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 A MONTHLY JOURNAL OF
## MEDICAL AND SURGICAL SCIENCE.

Vol. XIV. TORONTO, JAN., $1882 . \quad$ No. 5.

## Origimal Communications.

## ELECTRICITY IN THE TREATMENT OF SPECIAL DISEASES.*

by A. M. ROSEBRUGH, M.D. SURGEON TO THE toRONTO EYE AND EAR DISPENSARY.
Read before the Toronto Medical Society, Dec. Ist, 188i.

## ELECTRICITY in insanity.

The first systematic use of electricity in the treatment of mental diseases, according to Althaus, was made in France in 1845. Teilleux and Auzouy found that although it was no specific, it nevertheless did good in well selected cases. Remack and Benedict report favorably of its use, and Dr. Arndt of Griefswald, who has given special attention to the subject, asserts that electricity is an invaluable remedy, of equal importance with quinine, iron and baths, and of far more importance than narcotics, in the treatment of insanity. In 1873 , Drs. Willians and Newth of the Sussex Lunatic Asylum, and Dr. Bryce of the Alabama Lunatic Asylum, reported favo:ably of the use of electricity in mental diseases. Dr. B.rtholow states that the treatment of psychical disorders by electricity has been productive of some very striking results : and Drs. Beard and Rockwell predict that an important future is in store for the scientific and faithful use of electricity in our public and private asylums.

Up to the present time, the best results seem to have been obtained in those forms of insanity associated with or dependent upon debility and nervous exhaustion. Arndt recommends "peripheral faradization" (general faradization ?), and Bartholow,--a modification of central galvanizıtion. Beard and Rockwell recommend central galvanization as the best means of influencing the central nervous system, and in cases associated with bodily depression, they would alternate central galvanizution with general faradization. They
make the first tentative applications very cautiously, and the strength of the application and the time of the sitting gradually increased, as the patient is able to bear the treatment.

Dr. Clifford Albutt of the West Riding Lunatic Asylum, Leeds, usep galvanism in acute primary dementia, in mania, and in atonic melancholia. He states that in mania and in atonic melancholia, distinct improvement takes place, and that in acute primary dementia the improvement is marked.

## SPASMODIC DISEASES.

"Of spasmodic diseases this general law holds, that when recent, even though violent, they yield readily to electrical treatment; but when longstanding, they are easity palliated, cured with difficulty, and are prone to relapse."-(Beard and Rockwell).

According to Bartholow, there is no fact in regard to galvanism more conspicuous than its power to allay spasins ; that when a strong (continu sus) current is passed through a muscle, irrespective of direction, it remains quiescent and relaxed until the current is broken.
In Writers' cramp the treatment should be adapted to the condition present-winether local and muscular-local and nervous, or whether the affection arises from intra-cranial lesions. To the muscles fatigued from over use, the galvanic current is applied, and to the muscles affected with paresis, and degeneration, the faradic current is applied. The individually affected muscles are picked out and the current applied with Duchenne's small electrodes. The current should be just strong enough, when interrupted, to cause contractions, and the muscles should not be fatigued by long applications. In some cases the galvanic current is also applied to the upper part of the spine, and to the median and radial nerves. Or the positive electrode may be placed over the cervical plexus and the descending current applied by the labile method to all the muscles from the shoulder down. When there is anæsthes a, the faradic current and the metallic brush should be usec. Systematic gymastic training is recommended, and rest from occupation is said to be almost imperative.

Torticollis or wiy neck, in the early stages, may be cured or relieved by electrical treatment alone. Spasm of the muscles of the neck on one side
causes the head to be turned to the opposite side, where the muscles become flabby and weak. The treatment consists in passing a localized galvanic current through the contracted muscles, and the faradic current through the relaxed muscles. Beard and Rockwell use mild currents, but Bartholow uses 30 to 40 cells of the galvanic battery for the tense and rigid muscles, and a faradic current strong enough to throw the weak muscles into very active contractions. He makes each application last about five minutes.

Epilspyy is treated by Rockwell apparently with encouraging resalts. He uses general faradization and contral galvanization alternately, the patients being treated every other day, and the treatment continued for several months.

Rheumatisnt and Gout.-Rheumatism is a constitutional dise tse and requires constitutional treatment. The best results are obtained by general faradiz ttion, central galvanizution, and the alternate galvanizution and faradization of the affected joints. Swollen joiat; are trested by mild and steady cur-rents,-th $=$ ap, slication bein $y$ made, preferably, with the positive electrode. Prolonged local applications of the galvanic current may be tried for anchylosis. "The most uniform results are obtained in the muscular form; the next best are the subacute and acute, and the least satisfactory of all in the chronic stajes." In lumba;o, p'eurodynia, and stiff neck, mild currents, either the faradic or the galvanic, are used locally. In lumbago, some authurs prefer stroing galvanic currents, one pole being placed on each side and the current applied transversely. An attack of myalgic may sometimes be completely cured by a single application of a mild faradic current, frolonged for one or two hours.

In gout, in the chronic form, general faradizition and central galvanization are to be tried, with a view of raising the tone of the system. Local faradization seems to be of service in some cases; the pain may be temporarily relieved by either the galvanic or the faradic current, the positive electrode being used and the current not strong enough to increase the pain. In muscular rheumatism with paralysis, the interrupted galvanic current is used, and in chronic articular rheumatism, dry faradization of the skin around the joint is preferred by some. Stimulation of the trophic system, by means
of galvanization of the cervical sympathetic, will assist the absorption of nodosities about joints.

## HYSTERIA AND ALLIED AFFECTIONS.

Undor this head, Beard and Rockwell include hysteria, nervous exhaustion. hypochondriasis, melancholia, spinal irritation, and insomnia; and claim that for this class of diseases electrical treatment is especially adapted and in which its success is most remarkable.

It is in the treatment of these affections that these authors seem to have had their greatest success in the use of their methods of general electrization. Hysteria and hysteroid affections all depend, they affirm, upon constitutional disease, and are most successfully treated by the tonic and sedative influence of general firadization and central galvanization.

In hysteria, in addition to the constitutional treatment by general electrization, paralysis or rigid contraction of certain muscles wilı require localized treatment,-the former by the faradic and the latter by the galvanic current. In cases of extreme hyperæ; thesia, Benedikt recommends the patient to be placed under chloroform before applying general electrization, and using strong currents.

In hejpochondriasis and melancholia, galvanization of the cervical sympathetic is used in addition to general faradization and central galvanization. The positive electrude is applied to the sympathetic, beneath the ear; the negative electrode is placed on the back of the neck, and a current of 10 or 12 cells used for about two minutes. The negative electrode is then removed from the back of the neck and placed over the stomach, and the positive is applied to the head, neck an! spine, as recommended in central gulvan:zation.

In nervous exhaustion or general debility (neurasthenia), the electrical trearment is by general faradization and central galvanization. General faradization alone is said to be rap:dly efficacious in some cases. The electric treanment, however, in these cases is simply to supplement other treatment.*

[^2]Spinal irritation is part of the hysterical constitution and requires the same constitutional treatment. In addition to the treatment by general faradization and central galvanization, the galvanic current is applied separately to the spine and cervical sympathetic ; and in case of tenderness, counter-irritation is applied over the sensitive verte'ræ, and phosphorus or strychnine administered internaliy.

In the treatment of insomnia, it is claimed that there is no remedy which permanently relieves the symptoms in so large a proportion of cases as electricity. Improvement in sleep appears to be one of the earliest effects of a course of general electrization,--" a result of the improvement of the morbid condition on which the insomnix depends." Simple wakefuiness, unaccomp unied by disease, may be relieved either by the application of the faradic current to the :head and spine, the application of the galvanic carrent to the head and sympathetic, or by generil fa:adization.
Diseases of !Vomon.—According to Kockwell, the diseases peculiar to women in which electrical treatment has been most successful are amenorrhœa, dysmenorrh:ea, and menorrhagia. Tripier in France and Burtholow of Philadelphia were among the first to advocate the treatment of structural diseases of the uterus by galvanism. In cases of chronic metritis, congestion without plastic effision, sub-involution, etc., the latter author finds both the faradic and the interrupted galvanic current highly serviceable. The faradic current has also been used instead of ergot in cases of uterine inertia, post-partum hæmorrhage, and retained placenta. It has also been used for the expulsion of polypi, moles, and hydat. idj. The faradic cirrent is used in all cases requiring the muscular action , $i$ the uterus, while the galvanic current is preferavie when nutrient changes have taken place.

In cases of amenorrhoa, dependent on anæmia, chlorosis, or nervous exhation, the constitutional condition is treated by internal medication and by general faradization, without applications directly to the uterus.

In the treatment of dysmenorrhax. by electricity, the results are said to be brilliant, even after years of ineffectual treatment by other means. Internal applications are usually not necessary. Either the faradic or the galvanic current may be used, but
the best results are claimed for the latter. One electrode is placed on the lumbar spine and the other on the hypogastric region. The current from 12 cells?is applied for about five minutes, three or four times a week. The galvanic current is applied to the whole length of the spine as well, and in some cases general faradization is also used.

In cases of menorrluagia, free from organic disease, and occurring near the climacteric period, general farıdization i; employed, when there is inactivity of the liver and constipation, associated with nervons exha:stion.

## miscellaneous diseases.

Diseases of the Orjans of Disestion.--In the treat. ment of disorders of the dig-stive tract, the faradic current is preferred. It acts more vigorously on the muscles and produces more powerful mechanical effects. One electrode (usually the negative) is applied to the feet, coccyx, or spine, and the other clectrode is applied to the abdominal viscera. Or the patient may be treated by general faradization. General faradization is alyo useful in nervous dyspepsia, from its influence more erpecislly on the nervous condition upon which the dyspepsia depends. General faratization is alss used in diarrhœa and constipation, and is hel:l to be beneficial from the improvenent in nutrition that follows this method of using electricity. In obstinate cases of constipation, one electrode may be placed in the rectum, and the other applied at different points on the ablomen. Strong currents may be used.

Diseases of the Bladder.-Incontinence of urine is frequently associated with hysteria and spinal irritation, and requires treatment for the constitutional condition. When the affection is purely local, it is treated by strong faradic currents directed through the neck of the bladder. Oae pole is placed over the symphysis pubis, and the other over the perinæum, in males, and over the lower part of the sacrum in females. In recent cases and in the young the prognosis is said to be favourable, but depending, of course, upon the nature of the malady with which the incontinence is associated.
"Paresis and paralysis of the bladder so frequently depend on incurable diseases of the spine, that the prognosis is, as a rule, uafavorable as regards a complete cure. Relief and improvement,
even in very bad cases, may be gained by faithful treatment, but entire recoveries are exceptional.
"The treatment should be external and internal, with both the galvanic and faradic currents, combined with central galvanization.
"External applications may be made, placing one pole, the negative, over the symphysis pubis, and the other on the back, or at the nape of the neck, and passing very strong faradic currents with interruptions.
" Internal applications may be made either with the insulated catheter electrode, or with Duchenne's double vesical electrode.
" The catheter electrode may be connected with the negative pole while the positive is at the hypogastric region or back. By means of the double exciter of Duchenne the current can be more exclusively localized in the muscles of the bladder than by any other method." (Beard and Rockwell.)
Impotence is also treated by electricity. When it depends upon disorders of a general character, such as the inmoderate use of sedative narcotics, sedentary habits, or mal-nutrition from any cause, it demands "the general constitutional tonic influence of general faradization." The local treatment is by placing one pole on the perinæum and the other on the testicles (the testicles may be placed in a cup of warm water in which one pole of the baltery is immersed). Either current may be used, but the faradic current is preferred, and the application is not extended beyond ten minutes, "Impotence like seminal emissions, may sometimes be treated by connecting the steel sound introduced into the urethra with one of the poles of the faradic current, thus combining the toning effect of pressure with the toning effect of electricity on the relaxed parts." (Beard \& Rockwell).

Exoplithulimic Goitre.-Graves' disease, which is supposed to be due to ennervation of the sympathetic, according to Rockwell, is almost invariably benefitted by galvanis!n. The anophthalmia and the enlargement of the thyroid gland do not always disappear, but the violent palpitation which constitutes the most distressing symptom according to this author, is decidedly and permanently alleviated. 'I he positive electrode is placed just above the sixth cervical vertebra. and the negative in the auriculo-maxillary fossa. The negative electrode, after reintining in this position one minute, is gra-
dually moved down along the inner border of the sterno-cleido-mastoid muscle to the sternum. A current from 6, 8 , or io cells is used and this part of the application should not last longer than two or three minutes. The negative pole is now removed to the epigastrium (the region of the solar plexus) and the positive placed again in the auri-culo-maxillary-fossa and 18 or 20 cells used. The positive electrode after remaining about one minute in this position, is gradually moved to the back of the neck where it is allowed to remain one or two minutes longer,

Sequaela of Aeute Diseases.-Dr. Rockwell uses electricity for the relief of the varied symptoms that follow cerebro-spinal meningitis, diphtheria, and intermittent fever. In the treatment of the sequelæ of cerebro-spinal meningitis, he relies upon galvanization of the spine and central galvanization. For the paralysis following diphtheria he finds in most cases general faradization is sufficient without localized applications. In chronic cases of intermittent fever, after the use of quinine and other tonics, he uses general faradization, not as a specific, but for its beneficial influence over the processes of secretion and excretion, and for its constitutional effects.

Electrolysis, galvano-cautery and the treatment of diseases of the eye, ear. nose and larynx by electricity, are subjects, the discussion of which must be reserved for another occasion.

## ON DIPHTHERIA*.

BY H. K. KERR, M.D., C.M., F.T.M.S., HAMMOND, N.T.
Etiology :-Diphtheria is an acute specific disease, highly infectious, contagious, and sometimes epidemic. It is held by some that the propagating germs of the disease are contained only in the throat deposit, but careful research warrants the conclusion that they are given off from the breath and also present in the excretions of the body. It appears to be more contagious than infectious, as those who are in constant attendance on diphiheritic patients, inhaling their breath and exposed to the liability of having the diseased products coughed out upon them, contract the disease more readily than others who may live in the same dwel-

[^3]ling, but who are not in such close contact with them.

The infection lasts for a considerable time after convalescence and clings to houses, rooms, furniture, etc., and especially so if hygienic measures have not been thoroughly attended to. Some authors doubt the possibility of inoculation with the deposit. No such doubt, I think, need exist. My predecessor, Dr. F. R. Sherman, of Hammond, N.Y., caught it in this way. He assisted in performing tracheotomy on a patient with primary laryngeal diphtheria of a malignant type. During the operation a tenaculum pulling suddenly through the tissue scratched his finger deeply. He neglected the wound until after the operation. It inflamed in a few hours, showing the diphtheritic canker. He was taken down with the disease in its worst form and died in the course of a week.
A sporadic form of the disease is recognized, resulting from bad drainage, etc., but imperfect hygienic conditions are not so much a cause of diphtheria as of low fevers.

Predisposing Causis-Age, sex, climate, susceptibility, exhaustion, and nervous irritability. The age most favorable to an attack of diphtheria is put down at from five to ten years. From four to fifteen years is quite as near the mark. No age is exempt. I had under medical treatment recently, a child only ten months old with diphtheria, and know of a man of 76 years who also had the disease not long since. Sex is generally supposed to make no difference. I think, under certain circumstances it does. Girls seem more liable to contract the disease from 15 to 18 years than boys of that age. The termination appears less favorable in adult females than in adult males. Hot dry seasons favor the spread of the disease. Heavy autumn rains and moist depressing atmosphere frequently act in the same way. Some families are more susceptible to the disease than others, and the same may be said of individual members of a family. Some are so predisposed to it that they might be said to be of a diphtheritic diathesis. In such the disease is often of a malignant nature, not unfrequently carrying off almost entire households. Again it may be of a mild type with a susceptibility to frequent attacks.

Exhaustion due to previous disease, nervous irritability, over-exertion, dissipation or any cause that reduces the vital energies of the system, predisposes
to the disease and obscures the chances of a successful termination.

Anatomical Characters-Swelling and inflammatory redness of the soft palate, tonsils, etc., followed by the appearance of patches of exudation of a yellowish white or grayish color. These coalesce, forming a parchment-like membrane, covering the mucus surface of the fauces, extending to the mouth and nose and sometimes into the conjunctiva, trachea, œsophagus, stomach, etc. There is an increased flow of viscid secretion, the tongue covered with a dark grayish or brownish coating. The dphtheritic membrane becomes thickened by the formation of additional layers underneath. When removed it carries most of the epithelium with it, revealing the formation of ulcers. The lymphatic glands at the angles of the jaw become inflamed and enlarged. The neck may be considerably swollen owing to the infiltration of serum into the surrounding tissues. After death the various organs of the body are found to be congested, collapse or insufflation of the lungs, coagula in the heart and great vessels, parenchymatous inflammation of the kidneys, enlargement of the spleen and absorbent glands are the abnormal conditions, some or all of which are usually found.
Symptoms-The incubation period ranges from 48 hours to a week, usually from two to four days. There is a feeling of lassitude, diffused pains, chilliness, anorexia, increased temperature, headache, nausea, drowsiness, stiffness and soreness about angle of jaw, increased on swallowing. Much enlargement of the cervical glands and intense redness of the throat indicate a severe attack. The throat symptoms and the severity of the constitutional condition may, however, bear no necessary relation to each other. Articulation may be difficult and imperfect, and taste and hearing interfered with. There may be vomiting and diarrhœa, followed by convulsions and coma. The skin is natural, tongue thickly coated. On examination, the fauces, tonsils and uvula are found to be inflamed and swollen, in some instances almost entirely filling up the throat. There is much redness with more or less diphtheritic deposit. Enlargemen* of the glands at the angles of the jaw and tumefaction of the tissues of the neck are always present. There is a frequent desire to hawk, the false membrane being coughed up in pieces. The infection of the nasal passages is indicated by a
sanious discharge irom the nose and posterior nares. Infection of the larynx is indicated by a hoarseness of the voice, croupy character of the breathing, paroxysmal exacerbations of dyspnœa, etc. The breath and emanations of the body become extremely fetid. Hemorrhages may occur, epistaxis being quite common in bad cases; urea is largely in excess.

Varietios-The different forms run into each other and are sometimes difficult to distinguish, but the classification of Sir IV. Jenner is the neares: perfect. Mild form : Symptoms chiefly local, slight stiffness and sureness at the angles of the jaw, redness and some inflammatory exudation on the tonsils and soft palate. There may be more or less pyrexia, soon passing away. Recovery is speedy, without complications, and followed by no sequelæ.

Inflammatory form : Symptoms, local and general. Patient very ill, temperature high, much depression, pulse feeble, tonsils, uvula, glands of neck, ctc, much enlarged, rapid appearance of exudation ueposit, much inflammation of the throat foilowed by ulceration and sloughing. There may be laryngeal complications, indicated by croupy breathing-urine febrile, with albumen and casts.

Insidious form : Symptoms as a rule not urgent -may be no general disturbance, excepting malaise, until laryngeal complications set in, indicated by wheezing, crowing respiration and followed by depression, prostration and suffocation.

Nasal form : Chiefly characterizod by a fetid discharge from the nose, posterior nares, etc. There is low fever, throat inflamed and much swollen. Larynx may be suddenly attacked or recovery may take plice on subsidence of symptoms.

Primary Lary, ıgeal form : The larynx is the original seat of the disease in this form. Exudation may extend to pharynx, trachea, bronchi and lungs. Very fatal, not easily distinguished from membranous croup.

Asthenic form : Symptoms are of a typhoid character from the outset or shortly after the disease has asserted itself. There is much depression and prostration. Patient becomes sallow or dusky yel low colored, pulse weak, small and irregular, tongue covered with a dry brown coating, with sordes on lips and teeth. There is extensive ulceration of the soft structures of the throat. The amount of throat deposit is variable, üsually soft and pulpy.

The breath is very diagree.ble. Delirium supervenes followed by death.

Complications-The kidneys are liable to be affected. An abnormal condition of the epithelium of the tubes is sometimes followed by parenchymatous inflammation. The urine is diminished in quantity, sometimes suppressed. It may contain albumen and casts. The disease may extend to the trachea and bronchi involving the lungs. Insufflation, lobar or lobular pneumonia, giving way of air vesicles, collapse and pulmonary apoplexy are complications not unirequently met with. An erythematous rash, and purpuric spots on the skin are sometimes noticed-the latter in very severe cases. Hemorrhages from the mucous passages are not uncommon, chiefly epistaxis. Sequelæ very liable to follow bad cases of diphtheria. Recovery may be slow with the presence of considerable albumen in the urine for a time. Nervous disorders are the more important-paralysis, motor and sensory. It may affect the pharynx and palate, interfering with deglutition and articulation only. Two or three weeks usually elapse before these symptoms show thenselves. They may last from three weeks to three months. Alout the end of the second month is the most critical time. A continuance of the paralysis atter this perind may be regarded as serious. Fortunately the paralysis is due to a poisoned condition of the blood, and not to abnormal condition of the nerve centres. True diphtheritic paralysis is a serious complication. It commences with the throat, palate, etc., and extends progressively to other organs. There is much difficulty in swallowing, the food regurgitating through the posterior nares. Articulation becomes very imperfect, sometimes the power of speech is entirely lost. The mucous membranes become affected and the special senses impaired. The sense of smelling is either absent or perverted. The ciliary muscles become paralysed, preventing the proper adjustment of the eye. The limbs are next affected. The muscles are more or less paralysed, accompanied with numbness and tingling of the skin. The muscular tissue may continue to waste until the patient is unable to stand. The bladder becomes atonic, causing retention of urine; constipation is not uncommon as a result of paralysis of the abdominal muscles. When the muscles of respiration are affected difficulty of breathing is experienced. Respiration may cease entirely, due to this cause.

Paralysis of the heart may come on slowly, reducing the beats until it stops entirely. The nerves are subject to a painful sensation of a neuralgic character, often very severe. Adults mostly recover when the heart and respiratory organs are not implicated. In children, nervous sequelæ are often fatal.

Duration-The disease may last from a few days to two weeks, but complications may extend it to three weeks, a month, or even more. Relapses are apt to occur through exposure to cold, etc., after apparent recovery.

Termination-The clief dangers are ( I ) suffocation, mostly in those under five years, generally taking place during the first week. (2) Asthenia, generally in adults occurring after first week. (3) Uremia, Septicemia, etc., in cases in which the poison is so virulent and the system so impregnated with it as to cause death before the symptoms have time to fully manifest themselves. (4) Pulmonary complications, disease extending down respiratory passages affecting lungs, etc. (5) Secondary nervous phenomena, progressive paralysis of throat, tongue, cyes, limbs, bladder, etc., death resulting through general marasmus or interference with the action of the heart.

Prognosis-The prognosis is always serious, as grave symptoms may set in at any time. $\Lambda$ bout one half the deaths from diphtheria, in children, result from formation of croupous membrane. Severe cases are more likely to be followed by severe sequelæ. The dangerous symptoms are, difficult cranky breathing, extensive ulceration of the soft structures of the throat, epistaxis, constant discharge from the nose of a fetid sanious fluid, weak, irregular, thready pulse, intermittent action of the heart, retention or suppression of urine, high color of urine with presence of much albumen, bloody casts, etc. A persistent high temperature is always serious.

Treatment-The strictest care and attention is necessary in every case of diphtheria. In bad cases the patient must take to bed at once and remain there until convalescence has set in. The atmosphere should be kept moist and a uniform temperature of $68^{\circ}$ should be strictly maintained. In the case of children, tubing may be employed to convey steam into the tent arranged over the crib in which they lie. Disinfectants are to be freely used,
and due ventilation and cleanliness rigidly attended to. Any clothes used in wiping away discharges from the nose or eyes should be burnt. Care should be taken to prevent children and others from coming in contact with the patient unnecessarily. The atmosphere can be kept moist by means of the steam from a tea kettle kept boiling in the room with carbolic acid water. Inhalations of the vapor of hot water and slaking lime are invaluable and should never be omitted in serious cases. It is advisable to have all unnecessary clothing, furniture, curtains, etc., removed from the room as the contagium clings to these for an indefinite period. The apartment should be large, well ventilated, and as cheerful as possible. The bowels should be kept regular. If there is a tendency to constipation, a mild saline mixture may be given but avoid purgetion. Patient to be nourished with milk, lime water and beef tea. Stimulants are not required at the outset for children but should be resorted to when the heart's action is weak, and the imperfect circulation and coldness of the extremities show that the vitality of the system is flagging. I am not unwilling to believe that in adults good brandy in full doses may be valuable at the onset of an attack. The temporary impregnation of the system with the alcoholic poison seems to fortify it against the encroachments of the diphtheritic. Metaphorically speaking, " the devil divided against himself cannot stand." If the patient cannot or will not swallow, enemata of milk, egg, brandy, etc., may be administered.

As soon as diphtheria is diagnosed, hot irritating applications should be applied to the throat extending to the ears on each side. Two or three layers of flannel, saturated with a mixture of kero sine, collodium, turpentine. etc., answers this purpose admirably. Kerosine alone is often all that is necessary. Pork and mustard also answer the purpose very well. Warm fomentations of hops are good for their soothing effect. These may remain until a considerable amount of counter-irritation is set up, when they should be discontinued for a time and then re-applied. In the interim other cloths should be put around the neck to prevent external cold. Pieces of chopped ice should be sucked by the patient, as the cold internally is grateful and does good. Theory : The cold internally drives out the inflammatory congestion by its depressing effect, contracting capillary vessels, etc.,
the heat externally draws out the inflammation by its counter-irritant and derivative action.

There is no specific for diphtheria. Internally, tr. ferri mur., glycerine, etc., in full doses, with quinia sulph., pot. chlor., glycerine, etc., constitute the chief medicinal treatment. Saturate the system with iron. Carbolic acid dil., and a mixture of tr. ferri mur., acid hydrochlor. and pot. chlor., make good gargles. The former may be applied in spray. Permanganate of potash is also used with much benefit, when the ulceration is extensive. Nitrate of silver, in strong solution, is used for the same purpose, the ulcers being touched with the solid stick. I have never used the nitrate of silver. Ferri sub-sulph. and carbolic acid are valuable for the removal of the membrane. Sulphur should be dusted every hour or two on the cankerous surface. In children it may be blown in with a quill. For children, quinia sulph., etc., may be mixed with syr. sarsæ. co. It makes a pleasant preparation and they take it readily. Saline drinks of citrate of potash are cooling, grateful and beneficial. The nasal passages may be washed out when necessary, with carbolic acid injections.

Look out for complications, and treat them as they appear. For suppression of urine, apply hot poultices, fomentations, etc., over the loins. Dry cupping sometimes does good. Stimulate, when the vital functions begin to flag. When laryngeal complications set in, an emetic may give temporary relief. Some of the morbid products are got rid of, and breathing will be performed more readily for a time. To prevent suffocation, laryngotomy or tracheotomy may be performed. The former is more suitable for adults, the latter for children. Temporary relief is thus afforded, but recovery from this condition is rare.

During convalescence, a change of air and surroundings is highly beneficial. Diet should be healthful and nutritious, with a sufficient amount of exercise to exhilarate, but not to tire. Tonics of iron, quinine, strychnia, mineral acids, etc., are valuable during this stage.

Note.-Out of 19 cases treated in this way during the last four months, i 7 recovered. Several of the cases were of a malignant type. In severe cases, inhalations of the vapor of hot water and slaking lime is most valuable and should never be omitted-repeated, at least, every half hour. Both fatal cases were children, about 4 years old. One
had an insidious form of the disease and was not placed under treatment until far advanced; the other persistently refused all treatment-so that in neither case was there any chance. These facts are offered for what they are worth, as tending to show that, with the strict carrying out of this line of treatment, the mortality of this fearful disease can be reduced almost to a minimum.

## THE ANTISEPTIC TREATMENT OF PHTHISIS.

BY D. LeSLIE PHILIP, M.D., BRANTFORD, ONT.
(Read before the Brant Medical Association, Dec. 6th.)
Phthisis is now being treated with reported success by the continuous inhalation of the vapor of carbolic acid or other antiseptic agents by means of an almost constantly worn respirator.
"It is fair to infer says the British Medical Fournal, that the application to internal suppurating surfaces of an agent which has been used in similar cases externally with such benefit, will be equally efficacious in checking the growth and development of morbific germs, and thus allow tissues to be reconstructed." Recent researches on tubercular disease and the nature of tubercle have excited great attention, and the teachings of some of the German pathologists, notably Virchow, are subversive of what we have been taught regarding its nature, and especially with regard to the relation which it sustains to inflammatory processes, some of the leading pathologists maintaining the view that the inflammatory process is primary to tubercle, and utterly denying the tubercular nature of many of the processes engaged in phthisis pulmonalis. Without attempting to give the views recently enunciated by them in this extensive field of enquiry, I would like to direct the attention of the Association to a new method of treatment with which we are more immediately concerned, and which has been used with a considerable degree of success during the past year, by Dr. G. Hunter McKenzie, of Edinburgh, judging from the published report of his cases. He was probably led to adopt this method of treatment from the views recently set forth as to the septic and eminently contagious character of tubercle-I allude to the inhalation of the vapor of carbolic acid or other antiseptic agents for lengthened periods, as
practised by that gentleman with apparently highly beneficial results. The inhalation of vapors in lung diseases has long been practised, but the mode of administration has been so defective that the practice has to a great extent fallen into disuse. It has also been adopted by advertising charlatans, in an imperfect way, and has thus helped to bring it into undeserved disrepute with the profession. It is now, however, as a rational method of treatment, extensively employed by leading and eminent medical men with, no doubt, the happiest results.

Late investigation goes to show that phthisis pulmonalis is eminently contagious, and may be propagated by direct infection from man to man. Without stopping to narrate the proofs for this assertion, which I think are conclusive, it may be stated that phthisis pulmonalis is now regarded as a disease of septic parasitic origin, and readily infectious under certain conditions. Dr. Pollock, sen. physician to the Hospital for Diseases of the Chest, Brompton, in writing upon Phthisis in relation to Modern Pathology, says: "Tubercle is then not an essential element in the disease, but where found is a secondary superadded result, arising from infection or the resorption of inflammatory results in the individuals themselves. Tubercle is a shortlived product, arising from inflaminatory residua which have undergone degeneration-caseationand been conveyed into the system or to distant parts of the lung or other organs by the bloodvessels and lymphatics, or even directly by the air-tubes. Tuhercle probably lives but some weeks or months, but the changes in the lung formerly ascribed to tubercle, may last for years."
Professor Charcot, in the study of the thermommetry of the disease, says : "The thermic curves are not those of inflammatory action but of putrid infection, and in the pyrexial form of phthisis, the exacerbation (of temperature) is due not to a pneumonic process, but to resorption of softened material."

If this pathology be correct, the antiseptic treatment is a rational one, and indeed the success already met with in their treatment of certain forms of phthisis after this method, by Dr. McKenzie, Dr. Max Schuller and others, should secure for it an extended trial. In order to carry it out effectually, Dr. McKenzie has devised a very ingenious little instrument which he calls the "Naso-oral respi-
rator" which covers both the mouth and nose, and can be worn for hours at a time without the least inconvenience. The perforated lid upon the lower part of the instrument can be removed at pleasure, and a sponge saturated with carbolic acid, creasote or other volatile antiseptic agents placed within. The air in the respiratory process passes through the sponge saturated with the vapor. It is provided with inspiratory and expiratory valves, and is not liable to get out of order.

The following are the brief notes of a case which I have recently treated after this method:-Miss S., age 24, of good family history, consulted me about six months ago, complaining of general debility, cough which had been troubling her for some time, slight progressive emaciation, loss of appetite, shortness of breath upon exertion, \&c. I did not make any physical examination of the chest at the time, but prescribed for her cod-liver oil with the hypophosphites which she continued to use for some weeks with benefit. I did not see her again until the 2nd of September last, when I was sent for, as she had on that morning an alarming hæmoptysis. She must have got up fully a pint of blood. I immediately ordered her to bed, enjoined perfect quietude, and gave her fluid extract of ergot and iced drinks. Upon visiting her in the evening I found that the sputum had been occasionally tinged with blood, pulse 112 , temperature 102. Upon examination of the chest I found a diffused crepitant ralc over the superior portion of the left apex, which led me to infer that the hemorrhage had come from this portion of the lung. The history of the case for the next fortnight was unfavourable-afternoon exacerbation of fever, cough troublesome, sputum now and then tinged with blood. I now caused her to inhale continuously the vapor of carbolic acid and creasote, equal parts, by means of the respirator which I had some time since procured from Edinburgh, and after the manner prescribed by Dr. McKenzie. On an average she continued to use it from eight to twelve hours a day for the next two months, with, I think, markedly beneficial results. Her improvement appeared to go on from the period when she began using it, and at the present time though not strong nor robust, she is in a better condition of health than she was formerly ; appetite good, very little cough, and the only abnormality I can detect upon auscultation
is slightly prolonged expiration over the left apex. She can take a good long walk without fatigue, and says she fuels better than she his done for months back. She still continues to use it for a couple of hours morning and evening each day. The antiseptic treatment is of course to be employed with appropriate constitutional remedies; in this case, however, I used none, partly because she had previously taken a considerable quantity of cod-liver oil, and had a very decided aversion to its use in any form, and I also wished to observe the effect of the antiseptic per se.
Should the employment of the antiseptic be local or constitutional? Dr. McKenzie says : "My therapeutical experience leads me to believe that, as shown by Matthews Duncan to be the case in some examples of puerperal fever, it is more frequently a condition of sapremia than pyemia which obtains in phthisis, that the toxemia is rather attributable to the chemical factors which putrefaction engenders than to the presence of micrococci in the tissues and blood. I therefore think that it is only by the local application of the antiseptic that good results can be obtained."

These instruments, as devised by Dr. McKenzie, may be obtained from Mr. Mills, Chemist, Brantford.

## CURIOUS CAUSE OF ANEURISM.

BY J. ALGERNON TEMPLE, M.D., M.R.C.S.ENG., ETC. (Prof. of Obstetrics, etc., Trinity Medical College, Toronto).

On the 6th of June, 188 r , a young woman, æt. 24, consulted me for pain in the left knee. Six weeks previoully, on going up stairs, she was seized with sudden pain in the left knee. As the pain continued for some days after, she, thinking it was rheumatism, got a liniment to rub the joint with, which however gave her no relief. At this time she did nọt notice any swelling. Two days before consulting me, she perceived on getting out of bed that her knee was swollen. On examination I detected a uniform swelling occupying the inner side of the lower part of the thigh, about three or four inches above the joint. This was pulsating, a distinct bruit was easily detected with the stethoscope, and by pressure on the femoral artery both the pulsation and bruit ceased. This leg measur ed two inches more in circamference than the
right one. Recognizing the case to be one of aneurism I advised her to go at once to the hospital ; she did not do so, however, for three or four days, during which time the tumor had considerably increased in size and was very painful. After her admission to the hospital a consulta: ion was held, and there being no doubt as to the nature of the tumor, it was decided to try the effect of digital compression, which was faithfully maintained for 32 hours, by a number of medical students, who kindly volunteered their services. At the end of this time both pulsation and bruit had entirely disappeared, the leg was kept quiet in a semi-flexed position, and for four days neither pulsation nor bruit could be detected, but it gradually returned, accompanied by pain and increased swelling, which extended upwards on the thigh. As it was evident something more was necessary, a consultation was again held, and it was determined that I should cut down on the diseased vessel and ligate both ends. The patient, however, being influenced by her friends, most positively refused to submit to any surgical operation whatever, notwithstanding that I told her she must die unless she submitted to an opefation. The case grew worse from day to day, and on the 2nd of July gangrene made its appearance in the foot, gradually extended up the thigh, and she died on the 6th of July.

Post-mortem.-An examination of the parts involved was made 24 hours after death. On cutting into the diseased leg a large quanity of both fluid and clotted blood was found everywhere throughout the muscular structures. A large aneurism of the femoral, where it becomes the popliteal artery was found, with a small punctured opening in it, and a quantity of organized blood clots round the opening. From the posterior and upper part of the inner condyle of the femur a spiculated outgrowth of bone was found, measuring $11 / 2$ inches in length and terminating in a sharp point. Strangely enough we found that this sharp point had penetrated the sac and was the cause of the infiltration. It was also in all probability, primarily the cause of the aneurism by injuring the coats of the artery.

Sea-Sickness.-Bromide of sodium taken for several days prior to embarkation is the latest remedy for sea-sickness.

## zeparts of \$ocittics.

## COLLEGE OF PHySICIANS AND SURGEONS, QUE

The following is the new Tariff of fees recently adopted by the Board of Governors of this college. The items represent the maximum fees to be charges for services rendered :-
Visits from $8 \mathrm{a} . \mathrm{m}$. to $9 \mathrm{p} . \mathrm{m}$., not exceeding $1 / 2$ mile. $\$ 200$ Visits from 9 p.m. to $8 \mathrm{a} . \mathrm{m}$., not exceeding $1 / 2 \mathrm{mile}$,
not to exceed not to exceed
Visits, each additional mile, in daytime.
Detent" $" \Rightarrow$ at night................. 400
Detention a whole day..................................... I $_{\text {o }}^{\infty}$

Consultation, with special examination"............. 200

", with a practitioner................... 500
nary certificate of health
Special certificate, attested with report
1000
Certificate, with report on disease and de
Post-mortem examination, external.
Ordinary case of midwifery (subsequo cadaveris.... 1000 extra)

1500
Turning, application of furceps, extraction of placenta (subsequent attendance extra)
Miscariage, premature confinement (subsequent attendance extra).
For attendance with a midwife, in all cases the charge is the same as for delivery
Catheterism, ordinary cases each subsequent operation.

3000
1500

300
Vaccination, bleeding, extraction of teeth, hypodermic injection, etc
Introduction of stomach-pump
Application of cupping-glasses, leeches, setons, moxa, pluggi ig, etc.
Chloroformization, or other anæsthetics.
Setting fracture of the thigh.
100
100
500
500
Reducing dislocation of thigh.....
500

Reducing dislocation of thigh.....
20 0

Amputation of the thigh............................. 100 . 00
Operation for strangulated hernia............................. 5000
Reduction of hernia by the taxis........................... 10000
Lithotomy, or litha by the taxis.
Ovariotomy
2000
Tracheotomy........................................... 50000
Operation for cataract . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50 . 00
Extirpation of the breast. .................................... 500000
Amp ${ }^{\prime \prime}$ tonsil................................ 1000
Amputalion of ingers or toes....................... 1000
Capital operations, not already specified............. 100 . $\mathbf{0}$ Minor
" $\quad$ "
2500
The above charges for surgical "perations are for the operation only, subsequent attendance and services extra.

> L. LaRue, Registrar.
michigan state board of health.
We give below the following as a sample of the weekly reports to this board, of the state of health in different parts of the State :-

Reports to the State board of health, Lansing, by 63 observers of diseases in different parts of the

State, show causes of sickness during the week ending Nov. 26, 1881, as fullows :-

Number and per cent. of ubservvers by whom each disease was reported.

Number. Per cent.


For the week ending Nov. 26, 1881, there was a considerable increase in the area of prevalence of the tonsilitis, typhoid fever, and whooping cough reported ; and a considerable decrease in that of typho-malarial fever.

Special reports have been received of one case of small-pox at Grand Ripids (Nov. 27), and of two cases at Hartfurd, Van Buren Co. (Nov. 28).

Henty R. Baker, Secretary.

Lansing, Mich., Dec. 3, 1881.

## BRANT MEDICAL ASSOCIATION.

The regular quarterly meeting of the society was held in Brantford, on the 7th of Dec., ' 8 r . The members present were :-Drs. Griffin, Philip, Harris, Kitchen, Clarke, and Winskel. The following gentlemen were elected officers for the ensuing year:-Dr. Kitchen, St. George, president; Dr. Sinclair, Paris, vice-president ; Dr. Harris, Brantford, secretary-treasurer.

A paper was read by Dr. Philip on the "Antiseptic Treatment of Pithisis," and notes of a case of "Latent 'Typhoid Fever," by Dr. Harris. A long and interesting discussion took place, by all the members present, on these two papers.
Aftersome routine business the society adjourned, to meet again at Brantford on the first Tuesday in March, 1882.

## PROVINCIAL BRANCH MEDICAL ASSOCIATION.

A number of medical gentlemen from the neighbouring counties of Bruce, Grey, Huron, Perth, Dufferin, and Waterloo, met in Palmerston on the 1st of December, 188r, for the purpose of organiz. ing a Medical Association. After some consultation it was agreed to form an Association, and that it be known as the Noth-Western Branch of the Ontario Medical Association. It was further determined to hold the next meeting of the Association in Palmerston on the 15th of February, 1882.

## Selected Auticks.

## CEREBRAL SOFTENING.

BY PROF. WM. A. HAMMOND, M.D.

Case 3.-The patient was a German, fifty-eight years of age, powerfully built and healthy looking. He was accompanied by his two sons, from whom the following history was obtained: He had always enjoyed good health up to last fall, except that some years ago he had chills and fever; and four or five years ago he had an attack of rheumatism, and another about two years since. At that time the pain was chiefly in the chest and one arm which was swollen. The troubles from which he is now suffering date from September 17 th, 8880 . On the preceding day he had been on a little spree as was his custom once or twice a month. However, he never became so drunk but that "he could always navigate." On the morning of September 17 th , just after getting up, he was leaning against the barn, and talking very excitedly to another mán, with whom he was exceedingly angry. Suddenly he felt sick and dizzy. He was immediately assisted into the house and placed upon the sofa. By this time he had nearly lost consciousness, and had only enough sense to tell what had happened. It was then noticed for a moment that his head was drawn around toward his right shoulder. A spasm of the facial muscles followed, and he then went off into a regular epileptiform convulsion. He had five of these epileptiform
spasms in succession. For the next two or three weeks he remained sick; and during this time he had to be fed, because he had lost the control of the muscles of the hand, so that he could not find his mouth with his spoon ; and he would grasp his tork and other articles upside down. There was, however, slight, if any paralysis of the right hand. Since then he has been troubled with sleeplessness at night, and some shortness of breath, but has had no more convulsions.

The principal symptoms which he at that time presented are those which he still manifests. These Prof. Hammond endeavoured to bring out more vividly, by a personal examination of the patient.

He first asked his name. The reply after some hesitation was, "Johnny," "Sonny," "I am all over." " I didn't say," "Schordie," "George," and other such unmeaning words and disconnected phrases. When asked where he lived, he would only say, "See over there," "Some over there," and other unintelligible sounds, which could not be called words. His son said that his name was George, and that his home was in Westchester. When asked his son's name, which is John, he answered, "I know, but can't"" and so on. Next a question in German was asked, "Schlafen sie wohl?" but this he did not seem to comprehend any better than the rest. When asked if he had any pain in the head he replied, "I cant." "No." But his son said that he had always before told him that he did have pain there. Whenever the patient tried to speak, his tongue seemed to go automatically, and to be entirely beyond his control. He also seemed scarcely able to appreciate the meaning of what was said. On examining the top of his head a large encysted tumor was found, which his son said had been there for years, but was growing gradually larger. It was caused by a blow from a stick, or club, and so had no connection with the present disease.

The examination being finished, Prof. Hammond now said, that he had first seen the patient two weeks ago at his office. He could then talk little or none; but since that time he had been under treatment, and was now considerably improved. He seems to know people whom he sees, but he cannot tell who they are. His speech is inarticulate, and he cannot remember names. He, therefore, has aphasia, in both its amnesic and ataxic form ; and here it is due to the shutting off of the blood from a part of the brain, probably, by an embolus. He has lost the memory of some words, and the ability to pronounce others, especially nouns. But some words he can pronounce, thus showing that there is no paralysis of the tongue. Moreover, he can neither read nor write, and so has ataxia and agraphia; and he probably could not express what he means by gestures, any more rationally than by words.

In reference to such cases as the present, Prof. Hammond continued: There are two varieties of cercbral anæmia, the partial and the general. Partial cerebral anæmia may be caused by the cutting off of the circulation from a portion of the brain, as by an embolus from a distant part, or by a thrombus formed in one of the cerebral arteries, by the coagulation of the blood at some point where the internal coat of the artery has become roughened. This clot keeps back the blood from the parts of the brain which are normally supplied by the artery, and as a result of the failure of nutrition, softening of the brain substance follows. Or again, rough surgical handling of an aneurism, or an operation on it with an electrical needle, may cause a small portion of the clot to be broken off, and this becoming lodged in some small cerebral artery, may plug it, and thus form an embolus. The most common way for an embolus to form, however, is by the detachment of a heart clot; as the case of this patient illustrates.
Partial cerebral anæmia, due to an embolism, may be ushered in by any of the following symptoms: The patient is perhaps standing quietly, when suddenly he staggers and falls, and, it may be, loses consciousness. He is now, probably found to be completely paralyzed on the right side, and is also aphasic. This is the worst form, and may be followed by death in two or three days. Or , in another class, a man in perfect health may suddenly loose the faculty of speech, and not be aware of it until he attempts to talk. Again, the only symptom may be a slight paralysis of the hand and arm. The mental phenomena in any of these cases may vary from a temporary derangement of the mind to a profound coma.
Other symptoms may follow the first attack. The patient does not recover, but after three or four days he is still found to remain paralyzed and aphasic. Hemay continue thus, or with slight improvement, for weeks or months, and then a second attack may occur, by reason of the detachment of another clot from the heart ; and in this or subseq'ent attacks the shock and mental disturbance will be so great, as to cause a coma which will becom $=$ constantly deeper, until terminated by death. If the embolus be quite small, only slight symptoms may follow, from which the patient will in time recover.

When the physician is first summoned to a case presenting any of the above conditions, his first duty is to inquire into any of the antecedent circumstances and history of the patient. For, in the first stage, it is sometimes very difficult to distinguish this from cerebral hemorrhage. But the clinical history will decide this point. If there have been previous attacks of rheumatism or heart disease, this should arouse suspicions of
The connection between rheumatism and cerebral embolism is this: Rheumatism is a disease
which tends to affect the fibrous tissues of the body. The internal lining membrane of the heart is one of these. When this becomes affected its surface roughens, and then the fibrin becomes detached from the blood as it passes through the heart, and small clots are thus formed on the walls, chordæ tendineæ, or valves. The fibrin is bere separated from the blood, in the same way as it is done outside of the body when it is whipped with wisps of a broom. The heart clots thus formed may vary in size from that of a mustard seed to that of a large pea. If one of these from any cause becomes detached, it passes along in the circulation, and may finally be stopped in some small artery of the brain, and there form an embolus, which will give rise to any of the symptoms already described.
A patient first seen in one of these attacks presents a striking condition, and one about which little was known until within the last twenty years; and even now, the profession appears to know but little about it. These attacks were often called apoplexy, and whenever there was paralysis due to cerebral disease, but with no loss of consciousness, it was called a paralytic stroke. Nothing of the relation of these cases to rheumatism and heart disease was then known. But even now it is sometimes quite impossible to diagnose this from cerebral hemorrhage ; for a man may have an embolus without a previous history of rheumatism or heart disease ; and again, he may have such a history and still have an apoplexy, and not an embolism. But though the character of the disease cannot certainly be determined in the first stage, yet as it advances other elements appear which will settle the diagnosis. If it is cerebral hemorrhage, there will soon be developed contractions in the paralyzed muscles, especially in the hand and arm. The hand will be turned inward, and the forearm semiflexed on the arm, and held across the chist as if supported in a sling; and the legs will become stiffened and have a peculiar swing in walking. In these cases also, the paralysis is usually confined to the right side, and is accompanied by unconsciousness at the onset of the attack.
The remote cause of the disease is generally rheumatism, but the exciting causes are various. It may be rage as in the present case. An em. bolus might not become detached for many years, if there was no exciting cause. Ansthing that increases the force of the blood current, or excites the heart, may bring on an attack. Such as a blow on the chest from a fist, or any strong muscular exertion, such as wrestling, lifting heavy weights straining at stool, or the efforts of child-birtl, and even the act of stooping down, as in lacing a shoe, However, any of these same causes may also excite cerebral hemorrhage, because they increase the blood tension in the vessels of the head, and so lead to their rupture.
We now come to the rationale of this condition.

It will be noticed that paralysis, if present, is almost invariably on the right side only, and that it is accompanied by aphasia. The location of the lesion is therefore, in the left hemisphere of the brain. This is easily explained when we consider the arrangement of the arteries, as they are given off from the arch of the aorta.

It will be seen by this diagram, that as the current of the blood passes out of the heart, carrying with it a detached clot, it rushes by the coronary arteries, which are now closed by the auricular valves, and the embolus is driven along the upper curve of the aorta, and passes by the innominate artery, the opening of which is in such a direction, as not to be likely to stop and draw in the clot. When, however, it reaches the left common carotid, which opens into the aorta at nearly a right angle, the current tends to rush directly into this, and the clot is stopped before it can get by, and is drawn in. It now tends to follow the most direct course, and so passes by the external carotid, which leaves the bifurcation of the common carotid at a slight angle, and flowing up the internal carotid, it goes as far as possible without obstructing a vessel. If the clot is very large it may plug the common carotid, but if not, its most direct and natural course is toward the middle cerebral artery. Here it may be stopped at the junction of the two arteries, or it may pass on into the iniddle cerebral, or if not too large, into one of its smaller branches, and there form an embolus. The severity of the symptoms following will depend principally upon the size of the vessel which becomes thus plugged. The blood is in this way shut off from that part of the brain which is supplied by the obstructed artery, and its tissues become softened and degenerated, and breaks down, and is destroyed. This is the commonest cause of softening of the brain. If only a very small vessel is plugged, loss of speech may be the only symptom.

Thus Trousseau mentions the case of his colleague, who was reading, and when he for some reason attempted to call his servant, he unexpectedly found that he could not speak a word. But it rarely occurs that there are not other symptoms besides aphasia. However, if speech alone is lost, the seat of the obstruction and the part of the brain involved can be determined quite definitely. The location of the faculty which controls the faculty of speech is now known with considerable certainty. It was formerly supposed to be situated in the pisterior part of the third frontal convolu tion, but resent investigations tend to show that it also includes the islind of Reil, and probably the anterior part of the temporal lobe. It is almost unizersally located in the left hemisphere of the brain. There seems to be in most individuals a predilection to use the right hand principally, and this preference appears to be inborn. But aphasia
due to a lesion on the right side of the brain, is proportionately about as frequent as to find left handed people. This indicates that the left hemisphere is exercised more constantly than the right. Accordingly, we find the left side of the brain larger, and better supplied with blood, and developed earlier in life, and having the advantage generally over the right. This increased nutrition of the left hemisphere predisposes to a more constant use of the muscles of the right side of the body. But in men who use the left hand in preference to the right, the right side of the brain is found to be the better developed. So if a lefthanded man should have an embolus in the right middle cerebral artery, he would still be aphasic, because the centre of speech in him would be located on the right side.

The patient here to-day has aphasia, with only slight paralysis of the right hand. The mildness of the symptoms shows that he has only a small embolus probably, which plugs the arterial branch going to the speech tract on the left side. There are two varieties of aphasia. In one, the amnesic, the patient loses the memory of words, and consequently cannot express himself, though he may know what he wants to say. In the other, or ataxic variety, he knows what words he wishes to use, but cannot pronounce them, because of his inability to coordinate the movements of his tongue; and the result of his efforts is a confused mixture of unintelligible and disconnected words.

There has been much discussion as to the way in which improvement, or recovery of speech, takes place in these cases. It is probably by one of two means. Either the collateral circulation is restored, by means of anastomosing capillaries, or some other part of the brain assumes the functions of the diseased portion. Some observers deny the possibility of there being any collateral circulation, for they say the arteries of the brain do not anastomose, except by the circle of Willis. But for us clinical experience should be more of a guide than speculations. We know that patients do slowly recover their speech; and if there is no nutrition of the part of the brain where the speech centre is located, there will be death of the tissue of this part, and consequently no speech. There is no good authority for believing that there can be a vicarious action of one part of the brain for another; yet many believe this to be the solution of the difficulty. The truth is, probably, that the part is nourished by a collateral circulation. This is probably the cause of the improvement in the patient before us. There is a theory that the embolus undergoes fatty degeneration and finally becomes absorLed, and thus the obstruction in the circulation is removed, and the diseased portion hecomes revitalized. This is possible, but doubtful.

Treatment.-All patients of this class, if they re-
cover from the first attack, and do not die from cona, should be treated as this man is now being. The indication is, to improve the nutrition of the brain. There are some things which are thought to do this. Blisters are sometimes applied to the head, but this is absurd. Blistering cannot open a plugged vessel, and thus restore the circulation. Yet not long ago a patient in this condition was seen by me, and the attending physician had administered large doses of iodide of potassium, and applied blisters to the head; but neither of these means are of any use. They may draw the blood to that portion of the head until it meets the obstruction, but it must be remembered that the anæmia is beyond the clot, and in front of it there is already congestion, which is thus being increased and so doing more harm than good. The one great and grand thing to do when the patient is seen in the first stage of the attack is, to let him alone. Merely keep the head slightly elevated and cool, and there stop. Later on, after the active symptoms of irritation, such as muscular twitchings and convulsions, and the general prostration, have passed off, then the head should be kept warm, at an equable temperature, but not hot, so as to facilitate the flow of blood to the part. Otherwise simply carry out whatever indications may arise, such as drawing off the water, if the bladder is paralyzed, or administering a cathartic, if there is obstinate constipation. The diet should be nourishing and simple, and the habits regular. But if the strength continues to fail, and there appear symptoms of heart weakness, the question as to whether stimulants should be given then arises. When such a crisis comes there is only one thing to do. Alcoholic stimulants must be administered carefully, in small and repeated doses, and the effect closely watched. So the patient should be tided over the dangerous period, until the vessels can recover their normal relations. But after all active symptoms have disappeared, something should be done in the way of trying to improve the nutrition and power of the brain. Strychnia and phosphorus seem to have such an influence. One-tenth of a grain of phosphate of zinc and one-third of a grain of nux vomica may be given at a dose. The following is the usual formula :-
R. Zinci phosphatis,
gr. iij

> Ext. nuncis vomicx,................ Fiat pillulæ xxx.

SIG.-One pill three times a day.
This has been the treatment of the present patient for the past two weeks, and as he seems to be improving it will be continued.

In cases where there is still some paralysis, galvanism, or electricity in some other form. should time they should be exercised by pissive motions, rubbing hot applications, and so lorth. If, in the first stage, the patient feels chilly, or cold, from the
shock, the temperature of the body may be kept up by hot applications or other means.
Much may be effected in trying to reteach these patients to taik, by repeating to them often those nouns and names which they seem especially to have forgotten. They usually forget the names of persons, and of the commonest things, as this patient illustrates. When a watch is shown him he calls it a "ring post," a "boot," and "newsboys." A pencil he calls a "capie." A hat is "John," and so on. Now if you try to make these people talk, by patiently teaching them to use the commonest words, mostly names of things in a short time they will be found to have a vocabulary which will be very serviceable to them. An example of this fact is that of a lady patien' of mine, who when I first saw her could only repeat over and over one single phiase, but after six months of education, she could use correctly three or four hundred words. This is quite a gain, when we consider that most of us, in our ordinary conversation, probably make use of only about one thousand different words in a year. This man should be taught in this way, for some time each day, and he will probably continue to imprcve in his talking, as he has done within the past two weeks.
Notes on Case 3.-The review of this case suggests the thought: How is it, that the faculty of speech is sometimes restored after aphasia has once existel? In answcring this, the question arises, as to whether the so called speech centre is really the source from which impulses are carried directly to the organs of speech, or whether the rrue course is not in the corpus striatum beneath, to which impulses are transmitted from the cortex. Experiments seem to point rather to this latter leing the true condition. The gray matter of the cortex is then thought to have rather an intellectual function, and merely originates ideas, and then stimulates the special centre beneath to carry them out. Now, if this be the case, we must search here in the corpus striatum for the source of both amnesic and ataxic aphasia, which occur when the speech area is injured or destroyed.
If the gray substance of the convolutions in the speech region is the source of the intellectual ideas relating to the memory of words, it is evident that obliteration of this portion will be follored by furgetfulness of what words to use in order to express ideas which may have originated in some uther portion of the cortex. So we find t'e amnesic patients have ideas about things which they cannot remember words to express.

But when we come to explain the cause of ataxic iphasia unaccompanied by the amnesic valiety, we must bring in another element, the existence of which, experiments have apparentiy demonstrated namely, that there appear to be so-called sensory areas in the brain, which, if affected, interfere with
or modify impressions which are normally transmitted to the brain by the sensory nerves, or which originate in the mind itself. Thus there apfear to be visual, auditory, tactile, and other sensory areas or centres. And if the visual centre, for instance, were destroyed, though impressions would still be carried through the uninjured optic nerve, yet there would be no consciousness of a perception in the intellectual portion of the brain.

In a similar way the inability of the perceptive portion of the cerebrum to determine in what condition of contraction or relaxation any of the muscles of the body are without the aid of other senses, will account for the lack of coordinating power over these muscles when the tactile centres are involved in the disease. So in the ataxic aphasia, the inability to control the movements of the tongue may be due to partial or complete paralysis, and hence blunting of the sensibility of the tactile nerve centre of the brain which receives impressions from the muscular fibres of the tongue ; and this prevents the patient from knowing in just what condition of contraction the muscles of the tongue are at any given moment. So that if he starts to speak and puts his tongue into position to pronounce the first syllable of a word or sentence, when he wishes to change its position, so as to pronounce the second and following syllables, it moves about automatically, and is most likely to pronounce those words to which it has become most accustomed. This action is similar to that seen in the walk of a drunken man or one afflicted with locomotor ataxia, who may not be able to coordinate the muscles of his legs, simply because the mucular sense, or tactile sensibility of his legs and feet, is blunted, so that he does not know, from the impression made upon the terminal nerves, in what condition of contraction his muscles are. And if he attempts to walk without the aid of his eyes to help him determine the position of his limbs, he will stagger about and put his legs into as indefinite and peculiar positions as the man with ataxic aphasia will his tongue in pronouncing unmeaning and disconnected syllables.
So we conclude, that where there is ataxic aphasia the destruction of brain tissue from disease has involved the tactile area for the tongue, which is probably located in some portion of the speech area. It is thus easy to see how both forms of apliasia may be present simultaneously, if the disease be so extensive as to involve the whole of the region
of speech.

We are now prepared to consider how it is possible for speech to be partially and gradually restored in these cases. There can be found objections to every hypothesis heretofore advanced to account for this. It seems, however, that the following explanation has something at least, to recommend it.

We have seen that the lesion is generally on the
left side only of the brain, while the other side is still intact. Now because we have found that the "centre of Broca" on the left side is principally concerned in speaking, it does not follow that the same centre on the right side has not also been partially educated to assist the left, any more than the education of the motor area for the right hand and arm has been carried on to the total neglect of the corresponding area of the opposite side. And we know that when a man has lost the use of his right hand and arm, from paralysis or other cause, he can educate the left hand, so that it may ultimately become as skillful as the right. So it appears at least possible that the partially educated speech area on the right side of the cerebrum may gradually be educated to assume the functions hitherto pertormed by the left side. The fact that after a paralytic shock causing aphasia the patiens still has an awkward and blundering use of words, though the left speech centre may be utterly destroyed, seems to point to the probability that the right side is attempting to perform the duties of the left, to which it is as yet unaccustomed. And just as a child may be slowly educated to talk, so these patients, by faithful teaching, will gradually regain the use of language.
An objection to supposing that the left area is gradually restored by a collateral circulation, and thus at last reassumes its accustomed function, is the fact that when an embolus or thrombus forms in an artery there is a stasis of blood throughout the whole neighbourhood of that artery, in the vessels supplied by it. And this stasis causes the coagulation of the blood and the extension of the clot throughout all these branches. Thus the arterioles become clogged, and they finally degenerate into mere cords, just as is the case where a ligature is tied round a small artery. Now these impervious cords can never again allow blood to circulate through them, and so it is difficult to conceive how there can be any collateral circulation where there is no means for the blood to pass into the diseased part. Furthermore, this view seems to be strengthened by the fact that, on postmortem examination, the brain substance of this part is found to be softened, broken down, and frequently destroyed completely.
For these reasons, it seems more probable that the speech centre on the right side assumes the duties heretofore performed by the left. So it follows that efforts at education may be made with hopes of gradually restoring the lost faculty.-Med. and Surg. Reporter.

Mr. Erasmus Wilson, President of the Royal College of Surgeons, Eng., has received the honor of knighthood, in consideration of his numerous gifts to charities, etc.

## 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 literai 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," "codliver 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 cigestion 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 I 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 longerthan 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 15 th, 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, xt. 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 grati. fying, 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 des. tined, at no distant day, to very largely supplant
the undigested oils.

> HAZEN MORSE, 57 Front Street East, TORONTO,
> Sole Agent for Ćanada.

## TUBERCULOSIS RESULTING FROM DEFICIENT NUTRITION.

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

Various as are the opinions regarding the treatment of consumption, all writers cuacur 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 triking 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 desquamatious centres of disease which, in their turn, throw off infectious matter to be absorbed into the general system. The immense extent of delicate mucuus 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 th: action of the gastric juice, but passes, together with
the chyme or digested fibrinous and albuminous matter, to the duodenum, where it comes into contract with the pancreatit 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 a:nount of oleginous 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 fhorough 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 |  |
| Soluble pancreat | 5 grains. |
| Soda | $\frac{1}{3}{ }^{\text {a }}$ |
| Boric |  |
| Hyocholic acid | I-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 ard Boudault's poudre nutrimentive 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 pharmaceutists 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 staroh 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.

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| :---: | :---: |

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 $1 \frac{1}{2}$ 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 Fibrinand Caseine, emulsifies the fat of food taken into the stomach, thus rendering it assimilable, converts starch into glucose, in fact it combines alr 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 de 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 in. fants, is sufficient to disagree with them.

With regard to the proper time for its admin. istration, 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 comson with the existing condition of the stomach, and produce the most natural effect upon t'ie fuod.

## OPINIONS OF MEDICAL MEN.

46 St. Joseph St., Toronto, Aug. 19, 1881. I have tried both Maltopepsyn and Hy Jroleine 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, 188i.
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, 188 i.
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 ether 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, i88r.
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 testimqny 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. L.APTHORN SMITH, M.D.
M.R.C.S., England, F.O.S. Lond:,

Physician Montreal Dispensary.

53 I 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 ; other preparations, endeavor to cover up defi ciencies 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, 188r.

Dear Sir.-I have much pleasure in testifying to the excellence of your Maltopepsyn in cases of indigestion and the diarrhoa 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, 188i.
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. DANSEREAU, M.D.

126 Bleury St., Montreal, Sept. 12. 1881 i.
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, 188 I .
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 $1 \frac{1}{} \mathrm{lbs}$., 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 immediately.

## Yours very respectfully,

Upper Bedford, Que., Sept. 28, 188 r .
Dear Sir.-For the past 12 months I have used Hydroleine (Hydrated Oil) in all my cases presenting either a scrofulus 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. 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.

## DR. FERRIER'S LOCALISATIONS.

In 1870, Fritsch and Hitzig published an experimental research on the brain, showing that the cerebral substance was not, as had been hitherio thought, unsusceptible of excitation; and they demonstrated, among other things, that electrical stimulation of the anterior parts of the brain produced movements on the opposite side of the body. Professor Ferrier laboriously and ably continued and extended these researches, and succeeded in ascertaining in a very exact manner that, in certain animals-dogs, cats, and monkeys-the excitation of certain definite and limited areas of the external cortical layers of the brain invariably produce certain definite movements on the opposite side of the bady. In his earlier experiments performed on dogs, cats, and rabbits, (published in the West Riding Lunatic Asylum Report of 1873), he ascertained that the anterior loves of the cerebral hemispheres are the chief centres of voluntary motion and active outward manifestations of intelligence; he defined and localised the centres for the movements of the eyelids, face, mouth, tongue, ear, neck, hand, foot, and tail; and showed that, in general, the action of the hemispheres is crossed, but that certain movements of the mouth, tongue and neck, are bilaterally co-ordinated for each cerebral hemisphere ; that the corpora striata have crossed action, and are centres for the muscles of the opposite side of the body; that the optic thalami, fornix, hippocampus major, and surrounding convolutions, have no motor significance, and are probably connected with sensation; that the optic lobes or corpora quadrigemina, besides being concerned with vision and the movements of the iris, are centres for the extensor muscles of the head, trunk, and legs; and that the cerebellum is the co-ordinating centre for the muscles of the eyeball; and on the integrity of these centres depends the maintenance of the equilibrium of the body.
It would be difficult to nverestimate the value and importance of these discoveries; but, when they were followed and confirmed, a little later, by similar researches on the brain of monkeys, the localisation of function in the hum in brain-having been deduced from the study of the homologous parts of the brain of the lower vertebrates, and the almost identical brain of the monkey-was removed from the region of prubabilities to that of scientific facts. These researches, coupled with an immense amount of puthological data collected by Ciarcot, Pitres, Hughlings Jackson, and many others in all countries, have culminated in the establishment of a cerebral topography of locali ation of function, which, thoush still disputed, and however much they may be inodified by other researches, such as those of G liz and Munk, must enter largely into the new physiology and pathology of the brain.

Briefly considered, the defined areas of cerebral localisation discovered and mapped out by Ferrier are as follows:-Most of the voluntary motor centres are gruuped round the deep vertical fissure of Rolando, which passes from the summit of the hemisphere above to the horizontal fissure of Sylvius below ; the convolution anterior to this fissure, the ascending frontal, contains, in its upper part, the centres for the complex movements of the arm and hand, and, in its lower part, the centre for the movement of the lips; the pusterior half of the superior and middle frontal convolution is a centre for lateral movements of the head and eyes, with elevation of the eyelids and dilatation of the pupil ; in the upper part of the convolution, which is behind the tissure of Rolando, the ascending parietal convolution, is the centre for voluntary movement of the lower limb, and luwer down are centres for the movements of the hand and wrist ; the posterior extremity of the third left frontal convolution is, as had been previously established by Broca, the centre of speech, and, as further demonstrated by Ferrier, the motor centre of articulation. Behind the ascending parietal convolution, in a spot called the supramarginal lobule, are the centres of vision; still more posterior is the centre of hearing; the centre of smell is located in the uncinate gyrus; near it is the centre of taste; and touch is located in the hippocampal region. Ferrier showed, moreover, that the optic lobes, or corpnra quadrigemina, are not only closely connected with the function of sight, but are also the centres of equilibriation and of certain emotionad expressions; and that the cerebellum, while mainly concerned in the preservation of equilibrium, is also a centre for associated movements of the eye, and of various muscular adjustments which aid in maintaining the equilibrium of the body.
These are, briefly stated, the main results of Professor Ferrier's researches; and to the physiologist and physician they are, by mapping out the brain, as invaluable as a chart of an unknown region would be to an explorer.

It was not lung before physicians and surgeons began to take advantage of these new data. Tney found in them an explanation of many of the p.thological experiments practised by that arch-vivisector Nature ; and discovered that some of the diseases of the brain hitherto considered incurable, were susceptible of amelioration, or even of cure. We will mention a few examples of the recent application of cerebral localisation to medicine, among a great number. A child (Fall von Hirnabscess bei Courvoisier Correspondenzb!. schureiz. Aerzte, No. 1, January 1st, 1879,) two and a half years old, had a slight fall on the leit side of her head, to which, however, no importance was attached ; a week later, the child was seized with vomiting, pain in the head, and paralysis of the right leg and arm, followed by ptosis and strabis-
mus ; the next day there was complete right hemiplegia, with left facial paralysis and loss of consciousness. The paralysis pointing, according to Dr. Ferrier's localisation of functions of the brain, to injury or disease of a certain definite spot; the skull at this spot was, therefore, laid bare, and a depressed fracture was discovered. The piece of depressed bone was removed, giving exit to a quantity of pus ; a consciousness and power of movement of the paralysed limbs returned a few hours after the operation, and the child eventually recovered. A man who had been struck on the left side of the head with a stone immediately became unconscious ; and, on recovering consciousness, was found to have become completely speechless, or aphasic, without paral. sis. Some time later, he came under the care of Dr. Hammond, of New York, (Diseases of the Nervous System. seventh edition, p. 209), who diagnosed from the symptoms fracture of the internal table of the skull and pressure on the posterior part of the third frontal convolution. The spot thus indicated by the localisation of the lost function of speech was trephined by Professor Sajer, and, as diagnosed, the internal table of the skull was found to be fractured and a splinter pressing on the convolution named. The fragment was removed; and as soon as the patient recovered from the ether, he spoke perfectly well. We will give but one case from a great number, of traumatic epilepsy. A child, aged 7, received a blow from a poker; it produced no external wound, and no scar or depression of bone remained. A year later, the child had an epileptic fit, and continued to have fits daily for about seven years, with occasion.al periods of exacerbation, at which time the fits increased to twenty or thirty a day. . At the end of this time Dr. Ferrier was asked to see the child in consultation; tenderness was tound over the right parietal region, with loss of power in the lett hand, and indistinct utterance from loss of muscular power in the lips. Trephining was decided upon, and Dr. Ferrier pointed out that the seat for trephining should be rather low down. to correspond to the centres in the brain for the arm and lips, which seemed affected. This was done; for eight weeks after the operati in, the child was free from fits, and though at the periodical exacerbations the fits returned, yet with alwass diminishing severity, (British Medical Fournal, October i 6 6h, 1830 ). These cases might be mulipplied greatly. In the Glasyow Mextical Journai, (September, 1879,) is reported a case of right hemiplegia and convulsions, due to tumor of the dura mater pressing on the motor centres of the left brain, diagnosed by aid of cercbral localisation, and cured by removal of the trmor. In Brain, (October, 188 I , ) in a case of lett hemiplegia, due to abscess of the brain, the situation of which was indicated by knowledge of the motor centres of the paralysed limbs; the skull was trephined, and the abscess opened and
emptied, the patient ultimately recovering. Dr. Fcheverria has collected 165 cases of traumatic epilepsy, of which 64 per cent. were cured by trephining, the site for the operation and the exact nature of the lesion being indicated by cerebral localisation.

But, apart from these cases of direct surgical interference, which, but for a just confidence which a knowledge of cerebral localisation gives, would be left to live or die equally miserably, the influence of exact knowledge of the brain is felt in the treatment of mental and nervous diseases. Time was, and not long ago, when insanity was looked upon by the physician, as it is now by the vulgar, not a disease of the brain-tissue, often capable of cure, but as an incomprehensible affliction of the imnalpable mind, before which the physician and surgeon are therapeutically powerless. Thanks, however, to scientific research, brain-tissue has been found to be not only as capable of regeneration as many of the other structures of the body, but even more so ; and stimulation, electrical and therapeutical, of degenerated centres of localised function may, and in fact often does, lead to recovery. In an interesting paper by Dr. Althaus, in Brain, (April, 1881), cases are given of the application of the constant current, with very happy results, to those parts of the brain which, from the symptoms considered in connection with cerebral localisation, were known to have undergone morbid change. This comparatively untrodden path opens a now vista of the cure of nervous diseases.

In therapeutical researches, also, the effort at the present day is to discover and define the localised action of drugs; and in this direction also the study of cerebral localisation opens out to us a fuir prospect of being able to treat various forms of insanity and acute nervous diseases, due to local causes, on a rational basis. Dr. Ferrier's recent research on the localisations of atrophic paralysis -showing how atrophy of certain groups of muscles which are associated in action is due to localised lesions in the spinal cord-point the way to fresh improvement in the treatment of such lesions.

Indeed, the outcome of the minute and faithful study of the functions of the brain cannot be estimated, so great are the already achieved, and so much greater the probable benefits; so vast the importance of knowing the working of the great organ of the mind and centre of the movements and sensations of the body.-Brtish ARedical Fournal.

M Berger advocates a method in skin grafting, of exciting the vascularization of the flap before cutting it, by covering the skin either with a mustard plaster or with warm poultices. He has already found this method to be successful.-Brit.
Med. Four.

## RUPTURE OF THE PERINAUM AND PROLAPSUS UTERI-THOMAS.

Ann R., aged forty years and a native of Ireland. She has had one child (six years ago) but no miscarriages, and is now a widow.
How long have you been complaining? "For about a year." How do you suffer? "From a great pain in my back." What else? "Pains in my knees, legs, and shoulders." Do you suffer much at your monthly periods? "No." Can you walk about pretty well? "Yes." Can you go up and down stairs well? "No." Can you do "as much work as before you began to feel badly? "Oh, no." Have you any trouble about your bladder? "I have to pass my water too often." How many times during the night? "Only once or twice at night, but I have to pass it very often indeed through the day." You feel relieved in this respect, then, at night? "Yes." Do you have the whites? "Yes."
You observe that the patient has a very strong frame, such as we commonly associate with persons in robust health; but it needs only a glance to see that she looks harasscd and depressed. As you have heard, she was well up to one year ago, when she began to suffer from great weakness and pain in the back and thighs. Then followed leucorr hœes and irritability. Such symptoms scarcely seem like those that could seriously affect a patient apparently so strong, and she herself does not make very much of them; but yet the fact remains that she cannot do her ordinary work any more.

Now let me show you what took place in this woman's case six years ago, and has really caused all her trouble, although she has been complaining only for the past year. Before the birth of her child her uterus was kept up in place by the ordinary means provided by nature for the support of this organ; but at the time of the delivery the parineal body was split directly in two, the rupture of the parts extending completely back to the anus. What was the result of this accident? Presently the bladder began to fall. because the laceration of the perinæum took away its entire support; and as it descended lower and lower, the uteru- which was in a state of subinvolution and greaily enlarged) came down with it. The patient's system bore up nolly under such a strain; but at las', at the end of five long years, it began to give out. The uterus has not as yet come down outside of the body in this case, but it has fallen down to the vulva; so that the fundus thus presses upon the bladder, while the rectum, on the other hand, is dragged upon.

Next we enquire, Can the symptoms, of which the patient complains, be satisfactorily explained by such a prolapsus uteri as we find here? and the answer is, "Undoubtedly they may." This
is in some respects a prolapsus of the second degree, because, for some reason, the uterus still retains its normal axis, instead of having become retroverted, as is generally the case. I presume that if nothing were done to prevent it the organ would, before a great while, come down entirely outside of the body; the ligaments having finally given up all resistance.

I wish to pause here for a moment to say, that any medical man who is in the habit of practicing obstetrics and igrores sucn an accident as rupture of the perinæum had better, by all means, give up this branch of the profession. All sorts of uterine troubles are constantly arising from it; and the most lamentable part of the matter is that they might all have been avoided if the accoucheur in attendance in each case had only performed his duty properly. Of course, rupture of the perinæum is sometimes inevitable, in spite of all our efforts to save it; but not infrequently the accident can be prevented by a little care. For instance, when forceps are employed it is better to take them off before the head is delivered. If by taking every precaution, then, we can prevent the perinæum from giving way, we are doing a vast deal for the patient's present safety, as well as for her future welfare. There are some who boast that they do not even tear the fourchette in delivering their patient ; but as a fact it is found that this almost invariably gives way. Such a rupture, however, is physiological, rather than pathological, and it is not of this that I am speaking. More extensive lacerations of the perinæum are, unfortunately, very frequent, and, indeed, they take place in the great majority of instrumental labors. Of course, I- do not mean that in the generality of forceps cases the perinæum is torn all the way through to the anus; but enough injury is done to give rise to very serious trouble. When we consider what an acrid and irritating fluid the lochial discharge is, it certainly appears marvellous that more parturient women do not die of septicæmia, because when there is a rupture of the perinæum, the raw surfaces are constantly bathed by this irritating material pouring from the uterus. Yet this is only one of the many evils that result from this accident.

Now suppose that, in some case, in spite of all efforts to prevent it, you find that there has been a rupture of the perinæum. The question at once presents itself, Shall I close it or shall I let it alone ? While it is impossible to lay down any law that shall be universally applicable in such cases, the rule is, put in sutures immediately and repair, as far as it is possible, the damage that has heen done. To this, however, there are some exceptions. When, for instance the paticnt has lost a large quantity of blood, or has otherwise become much exhausted during labor, or when there are weak-minded relatives present who will cry out with horror at the mere thought of such a proced-
ure, and nearly frighten the patient to death, it is better to delay the operation until a more appropriate time. If the patient has been bleeding very profusely, she may actually die while the sutures are being put in, and, of course, any obstetrician who attempts to operate under such circumstances must be regarded as culpable.
If done carefully and thoroughly the immediate operation is generally successful. Usually, however, the practitioner does not have the necessary appliances for operating with him, but it should be the rule of every one who practices obstetrics at all to always have the things required at hand in every case which he attends. When this is the fact he can put in the sutures without any delay, and if anæsthetics have been previously used during the labor, the patient very often is entirely unaware that any operation is being performed upon her. When a laceration has thus been promptly repaired you have closed up two avenues of future trouble to your patient. In the first place, you have prevented the exposure of the raw surfaces of the torn perinæum to the septic action of the lochial discharge, to which allusion has already been made. I often wonder why it is that all women do not die of puerperal fever after labor. As the patient lies on her back the septic fluid bathes not only the cervix (which is very likely to have been lacerated) and the vagina, but also pours directly over the fourchette whose lymphatics and blood-vessels have been exposed by its almost inevitable rupture. All this is going on for days and days together, and although vaginal injections may be of service, they cannot prevent it. How much greater must be the danger, then, when not only the fourchette, but perhaps nearly the whole perinæum, is torn through, and the extensive surfaces of its two parts left exposed. In the second place, by an early operation the necessary support is furnished to the uterus, and the danger of prolapsus in the future is averted. During the present course I have not had so good an opportunity as the present for speaking of this subject, which I regard as a very important one.

But now, as to the patient before us. Can she be cured ? I think she can, but it will take a long time. Under the circumstances here present I would byno means advise that the treatment should be begun with a surgical operation. It is possible to restore this uterus to position and maintain it there by other means, and this will relieve both the engor eement which now characterizes it and the severe dragging upon the ligament which has been going on so long. For the purpose I would suggest Cutler's pessary or some modification of it (which might be removed at night), and in addition
copinus vaginal injections of copinus vaginal injections of hot water should be frequently used, while care should be taken that all pressure from tight clothing be removed. After three months of such treatment as this I do not
doubt that we should have a uterus much less hyperæmic and heavy than at present, and it would then be proper to restore the lacerated perinæum by an operation. The restoration of the perineal body would thus support the bladder, and all traction having been removed the uterus would probably remain in its normal position without the aid of a pessary or other mechanical contrivance.

## SUPPURATION OF THE KNEE-JOINT, ASSOCIATED :NITH PHTHISIS. AMPUTATION; RECUVERY, WITH DISAP. PEARANCE OF CHEST SYMPTOMS.*

Charles W-, aged twenty-three, a footman, was admitted on May 12 th, 188 I , into Job ward under Mr. Bryant's care. In February, 1878, he jumped from a loft about ten feet, and at the time felt no ill effects. About ten days afterwards he became feverish and very weak; he perspired a good deal, and had a bad cough. For three months he kept his bed In August he went into Canterbury Hospital, where he was told he had rheumatism in his knee. His legs were dressed with a spirit lotion, and in a fortnight he was discharged. For three months he was in good health; the swelling had entirely disappeared from his knee, which he was able to bend. His knee, however, soon began to swell again, and became hot and painful. In July, 1879, he was admitted into Guy's, when his knee was swollen and felt pulpy to the hand. It measured 14.25 ag inst right 12.75. There was no fluctuation, but pain on pressure over the femoral condyles. There was then dulness at the base of the left lung. The knee was blistered and a posterior splint was applied. He was discharged August 27th, wearing a Bavarian splint to ensure immobility of the joint, and with an elastic bandage beneath it for purposes of pressure. He wore his splint for two monihs, when his knee being much better he discontinued it. He was then able to bear his weight on his leg and bend the knee, and so resumed work.
Six weeks ago he jarred his knee when coming down stairs. The accident caused him much pain and the joint in about two hours after swelled a good deal. He could, however, use the limb. The joint has since steadily grown worse. He has had hæmoptysis for the last three years, and a bad cough in winter. He perspires much at night.

On admission, May 12th, $: 88 \mathrm{r}$, the knee was much swollen and displaced backwards, the tissues around being very œedematous. The joint was clearly disorganized. The man looked very ill and thin, and had a bad cough. There was dulness over both apises in front, and "cogged" inspiration

[^4]at buth apices, but it was most marked on the left side. There was prolonged expiration and bronchial breathing at the left apex. Good resonance and vesicular murmur at the bares. He had had a good deal of hæmoptysis, and his expectorations were muco-purulent.
June 7th.-Under chloroform his leg was amputated; an Esmarch bandage having been applied as a tourniquet after elevating the limb, anteroposterior flaps were made. The anterior one was made by a semilunar incision reaching to about two inches below the condyles. The posterior flap was made by transfixion. The bone was sawn through above the condyles. All the vessels were twisted, except one large vein, which was ligatured with carbolized gut. Great care was taken to stop all oozing, by the use of sponges wrung out with hot iodine water, that quick union might ensue. The flaps were brought together by silk sutures, one inch apart, strapping being applied in the intervals. The stump was washed with iodine water, and a drainage-tube put in. The wound was dressed with terebene and oil, and a stump put upon a posterior splint. The knee, on examination, was in an advanced state of pulpy disease. The joint was full of caseating pulpy material. The cartilage was removed from the external condyles, and the bone was covered with granulations. The opposing surface of the tibia was in a less advanced condition. The underlying bone was healthy. In places sinuses had begun to form. On the 13 th, the sixth day after the operation, the stump was dressed for the first time, when union of nearly the whole length of the wound was found to have taken place. Un the 14 th, the patient was doing well. There was very little discharge from the stump. Temperature, $99.6^{\circ}$; pulse, 100. On the $17^{\text {th }}$, secretion had diminished in quantity. On the 2 Ist, the fourteenth day after the operation, the drainage-tube was removed. Temperature $101.2^{\circ}$, probably due to constipation. On the 23 rd there was only a granulating surface of about a quarter of an inch at the inner extremity of the wound. Union had taken place in the rest of its extent. Temperature $99^{\circ}$.-Chest examined : Right apex much improved since his admission. Good resonance over the right apex, and fair over the left, the only fault being a slight prolungation of the respiratory murmurs. Left side inspiration still cogged. Respiration still somewhat bronchial. At bases good vesicular murinur.

On July 14th the patient was discharged convalescent, and luoking comparatively well. He had then no night sweats, and did not spit blood. The stump had healed well, except at the inner extremity of the line of union of the flaps, where there was a very small granulating surface.

Remarks.-I have thought this case worthy of being brought before the notice of this Society on account of the important practical point it illus-
trates--namely, the value of removing local suppurative disease, and more particularly bone or joint disease, when associated with lung mischief; and if it cannot be said in the case before us, from the want of lapse of time to enable us to form a positive judgment, that the organic. disease which existed in the lungs at the time of the amputation had disappeayed, there can be no doubt that it had become quiescent, and had apparently advanced towards cure; for when the man left the hospital all the local lung symptoms had ameliorated, and his general condition had greatly improved. It is to be noticed also that the wound after the amputation had almost entirely healed by quick or primary union. If I might venture to speak from my own personal observation, I amconvinced that the presence of local suppurative joint and bone disease, if it does not primarily originate lung trouble, does much to aggravate if and hasten its progress; while the case I have brought before you, in addition to the experience gained by others which have passed under my: care, clearly prove that by the removal of the local suppurative disease the lung mischief, which may have been previously progressive, is retarded, if not cured; the lung disease by its presence affording an argument in favour of operative action rather than of delay. Under these circumstances, it clearly becomes the duty of the surgeon to employ his art actively rather than expectantly, and to take away by no partial but by some decided operative measure any local suppurative disease which by its progress has been proved to be incurable by natural processes, or from its nature is likely to require much time for its repair. The case I have just read adds another to the list, which has been steadily lengthening, in which this practice has proved successiul, and it will, I trust, encourage surgeons to carry out the line of practice it illustrates. In lardaceous visceral disease the same line of practice should also be employed.

## ANIMAL LIGATURES.

The choice of a proper material for a ligature is a matter of serious import to the surgeon in the performance of plastic and other operations. It is well known what stress Marion Sims laid upon the value of the silver wire suture as affecting the succe-s of the operation for the cure of vesicovaginal fistulæ. Various metal wires have been used, yet still the silver wire is considered as the most generally serviceable of all the metal sutures. But there are many cases in whicb metal sutures of any sort are inconvenient or inapplicable, and the attention of surgeons has long been turned to the search for a material for sutures that should better meet the indications than does silk, which
has been used probably more than any other material.

Of late, special attention has been paid to the matter of discovering animal ligatures which should be of sufficient strength and endurance to serve the purpose of ligating an artery, without danger of premature absortion allowing of secondary hemorrhage, and which should yet be absorbed after serving their purpose so as not to be a source of irritalion.

Carbolized gut was proposed some years ago and has been used with more or less favourable results by a number of surgeons. The great objection to this ligature has been that it would take up considerable moisture from the vital tissues, soften, and become absorbed so soon that it could not be depended upon in circumstances which require
that the ligature should remain firm for several that the ligature should remain firm for several days.
In the Annals of Anatomy and Surgery, of October, we note a paper by Wm. Macewell, M.D., of Glasgow, Scotland, in which, after discussing this subject at some length, he recommends as the result of his experiments, a preparation of gut by a prolonged immersion in a solution of chromic acid in water and glycerine. He found that by varying the proportions of chromic acid and glycerine, greater or less power of resisting absorption could be imparted to the gut. "By using a strong solution of chromic acid a gut was obtained which resisted the action of the living tissues for at least two months, and by a weak solution gut was prepared which softened in the tissues in a few days."

By a series of experiments he ascertained that to prepare a gut which will resist the action of the tissues for about two weeks and then soften and become absorbed, it should be kept for two months in a solution consisting of chromic acid, one part, water, five parts, glycerine, one hundred parts. It should then be washed and dried and placed in a solution of carbolic acid and glycerine 1-5. As the length of time taken to prepare the gut in this way is an inconvenience, he experimented fariher, and has found that a gut can be prepared which will resist absorption almost as well as this by immersing it in a solution consisting of chromic acid, one part ; water, five parts; and glycerine, twenty-five parts. If kept in this solution for four days, the gut will resist the action of the tissues for from five to eight days, and will answer for sutures in flaps or in plastic operations of various sorts.

Mr. Lister's method of preparing catgut ligatures, as given in his address before the Clinical Society of London, is as follows: He takes one part of chromic acid, 4,000 parts of distilled water and 200 parts of pure carbolic acid. Into this solution is placed catgut about equal in weight to the carbolic acid. At the end of forty-eight
hours catgut steeped in such a solution is
ciently prepared. It is then taken out of the solution, dried and placed in carbolic oil, one-to-five, it is then fit for use.

Dr. Macewen calls attention to the necessity of having a good article of the thoroughly dried old gut in order to make a good preparation. The result of quite an extended use of these ligatures
during the last during the last three or four years has shown to his entire satisfaction that they do not produce irritation in the tissues. The average length of time that they will maintain their hold in the tissues has already been stated in the directions for preparation of the ligatures.

Other animal substances have been used with success by different surgeons. An Australian surgeon has used and highly recommends ligatures made from the tendons of the kangaroo. He reports very favourable results obtained by their use, but we have not heard of these ligatures being introduced into general use, or in fact of their having been placed in the market at all, so as to be obtainable by the surgeons of this country. Our attention has been called, however, to a ligature manufactured from whale tendon, which is to be found now in the hands of our most reliable dealers in surgical instruments and appliances. This whale tendon ligature is imported from Japan, and is the invention of Dr. Ishiguro, the Chief Surgeon of the Imperial Jap inese Army. In its preparation a whale's tendon is teased out until the fibres look very like those of hemp. Then the longest and finest fibres are selected and spun together as ordinary silk thread. According to the reports of the Japanese surgeons who have tested them, some of whom have been connected with the Japanese army in active service, have had excellent opportunity to test them, the results have been eminently satisfactory. One statement made by Dr. Ishiguro as to the readiness with which the whale tendon ligature is absorbed in the tissues, would be calculated to make us seek farther testimony before we should be willing to depend upon it in cases where there would be serious danger from secondary hemorrhage. If it is necessary to put the whale tendon ligature through a special course of hardening with chromic acid or other chemicals in order to prevent too early absorption, it is not probable that it will meet with any very general acceptance. We shall be very glad to have the experience of any who have tested these ligatures, or any other form of animal ligatures.

We observe in the Medical Times and Gazettee of April 2, 1881, in the report of a discussion before the Royal Medical and Chirurgical Society, Mr. Dent stated that he found these whale tendon ligatures to be too readily absorbed.
Another material which has been used with success is a flat ligature cut from the aorta of the ox. Mr. Barwell introduced this ligature, and commends it emphatically to the attention of the pro-fession.-St. Louis Courier of Medicine.

## LUPUS EXEDENS SUCCESSFULLY TREATED BY CREASOIE AND CALOMEL.

Dr. Clinton B. Herrick reports the following case in the Medical Annals.
P. S., aged 65 , was admitted into the Albany Hospital (service of Dr. A. Van Server), October 21, 1880, with the following history. No trace of disease of ulcerative nature in family. About fifteen years previous, patient first noticed a spinal wart, about the size of the head of a pin, in front of left ear, which remained about the same for a period of five years. Then it began to get a little sore, and if scratched would bleed, a scab forming ing afterwards. He also noticed then that a small ulcer was progressing, which increased and spread downward, and then toward his eye, the ulcer healing and crusting over $i_{11}$ its track. The character of the sore was, in form, irregular, without discharge, up to this time, and painless, being accompanied however with an intense itching senstation, so great sometimes that the patient could scarcely control himself. The disease advanced, surrounded the eye, implicated the lids, and crept on over the left side of the nose down to the alp, and a portion un the right side. About three months before coming into hospital the ulcer began to discharge a thin, purulent matter, very profusely so as to require, at tunes, redressing every hour or less. When admitted, the disease covered almost entirely the upper half of left side of face. At first creasote alone was applied, then the dischloracetic acid was used with some benefit. Then applications were made of creasote and calomel, and from the first use of it the ulcer began to improve. The method of using it was to take a camel's hair pencil, dip, it first in the creasote, then in dry powder of calomel, applying it to the edges and where depressions existed, the brush with a $t$ wiring motion dislodging and removing the cells By this treatment, the surface glazed over with healthy skin, its size diminished. and at present there only remains a sinall portion of the disease over the eyelids, without any indications of its returning or spreading again.

Action of Pilocarpine in Croup after Tra-cheoromy.-In connection with recent cases which demonstrate the good results obtained in diphtheria by the employment of pilocarpine, I have the honor to communicate the report of a case which is a confirmation of it under a new form, and which contributes in my opinion, to settle briefly the mode of therapeutical action of the medicine.

On Monday, th July, I was called in consultaticn at Kerentrech by my friend Dr. Duliscouet to see young L., six years of age, affected with well marked croup. The situation was so grave
that tracheotomy was deemed immediately necessary. We had at hand only one canula a little too large, but it would have taken too much time to have sent for another. Its introduction into the trachea was tedious and difficult : one moment we believed the patient dead. At length after a strug. gee of half an hour we had the happiness of calling him back to life.

Tuesday 5 th - The night had been safely passed. The cleansing of the canula had been intelligently done by the parents. Temperature $39^{\circ}$. I had read the afternoon before the interesting remarks of Dr. Le Reboullet in the Gazette Hebdomadaire (May, 188I) ; I told my colleague of it.

The same evening the respiration having become harsh and embarrassed, M. Duliscouet injected under the skin of the neck 5 milligrammes of chlorhydrate of pilocarpine in a gramme of distilled water. Five minutes after, abundant salivaton occurred : a spell of coughing expelled by the canula a quantity of mucus and false membrane. A perfect calm succeeded and continued during the night.

Wednesday 6th-The child appeared to be doing well. Temperature $38^{\circ} .2$; respiration easy. The little patient took his food without trouble; he was sitting up and playing in bed.

We nevertheless practiced morning and evening a subcutaneous injection of 5 milligrammes of pilocarpine. Every time after some minutes, volent spells of coughing occurred with the expulsion of mucus and false membrane through the canula.

Thursday 7 th -The night had been bad. The child was much troubled and restless; temperatare $38^{\circ} .5$, respiration more wheezing and expectoration more difficult. M. Duliscouet however seeing no very bad symptom, abstained from making as on the preceding days, an injection of pisocarbine. At two in the afternoon the father came in haste for us. We found the child in a state of advanced asphyxia ; the look fixed, face pale and livid, lips purple, extremities cold, etc.

Both canula were at once removed. We vainly attempted to extract with a pair of forceps a large piece of false membrane that had appeared in the trachea. The situation seemed desperate. An injection of pilocarpine was given by M. Duliscouet upon the front of the chest. The child was seized with a violent coughing spell and expelled through the tracheal wound a great many pieces of false membrane bathed in mucus. One piece larger than the rest presented the appearance of a brownchial tube and branches. The efforts of coughing lasted thus nearly half an hour, expelling every time pseudo-membranous debris. Gradually the face of the child became colored, showing great relief. At half-past three o'clock everything was
doing well doing well.
In the evening another injection of five mill-
grammes of pilocarpine was followed by the usual good effect.

Friday 8th-The child had slept perfectly. There was no fever. Expectoration was purely mucus, a little thick but very easy. A last injection was given as a precaution. In the afternoon the canula removed as a trial, was entirely removed in the evening. The next day and the following days the larynx became freed at the same time that the tracheal wound closed. From this time on the case proceded without interruption.

We are convinced (Dr. Duliscouet and myself) that tracheotomy alone would not have saved our little patient, and that the honor of the cure was due to the repeated injections of pilocarpine. It seemed to us from every evidence presented, that the beneficial action of pilocarpine is due to the bronchial hypersecretion that it induces and the expulsion of false membrane which obstructs the respiratory tract.- Fournal de Medicine ct de Chirurgie. - Nashville fournal of Medicine.

Peritoneal Surgery.-The New York Medical Record of October 22nd, gives an interesting report of a discussion on the recent progress of peritoneal surgery in the New York Academy of Medicine. The discussion was opened with a paper by Dr. Marion Sims. Dr. Sims reviewed the progress of peritoneal surgery, and specially directed his mind to this question: "Does it lead to a better treatment of gunshot and other wounds of the abdominal cavity ?" Dr. Sims claimed for ovariotomy that it was the parent of peritoneal surgery, and that the governing principles of the one must govern all operations affecting the other. Dr. Sims arrived at the following conclusions :-1st. Wounds of the peritoneal cavity have a common course to run. and. They have a common termination, and that is death by septicæmia. 3 rd. That is the general law in death after ovariotomy. 4th. It is the general law in death after gunshot and other wounds of the abdominal cavity. 5 th. Septicæmia is the result of absorption of bloody serum found in the peritoneal cavity after wounds or operation. 6th. Gunshot wounds of the pelvic cavity are recoved from because of the natural drainage afforded by the track of the ball. 7th. Patients with gunshot wounds of the abdomen die of septicænia because there is no natural drainage, and the bloody serum falls into the peritoneal cavity, and is there absorbed. 8th. The effect of bloody fluid upon the abdominal cavity is such as to demand abdominal incision, the suturing of wounded intestines, the tying of bleeding vessels, the cleansing of the cavity, and the use of the drainage-tube or not, according to circumstances. 9 th. If this operation be well done there is hardly any need of a drain-age-tube. Dr. Sayre expressed practically the same views as Dr. Sims. One of the chief features of the discussion was a speech by Dr. James R. Wood.

He allowed much, but " not all the glory," to gy næcologists for the advance in peritoneal surgery. He cautioned the Academy against too quickly reasoning from the case of ovariotomy to cases of abodominal wound. He was especially cogent when he showed the difficulty of diagnosing the seat or the nature of the injury in gunshot cases, saying "with reference to reaching into the cavity of the peritoneum in search for bullets, or injured parts, it is a very serious matter"; also in pointing out the difference between a patient about to undergo ovariotomy and one recently the subject of gunshot injury. The one was not in a state of shock, and was well prepared for the operation. The general surgeon has the state of shock to deal with in gunshot wounds of the peritoneum. Such a note of caution from a surgeon of Dr. Wood's boldness and experience will not be misconstrued. It is obviously premature to apply the facts of ovariotomy to gunshot and other wounds of the peritoneum. - The Lancet.

Management of Labour in the Vienna Lying in-Hospital.-In Le Medicin for March 12, is given the following as the modus operandi in this Hospital. As soon as the head appears at the vulva, the woman is made to lie on her left side, her right leg being raised and held by an assistant. The accoucheur, standing on the right of the parturient woman, passes his left hand between the woman's thighs, carrying it forward and applying it against the ch ld's head, He supports the perineum with his right hand; but the resistance thus afforded must not be a passive one. He must on the contrary, during each labour pain press energetically over the sacro coccygeal region, and pull as much integument as he can over the child's head. Meanwhile, his left hand steadies the head at the vulva and prevents its coming out under the influence of uterine contractions. In the interval between the pains, the head goes back, soon to return again. The forced alternate motion which the head undergoes has for its result the gradual distension and a gieater elasticity of the vulva. At last, the head comes out and extension takes place. One must carefully prevent this expulsion from taking place during a uterine contraction, and let the head come out when the pain is nearly over. The perineum must be supported to the end, for the passage of the shoulders is ordinarily more dangerous than that of the head it-self.-Le Medecin Practicien, March 12.

A Malpractice suit in Belgium, brought against a physician for the alleged improper prescription of morphia, resulted in 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.

## The Canada Lancet.

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## THE PAST YEAR.

Many events have transpired in the medical world during the past year which are well worth recounting, although with one notable exception, none may be said to have been pre-eminently noteworthy. Only those who have watched closely the tendency of the times and the progress of events, can form a correct estimate of the great advances which are being made all along the line. Medic:ne to-day holds a position of pre-eminence among the learned professions, never before attained in history, and its prospects are brightening and widening from year to year. Although, with the revolution of each year, there appears as in the movement of a carriage wheel, to have been but a change of position which brings us back to the same same point, yet, as in the wheel, there is a progressive advance equal to the length of its circumference ; so it is in medicine. The advance to many may appear slow, and as it were, only in a circle, ever returning to the same point again; it is, nevertheless, a positive progressive advance.

The mental activity among the members of the profession in all parts of the world; the interchange of new lines of thought and ideas; the friendly and professional associations that are be ing formed ; the increasing interest in science and truth, for its own sake ; and the increasing amount and value of experimental research and investigation, are all contributing in no small degree to the rapid and lasting advancement of our noble profession.
The noble charity of our art is also seen in the
philanthropic efforts of the profession for the amelioration of the sufferings of the race, so far as may be accomplished by attention to hygienic laws and measures of sanitary reform. The various governments of the country have been besought again and again by the profession, to initiate cer tain measures for the improvement of the condition of the people in sanitary matters, and their requests have been met with a spirit of enquiry by these governments who, we have no doubt, but for their utter want of knowledge of such subjects, would ere this have given effect to the required legislation. The way is rapidly opening up now, however, and sooner or later these much needed measures will be obtained.

The greatest event of the season so far as medical affairs are concerned, was undoubtedly the meeting of the International Medical Congress, held in London in August. Here were gathered together from all parts of the civilized world, the leading lights of the profession, seeking to lay at each other's feet, the results of their labours, in the advancement of science, and the pursuit of truth, and to learn wisdom from each other. No one attempted to say that he was right and all the world wrong, but each was perfectly willing to have his work tested by the crucible of the great minds, and the experience of his fellowworkers in the profession, and if valuable to have it recorded for the benefit of posterity, or if worthless, to have it cast aside and forgotten. Such a spectacle is not often beheld. Here were upwards of three thousand of the foremost minds of the profession, some of them from a great distance, collected together, to discuss questions of vital interest, not only to the profession, but more especially to the welfare of mankind in general.
The meeting was opened by H. R. H. the Prince of Wales, and among those present may be men. tioned such names as Sir Jas. Paget, Virchow, Jenner, Charcot, Langenbeck, Pasteur, Volkmann, Esmarch, Kuester, Panteleon, Trelat, Pancoas', Flint, and many others of equal eminence. The addresses were all, without exception, of the highest order of merit, and the work of the different Sections was of the greatest possible interest and importance, from a professional point of view. The entertainments were almost unlimited, and some of them of unsurpassing grandeur, the tout ensemble of the entire gathering making it one long to be re-
membered by those who had the good fortune to be present.

The meeting of the British Medical Association, which was held in the Isle of Wight almost immediately after the former, and which is usually considered the great medical event in England, although in some measure overshadowed by the Medical Congress, was, on the whole, a very successful affair, and obtained some considerable notoriety through some remarks in the President's speech, and also by others present to the same effect, looking towards a certain degree of professional intercourse with homceopathic practitioners. The remarks were, no doubt, the outcome of the discussion which had been going on for some time previous regarding Dr. Jenner's refusal, and Dr. Quain's acceptance of a consultation with Dr. Kidd, at one time a pronounced homœopath, during the illness of the late Lord Beaconsfield. We, in common with many others, felt a good deal of sympathy with Dr. Quain's position in this matter, and believe that, under all the circumstances, he acted not only judiciously but also in the best interests of the profession, inasmuch as he was informed by Dr. Kidd that he was not treating his patient homœopathically. There could, therefore, be no other than a merely sentimental ground of objection to meet Dr. Kidd, and give the benefit of his skill to an illustrious man. There may be times and circumstances in which an opposite course would be the most politic, but certainly not in the case referred to, where the life of one of England's greatest men hung in the balance. This was no time for any mere sentimental objections to obtrude themselves, and certainly Dr. Kidd cleared the way of all others.

The American Medical Association met in May in the city of Richmond,Va., under the presidency of Dr. Hodgen, of St. Louis, and was attended by about five hundred delegates from all parts of the Union. The address on surgery was delivered by Dr. McGuire, chairman of the surgical section. He advocated operative interference in penetrating gun-shot wounds of the abdomen with intestinal injury, and the use of the drainage tube. Dr. M. Pepper, of Philadelphia, delivered the address in medicine, in which he dwelt upon the great impor. tance of local lesions as forming the cause of many apparently obscure diseases. He also alluded to the value of remedies possessing special antidotal
power against contagious diseases, and referred to the remarkable results recently observed in the treatment of diphtheria by the use of large doses of bichloride of mercury. In the business part of the proceedings, a resolution was passed and a committee appointed relative to the establishment of a weekly journal for the publication of the transactions, similar to the Brilish Medical Fournal, in lieu of the present system. Dr. J. J. Woodivard, of Washington, was elected President for the ensuing year, and St. Paul, Minn., selected as the next place of meeting, on the first Tuesday of June, 1882.

The Canada Medical Ass ciation met at Halifax, N.S., on the 3 rd of August, under the Presidency of Dr. Canniff, of Toronto, and although the attendance was not large, yet the meeting was on the whole a most successful one. The address of the President, on the subject of "Medical Ethics," was one which much required reviving, and was well received by the profession. The papers read were of moie than ordinary merit, and elicited considerable discussion of a profitable character. The Committee appointed at the last meeting relative to the establishment of a Bureau of Health for the Dominion, reported the result of their interview with the Government, which was on the whole very satisfactory, though nothing definite had yet been accomplished. Dr. Fenwick, of Montreal, was elected president for the ensuing year, and Toronto selected as the place of meeting on the first Wednesday in September, 1882.

The inauguration of a Medical Association for the Province of Ontario was begun and successfully carried through in the e.rrly part of the year. The first meeting was held in Toronto, on the first and second of June, under the able presidency of the venerable Dr. Workman, and was a grand success, in every sense of the word. Many excellent papers were read and discussed, and much real substantial work done, and the profession in this Province is to be congratuiated upon the successful organization of an association which promises so well for the future. The next meeting will be held in Toronto under the presidency of Dr. Covernton, on the first of June, 1882

In the field of medicine and therapeutics, the advances have been chiefly towards a consolidation of past gains and the elimination of former errors. Our knowledge of the localization of cerebral functions has made some progress. In addition to the
localization of motor areas, Dr. Ferrier has recently defined the areas of sight and hearing. Some interesting facts relating to the temperature in General Paresis have been brought forward during the past year. Dr. Reinhart (Archiv), states that this disease may be diagnosed from other forms of mental disturbance, by the relative excess of the temperature of the head over that of the body, and by the great variations of bodily heat from day to day. Dr. Crœmer, (Allgemaine Zeitschrift,) asserts that the bodily temperature is abnormally low, and insists in the daily oscillations described formerly by Dr. Clouston, and which seem to be characteristic of the disease. Dr. Allara, (Sperimentale, 188 I, ) expresses his belief that bronchocele is caused by drinking water containing a silicate of an alkaline base, and that the administration of the alkaline carbonates, owing to the power they have of decomposing these silicates, has a beneficial effect upon the disease. The practice of washing out the stomach in certain diseases has again been revived. Dr. Constantine Paul, in (Bul. Gen. de Therap.), speaks in high terms of the advantages to be derived from it in certain cases. He prefers the syphon tube to the stomach pump, and recommends first a quart of plain warm water, to be repeated until it returns clear, and then a weak alkaline solution of bicarbonate of soda, or an antiseptic one of hyposulphite of sodium as may be required. Dr. McL. Hamilton, of New York, recommends a new silver salt, the tribasic phosphate of silver, in nervous diseases. The dose is from one-third to half a grain three times a day in glycerine. Its use may be continued for months, as it does not discolour the skin. He has employed it with advantage in cases of spinal sclerosis, myelitis, epilepsy and cerebral tumor. Dr. Schwarz, (Dtsch. Mei. Woch.) strongly recommends iodine and iodide of potassium in membranous croup, believing them to be the true remedies in uncomplicated cases. The value of pilocarpine has also been much vaunted in the treatment of this affection by Dr. Gutmann, who claims that in doses of $\frac{1}{25}$ to $\frac{1}{60}$ of a grain, every hour, it produces salivation, and also loosens the membrane. The results of its use however, have not been so good in other hands as they appear to have been in his. Papayotin is also said to possess the power of dissolving the membrane in croup and diphtheria, but it has not been thoroughly tested.

Dr. Tompkins (Lancet, March 1881,) speaks very highly of the antipyretic action of salicylate of sodium in typhoid fever, and reports the results of forty-six cases in which it was employed. He gives it in 15 to 20 grain doses every two hours, commencing its use whenever the temperature reaches $102^{\circ} \mathrm{F}$. This is continued for about six doses, when the temperature will be found to have fallen two or three degrees; the dose is then diminished one-half. One objection to its use is, that it is liable to disagree with the stomach. This remedy has also been used by M. Lable with varying degrees of success in neuralgia. Duboisine given hypodermically in doses of $\sigma^{\frac{1}{0} \delta}$ to $\mathrm{r}^{\frac{1}{2} 0}$ of a grain, has been found very serviceable by M. Desnos (Bul. Gen. d: Therap.) in the treatment of exophthalmic goitre. The action of the heart becomes steadier and slower, the goitre pulsates less, and the general health improves under its use. The use of inhalations in the treatment of phtnisis has again been revived. This method of treatment is not only advocated by Dr. McKenzie, of Edinburgh, but also by Drs. Coghill and Hamilton, in the Brit. Med. Jour., May 28, and July 2. Inhalers for the purpose have been devised, which answer the requirements, and the substances used are, tinc. iodini ætherialis, acid carbolic, and creasote either separately or combined as may seem most suitable, and much benefit is said to have been derived from the treatment. Nitroglycerine is a new remedy which has received some degree of attention during the past year. The dose is one or two drops of a one per cent. solution. The action is somewhat similar to nitrite of amyl, in reducing systemic contraction. It has been used with benefit in angina pectoris, in acute and chronic Bright's disease, migraine, \&c., \&c. The efficacy of quebracho in all forms of dyspnœea shows it to be a most valuable addition to our therapeutic armamentarium. The dose is from twenty to sixty drops of the fluid extract every hour or two, as called for by the emergency of the case without reference to the exciting cause.
In the domain of surgery considerable activity has been manifested, and some new and important principles have been adopted. The invention of Faure's, storage battery, and Swan's electric light, seems to open up the way to greater usefulness of this wonderful agency in surgery. The storing up of electricity for use in the removal of a nævoid or
cancer of the tongue, is a feat little contemplated a year or so ago; and Swan's light will enable the surgeon to test the translucency of parts under examination, or the character of the interior of organs capable of being reached in this way. Abdominal surgery has been pushed to the extent of operating for the removal of hydatids of the liver. Lawson Tait, reports 6 cases in which the operation was successful, and yet no attempt was made to conduct the cases upon Listerian principles. Keith's recent successful casesalso show that his former success was not due to Listerism, but to the care and cleanliness so greatly observed by that master surgeon in the treatment of all his cases. Several successful cases of gastrotomy and laparotomy have beeu reported from time to time during the year, all of which lead us $t$, hope much for the future of peritoneal surgery. In the operation of tracheotomy in croup, Dr. Mastin, Annals Anat. Eo Surg. dispenses entrely with the canula, or any mechanical contrivance, and uses only wire or threads to keep the wound in the trachea open ; while Golding-Bird has adopted a new plan of mechanical treatment, which consists in the application of an instrument somewhat similar to a nose speculun, to keep the tracheal wound open. Operators are gradually discarding the old-fashioned tubes as being dangerous from their irritation, and also their liability to become clogged up. Prof. Billroth has successfully performed the operation of ex-section of the pylorus for cancer. The disease involved the pylorus and about $\frac{1}{3}$ of the stomach. The duodenum was cut across, and the stomach divided above the seat of disease. The large opening in the stomach was then sewed up, until an opening was left about the size of the duodenum which was then stitched into it. Fifty-four carbolized silk ligatures were used; no unfavorable symptoms followed the operation. Ice was given by the mouth for the first few hours, and after that milk in small quantities. On the 8th day some solid food was allowed. He also performed the operation of excision of a cancerous stricture of the sigmoid flexure, forming an artificial anus in the groin, but the patient died about thirty-six hours afterwards from diffuse peritonitis.
M. Koeberle reports, in the Gaz. Hebdom, the most successful case of resection of the intestine yet recorded, viz., the removal for intestirnal ob-
struction, caused by cicatricial contraction, of two metres (about six feet six inches) of the intestine. The result was a perfect success, with entire recovery of the patient. An ingenious application of the principle of the elastic bandage of Esmarch has been made by Trendelenburg in amputations at the bip-joint. It consists in passing a large needle, armed with an elastic cord, in front of the joint, and tying it before cutting the anterior flap; then disarticulating, and repeating the same procedure behind, before cutting the posterior flap, thus rendering the operation almost entirely bluodless. Several cases of removal of the kidney, some successful and some not, have been reported during the year, the result upon the whole being such, however, as to warrant the advisability of the procedure in certain cases. The spleen has not been disturbed more than once or twice during the past year, and these cases terminated fatally. One of them was performed by a Detroit surgeon. The operation is not growing in favor, and spleeny people will have to go unrelieved until some other mode of treating this organ is hit upon. Dr. Bryaut reports several cases in which early amputation of diseased joints has had the effect of causing decided improvement in the condition of the lungs, previously involved in tubercular disease ; the inference being that the presence of tubercles in the lungs is not a bar, as formerly believed, to an operation. In the Lancet for May 28, Dr. McEwen reports a successful case of transplantation of bone in a child four years of age. The shaft of the humerus had become necrosed; there was no attempt at osseous repair, and the limb was useless. Making a groove in the centre of the soft tissues, he placed therein small fragments of wedges of bone, removed from other patients for curved tibiæ. The result was the formation of a new shaft and complete restoration of the use of the limb.
In Obstetrics and Gynecology there is nothing which may be said to be very new or startling though much that is interesting. In the management of ruptured perineum most gynæcologists are now agreed upon the propriety, as a rule, of immediate treatment by means of silk or silver sutures. Cases so treated, if properly stitched, generally do well, and the patient is spared a great deal of worry and after trouble. A considerable degree of success has attended the treatment of rupture of the uterus,
by washing it out with carbolized water and inserting a drainage tube. Dr. Frommel of Berlin gives a report of eight cases, in seven of which laparotomy was performed and all died, while the eighth case, treated by irrigation and drainage recovered. In the N. Y. Meq. Fournal for February, Dr. Noeggerath gives some improvements in the operation of ovariotomy which are worthy of a passing notice. One drachm of potassium bromide is given daily to the patient for two or three days before the operation, and thirty grains of chloral per rectum after. The patient during the operation, to prevent lowering of the temperature, is placed on a rubber bed filled with water at $100^{\circ} \mathrm{F}$. He makes his incision through the skin and superficial fascia, then plunges in a trocar and empties the cyst before opening the peritoneal cavity, If the escaping fluid is thick or grumous he injects a $2 \frac{1}{2}$ per cent. solution of carbolic acid to disinfect the fluid in the event of any of it passing into the abdominal cavity during the operation. After the cyst is emptied, he then opens the cavity and removes it in the ordinary way. Renewed attention has been given to what is known as Crede's method of removing the placenta, viz: by expression; and Crede himself has written an article in the (Archiv,) to show that his method does not consist in an immediate expression of the placenta. He places the hand upon the uterus and moves it about gently, waiting for a contraction. Then the uterus is grasped'and pressed towards the hollow of the sacrum. In pruritus vulvæ, Dr. Wiltshire (B, it. Med. Fournal) adopts Friedrcich's view, that nearly all local applications that give relief are parasiticides, and that the pruritus is due to the development of fungous organisms. He recommended borax wash, grs. xii. or more to the cunce, mercurial ointment, corrosive sublimate used with cuution, iodine, chloral, hydrocyanic acid, etc. Spencer Wells gives the particulars of 20 additional cases of ovariotomy, making 1,000 in all in (Brit. MItal. Journal, March 5th): 231 of the patients had died, and 769 recovered. The percuntage of mortality had steadiy diminished trom 34 in the first 100 to 11 in the last. Dr. Moberity Smith, (Lancel, July 16), reports most gritifing sutces; in the treatment of puerperal convulisurs with hypodermic injections of morphia, viz. : from a guarter to a third of a grain. This is in accord with the experience of Dr. C. P. Clark, (Amer. Jour. Olstet.), July 1880 . These facts
would lead to the assumption that nervous irritatation is a prolific cause of this affection. Chloral hydrate and chloroform or ether, also have a beneficial effect, no doubt upon the same principle, and those who would readily administer the latter may yet have some misgivings about the advisability of the former. Dr. Goodell, (Med. and Surg. Reporter) expresses the opinion that the most common cause of laceration of the cervix is from too early rupture of the membranes, and states that as a rule the accoucheur should wait till the os is dilated.

Among new books, and new editions of old ones published during the year, may be mentioned Lusk's Midwifery ; Glisan's do. ; Flint's Practice of Medicine ; Bryant's Surgery ; Diseases of the Skin, by Duhring ; Materia Medica and Therapeutics of the Skin, by Piffard ; Albuminuria, by W. H. Dickenson ; Bosworth, on the Throat; Wood's Library ; Ziemssen's Cyclopædia, vol. IX., Supplement and Index ; Beard \& Rockwell's Electricity; Ty:on on Bright's Disease and Diabetes; Flint's Physiology ; Foster's do. ; Agnew's Surgery ; Magnin on Bacteria ; Benedikt on Brains of Criminals ; Cutaneous Syphilis, by Fox; Diseases of the Nervous System, by S. Weir Mitchell ; Morton on the Eye; Niemeyer's Practice of Medicine; Holmes' Surgery, vols. i. and ii.; Reynold's Practice of Mcdicine ; Bartholow's Medical Electricity ; Index Catalogue, Library Surgeon-Genl's. Office, U. S. ; Taylor's Medical Jurisprudence ; Clowe's Chemistry; Green's Pathology; Van Buren on Diseases of Rectum: Holden's Landmarks; Satterthwaite's Histology; Fothergill, on Indigestion ; Harrison on the Urinary Organs ; Smith on Diseases of Children; Hartshorne's Essentials, \&c., \&c.

The obituary notices are more numerous than usual. Among those of our own confreres who have paid the debt of nature, may be mentioned Hon. Dr. Brouse, Ottawa ; Dr. Mack, St. Catharines ; Dr. Berryman, Toronto ; Drs. J. K. Oliver, Kingston ; W. Harkin, Vanleekhill ; H. F. Tuck, Orangeville ; A. H. Fraser, Brockville ; E. S. Bel. leau, St. Michel, Que. ; H. B. Forman, Parrsboro, N.S.; Wm. B. Malloch, Brockville ; R. F. Godfrey, Montreal ; J. G. B. Morrison, Metaghan, N.S.; W. Mostyn, Almonte; M. M. P. Dean, Keene, Ont.; G. P. DeGrassi, Toronto ; J. P. Nash, Picton ; J. A. Gregory, Fredericton, N.B. ; G. Burnham, Peterboro ; A. W. Herrington, Carman City, Man.; W.

Lambert, Amherstburg ; N. Fleming, Mildmay, Ont.; H. Parsley, Thornbury ; A. Chapman, Muskegon, Mich.; J. A. Purney, Shelburne, N.S, ; A. Robertson, Liverpool, N.S.; J. G. Bibaud, Montreal ; N. Munro, Detroit, Mich.; W. G. Middleton, Stella, Amherst Isld.; A. McMichael, Gorrie, etc., etc. Among those in distant lands we find the names of Bouill ud, of Paris; Wilms, of Berlin ; Dr. Sanders and Andrew Wood, of Edinburgh; Professor Rolleston, M.D., of Ox!ord; Skoda, of Vienna; Dr. Bradford, of Manchester ; Prof. Schleiden, of Frankfort; Spiegelbers, of Breslau; McClintock and Hayden, of Dublin ; Foulis, of Glasgow ; Hays, of Philadelphia; Greene, of Portland; Bache, of Philadelphia; White, of Buffalo, and many others.

We need scarcely allude to the assassination of the President of the neighboring Republic, as the circumstances are still fresh in the memory of our readers, who perhaps more than any other members of the community took a deep interest in the progress of the case, and also in the surgical treatment of the patient. Nor need we refer to the last act of the drama which is now being played in an American Court of law. The year has been more prolific than usual of disasters at sea, and on land, the litest and most harrowing of which was the burning of the Ring Theatre in Vienna, attended with an appalling loss of life, which might easily have been averted in great measure had there been ordinary care taken to permit of ready escape from the building in case of accident. The country has upon the whole been very prosperous, and free from any serious epidemics or plagues, except the too frequent occurrence of malignant diphtheria, chiefly in .Queber: and the Maritime Provinces. We conclude by wishing our readers, one and all, a happy and prosperous new year.

Alleged Advertising.-In our last issue we referred to a case of alleged advertising by a prominent medical man in Port Hope. We are glad to be able to say that since then we have received a letter from the editor of the "Times" in which he states that the medical gentleman in question has never written any paragraphs for the paper, and was in no way responsible for the one alluded to ; on the contrary he has invariably requested that his name should not appear in the paper in connection with any item or accident of a medical or
surgical character. The editors of the Guide and Nezes corroborate in effect, the above statement. The medicalgentleman must, therefore, in justice be entirely exonerated from all blame, and we regret that any injustice should have been done him in the matter.

Vexatious Litigation.-We understand that an attempt is to be made to revive the Tost-Freeman case, which was reported in the Lanct for March 1881. This was an action brought by one Tost, against Dr. Wm. Freeman of Georgetown Ont., for alleged malpractice in the treatment of a fracture of the forearm. The case after considerable delay was tried before Justice Galt, at the Hamilton Assizes, in January last, and after hearing the evidence the Judge very properly refused to allow the case to go the jury. The renewal of this case now, is a great hardship, for if it should go to trial, the hard carnings of a diligent practitioner will have to be spent in defending himself against a man worthless in every sense of the word, backed by men who should be above lending themselves to anything so contemptible.

Correction.-It appears that we, as well as many others, were in error, in the statement that the surgeons in attendance on the late President had sent in their bills for services rendered. The Medical Times, Phila., speaking with authority from Dr. Agnew, says that no bills have been sent, and that the matter of remuneration will be left entirely in the hands of Congress.

Appointments.-Dr. L. D. Migneault has been appointed to the Chair of Anatomy, in Victoria Medical College Montreal, made vacant by the death of Dr. Bibaud.

Dr. L. McFarlane of this city, has been appointed to fill the unexpired portion of the term of the late A. F. Campbell, M. D., in the Senate of Toronto University.

Dr. Louis Elsberg of New York, has been appointed Professor of Laryngology, and Diseases of the Throat, in the Dartmouth Medical College, having resigned his Professorship in the Medical Department of the University of New York.

Dr. McMillan of Alexandria, has been called to the Senate of the Dominion ; and rumour has :t that Dr. McInnis of New Westminster, B. C., has also been appointed to a similar position.

Coroners.-Dr. R. W. Clark of Hastings Ont., has been appointed associate coroner for the Counties of Northumberland and Durham Ont.

Dr. Stanley Scott of Newmarket, has been appointed an associate coroner for the County of York.

Dr. W. H. Taylor, of Bradford, has been appointed an associate coroner for the County of Simcoe.

British Qualifications.-W. F. Cleaver M. D. Kingston, has been admitted a member of the Royal College of Surgeons England. Drs. M. L. Cameron, W. Gunn, H. R. Elliott, D. McTavish, and $W$. Cormack, have received the double qualification of L. R. C. P., \& S. Edinburgh ; and Drs. E. A. Stutt, A. Mi:C. Sloan, and G. Wilcock, have received the L. R. C. P., Edinburgh.
F. O. S.-Dr. F. P. Taylor of Charlottetown, P. E. I., has been elected a Fellow of the Obstetrical Society of London, Eagland.

Dr. St. Jean, has been elected mayor of Ottawa, without opposition.

## Brooks and examphlets.

1. Lectures on Digestion: By E. A. Ewald, lecturer in the Royal College of Berlin, etc. etc.
2. Indigestiun and Biliousness: By J. Milner Fothersill, M.D., M.K.C.P., etc. etc., London.
3. Food and Dietetics: By F.W. Pavy, M.D., F.R.S., F.R C.P., etc., etc.
4. General Medical Chemistry : By R. A. Withaus, A.M. M.D. Protessor of Chemistry and Toxicology in Vermont University, etc., etc., etc.

## 5. The Wilderness Cure: By Mark Cook.

The above books are all from the enterprising press of Wim. Wood \& Co., New York. We have done our best to get through the first three, but we regret to have to confess that the condition of our digestive powers was very little improved by the undertaking. Somebody, and he was no fool, said those who digest well, have never found out that they have a stomach. This was not our state of mentality on relinquishing the perusal of the gastric triad which heads our present list. How could one swallow, without feeling flatulent and squeamish, the following dose, presented in Dr. Ewald's gth licture?
"If," says the author, "I were to give you a table of the action of the pancreas on albumen and gelatine, similar to that for pepsine, leaving out chemical details" (thanks, dear Fwald, for the grace) and accepting Kïhne's views, it would take the following shape :
Albumen x. Trypsin (Pancreatin)x. Soda solution of I p. c. forms, at the body temperature, first globulin insoluble in water, and then:

Hemipcptone.-Leucin, Tryosis, Hypoxanthin, Asparaginic Acid, Glycoll: Normal Digestive Products. Antipeptone.--Indol, Phenol, Fatty Acids, Ammonia, Sulph. Hydrogen, Carbonic Acid:
Are not the above jawbreakers, enough to turn topsy-turvy the whole process of digestion, and to make a prudent person forswear forever the mastication of a particle of gristle? for from this tissue, roasted, boiled or stewed, come forth the seven half-toned abominations, which generate bacteria and microccocci, and who knows how many more of their ad infinitum backbiters. Let the reader bear and ponder well. "It scarcely needs to be mentioned that the occurrence of the bodies described as products of putrefaction" (bah! sulph. hydregen) " is contemporaneous with the development of bacteria," (back out, if you can, from that,) "and microccocci, as an almost universally admitted result of them. These organisms are taken up with the food, and find in the intestine a favourable nidus for their development." Alas, for us defenceless, human bipeds ! but thrice happy " just killed dogs and rabbits," in whom Ewald has "never found bacteria or microccoci;" yet dogs eat gristles and bones whenever they are fortunate enough to light upon them, nor is it very common with them to eruct sulphuretted hydrogen. This must be the resuit of their ignorance of organic chemistry.

Here is another truly startling fact, which we have shuddered over, in Ewald's ioth lecture.
"But if we turn away from this practical point," (whatever that was) "it is certainly very interesting that phenol, which we make use of extensively every day for its antiseptic properties, should be found as a product of putrefaction, and that actually in our own intestines!"

And why not? Should not home manufactures be encouraged? and is it not a homo-opathic certainty that like cures, (or kills), like? Have not Jenner and Pasteur proved that infinitessimal contagionation of men and animals proves re-
pellant to future invasion? If, however, we have in our intestines already from gristle-eating, a sufficient amount of phenol and sulphuretted hydrogen, etc., etc., to fertilize the soil for the germination of bacteria, may we not kill out these vermin by too high enrichment of the soil? Eureka! Too much of any good thing is just enough. "The baccy hick, if you be well, will make you sick ; but the baccy hick, if you be sick, will make you well."

But parting with phenol and fun, here is a passage from Ewald's 12 th lecture, which we humanely commend to a certain number of highly valued friends, whose groanings and moanings over rebellious bowels, ill-natured head-aches, sleeplessness and morning lassitude, often distress our vibrating sympathies.
"The intervals between meals are often too long, between others too short. It is so particularly with us," (Germans), "but especially in England and America, where the custom is to eat a large breakfast, and then go till evening without eating hardly anything, and at six ''clock" (rather seven) "to take another meal, naturally then in abnormal quantity. This not only causes inactivity of body and mind, which alway's accompanies the digestion of large meals, but is is the cause of numerous disorders of the digestive system, especially of the stomach."
"Abnormal quantity!" Not a word as to quality, multitudinosity, gastric goading, spicings, and saccharine enticings? Why! the poor man knows little of English and American gourmandise. Best so, for must not doctors and druggists live? And are not these late-dining big eaters, the very crean of their support? They certainly are, and it would be a crying sin to intercept their patronage, or to try to suppress their self-sacrificing virtue.
Well, this little volume of Professor Ewald's has monopolised so much of our attention and space that we have ton litule left for the four others lying before us. Futhergill's Indigestion and Bilicusness is bpth a racy and instructive book. We quote but the following paragriph from the conclusion, to satisfy every sensible mother, and every common sense doctor, that the author has had some personal experience of the unpleasantness (to both parents) of icy cold feet, both in themselves and their babies.
"Cold hands and feet are a very frequent indication of imperfect nutrition in children. These
should be attended to, the children should not be allowed to go to bed with icy feet, which will often be the means of causing wakefulness for some length of time alter retiring."

Dr. Pavy's "Food and Dietetics," being inscribed to the Right Honourable Lyon Playfair, M.P., C.B. and F.R.S., we take for granted must be a work of considerable merit. We do, however, sincerely trust that the author has not made personal provings of more than a limited percentage of the alimentary substances, bererages and condiments," whose dietetic and other properties he details. If, unfortunately he has fallen into this mistake, he will do well to read "Cook's Wilderness Cure," and come across to the Adirondacks.

Walsh's Physicians' Call-Book and Tablet for 1882, Sixth Edition. Also, Walsh's Physician's Handy Ledger, published by Ralph Walsh, M.D., Washington, D.C.
Walsh's visiting list is very convenient in size and form, easily carried about in the pocket, and well adapted for the purposes intended. It is ruled to accommodate a practice of thity-five patients per week for one year. The erasing tablet is a special feature, and will be found very useful. The Handy Ledger, is a day-book and ledger combined, and is peculiarly adapted to the practitioner's wants. It will accommodate 600 or 1200 names according to size ordered. The simplicity of the method is what commends it especially to the attention of the profession. It is so arranged that the gross amount and items of any account may be readily ascertained in a moment.

The Montreal Witness, Published by J. Dougall \& Sun, Montreal.

The proprietors of this paper announce for 1832, the following features besides the ordinary news department, viz., a Legal, Agricultural, Veterinary, Poultry, and Apiary department, each presided over by thoroughly competent persons. The paper is liberal in tone, has no party connections, but supports on every ques. tion what it believes to be right. The following premium pictures are offered with the Daily Witness. "The Roll Call after the battle of Inkerman," and "Quatre Bras," representing the first stroke of Waterloo; and either of the above picures with the Weekly Witness. Price of the Daily, \$3.00; Weckly, \$1.10; Northern Mezsenger, for young people, and Sabbath-schools, 30 cts. per annum.

## Bitths, 解arriages and 召eaths.

On the 28th Dec., Dr. E. Cook, of Norwich, in the 77 th year of his age.


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SEE TESTIMONIALS OF PHYSICIANS.
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The whole in Bag of Superior Morocco Leather, or of Black
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## : GELatum <br> VASELINE <br> PETROLEI

## GRAND MEDAL nt the Hhiladelphia Exposition, 1876. <br> SILVELE MEDAL at the Paris Exposition, 1878. MEDAL OF PROGRESS by the American Institutc, 1880.

| Bronze Medai and Diplima hivalicd by the American Insitute for 1874. <br> " Vaseline is an admirable preparation for niany 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 awarded fatty bodies. We deem it an article of great value, and deserving of special mention for the above purposes." Bronze Medal $\text { Signed by }\left\{\begin{array}{l} \text { P. W. BEDFORD, } \\ \text { ISADOK WALZ, } \end{array}\right\} \text { Chemists. }$ |
| :---: |
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[^6]
## OINTMENTS, CERATES, \&e.,

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 eq:alled 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 Raport of Dr. Galezowski, the distinguished
Fronch Oculis.
"Vaseline is the beat pharmaceutical preparation in the making of Ointments, as it in completely nentral and unchangeable. I saw it used for the first time in London by Dr. Lanson. I then procurei the 'Vaseline' myse!f, and have experimented with it for four months on over one thousand patients, aud I must declare that the knowledxa acquired by practice has surpassed my expectations by far. ****. I have also prepared larye quautities of eyo ointments with 'Vaseline,' and have employed them on numerous maladies with very great sucess, and I can afirm that 'Vaseline' is very precious in ocular therapeutics, end great replace all the ointments in use at the present time. * * in ocular thorapeutics, and must believe conclusion, 'm account of its unalterahility and its great affinity for perfumes, I

DR. REUSCIIE, of Mamburg (translation) says:
"In six cases of small-pox I have u+el Vaseline with eminent success-one a severe case of variola vera-a boy sixteen years old, not vaccinate 1 .
" It developed the disease rapidiy, and shortened considerably the duration of it-the time varying from seven to twenty days, the fitter parisid for tiae 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 wo ald bzeome irritable and feverish.
" Applicl internally, it removed the small-pox in the mouth and throat in a few days.
"A few gcars remained in only one case, but the patient will outgrow these, as theg are very slight."

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

"We havebefore noticad this preparation of petroleum in tarm; of warm praise. It is of the consistency of butter, is perfectly fres from olor, anid dues not become rancid. We have now before us several new preparations male fiom it, which are so useful as to call for remark. They are a poimate, a cold cream. and a camphor ice, all of excellent quality. We have tried tions in common use."

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Pomade Vas liac, Vaschine Ceta creanm, Vasetinc Camphor Ice, and Vaseline Toifet Ssap, are all exquisite tuilet articles mate f.oun pure Vascline, and excel all simular ones.

# Recent Introductions to the Materia Medica, .i 

\author{

- BY <br> PARKE, DAVIS \& CO. <br> Manufacturing Chemists,
}


#### Abstract

CHEREN. (Eusconia Chcken, Myrtus Chikan.) This remedy, a native of Chili, is very popular in that country, where it is employed as an inhalation in diphtheria, laryngitis, bronchitis, bronchơrhœe, etc.; as an injoction in gonorihoea, leucorthoen, cystitis, etc.; and internally as an aid to digestion, to allay cough, to facilitate expectoration and to stimulate the kidueys. It is also an astringent and is said to be of great value in hamoptysis.

Cheken (known also as Chekan and Cheqaen). was introduced to the profession of England through a report of results following its use in chronic bronchitis or witter esagh by Win. M urrell, M. D., M, R.C.P., Assistant-Physician to the Royal Hospital for Dis-ases of the Chest, and lecturer on Practical Physiology at the Westminster Hospitat. Dr. Murrell's eport is very favorable and he has sapplemented it by private adlvices to us expressing grent satisfaction with the drug in the affections in which he has empl yed it. Ife regards it as one of the mest valuable introductions of late years, and pronounces it a dhug of vely :uperior properties in the treatment of chromie bronchitisq acting in this affection both as an anodorne and exerting a favolable influence over the organic changes in the mucous membrane. It is certainly a remedy which merits a chorough trial at the hands of the profession of this country.


## SIERRA SAIVIA <br> (" MOUNTAIN SAGE.") Artemisia Fririda. Fluid extract of the herb. Dose one to two fluid drachms.

## DIAPHORETIC AND DIURETIC.

The success which has attended the achministration of his drug in "Mountain Fever," has suggested its em-
 fever seems to be two foll, acting directly on the nervons 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 constituente $\cdot i$ the urine proportionately increased. Therapeutic te.ts have corroborated the opinion formed of it on theoretical grounds.

(ALLIGATOR PEAR.) Fluid extract of the seeds. Dose 30 to 60 minims. This remedy is now for the first time presenter to the profession of this country. It is introduced on the recommendaion of Dr. Henry Fruehling, of Baltimore, Maryland, who while acting in the capacity of botanist and scirnti-t to an exploring expedtion in Southern Mexico, became familiar -with the drug both from reports of the natives aud persomal expericuce, as a remedy in intercostal neviralgia. -The following extract from Dr. Frwehling's report will give some conception of the nature of this remedy.
"A common experience among phyicians is that some cases of intercostal nenralgia are very troubles mee and obstinate, resisting almost every kind of treatment ; paricularly is this the case in malarial districts. In such cases I would recoumend the fluid extract of Persea seei. In my own pers in and in eve y case in which I have empuyed it i have been highly gratifed with the result. Those of my medical friends to whom I have given samples of the preparation! waruly endoree my opinion of it as above and I c.anot but believo that murther trial of it will cause it to be resarded as a valuabie uddition to vur list of medicines."

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

(EQYTIIROXYION COCA.) The evidence in favor of Coca is to prove it a powerful nervous stimulant, through which property it retards waste of issue, increases muscular stremgh and emburance, and removes fatigue and langwor, due to prolonged physical or mental effort. While indicated in all conditions presenting these symptoms it has an eqperial indication in the treatment of the opitann and alcoliol habits. In these deplorable conditions it has been found to noisess extraordinary propeities-relieving the sense of untold bodily and memal misery which follows the withdrawal of the accustomed stimulus, thus reventing a return to the narcotic, and affurding 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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\text { DEMROIT, MICHIGへN. • • }
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[^2]:    * Nerve tonics, such as strychnine, phosphorus, arsenic, etc., are given internally, and rest. diversion, etc., enjoined upon the patient. Dr. Weir Nitchell, in the treatment of nervous subjects, proposes to improve nutrition by seclusion, massage, inunction of fat, and a methol of genelal faradiza. tion hy means of localized faradization of all the superficial muscles.

[^3]:    * Being a Thesis for the M.D• Degree in the University of Trinity
    College, Toronto. College, Toronto.

[^4]:    - Read before the Medical Society of London, Oct. 24, '8r.

[^5]:    Medical Electricity！
    

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[^6]:    The attention of physicians, druggists and hospitals, is called to this article, and to the fact that it is favourably regarled and extensively used in the United States, on the continent and in England, by the profession and pharmacists as a base for

