent, and from the spasm from the introduction of a foreign body into the larynx. This spasm is expiratory or inspiratory. The expiratory spasm is nothing else than the whimsical cough of the hysterical, a symptom common to nearly every hysteric, but one the most painful. In a boy 14 years of age we have counted as many as twenty-five coughs per minute during weeks. This child was cured by a heavy rain which overtook him during a walk, and to which he was exposed for two hours. At other times the hysterical cough is cured by the intercurrent affection which has been its primary cause. We know the fortunate consequences of the cure of uterine maladies from the hysterical cough. This hysteric cough was the cause of many errors being made before the laryngoscope had unveiled the exact state of the larynx. When it is met with in young girls associated with supplementary hemoptysis, it gives rise to a prognosis of which the gravity is only apparent.

LARYNGEAL HYPERÆSTHESIA.

Hysterical laryngeal hyperæsthesia is very common. It is perhaps the most frequent manifestation of hysteria in the larynx. It is sometimes diffuse, and manifests itself by various sensations—sensations of burning, tearing, pulling, going from the throat to the sternum, sensations of a foreign body. Who does not remember being called out in great haste to see a woman who had swallowed a pin, a fishbone, etc., and who was in the greatest agony. After a conscientious examination, we find that the patient has been mistaken by a false sensation, and that we ourselves have been the victim of a false alarm. But it is not always easy to convince these same subjects that it is not a rare thing to find among them veritable cases of laryngeal hypochondriasis.

LARYNGEAL ANÆSTHESIA.

The result of our inquiry on this subject is that only in one-sixth of hysteric patients we have met with more or less complete anæsthesia of the epiglottis. It is the epiglottis which is frequently attacked by anæsthesia, and frequently to the exclusion of every other part. Anæsthesia may have completely mastered the whole of the larynx, and be absolute. Generally it is bilateral, and is not limited to any well-defined nervous territory. This characteristic sometimes sufficiently distinguishes it from other anæsthesias, which are as extensive as one of the areas of one of the superior laryngeal nerves, such as diphtheritic anæsthesia. Another important and special characteristic of this anæsthesia

thetia is that it is frequently associated with a cutaneous patch of anæsthesia on the front of the neck, a peculiarity already noticed with reference to hysteric aphonia. The simple introduction of the mirror is sufficient to cause many of these anæsthesias to disappear.—*Edin. Med. Four.*

FREEDOM IN CONSULTATIONS.

* * * * *

It was hardly supposed when the code was adopted, giving freedom of action to every man regarding consultations, that there would be a lack of opposition to the movement by outsiders. Whenever an old rut is left and a new road projected, the first passengers generally have a rough time of it. They must expect this, and bounce over the old prejudices as best they can. In so far, perhaps, the State Society has in a measure, come to a realizing sense of the radical character of its recent departure. But as yet there is no sign of weakening as to the stand taken. In reality, there is no good reason why there should be. Far from being in the wrong, the profession of this State have taken a much-needed step in advance. The cry that concessions have been made to irregular practitioners is simply absurd. The assertion that the honor of the regular profession has been sacrificed to the mere expediency of obtaining extra consultations is ridiculous. The profession of this State have a birthright which has never been for sale for any such price. The action regarding free consultation was based solely upon the principle that medicine was a broad and liberal profession, and that every barrier which interfered with the expansion of its usefulness and the increase of its influence should be broken down. The soundness of this doctrine cannot be questioned even by the most contumacious sticklers for the National Code. The best reason for rebuking bigotry and dogmatism is to be found in the fact that we are free from any suspicion of them ourselves. And this results when the opportunity is given to every one desiring it to search for truth wherever it may be hidden, and in his own way. * * *

Of course we hear all sorts of absurd things concerning the desertion of the old flag, of going over to the enemy, of acting in defiance of all the principles of right and justice regarding professional associations, and of doing many other terrible things tending to encourage quackery. But in reality the State Society has only done a commonplace thing. It merely states that any medical man who chooses to act according to his best judgment in consultation with any honest practitioner whatsoever, can do so without being subjected to discipline for such opinion's sake. He is not recommended to consult with any one whom he may consider an improper person; he can refuse to consult with any one, regular or irregular, if he

pleases so to do. No effort is made, directly or indirectly, to do aught to recognize quackery in any of its forms. Certainly the honor of the profession can as safely be trusted, perhaps, in the working out of this apparent problem of requisite qualifications for consultation as in a blind obedience to the dicta of any committee on ethics. * *

We repeat that the Medical Society of the State of New York has done nothing of which it may be ashamed. It can take nothing back, so far as freedom of consultation is concerned. The stand taken is an eminently proper one, and we hope it will be persistently maintained, even at the risk of non-representation in the American Medical Association. It will, in any event, be only a question of time for the Association itself to follow the example of the Society of this State. The free and progressive spirit of medicine can no more be trammelled by foolish restrictions as to the conduct of its members than can its grand principles be made to revolve upon doctrinal points, or its legitimate aspirations be controlled by mere sectarian influences. The religion of medicine is as broad as humanity itself, and should compass it at every point; its faith, founded on facts in science, should reach out in every direction for new strength; and its mission to cure the sick should not stop short of the use of every means within honest reach. The darker the places beyond, the higher we should raise our torch, and the more persistently and earnestly should we press forward. The Medical Society of the State of New York has striven by its recent action to give such a doctrine its most liberal interpretation, and such a faith its most practical turn.—*New York Medical Record, April 15th, 1882.*

UTERINE DISPLACEMENTS.

Paul F. Mundé, M.D., in the (*American Journal of Obstetrics*, Oct. 1881), gives the following conclusions deduced from his large and varied experience:

1. Recent displacements of any variety are the only cases which offer a fair chance of complete recovery by any of the mechanical means at our disposal.

2. Of these means pessaries are the most convenient for temporary relief, but only in a small number of cases does permanent cure result.

3. The best curative means of support of the displaced uterus is probably the systematic and intelligent use of vaginal tampons, impregnated with a mild astringent solution.

4. Posture, while excellent as a means of relaxing the uterine supports and relieving pelvic congestion, is by its inconvenience at best but a means of temporary relief.

5. Permanent relief, cure, can be expected and

will be obtained only when the displacement is of recent origin, especially when it has been produced by some sudden physical shock; or when the complete tissue-metamorphosis accompanying puerperal involution aids in restoring to the uterine supports and the uterus itself their original and healthy tone. This fortunate occurrence must be looked upon as decidedly the exception, since the favoring circumstances above mentioned are but rarely met with, or the displacement is seldom recognized at a sufficiently early date to permit of a perfect restoration to health.

6. The most favorable period, therefore, for the treatment of a uterine displacement, or distortion with a view to a permanent cure, is within one or two weeks after delivery, before the woman has left her bed.

7. The excitation of a certain amount of plastic exudation in the walls of a flexed uterus may, if kept within bounds, result in a permanent straightening of the organ. This may be accomplished by rapid dilatation, or by the protracted wearing of stem-pessaries, but permanent success will at best be rare.

8. The protracted use of astringent vaginal tampons introduced daily, offers for some cases of ante and retro-displacement an excellent, and for most cases of procidentia, almost the only efficient and safe remedy for the displacement, far superior to all steadily worn hard or soft pessaries. A procidentia may even be cured by several months of this treatment, if the affection be not of too long standing.

9. While permanent cure is only occasionally met with, so much relief is afforded by pessaries and the other mechanical supports and methods above discussed, they should in no case be discarded unless all treatment be contraindicated.

10. Electricity, if rationally and scientifically applied for a sufficiently long period, offers chances of cure of comparatively recent cases, which call for a more thorough and persistent trial of the method.

11. For prolapsus uteri et vaginæ, unless of quite recent origin, an operative constriction of the vaginal canal and a restoration of the relaxed or destroyed perineum to its normal state is the only sure means of cure, and even for this affection the unfailling method remains to be discovered.

12. The cure of a flexion by operative (bloody) treatment is impossible. The canal may be made comparatively straight by a division of one or both lips of the cervix, but the flexed condition of the organ still remains. Only by gradually increased elevation of the fundus by a vaginal pessary (best Thomas' cup) after delivery, or by the protracted wearing of an intra-uterine stem, and that only in a small proportion of the cases can a permanent cure be effected.

PROFESSIONAL LIBERALISM.

View it as we may, there can be no doubt that in ethics the profession of medicine is much less conservative than it was a few years ago. Progress is so gradual that those who live during a period of changes fail thoroughly to realize them, since they come one by one, allowing time for custom to breed familiarity with the first before the second follows on its heels. If, on the other hand, the spirits of Astley Cooper, John Hunter, Chapman, Dewees, Jackson, and Physic, could return for a short time to their ever remembered localities and duties, think for a minute what they would see. Their eyes would become round with amazement, as they read of the utterances of distinguished English physicians, in favor of admitting homœopaths to their consultations. They would see the wife of the distinguished editor of one of our greatest journals herself a distinguished and cultivated physician. They would stand aghast when they heard that the medical profession of one of the greatest States in the world had rendered it officially proper to consult with a sect, the members of which they, in their day and time, avoided and shunned, professionally, with as much or even more care and assiduity, than they did the devil himself.

They would find physicians in good standing officiating as teachers in medical colleges for women. They would be informed that several medical societies of repute had opened the door of membership to female physicians. In time their unsophisticated minds would awaken to the various devices used by their modern confreres to secure practice, and they would be almost paralysed when they learned how much wire-pulling and political intrigue had entered into their beloved profession.

We do not mean to say that this is not all right. We are champions of progress, and rejoice when we see human nature advancing. We merely desire to enable our readers to enjoy with us the real amusement that would be afforded by the puzzled and half incredulous expression that would occupy the faces of these old medical war horses were they enabled to see and hear what we do, and to watch them throw up their hands in astonishment, as they exclaim, "*By the shade of the great Hippocrates, but this is an age of progress,*" as they vanish from sight into the dim mist of uncertainty, born of their doubts as to whether all this seeming progress will redound in the end, to the real and substantial advantage of their ancient profession.—*Med. and Surg. Reporter.*

VENEREAL AFFECTIONS IN GUATEMALA.—According to the *Diario de Centro-America*, an official examination of the public women of Guatemala proved that over ninety-five per cent. of these unfortunates were in bad health.

CASCARA SAGRADA FOR CONSTIPATION.

Dr. Boardman Reed (*Med. Bulletin*) says:—For the past two years I have been making constant use in my practice of the fluid extract of Cascara Sagrada (*Rhamnus Purshiana*) for chronic constipation. It always affords relief in even the most obstinate and inveterate cases, and often seems to effect a permanent cure. My methods of using it are as follows: For persons who do not object to the intense bitter taste of the medicine in plain water, I order a two-ounce bottle of the fluid extract, with directions to begin by taking ten drops in a wineglass of water before each meal. If within two or three days this does not produce a regular natural evacuation every morning, the patient is told to increase the dose by two or three drops every day until the required effect is produced; then to continue with that amount regularly three times a day for a week or ten days. At the expiration of this time, I advise that the dose be decreased again by taking one drop less every day, until it is reduced to nothing. Then, if the habit of soliciting a movement punctually at a regular time every morning is kept up, there is usually no more difficulty. In many cases the initial dose of ten drops three times a day is quite sufficient. Occasionally it is found too much, and five or six drops answers every purpose. In the more obstinate cases, however,—cases of patients who have accustomed themselves to take three or four compound cathartic pills, or some harsher quack concoction, every few weeks or days, “to keep their liver acting,”—the bowels sometimes require half a teaspoonful, and in rare instances even teaspoonful doses, three times a day to bring about regular alvine evacuations. Taken in this way before meals this medicine acts as a tonic to the stomach, increasing the appetite and improving the digestion, at the same time that it strengthens the peristaltic movements of the intestines and apparently stimulates the normal functions of the liver. But the cascara is one of the bitterest of medicines, and many persons, especially ladies and children, cannot take it unless it is first well disguised by elixirs, etc. For the benefit of these I have been accustomed to compound it as follows:

R—Ext. Cascara Sagrada,	f ℥vj.
Glycerinæ,	f ℥j.
Curacoa,	f ℥ij.
Syr. Glycyrrhiz. ad.,	f ℥vi.—M.

A teaspoonful of this mixture, which is comparatively palatable, will represent about ten drops of the cascara; and a tablespoonful will represent half a teaspoonful of the same, which is usually all that the worst cases require, taking it three times a day. A solid extract of the same drug is now prepared, so that it can be ordered in proportionate doses in pill form for those who prefer pills to

potions. These cascara preparations seem to me to act even better than the famous dinner pill, and aloetic pills which have been so much in vogue for two generations at least. One thing is certain, they accomplish the purpose of a laxative most admirably, and usually—though not in every case—the dose can be diminished or even omitted altogether after a time, while other laxatives nearly always lose their effect, larger and larger doses becoming necessary.

PNEUMOTHORAX.—Text-books of physiology describe the thorax as an air-tight box containing the heart, lungs, and great vessels; and, after a fashion not particularly clear in any single work, an attempt is made to demonstrate the bearing of this fact on the progress of various chest complaints. The importance attending a thorough comprehension of the physics of the pleural cavity, is probably not fully appreciated by students until they attempt to apply in the wards of the hospital the theories learned in the lecture-rooms of the college. Nor, probably, is this difficulty ever more apparent than when a hesitating clinical clerk is suddenly required to explain the *rationale* of pneumothorax. Rarely is an intelligent and at the same time intelligible reply forthcoming to the question, and we remember more than one case in which *not any* scientific or appropriate description has been elicited.

The question is not abstruse, either; but it demands a certain amount of clear thinking, added to an accurate preliminary comprehension both of the anatomy of the lung and pleura, and of certain elementary mechanical principles. The whole matter, however, was, on Friday evening last, put before the members of the Clinical Society, by their President, Mr. Lister, with such clearness and practicality that we seek no excuse for describing the experiment he referred to. The subject of discussion was pneumothorax, and Mr. Lister said the manner in which he was accustomed to demonstrate to his classes the gravity of the condition was the following: Into the bronchus of a lung obtained from an ordinary butcher, he inserted a glass tube, connecting with this, by means of India-rubber tubing, a hand syringe. Then, with a pair of scissors, he incised the surface of the lung, and on pressing down the piston of the syringe, air passed freely through the wound. On attempting, however, to withdraw the piston, the most considerable force even was found insufficient to do more than just move it, the opening in the lung at once closing and preventing the return of air.

The application of this ingenious and forcible illustration is clear. During life, the lung hangs in a chamber to which air can only enter by abnormal channels. In a condition of pneumotho-

rax such opening is usually produced by a rent (how caused we need not stay to inquire) in the visceral layer of pleura, and we are told on Mr. Lister's authority, that such openings are usually valvular. With every inspiration, then, air will pass from the lung through the opening into the pleural sac, in which, as there is no other mode of exit, it must necessarily be confined. Also, as the wound in the pleura refuses to allow a return current of air through it, the quantity in the chest increases with each breath that is taken, and in this way it is quite easy to understand how the symptoms of pneumothorax may rapidly assume the most urgent character. Treatment by removal of the contained air with a small trocar and cannula produces relief by reducing the pressure set up by the contained gas, but where this is slowly accumulated and long retained it may give rise to most considerable displacement of organs without immediate urgency of symptoms.

Occasionally it happens that cases of pneumothorax undergo spontaneous recovery. Several such were instanced on Friday at the meeting referred to above. But this is a most favourable termination, and is due to the occurrence of some fortuitous events—such as prompt closure of the opening by lymph, and subsequent absorption of the intra-pleural air; or to the fact that the disposition of the lesion permits a *to-and-fro* current of air through it, whereby confinement of the gas is not set up, as proved by a double amphoric sound; or to the efficacy of prompt surgical measures, etc. It is not our intention to dilate on this point now, however; we wish chiefly to reproduce as nearly as possible Mr. Lister's admirable illustration of the meaning of pneumothorax, from a feeling that it may serve to help many others than those whose privilege it is to receive instruction direct from the author.—*Medical News*.

PUERPERAL SEPTICÆMIA, BY DR. J. S. BUCK.—The following case illustrates the value of antiseptically washing out the uterus.—*Medical Times and Gazette*.

Mrs. M., married, aged twenty-eight, a multipara, aborted on Thursday, October 27th, 1881. She was said to be about three months pregnant, and was attended by a village midwife, who stated that "all the membranes came away whole," but that the patient lost a good deal of blood. I was sent for Nov. 1st. On my arrival I found her lying in bed on her back, with her knees drawn up. Her countenance presented that peculiar sallowness appearance usually seen in patients suffering from puerperal septicæmia. She appeared in a semi-conscious state. Temperature 104° F.; pulse 138, very small and thready. She had no lochial discharge whatever (this I was informed had ceased on October 31st, the day previous to my seeing her). I ordered her one ounce of brandy every

three hours, and gave her a mixture containing five grains of carbonate of ammonia, ten minims of spirits of sulphuric ether, and one ounce of decoction of cinchona every four hours. On November 22nd patient seemed rather weaker, if anything. Temperature 104.4° F.; pulse 140, very small and thready. I continued the same treatment, only ordered the brandy every two hours, and repeated the chloral and bromide draught, as she had not slept. On the 3rd, at 4 a.m., she had an attack of convulsions, which lasted about an hour and a half. On my visit she had a slight yellow discharge, which the nurse said smelt very badly. Temperature 104.4° F.; pulse 138, weak and thready. So I determined to wash out the uterus antiseptically. This I accomplished fairly easily, as I found the os uteri would admit the tips of two fingers nearly. I injected a quart of tepid, weak solution of permanganate of potash, which brought away a quantity of very offensive matter and shreds of membranes. I continued the brandy and ammonia treatment. On the 4th I was surprised to see the change in the patient. She had slept well without medicine. The pain in the abdomen which she complained of the day previous had ceased, her temperature had dropped to 101.6; her pulse was 120, much fuller and stronger, and she had no more convulsions. I determined to give her another intra-uterine injection, which I did with some little difficulty, as I found the os somewhat smaller than on the day previous. I injected the same amount and of the same character, and brought away a few shreds of membrane, but it was not offensive at all. I ordered the brandy every four hours, and continued the ammonia and bark mixture. On the 5th she was much brighter and better. Temperature 101°; pulse 120. She slept well; no pain. I ordered the same treatment. On the 9th the patient was progressing well. Temperature 99.4°; pulse 96. She said she felt well and wanted to get up. I ordered her ten minims of dilute nitric acid and an ounce of the decoction of cinchona three times a day. On the 12th she was out of bed for about an hour. Temperature 90°; pulse 88; going on very well. 21st. Since the last note the patient had improved very much, and she is able to sit up all day. She takes her food well and sleeps well; has no discharge, and her temperature and pulse are normal. I have been giving her ten minims of the solution of dialysed iron three times a day, after food, and ordered her to continue taking it.

I think this case shows the good effects of antiseptically washing out the uterus in such cases. Dr. Playfair, in his "Science and Practice of Midwifery," speaks very highly of the practice, especially in those cases of "autogenetic origin, or self-infection as he terms them; and certainly, in my case, the effect was marvelous.

THE REWARDS OF PROFESSIONAL LABOR.—We have recently allotted special space to the notification of wills left by medical men. It must have already struck those of our readers who have glanced at the figures recorded in this weekly report, that the average value of the property handed down by members of the profession to their families is singularly small. This is, unhappily, the fact. The general practitioner is a hard-working, and too often a struggling man to the end of his days. Comparatively few of the class are able to retire, as the members of other callings retire for rest from their labors, before the relief which death brings to all men. Physicians and surgeons as a rule die in harness. The expenses incurred by those who make specialties of medicine or surgery, or of any one branch of either of these departments of professional work, are necessarily great, while the recompense to the life of labor entailed, looking at the career as a whole, is proportionately small. Even the few who seem to make large incomes during a part of their career seldom amass even moderate competencies. Some five-and-twenty years ago, calculations were made for London and the provinces, and it was estimated that a physician, practising as such in London, did not acquire an income on which he would be required to pay income tax for sixteen years from the commencement, while a physician in the provinces reached the legal figure in eleven years, but not earlier. The differences in favor of the provinces are, of course, due to the fact that no man would think of commencing practice as a pure physician in any city or town, except the capital, unless he had special reason to believe there existed "an opening." We have no means of knowing whether matters have mended with the profession generally during the last quarter of a century, but, looking to the increase of its aggregate numbers in relation to the population, we fear there is not much ground to hope that the rewards of professional labor have been sensibly augmented. The laborer is worthy of his hire, and it is well now and again to look into this matter of money. It will sooner or later be necessary to take it into very serious consideration in relation to the question of fees. Meanwhile, the lesson to be learnt from the story of the wills left by medical men is certainly one of caution and thrift. It is a sad reflection that, speaking generally, the families of medical practitioners are insufficiently provided for, a large proportion being left almost in poverty.—*Lancet, April 8, '82.*

ANÆSTHETICS FROM A MEDICO-LEGAL POINT OF VIEW.—Dr. J. G. Johnson, of Brooklyn, gives the following which has an important bearing on the practical relations of patient and medical attendant :

Anæsthetics do stimulate the sexual functions ;

the ano-genital region being the last to give up its sensitiveness. Charges made by females under the influence of an anæsthetic should be received as the testimony of an insane person is. It cannot be rejected, but the *corpus delicti aliunde* rule should be insisted on. Dentists or surgeons who do not protect themselves by having a third person present, do not merit much sympathy.

Deaths from administration of chloroform after a felonious assault, unless the wounding were an unmistakably fatal one, reduces the crime of the prisoner from murder to a felonious assault. The surgeon has no right to use chloroform to detect crime, against the will of the prisoner. But the army surgeon has the right to use chloroform to detect malingerers. The medical expert, notwithstanding he is sent by order of court, has no right to administer an anæsthetic against the wish of the plaintiff in a personal damage suit, to detect fraud. Gross violations of the well-known rules of administering anæsthetics, life being lost thereby, will subject the violator to a trial on the charge of manslaughter. A surgeon allowing an untrained medical student to administer anæsthetics, life being thereby lost, will subject the surgeon himself to a suit for damages. What he does through his agent he does himself. The physician who administers an anæsthetic should attend to that part of the business and nothing else. He should have examined the heart and lungs beforehand. He should have the patient in the reclining position, with his clothes loose, so as not to interfere with respiration ; should have his rat-tooth forceps, nitrite of amyl and ammonia, and know their uses, and when to use them and how to perform artificial respiration.

In operations on the ano-genital region and the evulsion of the toe-nail, complete loss of sensation in these parts should never be allowed, and no operation on these parts at all should be had under an anæsthetic, unless by the approval of a full consultation who have a knowledge of the dangers. Chloroform cannot be administered by a person who is not an expert, to a person who is asleep without awaking him. Experts themselves, with the utmost care, fail more often than they succeed in chloroforming adults in their sleep.—*Annals of Anatomy and Surgery, December, 1881.*

PUERPERAL EPILEPTIC CONVULSIONS.—Dr. Lucas, of Liverpool, reports the following case in the *London Lancet*, April 8, '82 :—On Dec. 27th, 1881, at 5 a.m., I was called by a midwife to see Mrs. W., who had been some hours in labor (primipara), and had just taken "a fit." When I saw her the convulsions had passed off ; quite sensible ; face somewhat puffed ; os dilatate and head presenting. While passing a catheter she had a violent attack of convulsions ; urine albuminous. I then gave chloroform, and delivered with long for-

cep; child alive. She had two more fits before delivery. I ordered draughts of chloral hydrate and bromide of potassium, notwithstanding which the fits continued during the day at intervals of one hour and a half. I had arranged so that chloroform was applied whenever a fit came on. Towards evening she lost consciousness. That night she had three fits within the hour, so (at the suggestion of Dr. Charles Hill) I used a subcutaneous injection of a quarter of a grain of morphia (B. P. solution). No fits for seven hours and a half. I then gave a clyster and passed catheter. No fits during the day. I gave another morphia injection (quarter of a grain) that night. No return of convulsions. Recovered her senses gradually, suckled the child, and made a quick recovery.

I am induced to record this case, not having seen reported in the *Lancet* any cases supporting those mentioned by Dr. S. Maberly-Smith in the *Lancet*, July 16th, 1881, page 86. There is no doubt that the hypodermic injection saved this woman's life, and I should certainly try the same treatment in the next case of uncomplicated puerperal epileptic convulsions as soon as possible.

BLISTER TREATMENT OF ACUTE RHEUMATISM.

—Dr. Herbert Davies, in pointing out the unsatisfactory results of the salicylate treatment (*Lancet*, Feb. 11th), claims the following advantages for the blister treatment, deduced from the observation of 50 cases at the London Hospital:—

1.—Blisters well and early applied (while fever is high and pain most acute) around every inflamed joint, and followed by large poultices to favor the discharge of large quantities of serum, produce rapid and full alleviation of the pain, reduce the pyrexia quickly, and speedily restore the use of the painful joints.

2.—The bold and free application of blisters around each inflamed joint restrains the tendency of the rheumatic virus to desert the limbs for the heart, thus depriving this disease of its most dreaded result. In the London Hosp. Clin. Report, I find the following statement: "In no case where the heart was sound at admission did any organic lesion subsequently develop itself, and in two cases in which soft but distinct mitral murmur was audible when the patient came under treatment, every trace of the sound rapidly disappeared as soon as a free and abundant serous discharge had been established."

3.—Relapses are slight in intensity and by no means frequent.

4.—The urine loses under this treatment its abnormal acidity without the internal use of any alkaline remedy, becoming often neutral and even alkaline.

5.—The time of the stay of the patients in the hospital was much less than six weeks—the old traditional remedy for acute rheumatism. The

average of my cases was 26 days.—*Maryla d Med. Jour.*

PROSPECTS FOR CURE OF HEART DISEASE.—According to Dr. J. Milner Fothergill, the views of the medical profession as to the prospects for the future of cases of valvular disease of the heart are undergoing very considerable changes, in a direction opposite the hopelessness with which they have been regarded in the past. Not every murmur which may be heard over the heart is a sign that the patient is destined to a sudden death from the action of the cause that produces the sound nor is it always evidence of organic cardiac disease. It is a grave symptom, but its importance may be, and often is, exaggerated. It is only probably produced by deformity in the cardiac valves; but anæmic, aortic, and still more, pulmonary murmurs, are now generally recognized. Dr. Fothergill has cases in his own practice, of mitral murmurs which have existed for sixteen, fourteen, twenty-seven, and thirty-eight years, without developing any very alarming symptoms, and reports the death, between the writing and publication of this article, of a case of aortic regurgitation—a rapidly fatal form of disease—which had not perceptibly advanced during twenty-five years of excessive activity. He also notices cases of aortic obstruction of fourteen, sixteen, and eleven years, of which the first only has as yet died. In conclusion, he observes that under proper treatment, by which the prospects are profoundly affected, and with care, a life of activity is practicable in many cases, provided bodily exertion be avoided, or exercised moderately.—*Popular Science Monthly.*

QUININE IN CHRONIC CYSTITIS.—In chronic cystitis accompanied by a little fever, ammoniacal urine, and charged with mucus, with frequent desire to micturate, M. Thornton, after emptying the bladder, recommends the injection of at first four ounces of tepid water, which is allowed to run out immediately afterward; then an injection of the third part of the following solution: Quinin, grs. xvi; sulphuric acid, q. s., distilled water, \bar{z} x. The liquid thus injected is maintained some seconds in the bladder, after which two-thirds are allowed to flow out, while the remainder is left for an hour in the urinary reservoir. This injection produces a very slight smarting, and after a treatment of some days the urine becomes acid and no longer contains mucus.—*Medical Press and Circular.*

A MALPRACTICE suit in Belgium brought against a physician for the alleged improper prescription of morphia, resulted in an acquittal not only, but the plaintiff was adjudged to pay the defendant one thousand francs damages. It is reported that the action was instigated by a rival doctor.—*Kings Co. Proceedings.*

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science
Criticism and News.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STRRET & Co., 30 Cornhill, London, Eng.; M. H. MAHER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, MAY, 1882.

This Journal has the largest circulation of any Medical Journal Canada.

ETHER VS. CHLOROFORM.

Considerable discussion has taken place recently in the medical journals relative to the comparative safety of ether and chloroform. So warm has been the discussion in England that a surgeon of eminence has written to the *London Times* in such terms as to lead the public to infer that the surgeon who uses chloroform is wilfully imperilling the patient's life. For many years past medical journals in the United States have characterized deaths from this agent as "unjustifiable homicides, warranting judicial interference." More recently the journals in Great Britain have taken a strong stand against its use in ordinary cases, and advise the substitution of the less dangerous agent, ether. In a late number of the *Boston Med. Journal*, it is asked—Why, if the practice of administering chloroform as an anæsthetic is not opposed and prevented by the medical profession, should not the courts without fear or favor interfere and stop such unjustifiable homicides?

The use of chloroform from its very first introduction, frequently proved fatal. Long before it had come into general use, within ten weeks, indeed, of its discovery as an anæsthetic, it caused the death in England of a girl fifteen years of age. This girl, Hannah Greener, had no other disease than an in-growing toe-nail, and presented no morbid evidences further than those which chloroform itself would produce. Within a month after her death a woman in Cincinnati, aged thirty-five years, died from the effects of its administration; within another month a death occurred from its

use in Boston; and about two months afterwards another in Boulogne. From that time until now, a period of about thirty-four years, scarcely a month has passed which did not chronicle a death from the administration of chloroform. Some years ago it was estimated that the proportion of deaths from its use was one in every 2,500 administrations; a very high mortality. The record of deaths was then, in all probability, not perfect, and a careful calculation now would most likely show its use to have been fatal in a yet greater proportion.

It is argued by the advocates of the use of chloroform, that those who die under it, or most of them, were living with their lives hanging on a thread so flimsy that the slightest shock—the loss of a little blood, a little unusual haste, the excitement of passion, would have a fatal effect. It is true there are thousands going about in apparent health, who from some concealed morbid condition are liable to die at any moment from a very slight physical or mental shock. Doubtless many who die under chloroform are of this type; but in many of them the *post-mortem* has revealed no abnormal condition whatever. The same advocates argue that often the quality of the chloroform used is bad; that the mode by which it was administered is at fault; or that the patient was not properly prepared for it. It is also said that sometimes the operation is the cause of death. There is probably a good deal in all this; but we believe nevertheless that the total good attributable to this agent is much more than outweighed by the evils resulting from its use, and we therefore urge the advisability of using that which is held to be a much less dangerous anæsthetic.

It is undoubtedly difficult, if not impossible to settle satisfactorily by actual statistics the question of the relative danger of the use of chloroform and ether; because, although we know about how many deaths occur from the effects of each agent, there are no means of ascertaining the relative proportion of cases in which each had been used. But the recorded opinion of many who, having for a great number of years had experience with chloroform, have also for many years abandoned it in favor of ether, is, that ether properly administered, is a much safer anæsthetic than chloroform. It is also claimed that ether, besides being safer, will produce anæsthesia much sooner than chloroform, by which time is saved, and a patient under the

influence of ether is much more passive, and therefore in a far better condition for an operation than one under chloroform. Besides, ether when administered without food in the stomach, rarely gives rise to troublesome sickness. Both in private and hospital practice in this city for several years past, ether has very largely taken the place of chloroform, and the results have been most satisfactory.

ONTARIO BOARD OF HEALTH.

Several weeks have elapsed since the appointment of the chairman and members of the Ontario Board of Health, but up to the present time no appointment of a secretary has been made. This is to be regretted, as there is much work awaiting the action of the board. It is especially desirable that efforts be made as soon as possible to organize local boards of health in every municipality in the Province, in order that some sanitary work may be done in all the villages before the heated season. Wherefore the delay in the appointment?

We have no desire to dictate in any degree to the Government, even in a matter concerning the public health, but feel it incumbent upon us to say a few words in regard to the appointment. The gentleman who is not only most fairly entitled to the position, but who is also, probably, upon the whole, the most fully qualified to discharge the duties of the office, is, we understand, prepared to accept it, and at once to commence practical work. We need hardly say we allude to Dr. Playter. But for his untiring efforts it is not at all probable there would yet have been any provision for such a board. It was almost entirely through his efforts during the past two or three sessions of the Legislature, that the medical men in the House took such action as led the Government to bring in a measure providing for the establishment of a board. Through his efforts several meetings of members of the profession were held in this city for the purpose of urging the desirability of such a measure upon the Government. He also, for the most part, framed the various resolutions which have been passed from time to time by the medical Associations of the Province and the Dominion, urging this subject upon the attention of the Dominion and Local Governments. All this would not, of course, entitle him to the position were he not considered competent to discharge

the duties. But from letters of recommendation we have before us, from leading medical men in the profession and others, we feel certain that the majority of the profession not only consider him quite competent, but regard him as the most competent, on account of the experience he has had in sanitary work. He has given greater consideration and study to the special work which is to engage the attention of the board, than any other man in Canada. He has also had a good deal to do with the vital statistics of the Province, in the Registrar-General's Department for a number of years in connection with the preparation of the annual report, and the general decennial review appended to the last annual report is entirely his work. This is an interesting and valuable report considering the imperfect nature of the materials available. Dr. Playter has written a good deal on public health, and his work has generally been well received, and through his labors he has become known in the United States as well as throughout Canada, as a prominent sanitarian. He has also made some useful investigations into the causes of consumption, one of the most important diseases with which the board will have to deal.

VOLUNTARY POWER OF DISLOCATION.

A short time ago we had an opportunity of witnessing a most remarkable and interesting case of voluntary dislocation. The subject of this wonderful peculiarity is an American acrobat and contortionist named Chas. H. Warren. He visited the various medical colleges in the United States and Canada during the past winter, and exhibited his wonderful powers before the classes. He is at present in London, England, and the *London Lancet*, April 8th, '82, gives the following description of his wonderful powers. A history and careful study of this remarkable case will also be found in Dr. Frank Hamilton's work on "Fractures and Dislocations," 1880, page 807.

"By voluntary muscular contraction he dislocates forwards either or both condyles of the lower jaw, downwards (partially) the head of each humerus, forwards or backwards (partially) each carpus, upwards and backwards (completely) the head of each femur, and backwards and forwards (partially) each of the phalanges of the fingers and thumb. With the aid of his hand he partially dislocates to

either side the carpus, and forwards and outwards the ankle-joint; when the knee is flexed he can rotate the tibia very freely, and make the inner condyle project an inch in front of the femur. Each of these displacements is accompanied by a distinct snap, but the replacement of the bones is noiseless and without effort. The most remarkable, as also the only complete, of these dislocations is that of the hip. He stands at ease with the toes turned further out than is usual, and has unusual freedom of eversion of the lower limbs. When the femur is displaced, the great trochanter is raised and drawn back on the pelvis, and is still very prominent; the limb is shortened and inverted, and knee- and hip-joints are flexed; the head of the bone cannot be felt. The explanation of these facts is that the man's ligaments are unusually lax, while his muscular power is very great, and probably also the rim of the acetabulum is less prominent than usual. In addition, Mr. Warren shows other illustrations of his remarkable power over his muscles, which are of fully as much interest as the foregoing. Thus he can contract at will the two pillars of the fauces, the platysma myoides, and the pectoralis minor, and can fix the elbow-joints by strong contraction of either the arm or forearm muscles, or of both simultaneously. He voluntarily produces the deformity of talipes equinus and talipes equino-varus. Equally interesting is his control over the muscles of the trunk. Thus he can contract his recti abdominis in a wave-like manner, and illustrate capitably the formation of phantom tumors. He can contract his abdominal muscles quite back on the spine, so that the abdominal aorta is seen, as well as easily felt, pulsating. He also expands his chest to an enormous size, and can contract it so completely that the front becomes quite concave. These are merely examples of muscles unusually developed, and brought under the influence of the will to a most remarkable extent; they do not betoken any congenital peculiarity."

DR. HORATIO YATES.

Dr. Yates, of Kingston, Ontario, a notice of whose death appeared in our last issue, has been a resident of that city for upwards of thirty years. He graduated in medicine in the University of Pennsylvania, and received his licence from the

Provincial Medical Board in 1842. In 1863 he received the degree of M. D. in Queen's University. He aided in the reorganization of the General Hospital and assisted in the re-establishment of the Medical Faculty of Queen's College. In 1854, he was appointed Professor of Surgery in the Royal College of Physicians and Surgeons, and for several years held the position of surgeon of "A" Battery. He was also a member of the Ontario Medical Council from 1866 to 1869. And thus, one by one, the ancient landmarks pass away, and their places are filled by others. Dr. Yates was in the 61st year of his age at the time of his death. His place will be missed amongst a large circle of friends and relations.

TRINITY MEDICAL SCHOOL, TORONTO.—The following are the names of the successful candidates at the recent examinations in the above school:—

Fellowship Degree.—W. H. Macdonald (Gold Medallist), A. C. Gaviller (1st Silver Medallist), A. D. Smith (2nd Silver Medallist), W. Bonnar, A. Cameron, H. H. Graham, W. Hanbidge, J. M. Johnston, J. Johnston, H. P. McCausland, J. T. Sutherland (Certificates of Honor), R. W. Belt, W. N. Brett, T. W. Duncombe, J. A. Gracy, S. A. Metherell, J. A. Urquhart, J. E. Shore, P. J. Strathy, and J. D. Wilson.

Primary Examination.—J. E. Jenner, E. H. Williams (Scholarship equally divided between them), T. H. Robinson, B. H. Scott (Certificates of Honor), A. L. Brown, W. F. Dickson, P. N. Davy, S. N. Darling, J. L. Davidson, C. E. B. Duncombe, A. G. Elliot, E. Furrer, W. F. Freeman, E. N. Hoople, A. D. Lake, S. W. McConachie, F. H. Sawers, T. C. Cowan, G. J. Charlesworth, A. Hawke, R. Hislop, S. W. Lamoreaux, J. A. McMichael, W. A. Martin, W. Roche, J. Shoults passed on several of the subjects. The Baptie Prize was awarded to E. H. Williams, and a special prize in Materia Medica to B. H. Scott.

First Year's Examination.—H. Leitch, W. M. Brown, J. Saunders, O. Belfry, F. Snellgrove, D. A. R. Jones, J. A. Couch, A. B. Wilson, J. J. Paul, R. Ovens, D. Ovens, H. H. Hawley, E. A. Hall, P. N. Dewar, W. Fierheller, W. J. Chambers, S. A. McKeague, W. Delaporte, T. McCullough, J. R. Logan, F. J. Lundy, J. A. Watson, —. Coats-

worth, R. J. Lockhart, S. S. Farrar, A. R. Hanks, J. Rack, W. J. Gunn, W. J. Mitchell, W. S. Harrison, C. Trow, W. E. Spragge, T. H. Mott, A. McKillop, F. C. Hood, W. A. Pepler, J. S. McCullough, A. P. Wade, A. T. Little, J. C. Bell, G. L. Johnston, A. E. Stuart, J. E. Anderson, J. E. Brown, W. A. Wilson, — Lawton, J. Lindsey, F. H. Johnstone, J. N. Cochrane, — Salter, J. G. White, J. Ferguson, C. J. McIntyre, A. K. Surgeon, D. N. Carmichael.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—The professional examinations of the above-named college have just been brought to a close. Eighty-one candidates presented themselves for the licence; of these, 59 were successful, and 22 failed to come up to the required standard. There were 58 candidates up for primary. Of these, 46 passed and 12 were rejected. The following are the names of the successful candidates:

Licentiates.—F. Bentley, L. Bentley, T. G. Brereton, J. Baugh, J. C. Burt, Wm. Bonnar, G. S. Beck, J. F. Bell, E. E. Book, Wm. Brett, E. Bedard, G. W. Clendenan, A. Cameron, G. S. Cleland, A. P. Cornell, R. M. Coulter, W. J. Charlton, L. E. Day, G. C. Dowsley, J. T. Duncan, C. R. Dickson, J. G. Davidson, W. F. Eastwood, Ira A. Freel, R. M. Fisher, A. C. Gaviller, R. W. Garrett, Wm. Gilpin, Wm. Hanbidge, A. J. Henwood, D. A. Johnston, J. M. Johnston, W. H. Johnson, C. E. Jarvis, James Lafferty, J. G. Mennie, T. M. Milroy, M. McPhaden, H. P. McCausland, H. R. McGill, T. F. McMahan, J. T. O'Keefe, L. C. Prevost, S. R. Rogers, D. B. Rutherford, David Rose, B. L. Riordan, H. H. Reeve, T. J. Symington, J. E. Shore, A. D. Smith, Alex. Stark, J. M. Stewart, W. F. Shaw, T. H. Stark, E. D. Vandervoort, R. R. Wallace, A. B. Welford, C. A. Weagant.

Primary.—J. L. Addison, W. G. Anglin, J. Bray, J. W. Clerke, J. Cugan, W. Cuthbertson, W. H. Carleton, D. Campbell, A. P. Cornell, H. R. Casgrain, W. F. Dickson, J. G. Davidson, F. P. Drake, W. F. Freeman, R. N. Fraser, G. A. Graham, J. B. Gullen, J. E. Hausler, R. Hearn, A. J. Henwood, Wm. Jacques, J. M. Johnston, J. F. Kidd, F. D. Kent, L. G. Langstaff, T. D. Meikle, J. Menzies, A. F. McKenzie, S. W. McConachie, A. McMurchy, E. B. O'Reilly, L. C. Prevost, F. H. Robinson, J. W. Ray, W. A. Ross, J. Spence,

A. Sangster, W. F. Shaw, Miss Augusta Stowe, F. H. Sawers, A. D. Thompson, A. D. Watson, J. B. Whitely, E. R. Woods, J. D. Wilson, P. C. Walmsley.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, KINGSTON.—We give below the official announcement of the successful candidates at the recent examinations in the above College. The announcement in our last issue was incomplete.

Final Examination.—R. W. Garrett, D. B. Rutherford, J. M. Stewart, A. P. Cornell, C. E. Jarvis, H. Knox, R. S. Anglin, A. D. Cameron, G. H. Denike, H. N. McDonald, A. A. Mordy and J. T. Reeve.

Third Year.—J. F. Kidd, W. Young, W. G. Anglin, T. A. Moore, A. McMurchy, H. M. Froland, John Cryan, C. Clancy, Dr. Hickey, L. T. Davis, G. S. McGhie, A. J. Grange, J. Smith and W. Hall.

Second Year.—H. R. Duff, R. N. Fraser, T. Cumberland, A. Forin, W. H. Bullis, E. Foxton, W. J. Webster, R. C. Cartwright, D. H. Mackie, H. J. Williams, H. J. Emery and E. S. Roy.

AMENDMENTS TO THE QUEBEC MEDICAL ACT.—The Special Committee to take into consideration the proposed amendments to the Medical Act for the Province of Quebec, reported in favor of the Bill, Hon. Mr. Lynch in the chair. There were present—Dr. Howard, President of the College of Physicians; Drs. Lemieux and Trudel, Vice-Presidents; Dr. Belleau, Secretary; Dr. Larue, Registrar; Dr. Lachapelle, Treasurer; also Drs. Hingston, Gingras, Larocque, and Larue, of the Medical Board. The present medical tariff for the Province of Quebec was repealed; but the Medical Board have the right reserved them to make a new one. The amendments to the Medical Act proposed by Mr. Mercier were adopted. The Public Health Bill was also discussed, and reported with slight amendments. We are pleased to learn that our friends in Quebec have succeeded in securing a Public Health Bill somewhat similar to the one now in force in Ontario.

NEPHROTOMY.—The operation of nephrotomy (*Canada Medical Record*) was recently successfully performed by Dr. Roddick, in the Montreal General Hospital. The patient was a girl of twenty years of age, who had been suffering from frequent

and painful micturition, the urine being scanty, muco-purulent and bloody. The urine became gradually more purulent and the patient's health steadily declined. In July last chills and fever set in accompanied by vomiting and diarrhoea, with tenderness over the right kidney. In October a well defined tumor could be felt in the right hypochondrium. The presence of pus in the tumor having been ascertained by the aspirator a transverse incision was made in the loin midway between the last rib and the crest of the ilium, and twenty ounces of putrid pus evacuated and the cavity washed out. The sac was secured to the edges of the wound by silk sutures and a drainage tube inserted. The operation has so far proved a complete success.

ATTEMPTED ASSASSINATION OF DR. GRAY, OF UTICA, N. Y.—The friends of Dr. Gray, medical superintendent of the N. Y. State Lunatic Asylum and editor of the *American Journal of Insanity*, will regret to hear that he has been shot at and severely wounded by an intending assassin. The man, whose name is Renshaw, an old soldier, shot at him through the window of his study, the ball entering at the external angle of the right eye and escaping through the middle of the left cheek. The intending assassin is not known as a lunatic, but had some real or supposed grievance. Dr. Gray had no bad symptoms, and has almost entirely recovered.

PREVENTION AND TREATMENT OF POST PARTUM HEMORRHAGE.—Dr. T. More Madden (*International Med. Congress*), advises a course of iron during the last months of pregnancy as a prophylactic measure. Speaking of the various modern methods of arresting flooding, he says, that the injection of hot water is a very uncertain method, except where there is great depression and other remedies have failed. Ice water has the same failings. The injection of a strong solution of perchloride of iron is too apt to give rise to metro-peritonitis. He, however, speaks highly of applying the iron solution on a sponge which is held in the hand, and both inserted into the uterus, and held there until the contractions force them out together.

BANNING TRUSS AND BRACE CO.—The instruments and appliances manufactured by the above

firm have been found, after years of faithful trial and experiment to be surpassed by none in the market. They make a specialty of spinal braces, and no other house can compete with them in this line of manufacture. The instruments are light, easily adjusted, comfortable to the wearer and what is of most consequence, thoroughly efficacious. Their trusses are also superior in make, light and durable in character. Physicians requiring anything in their line will do well to correspond with the firm, under the assurance that every attention will be paid to their requirements.

THE PATHOLOGY OF MALARIA.—Dr. M. A. Laveran (*London Lancet*) has found in the blood of malarial patients very definite and remarkable parasites. They are of different shapes, some being curved, cylindrical bodies, with pointed extremities, with pigment granules in the centre, making a dark spot. Others are spherical and about the size of blood corpuscles, also containing pigment. Fine filaments could be traced on these bodies about three times the length of a red corpuscle. The first, or cylindrical corpuscle had no motion; the spherical, however, owing to the filaments, had an oscillating movement.

IS SALICYLIC ACID A SPECIFIC FOR RHEUMATISM?—Dr. Lewis Shafter, Physician to the Devon and Exeter Hospitals (*Brit. Med. Four.*), commenting upon the value of salicylic acid in the cure of rheumatism, is unwilling to admit its specific properties. But Dr. Wm. Strange, of the Worcester General Infirmary, writing in the same issue of the journal, after an extended experience with this drug, is confident in his statements that in the same sense as quinine acts as a specific in malaria, or mercury and iodide of potassium in syphilis, so salicylic acid, but more especially its compound, the salicylate of soda, acts as a specific in acute articular rheumatism, by neutralizing the poisonous elements of the blood.

TREATMENT OF CHRONIC ECZEMA.—The *Chic. Med. Review* gives the following:—Avoid the use of soap, as this is irritating. Twice a day, bathe the part in an aqueous solution of borax, one ounce to the pint. Dry without friction and freely apply the benzoated zinc ointment, then bandage the part firmly with old dry muslin which has been previously wet with a saturated aqueous solution of

borax. Over this apply a bandage of oiled silk in such a manner as to exclude the air perfectly. Let the bowels be kept regular. In the majority of cases eczema can be promptly cured by the simple exclusion of air. Eczema of the fingers will generally yield by the ordinary rubber cot.

BISHOP'S MEDICAL COLLEGE, MONTREAL.—The following are the names of the successful candidates in this University: Degree of M.D.C.M.—H. Bishop (Wood Gold Medallist); N. C. Smilie (Chancellor's prize); J. W. Cameron (First-class honors); W. D. M. Bell, and G. M. Balcom (Second-class honors) W. Prendergast.

Primary,—J. B. Saunders (David Schlorship); J. A. Caswell (First-class honors); G. A. Balcom and E. Sirois (Second-class honors); W. D. M. Bell, W. Prendergast.

PERITONEAL TRANSFUSION.—The *Medical News*, Philadelphia, states that three cases are reported of injections of defibrinated blood into the peritoneal cavity, one death and two recoveries. From two to six ounces of blood were used at each injection. Mosler, of Greifswald, had the fatal case, and claims death to have taken place from repetition of the transfusion. In the lower animals there seems to be no danger whatever. The method is to defibrinate fresh blood, heat it to normal temperature, introduce a trocar and inject. The instrument should be warmed.

PAPOMA.—This new and valuable preparation of food for infants has now been before the profession for some time, and wherever it has been tried it has given entire satisfaction. The name of the manufacturer is a sufficient guarantee as to the purity and excellence of the quality of the article. Our own experience of its use bears out the almost universal testimony in its favor. It is easily digested, readily assimilated, and does not produce gastric disturbance or flatulence. It is a valuable addition to the diet of the nursery.

ANTIDOTE FOR STRYCHNINE.—The *British Medical Journal* of March 11, 1882, stated that Messrs. Greville, Williams & Waters of the Royal Society have discovered an antidote for strychnine. The substance is named *lutidine*, and is obtained by distilling cinchonine with caustic potash. The efficacy of the remedy has been tested by experi-

ments on frogs. The results of the experiments are most promising and lend encouragement to the hope that, at last, a reliable antidote has been discovered.

DANGERS OF ANÆSTHESIA.—Speaking in reference to the danger of using pure chloroform for anæsthetic purposes, Dr. Henry Smith says (*London Lancet*), "During the last five years, both in private and hospital practice, the anæsthetic employed in my operations consists either of ether alone, or of the mixture composed of one part alcohol, two of chloroform, and three of ether. This mixture is comparatively harmless, and will produce the same amount of insensibility as is effected by more dangerous anæsthetics."

TEST FOR GLUCOSE IN THE URINE.—Dr. L. S. Oppenheimer gives (*Louisville Medical News*) a modification of Prof. Haines test for glucose in the urine. One or two drops of glycerine are dropped into a test tube. A few drops of an aqueous copper sulphate solution are added, then about five or six times this quantity of liquor potassa is poured in and the whole boiled. The urine is then dropped in, and if sugar be present the yellow or reddish color will suddenly appear.

WARNER'S SUGAR-COATED PILLS.—Messrs. W. Warner & Co. are known the world over for their thoroughly reliable and valuable sugar-coated pills. We have been using their different preparations with the utmost satisfaction, and have much pleasure in recommending them to the profession. Our acquaintance with this firm, and our personal knowledge of the care bestowed in the manufacture of their preparations fully warrant us in the above statements. Their sugar-coated pills have always received the highest awards at all the great international exhibitions at home and abroad.

APPOINTMENTS.—Dr. K. N. Fenwick, Prof. of Physiology in the Royal College of Physicians and Surgeons, Kingston, has been appointed physician to Kingston General Hospital, vacated by the death of Dr. Yates.

As we go to press we learn that P. H. Bryce, M.A., M.D., of Guelph, has been appointed Secretary of the Ontario Board of Health.

TORONTO MEDICAL SOCIETY.

Feb. 9th, 1882, the Society met at 8.15 p.m., the President in the chair; the minutes of last meeting were read and adopted.

Dr. Workman then gave notice that three months hence he would move that the annual fee for membership of the Society be reduced from \$3 to \$2.

Dr. Graham exhibited two vesical calculi removed at a p. m. examination from a lad aged seventeen; the larger one was firmly fixed, and encysted below the pubic arch, and was taken for an exostosis. The same gentleman also showed a left lung and aorta; the aorta was aneurismal and had ruptured into the pleural cavity; the patient from whom the specimen was taken also suffered from pleurisy with effusion. The patient's voice was hoarse, due to pressure on the recurrent laryngeal by the aneurism.

Dr. Burns showed a young man aged nineteen, with hypertrophic enlargement of the ulnæ and tibiæ. No clue could be got to the disease from the family history. No evidence of syphilis except slight protrusion of the frontal eminences, and the bridge of the nose being sunken.

Dr. Wilson showed a fœtus with an abscess in the left thigh, with arrest of development in the affected limb.

Dr. Nevitt then showed a ruptured uterus; the child's body and part of the placenta had escaped through the rent into the abdominal cavity. No decided cause could be given for the accident. A microscopic examination showed fatty degeneration and inflammatory infiltration. The rent extended through part of the placental attachment.

Dr. Oldright showed a large tumor, which at first was thought to be fatty, but on microscopic examination it was found to be a lympho-sarcoma in structure; it was removed from the upper part of the thigh, situated beneath the adductor longus. Weight, 4½ lbs.

Dr. Cameron then showed a case of palmar squamo-pustular syphilide. No history of syphilis was obtainable, but the patient improved greatly under a mixture containing the perchloride of mercury and the iodide of potassium. The case also showed serpiginous eczema on the extensor surfaces of the arms.

Dr. McPhedran related a case in which there

was loss of power of the lower extremities after confinement. He could assign no cause for the malady.

Dr. Temple mentioned a similar case, which, after some months quite regained the use of her limbs, no special treatment being adopted.

The President then vacated the chair, and read a short paper upon "The difference between acute delirium and insane delirium." After a few preliminary remarks, he described the different effect alcohol had upon different persons and gave a vivid description of individual cases. He also gave a description of the mania of hysteria and delirium tremens, and concluded his paper by giving the points in the differential diagnosis between acute and insane delirium. The Society then adjourned.

February 23rd, 1882.—The Society met at 8.30, Dr. Graham in the chair. The minutes of the last meeting were read and adopted.

Dr. Davidson then exhibited a placenta which had been adherent to the uterine wall throughout nearly its whole extent. Masses of fibrinous lymph were to be seen on its surface, and in order to remove the placenta it was necessary to introduce the whole hand into the uterine cavity. A discussion then ensued as to the merits and demerits of introducing the hand into the uterus to remove adherent placenta.

Dr. Riddel showed the head of an aged man, whose widow was committed for trial on a charge of murdering him, on the medical evidence given at the inquest, which stated that the right temporal bone had been fractured, the result of several blows from some blunt instrument. On a close examination of the skull by Dr. Riddel, it was found that there was no fracture of the right temporal bone, but that a small fragment of the parietal bone was wanting, which must have been fractured at the time that the calvarium was removed by the operator, which, had it been fractured before the p. m., would have crumbled away or been detached from the dura mater by the action of the saw. Dr. Riddel also found a fracture of the left parietal, frontal and occipital bones, which must have been produced by the unskilful removal of the skull cap. At the trial of the supposed murderess Dr. Riddel was called for the defence, and gave his evidence in accordance with what he found, as above stated, upon which, and together with similar evidence by Dr. W. T. Aikins, the woman was acquitted.

Dr. Oldright then made some observations as to the condition of the prepuce in early

boyhood. He thought it was a very common thing to find the prepuce contracted in children, and that needless operations were often performed. He thought that as age advanced, the condition generally righted itself. A discussion ensued upon the subject, and several cases were cited where reflex symptoms were cured by the removal of the prepuce.

A communication from Dr. Hillary, of Annotto Bay, Jamaica, was then read, regarding an autopsy in which air was found in the right auricle of the heart and in the gall bladder, and there was also general emphysema. The patient had died suddenly. The Society then adjourned.

Books and Pamphlets.

- 1st. A HANDBOOK OF UTERINE THERAPEUTICS, AND OF DISEASES OF WOMEN. By Edward John Tilt, M.D. Fourth edition.
- 2nd. A TREATISE ON DISEASES OF THE EYE. By Henry D. Noyes, M.D., A.M.
- 3rd. LECTURES ON DISEASES OF CHILDREN. By Edward Henoch, of Berlin.

It is now a long time since the Preacher said, "Of making many books there is no end." He very truly added, "Much study is a weariness of the flesh." In his days the printing press had not even become a subject of prophecy. What would he think, were he now to revisit our planet, of the overwhelming profusion of ever-multiplying issues of new books, of all sorts and sizes, which threaten, not merely to weary the flesh, but actually to wear every vestige of it off the bones of those who strive to keep within the domain of modern bibliolatri? These reflections are forced upon us by the sight of only half-a-dozen of the numerous volumes submitted to our criticism by the enterprising publishers of New York and Philadelphia, among whom it might go without saying that the house of Wm. Wood & Co. still persist in occupying the first rank, and accordingly we have to acknowledge our obligations for the above valuable publications.

THE POPULAR SCIENCE MONTHLY for May, 1882. New York: D. Appleton & Company. Fifty cents per number, \$5 per year.

The contents of the May number are varied and substantial, without being striking or exceptional. "The Methods and Profit of Tree Planting," by N. H. Egleston, is an interesting article devoted to the remedy, practical benefits and rules of successful tree-culture. Herbert Spencer, in a short arti-

cle, gives his estimate, which is not very high, of "Goldwin Smith as a critic." Dr. Rutherford speculates on the causes, and offers a new theory on the "Diffusion of Odors." R. W. Lovett discourses on "The Development of the Senses," and Dr. Bachelor gives some information on "The Tree that bears Quinine." There is a full and very entertaining "Sketch of Sir John Lubbock," besides many other interesting articles, and an unusual budget of miscellaneous matter at the close of the number.

THE OPIUM HABIT AND ALCOHOLISM, by Fred. H. Hubbard; published by A. S. Barnes & Co., New York.

This "*unus e pluribus*" contribution to the therapeutics of inebriety will be much prized by all those who desire to enrich their libraries with books which tend to enhance the reputation of the possessor. By far the greater part of it is given to the exposition, by illustrative cases, of the treatment pursued by the author, which, no doubt, was attended with that uniform success which proves an irresistible stimulus to all earnest philanthropists. The field of practical utility is ample enough to warrant the hope that this work will be largely sought after.

SUPPRESSION OF URINE—CLINICAL DESCRIPTIONS AND ANALYSIS OF SYMPTOMS, by E. P. Fowler, M.D., with 39 clinical cases, etc.

This little volume commends itself by its brevity, and perhaps the colored plate in the front will contribute not a little to its attractiveness, though the multitude of tabular expositions which must have cost the compiler a great amount of labor, will hardly be dwelt upon by the reader with that interest and patience which the zeal and industry of the author should command.

Births, Marriages and Deaths.

On the 13th ult., Dr. Munro, St. Denis Street, Montreal, aged 75 years.

On the 19th ult., Frederick H. Wright, M.D., etc., son of Dr. H. H. Wright, Toronto, aged 30 years.

On the 15th ult., Dr. H. Bingham, of Manilla, Ont., aged 56 years.

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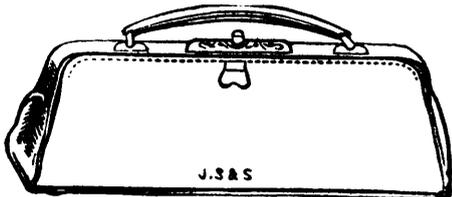
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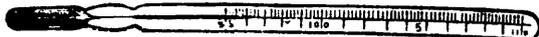
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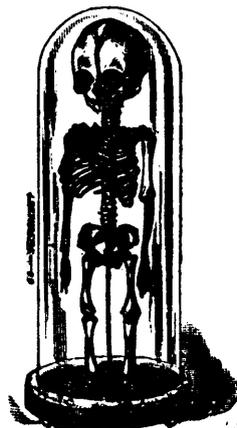
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At and after the Session of 1881-82, the College will return to its former requirements as regards fees and graduation; viz., those in force before the session of 1880-81.

THE COLLEGIATE YEAR in this Institution embraces the Regular Winter Session and a Spring Session.

THE REGULAR SESSION will begin on Wednesday, September 21, 1881, and end about the middle of March, 1882. During this Session, in addition to four didactic lectures on every weekday except Saturday, two or three hours are daily allotted to clinical instruction. Attendance upon two courses of lectures is required for graduation.

THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins about the middle of March and continues until the middle of June. During this Session, daily recitations in all the departments are held by a corps of Examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

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Recitations, Clinics, and Lectures	25 00
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FACULTY OF MEDICINE.

SUMMER SESSION, 1882.

THE Seventh regular Summer session of the Medical Faculty of McGill University will begin on the 17th of April, and continue twelve weeks. The classes are chiefly practical and demonstrative and are designed to supplement and extend the teaching of the regular winter courses. The experience of the past sessions has been very encouraging, both in regard to the numbers in attendance, and the diligence with which the classes have been followed; and the Faculty hopes that the students will endeavor to take one or more of these extra sessions, the fees for which have been placed so low as to be almost nominal. The special advantages of attendance upon a summer session are—1. The benefit derived from the practical and demonstrative classes. 2. Dresserships and clinical clerkships are more easily obtained at the Hospitals, and the student has more time at his disposal to follow up the cases. 3. Cases of midwifery are obtained in greater numbers at the Lying-in-Hospital. 4. Systematic study can be carried out more effectually than at home.

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At the University Dispensary there will be this year, in addition to the Demonstrations on Gynecology, Demonstrations on Diseases of Children and Diseases of the Skin.

Dresserships and clinical clerkships can be obtained on application to the physicians and surgeons in attendance at the Hospital.

The Faculty has made arrangement for the following courses:—

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Diseases of Women,		D. C. MCCALLUM, M.D., M.P.C.S., ENG.
Symptomatology,		GEORGE ROSS, A.M., M.D.
The Urine in Health and Disease,		G. P. GIRDWOOD, M.D., M.R.C.S., ENG.
Practical Gynecology,		D. C. MCCALLUM AND WM. GARDINER, M.D.
Practical Obstetrics,		ARTHUR A. BROWNE, B.A., M.D.
Ophthalmic and Aural Surgery,		FRANK BULLER, M.D., M.R.C.S., ENG.
Diseases of the Skin,		T. G. RODDICK, M.D.
Operative and Minor Surgery,		F. J. SHEPHERD, M.D., M.R.C.S., ENG.
Prescriptions and Prescribing,		R. L. MACDONNELL, B.A., M.D., M.R.C.S., ENG.
Diseases of the Throat,		GEORGE W. MAJOR, B.A., M.D.
Diseases of Children,		A. D. BLACKADER, B.A., M.D., M.R.C.S., ENG.
Morbid Anatomy,		W. OSLER, M.D., M.R.C.P., LOND.
Museum Instruction,		W. SUTHERLAND, M.D. L.R.C.P. LOND.

All students desirous of attending the above courses are expected to register their names with the Registrar of the Faculty, and to pay a fee of \$10, when a ticket will be issued admitting bearer to the lectures. Enregistration and payment of the fee is compulsory upon all students, whether attending one or more of the classes. The fees will be devoted to the extension and improvement of the Library and Museum, to which all students can obtain access. A printed certificate of attendance will be issued at the close of the Session.

The following special courses will be given:

Practical Chemistry. G. P. GIRDWOOD, M.D., M.R.C.S., Eng. Fee, \$12.

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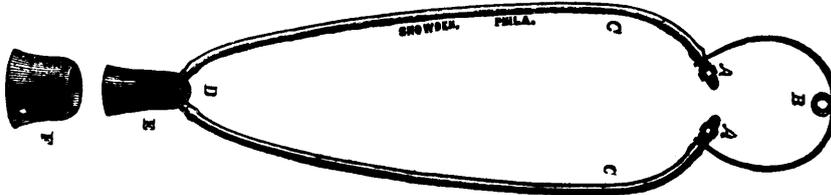
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Each fluid drachm contains two grains of Phosphate of Iron, one of Quinia, and one-sixtieth of a grain of Strychnia, in Simple Elixir, flavored with Oil of Orange.

ADULT DOSE.—One teaspoonful three times a day.

Compressed Tablets of Chlorate of Potash and Borax.

TWO AND A HALF GRAINS OF EACH; FREE FROM ANY ADDITION OR EXCIPIENT.

We ask the attention of Physicians to the above excellent combination, which will be found highly efficient in the relief of Diphtheritic affections of the mouth and throat, and other morbid states of those parts, attended with disordered secretions. The depurative effect of these remedies are well-known.

These Tablets have the great advantage over the gargles so commonly prescribed, that their ingredients are gradually dissolved in the saliva, and are thus constantly brought into contact with the affected parts. It must be evident that better results may be looked for from this, than from the momentary and occasional use of a gargle, which, moreover, is disagreeable to a great many persons, and to some impossible.

Children take the Tablets readily, as they have no unpleasant taste, while the convenience of carrying them in the pocket commends them to travelers.

PEPTONIC PILLS.

PEPSIN, PANCREATIN WITH LACTO-PHOSPHATE OF LIME AND LACTIC ACID.

(Copyright Secured.)

This Pill will give immediate relief in many forms of Dyspepsia and Indigestion, and will prove of permanent benefit in all cases of enfeebled digestion produced from want of proper secretion of the Gastric Juice. By supplementing the action of the stomach, and rendering the food capable of assimilation, they enable the organ to recover its healthy tone, and thus permanent relief is afforded. One great advantage of the mode of preparation of these Pills is the absence of sugar, which is present in all the ordinary Pepsin and Pancreatin compounds—in this form the dose is much smaller, more pleasant to take, and is less apt to offend the already weak and irritable stomach. The results of their use have been so abundantly satisfactory, that we are confident that further trial will secure for them the cordial approval of the Medical Profession and the favor of the general public.

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Fellows' Hypo-Phos-Phites

CONTAINS

The **Essential Elements** to the Animal Organization—Potash and Lime ;

The **Oxidizing Agents**—Iron and Manganese ;

The **Tonics**—Quinine and Strychnine ; and

The **Vitalizing Constituent**—Phosphorus,

Combined in the form of Syrup, with SLIGHT ALKALINE REACTION.

It differs in effect from all others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has sustained a high reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its **Curative Properties** are largely attributable to Stimulant, Tonic, and Nutritive qualities, whereby the various organic functions are recruited.

From the *London Practitioner*, June, 1880.

FELLOWS' SYRUP OF HYPOPHOSPHITES.—This preparation is composed of the hypophosphites of iron, quinine, strychnine, manganese, lime and potash. Each drachm contains a proportion of hypophosphite of strychnia equal to one sixty-fourth of a grain of the pure alkaloid. The difference in action between the phosphates and the hypophosphites has been recognized by the introduction of hypophosphites into the British Pharmacopœia ; and this preparation is intended to present the tonic and nutritive bases which it contains in the hypophosphites, so as to increase the medicinal powers which they would have even in the form of phosphates.

In Cases where innervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety, and satisfaction.

Its Action is Prompt, stimulating the appetite, and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of mental and nervous affections.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Each bottle of Fellows' Hypophosphites contains 128 doses.

Prepared by JAMES I. FELLOWS, Chemist.

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 Circulars and Sample Bottle sent to Physicians on application.

SPECIAL TO PHYSICIANS.—One large bottle containing 15 oz. (which usually sells for \$1.50), will be sent upon receipt of Fifty Cents with the application; this will be applied to the prepayment of Expressage, and will afford an opportunity for a thorough test in Chronic cases of Debility and Nervousness. Express charges prepaid upon all samples.

PUT UP
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1 lb. Cans
5 “
10 “
25 “
50 “
100 “



SAMPLES
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ON
application.
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THE
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FORBID anything
of an oleaginous
nature being sent
through the mail.

In chemical composition, Cosmoline [Unguentum Petrolei] is an oleaginous hydrocarbon, corresponding to the heavy petroleum oils, and containing a large amount of the paraffines and olefines of formulae C₁₆H₃₄ & C₁₆H₃₂. It contains but a small percentage of the paraffines and olefines, corresponding to the formula C₇H₁₆ and C₇H₁₄, respectively, and the offensive and irritating properties of the crude oil have been carefully removed. In the process of purification, no acids, alkalis, or other chemicals are employed, and no injurious additions of any kind are made to the natural product. The result is a semi-solid, translucent substance, with a faint odor, an unctuous feel and a slightly larry taste.

Cosmoline [Unguentum Petrolei] melts at about 100° Fah. (38° Cent.); and boils at about 625° Fah. (329° Cent.); its specific gravity is about 0.875 at 60° Fah.

As it contains no oxidizable or organic matter capable of change by putrefaction or fermentation, and is absolutely without affinity for moisture, it offers to the profession an admirable unguent, which can never decompose, ferment, or become rancid in any climate or temperature.

291 MADISON AVENUE, NEW YORK, February 26th, 1878.

I have examined the preparations of Cosmoline as manufactured by E. F. Houghton & Co., Philadelphia, and believe them well adapted to the purposes for which they are designed. As lubricants, and as the bases of simple or medicated ointments, they have a decided advantage over the fixed oils and fatty substances in ordinary use, in that they do not become rancid, and do not acquire irritating qualities from atmospheric exposure.

ALFRED C. POST, M.D., LL.D.,
Emeritus Professor of Clinical Surgery in the University of New York, Visiting Surgeon to Presbyterian Hospital, etc.

218 SOUTH SIXTEENTH STREET, PHILADELPHIA, July 7th 1890.

Messrs. E. F. HOUGHTON & Co. :

Gentlemen—The petroleum product prepared by you and supplied to physicians under the name of Cosmoline [Unguentum Petrolei], was first brought to my notice while I was a Resident Physician in the Pennsylvania Hospital, and it at once commended itself to me as a bland emollient, as an elegant substitute for Carron oil in burns and scalds, as a protective in excoriations and certain diseases of the skin, and as an excipient in the place of lard for applications to the eye and ear. For the last five years I have used the plain Cosmoline, both in hospital and private practice, in Gynecological and Obstetrical cases, with perfect satisfaction, and consider it much superior to Olive Oil, which is so generally used. Carbolated Cosmoline is a useful combination, but the rose-scented Cosmoline is beyond all question, a work of art, which cannot be too highly commended. I have the honor to be,

Very respectfully, yours,

FRANK WOODBURY, M.D.,
Physician to German Hospital.

PHILADELPHIA, July 10th, 1890.

Messrs. E. F. HOUGHTON & Co. :

I have for a number of years made extensive use of Cosmoline [Unguentum Petrolei] and consider it a most valuable article for surgical purposes. Either as a dressing by itself, or as a vehicle for the application of medicaments, it is greatly superior to lard or other fatty matters, especially by reason of its non-liability to change by time or temperature.

Yours truly,

JOHN H. PACKARD, M.D.

1031 WALNUT STREET, PHILADELPHIA.

Messrs. E. F. HOUGHTON & Co. :

I have used extensively Cosmoline [Unguentum Petrolei] both in Dispensary and private practice, with very great satisfaction. As a vehicle for making ointments it is invaluable, and far superior to lard, for the reason that it will not become rancid or undergo chemical change like the latter, when exposed to the atmosphere. I cannot too highly commend it as an application in various skin diseases.

Yours truly,

JOHN V. SHOEMAKER, A.M., M.D.,
Physician to the Pennsylvania Free Dispensary for Skin Diseases.

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GENTS:—I fully appreciate the value of your Cosmoline or Ungt. Petrolei and prescribe it frequently in ointments. Fluid Cosmoline I have used constantly for several years, as a lubricant of urethral sounds. It is the *cleanest* oil I know of for this purpose.

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To the Medical Profession.

LACTOPEPTINE

We take pleasure in calling the attention of the Profession to LACTOPEPTINE. After a long series of careful experiments, we are able to produce its various components in an absolutely pure state, thus removing all unpleasant odor and taste, (also slightly changing the color). We can confidently claim, that its digestive properties are largely increased thereby, and can assert without hesitation that it is as perfect a digestive as can be produced.

LACTOPEPTINE is the most important remedial agent ever presented to the Profession for Indigestion, Dyspepsia, Vomiting in Pregnancy, Cholera Infantum, Constipation, and all diseases arising from imperfect nutrition. It contains the five active agents of digestion, viz: Pepsin, Pancreatine, Diastase, or Veg. Ptyalin, Lactic and Hydrochloric Acids, in combination with Sugar of Milk.

FORMULA OF LACTOPEPTINE:

Sugar of Milk.....	40 ounces.	Veg. Ptyalin or Diastase.....	4 drachms.
Pepsin	8 ounces.	Lactic Acid.....	5 fl. drachms.
Pancreatine	6 ounces.	Hydrochloric Acid.....	5 fl. drachms.

LACTOPEPTINE is sold entirely by Physicians' Prescriptions, and its almost universal adoption by physicians is the strongest guarantee we can give that its therapeutic value has been most thoroughly established.

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GRAND MEDAL at the Philadelphia Exposition, 1876.
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The attention of physicians, druggists and hospitals, is called to this article, and to the fact that it is favourably regarded and extensively used in the United States, on the continent and in England, by the profession and pharmacists as a base for

OINTMENTS, CERATES, &c.,

As a dressing for **WOUNDS, CUTS, BRUISES, BURNS, SPRAINS, PILES, RHEUMATISM, SKIN DISEASES, CATARRH, SORES or ERUPTIVE DISEASES,** and all contused and inflamed surfaces, it is not equalled by any known substance.

In the treatment of **COUGHS, COLDS, CROUP, DIPHTHERIA,** and of **THROAT and CHEST** complaints. the best results are obtained.

One Pound Cans, 60cts. Five Pound Cans, \$1.50.

Extract from Report of Dr. Galezowski, the distinguished French Oculist.

"Vaseline is the best pharmaceutical preparation in the making of Ointments, as it is completely neutral and unchangeable. I saw it used for the first time in London by Dr. Lanson. I then procured the 'Vaseline' myself, and have experimented with it for four months on over one thousand patients, and I must declare that the knowledge acquired by practice has surpassed my expectations by far. * * * * I have also prepared large quantities of eye ointments with 'Vaseline,' and have employed them on numerous maladies with very great success, and I can affirm that 'Vaseline' is very precious in ocular therapeutics, and must replace all the ointments in use at the present time. * *"

"In conclusion, on account of its unalterability and its great affinity for perfumes, I believe that 'Vaseline' merits the attention of the scientific and industrial world."

DR. REUSCHE, of Hamburg (translation) says:

"In six cases of small-pox I have used Vaseline with eminent success—one a severe case of variola vera—a boy sixteen years old, not vaccinated.

"It developed the disease rapidly, and shortened considerably the duration of it—the time varying from seven to twenty days, the latter period for the most serious case only.

"While the application of Vaseline was regularly renewed, all inflammation and fever were kept off, and none of the patients, at any time, suffered any pain or great inconvenience, whereas, if neglected, the patient would become irritable and feverish.

"Applied internally, it removed the small-pox in the mouth and throat in a few days.

"A few scars remained in only one case, but the patient will outgrow these, as they are very slight."

From the **LONDON LANCET, Jan'y 5th, 1878:**

"We have before noticed this preparation of petroleum in terms of warm praise. It is of the consistency of butter, is perfectly free from odor, and does not become rancid. We have now before us several new preparations made from it, which are so useful as to call for remark. They are a pomade, a cold cream, and a camphor ice, all of excellent quality. We have tried all of them with most satisfactory results, having found them greatly superior to the preparations in common use."

Bronze Medal and Diploma Awarded by the American Institute for 1874.

"Vaseline is an admirable preparation for many of the uses mentioned. As a base for ointments, it has given very great satisfaction, whilst its freedom from rancidity or liability to become rancid gives it great advantage over many animal and fishy bodies. We deem it an article of great value, and deserving of special mention for the above purposes." **Bronze Medal awarded**

Signed by { P. W. REDFORD, } Chemist.
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"This article is one of great merit as a base for Cerates, Ointments, etc., and for Medicinal and Toilet uses, and is superior to the present bases used for Cerates, etc. It deserves the patronage of the profession, and shows undoubted superiority." **A Silver Medal awarded.**

Signed by { NEWTON SCOTTER, } Oculist.
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We manufacture the following Standard Ointments, according to the United States Pharmacopoeia, using Vaseline as a base instead of lard:

- Ung.: Hydrargyri (½ Mercury) Ung.: Zinci Oxidi.**
- Ung.: Hydrargyri: Nitratis (Citrine Ointment) Cerat.: Resinæ.**
- Cerat.: Plumbi Sub-acetatis (Goulards Cerate) Cerat.: Simplex.**

We recommend them as vastly superior to anything in use. **PRICE 75 CTS. PER POUND. NO CHARGE FOR JARS.** Send for Pamphlet.

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Pomade Vaseline, Vaseline Cold Cream, Vaseline Camphor Ice, and Vaseline Toilet Soap, are all exquisite toilet articles made from pure Vaseline, and excel all similar ones.

Recent Introductions to the Materia Medica

—BY—

PARKE, DAVIS & CO.

Manufacturing Chemists,

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CHEKEN. (*Eugenia Cheken, Myrtus Chekan.*) This remedy, a native of Chili, is very popular in that country, where it is employed as an *inhalation* in diphtheria, laryngitis, bronchitis, bronchorrhoea, etc.; as an *injection* in gonorrhoea, leucorrhoea, cystitis, etc.; and *internally* as an aid to digestion, to allay cough, to facilitate expectoration and to stimulate the kidneys. It is also an astringent and is said to be of great value in hæmoptysis.

Cheken (known also as Chekan and Chequen), was introduced to the profession of England through a report of results following its use in chronic bronchitis or winter cough by Wm. Murrell, M.D., M.R.C.P., Assistant-Physician to the Royal Hospital for Diseases of the Chest, and Lecturer on Practical Physiology at the Westminster Hospital. Dr. Murrell's report is very favorable and he has supplemented it by private advices to us expressing great satisfaction with the drug in the affections in which he has employed it. He regards it as one of the most valuable introductions of late years, and pronounces it a drug of very superior properties in the treatment of **chronic bronchitis**, acting in this affection both as an anodyne and exerting a favorable influence over the organic changes in the mucous membrane. It is certainly a remedy which merits a thorough trial at the hands of the profession of this country.

SIERRA SALVIA. ("MOUNTAIN SAGE.") *Artemisia Frigida.* Fluid extract of the herb. Dose one to two fluid drachms.

DIAPHORETIC AND DIURETIC

The success which has attended the administration of this drug in "Mountain Fever," has suggested its employment in all febrile conditions attended with suppression of the secretions of the skin and kidneys. Its action in fever seems to be two-fold, acting directly on the nervous centre, thus inducing a direct lowering of the temperature, and facilitating the radiation of the heat through diaphoresis which it stimulates. Under its use, the kidneys are also aroused to activity, and the solid constituents of the urine proportionately increased. Therapeutic tests have corroborated the opinion formed of it on theoretical grounds.

PERSEA. (ALLIGATOR PEAR.) Fluid extract of the seeds. Dose 30 to 60 minims. This remedy is now for the first time presented to the profession of this country. It is introduced on the recommendation of Dr. Henry Froehling, of Baltimore, Maryland, who while acting in the capacity of botanist and scientist to an exploring expedition in Southern Mexico, became familiar with the drug both from reports of the natives and personal experience, as a remedy in **intercostal neuralgia**. The following extract from Dr. Froehling's report will give some conception of the nature of this remedy.

"A common experience among physicians is that some cases of intercostal neuralgia are very troublesome and obstinate, resisting almost every kind of treatment; particularly is this the case in malarial districts. In such cases I would recommend the fluid extract of *Persea* seed. In my own person and in every case in which I have employed it I have been highly gratified with the result. Those of my medical friends to whom I have given samples of the preparation warmly endorse my opinion of it as above and I cannot but believe that further trial of it will cause it to be regarded as a valuable addition to our list of medicines."

Dr. Froehling also mentions the fact that *Persea* has been employed with benefit in the expulsion of tapeworm.

COCA. (ERYTHROXYLON COCA.) The evidence in favor of Coca is to prove it a powerful nervous stimulant, through which property it retards waste of tissue, increases muscular strength and endurance, and removes fatigue and languor, due to prolonged physical or mental effort. While indicated in all conditions presenting these symptoms it has an especial indication in the treatment of **the opium and alcohol habits**. In these deplorable conditions it has been found to possess extraordinary properties—relieving the sense of untold bodily and mental misery which follows the withdrawal of the accustomed stimulus, thus preventing a return to the narcotic, and affording an opportunity for building up the system by the administration of restorative tonics.

We prepare Fluid Extracts of all of the above Drugs.

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