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HEADACHE.*

BY DANIEL CLARK, M.D.,

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THERE is no symptom which is thrust more prominently upon the notice of the physician than headache. It is safe to say that nine out of every ten patients we meet with complain of headache to a greater or less degree. If we eliminate local causes for headache we will find that it is a symptom of a large class of bodily diseases, some of which may be in distant parts of the body. If the headache should be a prominent symptom we are inclined to treat it alone because of its persistency, and to overlook the primal cause of this painful signal of distress. In short, we are always to keep in mind the various reflexes which, in their multifarious forms, cause abnormal function and suffering beyond the central pathological area. For example, we have an intermittent pulse in various

*Read by title before the Ontario Medical Association, June 7th, 1894.

forms of atonic dyspepsia, when there is no organic heart disease. We have some forms of puerperal mania through the influence of the sympathetic system. The brain is ripe for pathological change, and the shock from the uterus and its appendages is the necessary excitant to evoke the heretofore latent diseased condition in distant parts. We have various forms of kidney and glandular disease, which we now know to have their origin in the trophic centres. In short, within the last twenty-five years much knowledge has been gained in respect to nerve influence on cell life, on vascular activity, and on selective affinity, which has revolutionized our diagnosis and treatment of disease. It is not my intention to inflict upon you an essay on headache in general, but rather to show the importance of a thorough examination into the cause of its existence in every individual case before treatment. Of course, we are to eliminate from our list such headaches as are present in fevers, inflammations, and those of traumatic origin. In such we know that the headaches will disappear when the obvious causes are removed. The same might be said of the hemicranial, occipital, and nocturnal headaches so pathognomonic of syphilis, especially in the secondary form.

In this connection it is well in practice at the outset to minutely enquire into the life history of those afflicted with persistent headache. Heredity and constitutional taint are potent factors, not to be overlooked. The form of the heredity is important in order to know what may be the likely inheritance. Neuropathic weakness may manifest itself in children in different forms from that found in the parents. Instability of the nerve centres can and does manifest itself in protean forms, as the heritage to descendants. Insanity, epilepsy, hysteria, dipsomania, neurasthenia, syphilitic degeneracy, and such like, may, in a vicarious way, take the place of one another. A knowledge of the existence of such bequeathment will help our diagnosis and prognosis very much. Our first enquiry should be along these lines.

It will be next in order to ascertain the existence of personal conditions and the presence, if any, of such diseases as heart trouble, dyspepsia, rheumatism, syphilis, and any of the strumous classes of diseases. It is of paramount importance to ascertain, if possible, under what causes and conditions the first attack came on. It might be after brain and eye were unusually taxed. A sunstroke, a fall, a blow, or a powerful emotion might be a precursor of the first attack. Much can be learned of present conditions from knowing the causation, and this knowledge leads to more intelligent treatment.

On the other hand, it is often forgotten that a large number of brain diseases exist without pain. The diseases are known more by a change in correlative energy, and in impaired functional activity. There may be no

apparent change in gross brain structure, although such change may be great in the ultimate elements, but, so far, beyond human ken. Simple blood deterioration may exist by the absorption of toxic agents, or by the absence of normal constituents. Numberless are the ways of a malign nature which disturb the sensorium, yet without physical suffering. Post mortems often reveal exostoses of all sizes growing from the calvarium, tumors, encapsuled abscesses, and the death of extensive areas of brain substance, as the result of embolism, without headache or even any apparent functional disorder commensurate with the injury found. It is astonishing how much destructive lesion and constructive abnormalities can exist within the skull without mental or physical disabilities. Very few of the insane complain of headache, and often, when such complaint is made, all the conditions of health are present. Good sleep, unimpaired appetite, and no constitutional disturbance show how often such statements are delusional, or made to deceive. Usually the hysterical, who border on the above class, have periodical headaches. It is generally located in the top of the head, and along the line of the occipito-frontalis muscle. Sometimes it is found in the neighborhood of some of the terminal branches of the fifth nerve. Worry of any kind, or menstrual disorder, intensifies it. The patient describes it as if a nail were penetrating the head. The neurasthenic headache is usually of a dull and undefined character, with, occasionally, tenderness in the back part of the head.

In the treatment of any of the head neuralgias or headaches, two objects are kept in mind: First, to relieve the immediate and persistent local pain; second, to cure, if possible, the disease by using remedies which tend to bring about a better condition of the system.

To alleviate local pain we have at our command a number of sedatives and anodynes, such as aconite, menthol, belladonna, and chloroform for external applications, and a legion of remedies such as quinine, iron, arsenic, opium and its salts, chloral, hyoscyamine, antipyrine, the bromides, and all the much-lauded remedies which have recently sprung into existence through synthetical chemistry. The remedies are so many that they can be counted by the hundreds, and this poly-pharmacy has been endorsed by many respectable physicians, who lend their names and influence to druggists to induce their less credulous brethren to invest in these so-called panaceas. When countless medicines are prescribed for any one disease we may be sure no specific has been found for it, and that our administration of drugs must be largely empirical, or simply based upon experience.

It is true that the causes which operate to produce the neuralgias and headaches are often obscure, and too often have to be dealt with on general principles. We reason from analogy in our practice, and aim to

give pabulum to the master-builder of our cellular structure, who gallantly fights to regain lost ground and to assume normal conditions. It is possible that our success in ameliorating, if not curing, the various headaches by the administration of cod liver oil, or by any of the hydro-carbonates, is a good illustration of this doctrine. As a rule, those afflicted with any of the neuralgias are anæmic, and even those who store up a good deal of adipose tissue are sometimes also afflicted, and are usually of a nervo-sanguine type, with evident instability in the great nerve centres. These states are liable to induce nerve pain in those of a neurotic diathesis, on whom even atmospheric changes in temperature and density have malign influences.

We also know that fat, in one or other of its forms, is not only a fuel, but is also a protector of the delicate nerves of fine organization. We see this in the structure of nerve fibre. A fatty organization is the sheath or axis cylinder of the delicate nerve fibre. This "white substance of Schwann" is the insulating covering of the nerve proper, and is necessary for the thermal protection of nerves outside the bony cavities.

We know that in the most of the neurasthenic, anæmic, and neuralgic we find a deficiency of fat in the system; so this nerve envelope must partake of the general deficiency. This is the reason why the exposed parts of the body, such as the head, face, and neck, are so susceptible to changes of temperature, and why the wintry weather is the time in which the infliction mostly prevails. This statement refers to those nerve pains which are brought about by general conditions, and not by any local irritations. As a rule, such are found to be associated with malassimilation and malnutrition, at the foundation of which lie hereditary tendency or dyspepsia of the atonic kind, worry beyond measure, mental strain from overwork, and such like drains upon the physical system, especially upon the trophic centres. I know of no other theory why cod liver oil has been so beneficial in the various neuralgias, especially where we find anæmia and neurasthenia.

It may not be out of place here to sound a note of warning as to the use of anodynes or narcotics in headache. It must be remembered that to benumb by drugs is not to cure. It is possible that their use retards recovery for the time by temporarily paralyzing vital energy and feeling; hence the necessity to be sparing in their use. Not only so, but a large number of our narco-maniacs come from this class, and it is to be feared that a good many medical attendants are unwittingly to blame by taking such patients into their confidence and informing them what quieting drug is being administered. As a result, the patients go to the druggist for their solatium after medical attendance has been dispensed with. An alliance, offensive and defensive, is set up between patients and druggists,

and from that day the life history of many such individuals is downward to insanity, or to a premature grave. No medical man should administer any such seductive drug except in a masked form, and, above all, should possess a discreet tongue as to the remedies used. Operate on the patient through faith, as well as by works. My experience of dozens of such cases has been sad, and nearly every one of them came to the knowledge and use of such drugs through the well-meant but ill-advised disclosures of the doctor. I give this note of warning in passing.

We know how prevalent is what was formerly called "bilious or congestive headache." The severe frontal pain, as if a band of iron were grasping the brow; the distressing nausea, and often vomiting; the appearance of waviness in the atmosphere, from affected vision; the *muscæ volitantes;* the dry skin in some and the profuse perspiration in others are ever present. It is most frequent in those of a nervo-bilious temperament. It comes at irregular times, and with little warning, especially to the Epicurean who overtaxes the digestive processes.

The many are often relieved immediately by drinking a strong cup of tea or coffee, or by a dose or two of bromo-caffeine or cocaine. In others it will run its course in spite of all remedies in twenty-four hours, and is followed by drowsiness and sleep. At the climacteric of life in man or woman this form of headache usually leaves, never to return. That is one of the advantages of advancing years.

There is another form which is often seen among the anæmic and dyspeptic. It involves the whole head, but is more intense at both temples. I have noticed that chlorotic females are often subject to it at menstrual periods. The barometric condition affects it very much, and I have observed a number of cases that were almost sure to be attacked when the barometer ran low and the wind was in the east, as the harbinger of an east storm. In such cases little can be done beyond general building up. So distressing is such a condition that I have given for temporary relief sulphonal, phenacetine, or chloralamide, especially the latter. They act as excellent anodynes, and produce less depressing results than do opium or its salts, hydrate-chloral, hyoscyamine, Indian hemp, belladonna, and such like. At best they are only palliative, but are resorted to in order to comfortably tide over an attack.

My object, however, is not, as I have said, to give an essay on headache, but rather to point out the necessity of strict enquiry and examination into the primary and proximate causes which operate in each case. Any treatment based on mere superficial knowledge and on the simple fact of headache merely would be empirical and unsatisfactory. It is necessary to emphasize the fact stated, that any medicine which merely allays pain by lowering the vital power of sensation cannot be curative, but

only palliative, and if continued for any length of time is harmful and never restorative, in a primary sense. Our main aim should be to tone up the system, and not to paralyze it, locally or generally.

I might append hundreds of formulæ which are recommended and classified according to the various kinds of neuralgias and headaches, but forbear, as you know how many of them disappoint us in practice. At the same time, it is well to keep in our minds the various conditions in each class, such as the neurasthenic, neuralgic, organic, toxic, anæmic, or congestive, when we apply our therapeutic knowledge.

My experience has gradually reduced the various radical remedies to few, and these are such as cod liver oil, the phosphides, nux vomica, quinine, arsenic, phosphoric acid, and the milder forms of the bromides and iron in its citrate or albuminate form.

I have not touched upon the use of electricity, in one or other of its forms, for the cure or amelioration of the various headaches. Learned treatises have been written in laudation of its benefits. The special kinds of currents and the direction of each are indicated, as well as the points of contact, especially along the course of the fifth or seventh pairs of nerves and their ramifications. There is no doubt that in hysterical cases the formidable apparatus and its scientific name, with the local sensation, have a beneficial influence on such neurotic persons as a sort of mental therapeutics, just as a thermometer under the tongue is said to have had in an historic case. There is a great deal in a name, as we all know how eagerly such nostrums as electric oil and magnetic ointment were sought for, as they were supposed to contain electricity bottled up. So batteries as cure-alls have become one of the drawing cards in modern charlatanism. The fact is, that animal magnetism and electrical action, either in faradization or in static electricity, are factors of activity whose influence upon the molecular life of nerve structure is unknown from a therapeutic standpoint; hence the uncertainty of its effect upon local pain. Electrotherapy may yet be applied with benefit when advanced knowledge of its operations can enable us to use it with discretion. So far its use is empirical, and its effects upon pathological conditions, such as are found to exist in the ganglionic nerve centres, are as apt to injure as to cure.

The records of its advocates show this; hence a word of caution as to its use in headaches, whose exciting causes may not be in the periphery, but in distant and central parts.

It is never to be forgotten that a large number of those afflicted with headache are afflicted with constipation as well as indigestion. The alimentary tract lacks tone and discharges its duty sluggishly, especially the colon, in its ascending and transverse sections. The urine shows often a decrease of urea, and also, as functional results, we find in it sugar, albu-

min, and uric acid crystals. The existence of these indicate the line of treatment.

Frontal headache is often associated with gastric disturbance, but also from the same cause we may have vertical and occipital pain. Chlorotic and anæmic females usually complain of frontal headache and great pain behind the orbits, which is often very intense. Such headache, however, is usually intermittent, and is often accompanied with general lassitude and physical impoverishment. It is striking to notice how intimate headache is with so many distant bodily diseases. Local pains from far removed causes do not exist to the same extent in any other part of the body. This relation between the head and all the body is striking, and, so far, insoluble, except on the reflex theory.

These reflexes are strikingly seen in the disturbance occasioned by migraine and the various other headaches upon the thoracic organs and stomach, as is evident in the pulse, breathing, and vomiting. This can be easily understood when we consider the intimate relation which exists between the pneumogastric and the chief central nerves, especially the glosso-pharyngeal, the fifth, ninth, the seventh and third pairs. The close alliance of the *par vagum* with the sympathetic, especially the cardiac and solar plexuses, shows that there is a community of sympathy which may and does spread over large and distant areas; hence the importance of localizing causes, and of not being deceived into believing that the pathological condition must be where the pain exists.

In inflammatory diseases, in kidney disease, in febrile conditions, in specific contamination, in morbid blood changes, in anæmia and plethora, we have head-pain of divers kinds, localized or general. This distressing symptom is almost a pathological index finger to indicate change in bodily conditions. It is also noticeable that pain which follows definite nerve tracks is neuralgic and usually intermittent. Pain limited to certain areas is also, for the most part, functional. All such are paroxysmal; but if pain is constant in the head, although remittent, and no extra-cephalic cause apparent, then does it point to serious lesion in the interstitial substances or arteries of the brain. This diagnosis is almost a certainty if optic neuritis and vomiting are present. Absence of it is not absolute evidence of intracranial soundness; but if serious pathological changes are evident in other directions, then this negative fact is valueless.

I have stated that the insane have little headache, although the contrary might be expected. Two principal reasons for this might be given: (1) The brain proper in its structure outside of its blood vessels and envelopes is painless. (2) The insane have not the sensitiveness of the sane because of lower vitality. This is seen in the performance of surgical operations on them, and in the capacity they have to endure self-mutila-

tion. If permitted to do so, many such would wound themselves, and would apparently be oblivious of any pain.

Within the last few years much attention has been given to the relation between eye-strain and headache. The increase of book learning among children, of clerical work of all kinds, of mechanical labor needing good sight and close attention, and of indoor employment in badly lighted rooms, or in badly arranged light, lead to errors of refraction or to muscular inco-ordination, and, as a result, eye-strain and frontal or orbital ache. In a majority of such cases there is astigmatism. This irregularity of the refractive media of the eye must of necessity mean stress in the operations of the eyes, and also produces nerve instability and pain. The mere eye rest taken in a number of such cases is followed by want of the usual headache, showing that herein is cause and effect. In such cases medicine alone, without rest, has proved of little value. In large cities and towns where the conditions favorable to this kind of headache mostly exist, it is evident that those facts have been largely overlooked until a comparatively recent period. This form of headache is a good illustration of a sympathetic or reflex kind. Reflexes are far-reaching in their effects, and the study of them is of paramount importance if success in treatment is desired. This fact I wish to emphasize.

In conclusion, my aim has been in this monograph:

(1) To direct attention to the importance of studying the reflexes in our diagnosis.

(2) In trusting more to general hygienic measures to promote health than to local or general medication.

(3) To study *ab extra* causes which are more general and potent than we may suppose. We are often deceived because of the local distress appearing so prominent.

(4) Not to delude ourselves into the idea that a benumbing treatment is curative, but, on the contrary, it often handicaps the heroic efforts of nature to again reach healthy conditions.

(5) To check the growth of the ever-increasing army of narco-maniacs by professional reticence in the use of seductive drugs. Headache and its many anodynes are fruitful sources through which this baneful habit is acquired.

(6) The classifications and remedies are legion, but the treatment must be applied to *genera* rather than to the *species*, as common causes lying in deranged cell life do produce multifarious manifestations.

FRACTURE-DISLOCATIONS OF THE SPINAL VERTEBRÆ.*

By A. Beverley Welford, M.D.,
Woodstock, Ont.

IN selecting this subject it has not been my intention to go elaborately into the subject of injuries to the spine in general, but more particularly to refer to that class of severe injuries resulting in fracture or dislocation, or both, and where the spinal cord has been injured, producing more or less complete paralysis of the parts below the injury; and, if possible, by discussion from the members of this association, to throw more light upon the subject, and to endeavor to establish a clearer line of surgical treatment in such severe and apparently hopeless cases than there seems to be at the present time. It does appear to me that some useful lives could yet be saved that are gradually frittered away, relying almost entirely upon nature to remove the trouble.

I refer, of course, to surgical interference. If a person receives an injury to the head, and there is depression of the inner plate producing unconsciousness and paralysis, we would not hesitate to trephine, and eventually save our patient. Why should not the same principle guide us in fracture-dislocations of the spine?

Why should we wait from five weeks to three months or more for nature to do what surgery could do better?

Valuable time may be lost and extensive damage done to the cord by degenerative changes that are so apt to follow such severe injuries. Too long pressure of simply smooth bone may produce persistent paralysis. Sharp spiculæ of bone may so injure the cord that its constant presence may produce abscess or softening of the spinal matter, or pent-up effusion of blood or serum may complete the compression which has not been entirely effected by the misplaced or fractured bone.

Surgery, in all probability, could relieve these dangers, and the inflammatory action which is so apt to follow such severe injuries.

Surely the dangers consequent upon the operation itself, in these days of clean finger-nails, night-robes, and sterilized waters, should not be put

* Read before the Ontario Medical Association, in Toronto, June 6th, 1894.

into the balance against the good results which may follow. Certainly, it would not cut much of a figure as against the prospects of from two to twenty-five years of a paralyzed, miserable, and useless existence.

I do not intend going into the symptoms of the various degrees of spinal injury, but only to refer to the surgical part of those cases where paralysis exists. A person receiving a severe injury to the spine, and paralysis being present, what shall be our line of treatment? Where continuous paralysis exists, it is positively certain that the cord has either been lacerated or pressed upon by bone, fluid effusion, or a foreign body. If the paralysis comes on immediately after the injury, it is tolerably certain that it is due either to bony compression or laceration of the cord, or both. I know of no symptom or sign that would enable us to say with certainty which it may be.

After careful extension and counter-extension has been resorted to with no appreciable benefits following, why should we not be justified in cutting down and relieving the possible dangers of compression?

Exploratory incisions in abdominal operations are to-day countenanced, and give us the satisfaction of a closer inspection and a definite conclusion as to the nature of any obscure tumor. So would it be in compression and laceration of the cord. The operation could relieve any compression by removal of the posterior arches, and if laceration were present we would not be in any worse condition than before with a great deal of doubt as to the prognosis removed.

I am so convinced that this procedure would be a move in the right direction, from facts gained in two operations I have had the privilege to perform during the last four months, that a recital of them will be of interest in this connection:

On the 26th of January, 1894, Mr. John Lounsbury, æt. 50, of Burford township, was thrown down a steep embankment, alighting on the back part of his head, with the weight of his body thrown upon the cervical spine. He was picked up unconscious, and removed to his home a short distance away. When he had recovered from the stunning it was discovered that he was paralyzed from his arms downwards, and his head was thrown unnaturally forward. He complained of severe pain on motion over the seventh cervical vertebra. During the following three days the paralysis gradually extended to the arms, and the respiration was very much more embarrassed. On January 31st I first saw him. His face and eyes were very much congested, and blood was coming from his nose. The latter was no doubt due to defective respiration, which appeared to be almost entirely diaphragmatic; pulse, very weak, and 155; and temperature 104° F., evidently within a few hours of death. At the earnest solicitation of his family, and with the concurrence of Drs. Johnston,

Staples, and Taylor, the cervical vertebræ were exposed from the third to the seventh, and it was found that the vertebræ above the sixth were dislocated forwards, with a fracture of the right side of the arch or lamina of the fifth, a small spicula of which projected into the canal and against the cord, but there was no evidence that the cord had been punctured by it. The two superior articular facets of the sixth were easily seen, and the inferior facets of the fifth were advanced, and hitched in front of the superior ones. It was not possible to reduce the dislocation by extension and rotation of the head until an aneurism or pedicle needle (the only instrument that would suit the purpose I had with me) was slipped in front of the arch of the fifth, and upward and backward traction made with extension and rotation of the head, when it came to its natural position with a snap, but on a slight movement of the head forwards it became redislocated. The posterior common ligament, the ligament sub-flava, and capsular ligament being torn, the sheath of the cord was exposed, very much inflamed, with a quantity of bloody fluid about it. There was no object in removing the arches, as the reduction was easily accomplished. A silver wire could have been twisted around the spinous process of the fifth, and drawn tightly around the spinous process of the sixth, holding the bones admirably and firmly in position, had not the spinous process of the sixth been cut off. The wound was washed out with a bichloride solution, a drainage tube inserted, and the wound closed by a double tier of sutures. He was bound to a padded fence board like an Egyptian mummy and put into bed. His breathing was very much improved, the congestion of the face disappeared, and he was able to direct the disposition of his affairs, and expressed himself as much relieved from pain. He lived about nine hours after the operation without having gained any muscular power in the arms or legs. His respiration was improved, no doubt from the relief of pressure to the nerve strand which emerges at the opening between the fourth and fifth vertebræ which goes to form the external respiratory nerve, and supplies the serratus magnus. The increased action of this muscle upon the ribs was the only perceptible effort of renewed muscular action. No improvement in sensation.

Query: Would it have been better to have operated sooner?

CASE 2 was one where an engine driver named William Turney, æt. 36, was running out of Rochester about two years ago, and, during a stop, was cleaning his engine, when a train shunted in behind, knocking him on to the roadbed, the engine doubling him up beneath the cow-catcher, producing a fracture-dislocation between the eleventh and twelfth dorsal vertebræ. He became immediately paralyzed from that point down, was taken to the Rochester city hospital, where extension and counter-extension were applied. He went through the usual symptoms in such cases of

irritable bladder, insomnia, huge bedsores, etc., without the slightest relief to the paralytic symptoms, the bones becoming consolidated.

He being particularly solicitous for an operation, laminectomy was done on May 25th last, with the assistance of Dr. McKay, M.P.P., Ingersoll, and Drs. McLurg and Rice, of Woodstock. An incision six inches long, over the spinous processes, was made, and the muscles and tendons cleared from the spinous processes and laminæ. The posterior arches of the eleventh and twelfth vertebræ were removed just internal to the transverse processes, thoroughly exposing the cord for about four inches. The sheath of the cord was so adherent to the arches, owing to inflammatory action, that the spinal marrow was exposed in their removal. A probe was now introduced several inches up the posterior surface of the cord, and the same in the lower part meeting with no obstruction, it showed that there was no angular projection of bone into the canal behind. The wound was treated in the same way as in the other case. On May 28th, three days after the operation, he was able to move all the toes of the right foot; on May 31st the foot could be slightly flexed upon the leg. There was a slight return of sensibility on a line two and a half inches lower than before. There has been no improvement in the left foot; all other symptoms remained unimproved, excepting lightning pains in the abdominal walls, below the navel, which made his life almost unbearable; these disappeared after operation, and did not return. During the operation his pulse ran up to 165, but during convalescence his temperature was not above 100° F., and pulse 110.

Query: Should this operation have been done earlier?

[N.B.—Since this paper was read before the Ontario Medical Association great improvement in nearly all his symptoms has taken place. He can move his right and left legs equally well from one side of the bed to the other, is gaining more power (natural) over the bladder and rectum, and in the short time since the operation the case has been attended with most gratifying success.—A.B.W.]

INFLUENZA: ITS GENERAL FEATURES.*

By L. M. Sweetnam, M.D.,

Lecturer on Therapeutics in the Woman's Medical College; Surgeon to the Outdoor Clinic, Toronto General Hospital; Surgeon to St. Michael's Hospital.

Mr. President and Gentlemen:

I TAKE it for granted that the committee, in asking me to open the discussion upon influenza, intended that I should limit myself to a general sketch of the subject; and prompted by a desire to respect that wish, my paper has become suggestive rather than exhaustive.

Influenza, or the modern plague, as it is sometimes called, certainly is not a modern development. We have descriptions of it from the earliest times. For the past 300 years it has been epidemic in Europe about eight times in each century, and since the year 1173 it has been pandemic fifteen times.

It probably first appeared in America in 1627, when it visited the New England States, the West Indies, and South America. While a moderate temperature, with moisture, would appear to favor the spread of the disease, having become epidemic, it moves on independent of climate, season, or soil, travelling against as well as with the wind. The present epidemic appeared to originate in Bokhara in May, 1889, and reached New York in December of the same year; since that time it has been more or less constantly with us during the colder months of the year.

For centuries, epidemic after epidemic passed over Europe without leaving any clue to its origin, or the way in which it was propagated. Many attributed it to meteorological conditions, despite the fact that these were different with each epidemic. Others traced it to a miasmatic material in the atmosphere; but as the number of specific diseases increased and were more closely studied, it was noticed that, like them, the influenza travelled with a velocity that corresponded closely with the rapidity of travel. In Russia and Siberia it moved slowly, but as the network of railways was approached it spread more rapidly, and always along the lines of travel. Like smallpox and diphtheria, it was accompanied by complications and sequelæ which, in the case of these diseases,

*Read before the Ontario Medical Association.

was proven to be due to the presence in the blood of a toxine, the product of a specific micro-organism; and so it has grown more and more difficult to resist the conclusion that influenza, like them, was due to an organized virus; that it was a disease "propagated by contact, evolved by the intrinsical operations of a specific poison, and distributed through the ordinary channel of intercourse."

So it was a matter of but little surprise when, in 1892, Pfieffer and Canon, of Berlin, announced that they had discovered a bacillus which they believed to be the specific cause of the disease. Pfieffer claims that this is the specific cause of influenza in man, for the following reasons:

(1) They were found in all uncomplicated cases of influenza examined; they were frequently situated in the protoplasm of the pus corpuscles; in fatal cases they were found to have penetrated through the bronchial tubes into the peri-bronchitic tissue, and even to the surface of the pleura, where in two cases they were found in pure cultures in the purulent exudation.

(2) They were only found in cases of influenza; numerous experiments proved their absence in ordinary bronchial catarrh.

(3) The presence of the bacilli corresponded with the course of disease. They disappeared with the cessation of the purulent bronchial secretion.

The prognosis in uncomplicated influenza is good, however desperate the condition may appear, except when met with in the aged, with organic heart disease, cardiac degeneration, or senile weakness. Influenza is certainly a severe test of the vitality of the old, and those advanced in years rarely come through an attack without material impairment of health. All diseases are liable to be complicated in course, by the development of influenza, and many cases pass on to a fatal termination which, were it not for the influenza, would have made a good recovery. The occurrence, then, of influenza, despite the low mortality rate of one per cent., is serious. It leaves the patient in feeble health, and this condition powerfully predisposes to disease. Those who have suffered either from influenza lung, or pneumonia proper (as a complication of influenza), however insignificant the lung difficulty may have been, seem particularly prone to take on tubercular diseases; and where the presence of this disease has been already demonstrated, its course becomes much more rapid.

Influenza is an acute affection, caused by a specific bacillus, marked by catarrhal, gastric, and nervous symptoms, and showing a marked tendency to develop cardiac asthenia and pneumonia. The prominence, as well as the severity, of the different symptoms varies with the epidemic. While the average attack presents the symptoms of an ordinary coryza, the sneezing and coughing so often the subject of jocular remark are not at all essential symptoms of the disease. In the severer cases the coryza may be absent, and the symptoms are those of acute infection.

So that it is the coincidence of the symptoms which establishes the diagnosis. The nervous symptoms, too, enable us to distinguish influenza from other catarrhal affections. We have headache, usually frontal, wandering pains, as well as those which seemed to take up permanent quarters along the course of the spine, deep-seated bone and muscular pains, a nervous depression altogether out of proportion to the other symptoms (and related, perhaps, to a gastric, hepatic, or intestinal catarrh), which not only brings about an indifference to life, but even a positive desire for the long rest, and too often leads to self-destruction. In the very young I have seen a nervous condition prompting the child to bump its head upon the wall or floor in sheer desperation. These symptoms gave way promptly to bromides and hyoscyamus, and, like other functional troubles, often appeared worse every alternate day. If the trachea and bronchi are not involved from the start, they become so by extension. The catarrhal condition of the respiratory tract distinguishes itself by its universality, extreme irritability, persistence, and tendency to involve the capillary bronchi. Pneumonia and broncho-pneumonia are the most commonly met with complications of the influenza, and then require even more active treatment than when they develop independently of this disease. The cardiac asthenia develops early, while the inflammatory condition subsides more slowly than under ordinary conditions, so that supporting and tonic treatment are indicated almost from the very start. DaCosta describes a lung condition frequently met with in influenza, commonly but incorrectly regarded as pneumonia. "We have then an intense congestion, rapid breathing, persistent cough, fine râles, slight impairment of resonance at the base, with feeble breath sounds; the expectoration is tenacious, but not rusty; if blood be present in the sputum it is in streaks, or in such quantity as to give the sputum the appearance of being made up almost entirely of blood. This is a condition in which the prognosis is much more hopeful than in pneumonia, although pneumonia, especially in those advanced in years, is very apt to develop out of it." The cardiac weakness, sometimes so alarming, even during the acute stage, appears to be due to toxemia, and the weakness and irregularity developing after the acute stage has passed over are probably due to nutritional changes. In some cases we have a blueness of the surface, especially of the fingers, suggestive of Reynaud's disease, due to vaso-motor disturbance, and quite independent of heart weakness.

Delirium in the adult is uncommon, and leads to a more grave prognosis. Coma is met with in cases which afterwards make a good recovery. In one of my cases coma developed in a few minutes without warning, was so complete that needles could be passed into the limbs without any evidence of suffering. The respiration was slow and shallow, and the

pulse at the wrist almost imperceptible. Dissolution seemed so certain and so near that funeral arrangements were made, and yet, after ten or eleven hours, consciousness returned, and the patient recovered.

Another young man became comatose without delirium, the limbs became relaxed, and no muscular action could be provoked. On being placed in the ambulance, that he might be moved to the home of a relative, he appeared distressed, and moved his head. Some twenty hours later he regained consciousness, and afterwards explained that he had had a lifelong dread of being buried alive, and that he must have dreamed that he had been in a hearse, although it appeared almost too realistic to be explained in that way.

The temperature in influenza is not usually alarming in uncomplicated cases. In children it runs higher than in adults. While this statement is true in the main, in some localities the temperature has been exceedingly high, and in twenty-four or thirty hours life has been crushed out by an intense toxemia, the temperature being in the neighborhood of 107° or 108°. The temperature appears to bear some relation to the amount of muscular exertion indulged in. In some cases the temperature appeared unsettled after the disease had apparently passed over, and for weeks, if not months, did not recover its usual uniformity.

A manifest heart weakness often gives a serious aspect to a case of influenza otherwise very mild. The tendency to cardiac asthenia is almost constant in the most severe cases, and is apt to be advanced to irregularity in the presence of pulmonary obstruction.

In the epidemic of 1889-90, many suddenly fatal cases were reported. In some fatal syncope occurred while the patient was upon the night stool, and in others while sitting up to take a dose of medicine. That the circulation is materially disturbed is proven by the quickened and often irregular pulse, and, on auscultation of the heart, irregular murmurs, with a defective first sound and a sharp second, tell of work done under difficulties. A want of synchronism suggests implication of the cardiac ganglia. In the old, intermission and irregularity is noted; in the young, simply increased frequency, with weakness.

As in other diseases due to the presence of a specific organism, cases of influenza are apt to develop nephritis. We may have simply an intense hyperæmia, or a catarrhal and croupous nephritis, as shown by the presence of albumen and hyaline casts. These evidences of actual kidney involvement are not persistent, usually passing off with the attack, and, while commonly seen in the more severe attacks, are not related to the nervous symptoms. When influenza attacks a woman during the menstrual period, as it very frequently does, increased pain and excessive flow are the usual result. Pregnancy secures no immunity, and I am inclined to think that

during the first three months abortion is more apt to occur than not, the emptying of the uterus being due, in my opinion, to excessive contraction from toxine irritation, not from any disease of the decidua, or death of the fœtus, as some cases, taken early, placed in bed, and kept upon uterine sedatives, overcame the tendency to abort, and went to term. After the fourth month a tendency to miscarry is much less marked, occurring before delivery, and extending into the puerperium, or commencing during puerperal period it may simulate sepsis, but the persistence of the lochia, moderate temperature, the bronchitis, depression, muscular pains, cephalalgia, enable one to diagnose influenza. Fatal cases have been reported, and we were unfortunate enough to meet with one, occurring on the third day, from heart failure, the influenza antedating delivery. The patient had been in poor health for some months, and came of a distinctly neurotic family.

"The evil that men do lives after them," and, as Gowers has very well added, "this is as true of individual maladies as individual men." Perhaps no disease is so often followed by sequelæ as influenza. Two facts worth remembering in this connection are: (1) That the most troublesome sequelæ may follow the mildest attack of the influenza; (2) that the second or third attack is more liable to develop these sequelæ than the first. The sequelæ most frequently met with are primary neuralgia (independent of neuritis), post-influenzal supraorbital, supramaxillary, ophthalmic, cervico-occipital, and cervico-brachial neuralgia. We have also intercostal neuralgia, sometimes so intense as to cause gasping dyspnœa. We, too, have fibrous rheumatism as a sequel of influenza, chronic rheumatism of the fibrous tissue of the erector muscles of the spine. This inflammation, spreading downward along the fascia at the sciatic notch, may attack the sheath and interstitial fibrous tissue of the nerve, giving rise to sciatic neuritis, with all its well-known and intractable symptoms. Among the other nervous sequelæ we have peripheral neuritis, which differs from that induced by simple poisons, as alcohol and arsenic, in that it involves, sometimes, the muscles of the face. The systemic condition, of which the fibrous rheumatism is but a local indication, is probably brought about by degenerative changes in the organs interested in the elaboration of food, and also by an altered tissue change, these combining to bring about a form of toxemia with which the excretory organs are unable to cope.

As has been proven by post-mortem examinations, serious lesions may occur to the spinal cord and its meninges, and, if this be true of the cord, it is probably also true of the cerebral and sympathetic centres as well, and also of any portion of any nerve's trunk. While many illnesses are distinctly traceable to the influenza, others, no doubt, so explained,

develop out of the weakness consequent upon the disease, but have no direct connection with it. There have also been cases of latent disease so slightly developed as to have altogether escaped notice, which, during or after an attack of influenza, have taken increased activity, and, when discovered, have very naturally, but none the less incorrectly, been attributed to the epidemic.

Except at the beginning of an epidemic, typhoid is the only disease likely to be confounded with influenza, and the marked nervous depression and dejection enable one early to say it is influenza, and it is not typhoid. In children the symptoms are not so easily interpreted; the severe and persistent vomiting suggest meningitis; the vomiting, pharyngitis, coated tongue, and, perhaps, an indistinct rash, for a time make it difficult to exclude scarlet fever. But the after history and the development of other cases of influenza in the same family clear up the diagnosis.

The temptation to use the combined antipyretics and analgesics, phenacetine, antipyrin, and antifebrin, is very great, but these must be employed with extreme caution. Both heart weakness and pulmonary stasis, with œdema, the commonest causes of death in influenza, are intensified by what is commonly considered a very moderate use of this class of remedies. The first and most important element in the treatment of influenza is rest—rest of mind and body as nearly absolute as possible. Next in importance to rest I would place a milk diet, or one made up of milk, eggs, and farinaceous substances, alone or in combination. Milk possesses the advantage of being a mild diuretic, removing waste products. Relapses have been explained by an ill-timed meat meal. Food should be given in small quantities and often. The room is to be kept warm, and the fever, if excessive, to be met with by cold sponging, or one-grain doses of phenacetine, frequently repeated, in combination with alcohol. If there be much gastric disturbances the milk had better be peptonized, and the eggs if given, followed by a preparation of pepsin and bismuth. If the intestinal digestion be at fault, salol and soda, or rhubarb and soda, answer well. If there be diarrhœa, it is promptly corrected by benzo-naphthol and bismuth salicylate in capsule. Only the mildest purgatives are admissible.

Where we have to contend with either form of pneumonia, or the influenza lung, the pneumonia jacket ought to be applied early. Dry cupping is a favorite remedy with many. The wet cup, even in those cases in which cyanosis with a distended right heart indicate obstruction, does not give the relief that might be expected of it. Alcohol is of decided value, and is to be given earlier than in cases of pneumonia without the influenza. If the lung complication be at all extensive, quinine and salts of ammonia will be indicated; but if the stomach be irritable, we shall have to fall back upon strychnine, or a combination of strychnine with Basham's mixture, and, perhaps, strophanthus.

For the heart weakness, independent of lung complication, alcohol stands first; caffeine citrate in small doses, and not too near bedtime, where there is reason to suspect dilatation.

Cactus grandiflora and nitro-glycerine have been found especially useful in those of advanced years, the former to correct post-influenzal irregularity; the latter where there is reason to suspect an anginose condition, cardiac or peripheral; atropia where there is intermission with or without irregularity. Strychnine in tonic doses is useful to all in the absence of tendency to angina; and lastly, but not least important, I would say, encourage cheerfulness, and avoid frequent or prolonged heart examinations.

Selected Articles.

THE DIETETIC TREATMENT OF DIABETES MELLITUS.

TWO well-marked forms of diabetes mellitus have long been recognized: A mild form, in which a strict diet (containing no carbohydrates) causes the sugar to disappear from the urine; and a severe form, in which complete exclusion of carbohydrates from the food does not arrest the sugar excretion. In the severe form frequently there is great wasting and loss of strength; acetone and diacetic acid are very often present in the urine. The value of a strict diet in the mild forms is generally acknowledged, but for some years the opinion has gradually been gaining ground (especially in Germany) that a very strict diet is dangerous in the severe forms of diabetes. Recently a number of valuable papers and monographs have appeared in Germany on this subject.

Leo has pointed out that in the majority of severe cases of diabetes there is a great increase of the nitrogenous metabolism, and, as a result, a great loss of strength. The aim of treatment ought to be to diminish not only the excretion of sugar, but also the nitrogenous metabolism.

The fatty foodstuffs are well known to diminish the nitrogenous metabolism, and Leo has shown that carbohydrates have a similar action (albumen-sparing influence). This action of the carbohydrates Leo has demonstrated in two severe cases of diabetes. For some days the patient was kept on a uniform diet, rich in albumen, but containing very little carbohydrate. The nitrogenous excretion was estimated, and after this had become uniform a definite quantity of carbohydrates was allowed in addition to the previous diet. The nitrogen in the urine and fæces was carefully estimated, and the results showed that the nitrogenous excretion in the urine was diminished distinctly when the carbohydrates were added to the food.

Careful observations have shown that improvement may occur, and the patient gain in weight, in severe cases of diabetes when carbohydrates

are allowed, even though the amount of sugar may be increased in the urine.

The author believes that this improvement is in part due to diminished nitrogenous metabolism, to a limitation of albumen destruction, brought about by the above-mentioned albumen-sparing action of the carbohydrates.

Hence, in the treatment of severe cases of diabetes, not only should the sugar excretion be daily estimated, but also the general condition of the patient, the body weight, and the quantity of urine and nitrogenous waste should be carefully watched. These latter should be taken as a guide in treatment, as well as the amount of sugar excreted.

Ebstein long ago pointed out the great danger of a rigid albuminous diet in severe forms of diabetes. He also draws attention to the danger of placing the patient suddenly on a strict diet, in order to determine to which variety of diabetes the case belongs. This sudden change would not be dangerous in a mild disease, but in the severe form of the disease might lead to coma. Ebstein changes the diet gradually, the more slowly the more serious the case is. In serious cases, he employs an albuminous diet very gradually. The milder the case is, the more rigidly ought a diabetic diet to be enforced. The presence of acetone or diacetic acid (as shown by Gerhardt's reaction, brownish-red coloration with perchloride of iron) is an indication that a strict diet would be dangerous. The appearance for the first time, or the increase, of these substances in the urine is an indication for diminishing the albumen and increasing the carbohydrates in the diet.

Hirschfeld has shown that acetonuria can be produced in healthy persons by a diet consisting of albumen and fat only. The addition of carbohydrates to the food prevents the occurrence of acetone in the urine. When acetone is present in a large quantity in the urine, diacetic acid is also found.

In those cases of diabetes in which the carbohydrates are for the most part no longer burnt up in the system, a large quantity of acetone is often found in the urine, in spite of the carbohydrates in the food. When the diet contains a very large amount of carbohydrates, or when glycerine is added to the food, the acetone or diacetic acid diminish in the urine.

Hirschfeld believes that, in diabetes, coma is favored by the exclusion of carbohydrates from the diet. In cases of diabetes in which the excretion of acetone is great, a strict diet ought not to be advised, but moderate quantities of carbohydrates should always be allowed. When early symptoms of coma appear, Hirschfeld also suggests the use of glycerine (100-150 grammes daily, in black coffee), since he found in the experiments on healthy persons above mentioned that glycerine causes the acetone to disappear from the urine.

Hirschfeld does not recognize any form of acetonuria except the diabetic. In all other diseases (fever, cancer, and diseases of the stomach) in which acetonuria has been described, he believes the condi tion to be due to deficiency of carbohydrates in the food. In all cases of this kind a diet containing carbohydrates (starch and sugar) causes the acetone to disappear.

Schmitz has drawn attention to the danger of an unduly large amount of animal food in diabetes. The stomach is unable to digest such large quantities, which pass into the intestines undigested. As a consequence, putrefaction occurs, and poisonous substances are formed and then absorbed into the blood. Schmitz believes that diabetic coma is due to the absorption of these toxic substances.

Schmitz points out the difference in the day urine and night urine in the mild and the severe forms of diabetes. In the severe forms of diabetes, the night urine (*i.e.*, that passed in the morning before breakfast—about eight hours after a meal) contains the greatest amount of sugar; whilst the urine passed after breakfast and in the course of the day up to bedtime, contains, as a rule, less sugar, even though carbohydrates are taken during the day. In the mild form of glycosuria, in which the sugar is formed from the carbohydrate of the food, and not from albumen, the condition of the urine is otherwise. The night urine contains constantly much less sugar than the day urine, and is often quite free from sugar; whilst the sugar eaten during the day appears in the urine a few hours after it is taken.

Sugar appearing in the urine eight hours after a meal is formed from albuminates, and is a special sign of the severe form of diabetes.

In the mild forms of glycosuria, by a strict anti-diabetic diet, the sugar in the day urine diminishes, and in a short time disappears entirely; whilst in the severe forms, the sugar of the night urine (the urine passed about eight hours after the last meal) is diminished very little or not at all, and if much albumen has been taken during the previous day it may be increased, even though carbohydrates have been absent from the food.

Also in the severe forms of diabetes, acetone and diacetic acid are present in the urine in considerable quantities; whilst they are absent, or only very seldom present, in mild forms. The well-nourished condition of patients in the mild form is pointed out, and the severe general symptoms in the grave forms are referred to. Owing to these clinical differences Schmitz thinks that the origin of the disease is not the same in these two groups.

By a strict diet the best results are obtained in the mild forms of the disease; but in the severe forms a pure animal diet is directly injurious,

both as regards the general condition of the patient and the amount of sugar in the urine.

In the severe form of diabetes, Schmitz allows his patients to take food containing starch, and fat in large quantities, but only a small quantity of albumen. By such a diet he finds that the general condition of the patient is much improved. The body weight and the appetite increase; acetone and diacetic acid disappear from the urine, or only traces remain; and, in spite of carbohydrates in the food, the sugar diminishes. Schmitz only allows food which contains sugar when the amount contained is very small, but foods containing starch he allows (though never in very great quantities). The withdrawal of starch-containing food he regards as injurious in this severe form of the disease.

Illustrative cases of severe diabetes are given, showing how the general symptoms and the glycosuria became worse on a strict diet containing a large quantity of animal food and green vegetables, whilst by limiting the animal food and allowing starch-containing food the general condition improved, and the sugar in the urine diminished.

Schmitz, Klemperer, and others, have drawn attention to the great value of cod liver oil as a fatty food in diabetes. This is an old remedy, which strangely has never been largely employed in the treatment of diabetes. If the patient cannot take cod liver oil, lipanin may be given in its place

Schmitz considers all fruits and other articles of food containing the various forms of sugar most injurious. Starch is the only carbohydrate which he would allow, and he considers that a certain amount of starchy food is necessary for every man.

In severe cases of diabetes, therefore, Schmitz would allow starch-containing food, which he considers of great importance, but he would limit the amount of animal food. Whilst in the mild cases of diabetes he would almost reverse the treatment, and withdraw carbohydrates from the food, *i.e.*, he would give the usual strict diet.

Karl Grube, of Neuenahr, has also drawn attention to the importance of carbohydrates in severe cases: "It has long been known from experience that in very advanced cases, in which diabetic coma is imminent, it is absolutely necessary to give chiefly food containing a large quantity of carbohydrates." He refers to the experiments of Hirschfeld above mentioned.

In severe cases, in which acetone and diacetic acid are present in the urine, and in which there is great danger of diabetic coma, Grube believes that the only way to prevent the acetonuria developing into diabetic coma is by impregnating the system with carbohydrates A case is reported in which, after a rigid diet, symptoms pointing to commence-

ment of diabetic coma developed. Grube advised the patient to take but little meat or fish, once a day, no eggs, but as many potatoes as he liked, and one ounce of bread twice a day. Afterwards half the amount of bread was allowed. The patient improved very much, and the sugar in the urine diminished; the improvement had continued three months later. Grube believes it to be one of the greatest mistakes, in severe and advanced cases of diabetes, to keep the patient on a diet consisting purely of meat, fish, eggs, and such substitutes for bread as gluten bread, etc. In these cases Grube allows potatoes at least twice a day in moderate quantities. Three other cases are reported as examples of the value of carbohydrates (in the form of potatoes) in the severe forms, where there are symptoms pointing to the onset of diabetic coma.

In the mild forms of the disease the great value of rigid diet is generally acknowledged; but even in this form there is a tendency to regard, as the essential point, great limitation of the carbohydrates, rather than total exclusion. The chief difficulty in a rigid diet—*i.e.*, one from which carbohydrates are excluded or greatly limited—is met with in regard to bread.

Many substances have from time to time been employed (gluten bread, bran cakes, almond bread, etc.). The great objections to these breads are: (1) They are mostly exceedingly expensive; (2) they are often very unreliable; (3) they are not tolerated for any length of time by the patient. With a very little trouble a diabetic patient can have a number of diabetic breads and cakes prepared at his own home, and such home-made preparations are more reliable, less expensive, and more palatable than the majority of those so largely advertised by various firms. Ebstein has drawn attention to the value of a substance named, in Germany, aleuronat (*aleuron* = flour). This is a vegetable albumen prepared from wheat by a chemist, Dr. Hundhausen. From this substance bread can be baked by the addition of ordinary flour. It is a cheap form of albumen, and can be used as a substitute for ordinary flour in the preparation of soups, sauces, etc. It is a yellowish powder, and contains from 80 to 90 per cent. of albumen in the dry substance. (Aleuronat can be obtained from R. Hundhausen, Hamm, Westphalia, Germany. A parcel containing 4½ kilos. is sent, post free, for seven shillings.)

Ebstein gives directions for the preparation of aleuronat breads containing 27.5 per cent. and 50 per cent. of albumen in the dry substance.

The following are the directions for the preparation of bread containing about 50 per cent. of albumen in the dry substance. Aleuronat and white flour are mixed in equal quantities:

200 grams white flour = about 7 oz.
200 grams aleuronat = about 7 oz.
125 grams butter (of the best quality) = about 5 oz.
1 teaspoonful of salt.
20 grams of baking powder.

The flour and aleuronat are mixed in a dish warmed to a temperature of about 30° C., and the melted butter and milk (made lukewarm) gradually added, then the salt, and finally the baking powder (one part of sodium bicarbonate and two parts of cream of tartar). The dough is well mixed, then formed into loaves, and baked at a good heat.

I have recently had prepared cakes composed of aleuronat and cocoanut powder. These are very palatable, very cheap, and are practically free from starch :

2 oz. of the finest desiccated cocoanut powder.
2 oz. of aleuronat.
1 egg.
A little milk.

The egg is beaten up, and the aleuronat and cocoanut powder added, together with a very small quantity of milk. The mass is stirred together until a dough is formed. This is cut into thin cakes and baked. The addition of milk is not necessary.

[Fine desiccated cocoanut powder can be obtained from Messrs. Lyon & Sons, 4 Bath Passage, Birmingham, price 4½d. per lb., in tins containing 112 to 130 lbs.]

Pavy long ago recommended almond cakes as a substitute for bread in diabetes. The sweet almond contains 9 per cent. of sugar and dextrine, but by washing the meal with boiling acidified water the greater part of the sugar is extracted. Almond meal washed in this manner is almost free from carbohydrate. It contains 24 per cent. emulsion and 54 per cent. of fat.

Owing to the large quantity of fat which they contain, these almond cakes are not easy to digest. Another objection is the price. Only wealthy patients can afford them.

Seegen gives the following directions for the preparation of almond cakes :

125 grammes (about ¼ lb.) of sweet almonds are ground as fine as possible in a stone mortar. To remove the small quantity of sugar which the almonds contain, the pounded mass is enclosed in a linen bag, and this is soaked for a quarter of an hour in boiling water to which a few drops of acetic acid have been added. The almond meal is then mixed well with 3 oz. of butter and 2 eggs. Then yellow of 3 eggs and some

salt are added, and the mixture thoroughly well beaten up. The white of three eggs is beaten up into a froth and then mixed with the above. The mass is divided into cakes and baked by a gentle fire.

Saundby gives the following directions for the preparation of almond cakes :

1 lb. of ground almonds.
4 eggs.
2 tablespoonfuls of milk.
A pinch of salt.

Beat up the eggs and stir in the almond flour. Divide in 12 flat tins, and bake in a moderate oven for about 45 minutes.

A pound and a half of cakes prepared in this manner costs 1s. 9d.

Saundby also gives directions for the preparation of cocoanut cakes :

¾ lb. finest desiccated cocoanut.
¼ lb. ground almonds.
6 eggs.
½ teacup of milk.

Beat up the eggs, and stir in the cocoanut and almond flour. Divide into 16 flat tins, and bake 25 minutes in a moderate oven.

Desiccated cocoanut costs 4½d. per lb., and the cost of 1½ lbs. of the above cake is 1s. 2d.

In Iceland and Lapland, Iceland moss (cetraria), deprived of its bitter principle, is used as an article of diet. The soluble portion is taken up by boiling water, and the decoction, in cooling, thickens and deposits a gelatinous mass. The soluble gelatinous substance is known as lichenin.

Saundby has published directions for the preparation of a pudding made from Iceland moss, which is much appreciated by diabetic patients.

For three hours the Iceland moss is soaked in water, then boiled in milk for three-quarters of an hour, strained, and poured into a mould and allowed to go cold. It may be sweetened, if necessary, with glycerine or saccharine.—R. T. WILLIAMSON, in *Medical Chronicle.*

A WORD IN SEASON TO BATHERS.

OWING to the inclemency of the season bathing machines, even on the south coast, are yet few and strange, like early swallows in the spring. The postponement of the bathing season, however, is not without compensating advantages. A series of observations recently made at Peterhead by the Scottish Meteorological Society every day during a period of four years and nine months show that the summer warmth penetrates the sea very gradually. The sea water attains its maximum warmth only at the end of August. From that time it becomes warmer than the air. The water also cools more slowly than the atmosphere, so that in November the average temperature of the water is 6° and in December 7° higher than that of the air. The moral is that bathing is more dangerous on the warm days of early summer than on chilly days in the late autumn. The sea is as warm at the end of October as it is in the middle of June, and the period between these dates may be taken as the normal bathing season. In the case of persons of average health there is little fear of harm being done by bathing, if the precautions dictated by common sense and ratified by common experience are observed. One thing, however, which even experienced bathers often fail to realize is that swimming in the open sea is really a violent form of exercise. At the beginning of the season, therefore, it is well to acclimatize oneself by degrees, just as mountain climbers go through a little preliminary training before they get to business. It is in the early dips of the season that "cramp" is most to be dreaded. There is a good deal of misconception as to the nature of "cramp," which has led some persons, who, like the Homeric heroes, rejoice in their strength, to laugh at it as a "bogey." It may be admitted that ordinary cramp in the calf of the leg, though likely enough to give a timid person the notion that he is in the grip of some monster of the deep, is not a very formidable matter to any one in whom familiarity with the water has bred confidence. This is not, however, the "cramp" which makes a strong swimmer suddenly throw up his hands and sink at once to a watery grave. It is impossible to say with certainty what takes place in these circumstances. The accident is probably due to failure of the heart's action, perhaps the result of spasm of the cardiac muscle—

"cramp" of the heart. Another view is that the cause of drowning is perforation of the drum of the ear by the pressure of the water, followed by vertigo and sudden unconsciousness. However this may be, there can be no doubt that among the dangers of bathing a prominent place must be given to the possibility of mischief being done to the delicate structures of the ear. Dr. Laurence Turnbull, the well-known otologist of Philadelphia, has recently pointed out that if the water which enters the ears in bathing is not removed (by leaning the head on one side and drawing the external ear forcibly outwards, at the same time shaking the head and opening the mouth, also striking the ear with the palm of the hand) it is apt, as the water decomposes, to cause inflammation, followed by perforation of the membrana tympani; or the suppurative process, if neglected, may pass inward to the middle ear, cochlea, and labyrinth, destroying the organ of hearing, and finally implicating the brain. Dr. Turnbull gives a formidable list of diseases of the ear traceable to the abuse of sea-bathing —that is, bathing too frequently and remaining too long in the water. These range from impaction of wax to exostosis of the meatus, an affection which is especially common in those who indulge in the fierce delight of the "header." Dr. Turnbull advises that the ears, especially if they are at all tender or diseased, should always be protected in bathing. For this purpose, ladies should wear an oilskin cap covering their ears, and men should close the aperture of the ear with a piece of cotton wool or other simple plug, which can be taken out on leaving the water. For surf bathing especially, and for those who like to float on their backs, such protection of the ears is a necessary measure of precaution.—*Editorial Note in British Medical Journal.*

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MEDICINE

IN CHARGE OF

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Cirrhosis of the Liver.

Dr. Graham Steel, after relating a cure of cirrhosis of the liver complicated by septic endocarditis, makes the following comments: The case above related is the first under my own observation in which ulceration or septic endocarditis had been the apparent cause of pyrexia in the course of cirrhosis of the liver. It would seem that in a few cases interstitial hepatitis itself is accompanied by a certain amount of pyrexia, as in a case referred to in the appendix of Murchison's "Lectures on Diseases of the Liver," but long-maintained fever should always lead to the suspicion of complication,* and in my experience tuberculosis of the peritoneum (with or without tubercle in the lungs or elsewhere) is one of the most common complications. I have met with this complication in quite elderly people, as well as in younger, the lungs being unaffected. We are almost forced to the conclusion that cirrhosis of the liver in some way predisposes to the development of tubercle in the peritoneum, and, in relation to the venous stasis, it is curious to note that venous stasis is supposed to be inimical to the deposition of tubercle in the lungs, so as to explain the rarity of pulmonary tuberculosis in combination with heart disease. There is a widely-spread popular belief that alcohol protects from "consumption." My experience would lead me to the opposite conclusion, provided that the alcohol is taken to excess. I readily admit

* I do not refer to cases of obstruction or irritation of the biliary passages.

that alcohol is often most useful in the carrying out of the "restorative" treatment of pulmonary tuberculosis, which aims at promoting the "resisting power of the tissues." But this is a different matter from the abuse of alcohol, which almost invariably leads to interference with the taking of food, and to a depraved nutrition, associated with lowered vitality, and, consequently, diminished resisting power. Alcohol unquestionably relieves a laboring heart for the time, whether by directly stimulating its contraction or by indirectly lightening its burden by virtue of peripheral vessel dilatation we need not stop to discuss. But, quite as unquestionably, the abuse of alcohol—the habit of alcoholism—acts injuriously on the heart, and ultimately leads to heart failure. Alcohol, again, may enable an anæmic brain to do better work for a time by "flushing" the organ, but I think it is the experience of most of us that in the end the function of the brain cells is impeded rather than promoted by it. I fancy there are very few individuals who can put forth their best mental work under the brain-flushing influence of alcohol, and not one who derives benefit from its influence on the brain cells themselves. It has always seemed to me that opium is a much more "intellectual" stimulant than alcohol. I would even deny that alcohol is an "intellectual" stimulant at all save by its brain-flushing property. Its action on the protoplasm of the brain cells seems to be all in the opposite direction. Within the last twelve months two typical cases of alcoholic heart failure under my observation, after recovery from the cardiac condition, have died of tuberculosis—one, in middle life, of very acute tuberculosis; the other older, of a less acute tuberculosis. I only state these facts, and draw no conclusions from them. My present belief is that the abuse of alcohol, by promoting a depraved nutrition, renders the organism susceptible to the attack of tubercle, but that the judicious use of alcohol may prove most valuable in the treatment of tuberculosis by promoting nutrition and thereby increasing the resisting power of the tissues. But my present subject is the frequent (from my own observation I am entitled to call it so) association of peritoneal tuberculosis with cirrhosis of the liver. When a high temperature is found in a case of cirrhosis of the liver, and there is no other obvious cause for the pyrexia, the possibility of tuberculosis should always be entertained, and this, too, whether evidence of pulmonary tuberculosis be present or absent. The dogma that when there is peritoneal tuberculosis there is also pulmonary tuberculosis is not infallible pathologically: it is still less reliable clinically, for a focus of disease in the lung is often quite latent, both as regards symptoms and physical signs. The history, however, of such a symptom as hæmoptysis may prove of great value in diagnosis.—*Medical Chronicle.*

The Treatment of Pruritus Vulvæ.

(1) If diabetic, try specific treatment and diet, with warm lotions locally.

(2) If connected with a chronic eczema of the genital organs, a gonorrhœal vaginitis, a chronic vaginitis with leucorrhœal discharge or vaginismus (with hysterical symptoms), suppress all exciting diets. If there is abundant discharge, inject night and morning 3-4 pints warm (45°C.) permanganate of potash solution (1 : 1000). Use three times a day the following lotion:

Water	450 grams.	or parts.
Alcohol	50	"
Mercuric chloride	1	"
Indigo carmine	.05	"

If burning or itching come on (especially during second half of night) wash with water as hot as possible. Abstain from all pomades, ointments, etc., which by their fermentation, etc., increase the irritation.—*Medical Chronicle.*

THERAPEUTICS

IN CHARGE OF

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SOMATOSE.

Hildebrand (*Therapeutische Monatscheft*, June, 1894) strongly recommends the new preparation, somatose, in stomach and bowel troubles. It is more nearly allied to albumen than to pepton, and has none of the toxic effects of pure pepton. It is an excellent remedy against the loss of albumen in the body, and is well borne, even in very large doses, for a long time.

OREXIN, TENCRIN, AND PAPAIN.

These three remedies are mentioned as stomachics, improving the appetite and digestion.

Orexin has been strongly advocated, during the last two years, for increasing the appetite. Henzoldt recommends the basic orexin instead of the muriate because it is more agreeable to the stomach. He gives about five grains, finely powdered in water, with a cup of milk or bouillon, in the forenoon. In cases of very sensitive stomach, or if there be irritation of the kidney, he begins with smaller doses—about two grains. Much larger doses are also often given. The good effect is not noticed at once, usually not until the medicine has been given four or five days consecutively. Vomiting occurred in an occasional case, but disappeared after continued use. Orexin is not indicated in ulcus ventriculi and superacidity, but is especially indicated in anæmic conditions, in beginning phthisis, and cases of phthisis which run a very chronic course, in functional neuroses, and in convalescence. It was decidedly effective in twenty-seven out of thirty-seven cases, the success in many being very striking.

Tencrin (ext. tencrii scordii dep.) has been administered by Mosetig in doses of one and one-half grains with success.

Papain (from carica papaya). In catarrh of the stomach, carcinoma, ectasia ventriculi—in fact, in all diseases of the stomach in which meat gives rise to dyspeptic symptoms, Sittmann found tencrin to have good effect. It is a whitish-yellow powder, with a flavor of meat extract, whose special action consists in dissolving albumen. It is given in doses of five to eight grains, immediately after each meal. It relieves the pain in the stomach, and improves the appetite.

The Physiological Actions of Alcohol.

Dr. David Cerna, in a paper on the physiological action of alcohol, read at the Pan-American Congress, concludes his very able paper as follows:

(1) Alcohol in small amounts excites and in large doses depresses both the peripheral motor and sensory nerves.

(2) Excessive quantities cause a spiral degeneration of the axis-cylinder of nerve-fibres.

(3) Reflex action is at first increased and afterwards diminished by an influence exercised by the drug upon the spinal cord and the nerves.

(4) In small amounts the drug stimulates the cerebral functions; it afterwards, especially in large quantities, depresses and finally abolishes them.

(5) Alcohol causes lack of co-ordination by depressing both the brain and the spinal cord.

(6) In toxic doses alcohol produces hyperæmia of both brain and spinal cord, especially of the lumbar enlargement of the latter.

(7) Small doses of alcohol produce increased rapidity of the cardiac beat; large amounts, a depression of the same. In either case the effect is brought about mainly through a direct cardiac action.

(8) The drug in small quantities causes a rise of the arterial pressure by a direct action upon the heart; in large amounts it depresses the arterial pressure similarly through a cardiac influence.

(9) In large doses alcohol enhances coagulation of the blood; in toxic quantities it destroys the ozonizing power of this fluid, causing a separation of the hæmoglobin from the corpuscles.

(10) Alcohol in small doses has little or no effect on the respiratory function; in large amounts it produces a depression of both rate and depth of the respiration through a direct action on the centres in the medulla oblongata.

(11) The drug kills by failure of the respiration.

(12) On the elimination of carbon dioxide alcohol exercises a varying action, sometimes increasing, sometimes decreasing, such elimination.

(13) The action of alcohol on the amount of oxygen absorbed also varies, and may be said to be practically unknown.

(14) The drug lessens the excretion of tissue waste, both in health and disease.

(15) In small amounts alcohol increases the bodily temperature; in large doses it diminishes the same. The fall of bodily temperature is due mainly to an excess of heat dissipation caused by the drug.

(16) Alcohol, in sufficiently large amounts, has a decided antipyretic action.

(17) In moderate amounts alcohol aids the digestive processes.

(18) Alcohol diminishes the absorption of fats.

(19) The drug exercises a varying influence on the amount of urine secreted, but it probably increases the activity of the kidneys.

(20) In large doses, or when continuously used for a long time, alcohol produces cirrhotic changes of hepatic especially and paralysis of spinal origin. It also causes insanity, epilepsy, and other maladies.

(21) Alcohol is mainly burnt up in the system when taken in moderate quantities, but when ingested in excessive amounts it is partly eliminated by the breath, the kidneys, and the intestines.

(22) Alcohol is a conservator of tissue, a generator of vital force, and may therefore be considered as a food.—*Therapeutic Gazette.*

Compound Tincture of Coal Tar.

Dr. Louis A. Duhring and Mr. J. M. Baer, apothecary, have made a series of investigations with a view of obtaining the most desirable and elegant pharmaceutical and therapeutical preparation for external use. The result of their investigations is published in the *American Journal of the Medical Sciences*, May, 1894. After describing the methods of procedure in the experiments, and reviewing the different preparations now on the market, the following conclusions are arrived at:

Conclusions. Summing up the result of these investigations, we may conclude:

(1) That the best tincture of coal tar is made with the aid of tincture of quillaia.

(2) That the strength of the tincture of quillaia should be 1 : 4, with 95 per cent. alcohol.

(3) That the coal tar (1 part) should be digested with the tincture of quillaia (6 parts), with frequent agitation, for not less than eight days, and preferably for a longer period, and finally filtered.

(4) The resultant product is a brown-black, clear tincture, which, upon the addition of water, forms a cleanly yellowish emulsion, the color and certain other characters varying with the kind of coal tar employed.

(5) The tincture is stimulating, and is prescribed usually largely diluted, with from 10 to 60 parts of water, as a wash, and is useful where tar is indicated, as in certain forms of eczema, psoriasis, pruritus, and in other inflammatory diseases of the skin. It is often more useful when employed weak than strong.

(6) This preparation, which may be designated as "compound tincture of coal tar," takes the place of several similarly composed proprietary preparations known as "liquor carbonis detergens," and "coal tar saponiné."

Iodoform.

Formulæ in use by author. Iodoform gauze: Soak a piece of gauze, ten metres in length, previously sterilized by boiling in the following solution: Sulphuric ether, 700 grammes (22½ fluid ounces); glycerine, 100 grammes (3¼ fluid ounces); iodoform, 50 grammes (1½ fluid ounces). Wring out and hang up in a dark room at a temperature of 30° C. (86° F.). Ethereal solution of iodoform for injections: Sulphuric ether, 95 or 90 parts; iodoform, 5 or 10 parts. Iodoform vaseline: White vaseline, 90 to 97 grammes (3 to 3¼ ounces); triturated iodoform, 10 to 3 grammes (2½ to ¾ drachms). Iodoform collodion: Collodion, 10 grammes (2½ drachms); iodoform, 1 gramme (15½ grains). Hard iodoform crayons (formula of the Bichât Hospital): Powdered iodoform, 10 grammes (2½ drachms); gum tragacanth, 0.50 gramme (7¾ grains); pure glycerine, sterilized water, aa q.s. as little as possible. Soft iodoform crayons: Iodoform, 8 grammes (2 drachms); gelatine or cacao butter, 2 grammes (31 grains).—*Terrier, La Union Médicale*, December 30, 1893.

Treatment of Sunstroke.

The conditions of sunstroke are an immoderate heating of the blood, and, consequently, of the whole body. The heat stimulates the heart ganglia, and, through these, the heart muscle, which is already overworked, and paralysis of the heart, from exhaustion, follows. The immoderate heat also irritates the various nerve centres of the brain, and thus produces general convulsions, etc.

Koerfer (*Therapeutische Monatscheft*, June, 1894) prescribes prolonged chloroform narcosis to reduce the irritability of the heart ganglia and nerve centres, and then the ordinary therapeutic measures; *e.g.*, cool baths, large amount of fluids (per anum, if necessary), ether and camphor injections, etc. Hirschfeld recommends, instead of the cold bath, a prolonged warm bath, the temperature of which is very slowly lowered, and venesection, if there be œdema of lungs or brain.

Heart Disease.

Pawinski (*Therapeutische Monatscheft*) compares caffein natrio-salicylate with strophanthus and digitalis as follows:

In valvular diseases of the heart, with disturbance of compensation, digitalis and strophanthus are superior to caffein, but the latter can often do good service when the former are contraindicated.

In respect to regulating the heart rhythm, caffein is also inferior to the others; but in respect to excitation of diuresis, it is much superior. The best field for the administration of caffein is in diseases of the heart muscle, either functional or degenerative, and especially in the early stages of the disease. But in the later stages, when the heart, in consequence of progressive degeneration of the muscle fibres, is not able to perform its duty, and there are œdema, dyspnœa, and dilatation, then we must resort to digitalis.

Caffein is also indicated in acute insufficiency in patients whose circulatory system is otherwise healthy, such as after severe mental strain, moral commotion, and especially during fevers. In many cases, also, caffein produces a pleasant narcotic effect.

The Value of Boiled Milk as an Article of Diet.

Every practitioner of medicine knows that in the treatment of certain cases of diarrhœa, where an absolute milk diet is required, better results follow the use of boiled milk than of raw milk, and for this reason it has become a popular idea among the laity and members of the profession that cooked milk is the more digestible. However this may be in clinical experience, it is certain that experimental research does not justify this conclusion. Ten years ago the late Dr. Randolph, of Philadelphia, made an interesting series of experiments to determine this point. A number of men in perfect health were given raw milk to drink; an equal number, equally healthy, were given a similar quantity of boiled milk. An equal time after the ingestion of the liquid a hypodermic injection of apomorphine was administered to each, and a careful examination made of the vomited matters to determine how far the process of digestion had proceeded. In every instance it was found that the raw milk was more digested than the cooked, and as Randolph graphically expressed it: "We obtained proof that in making milk, nature made that compound most easy of digestion."

The experiments of Crolas, on the other hand, seem to point to a different result, for he believes as a result of his studies that boiling has no action whatever on the casein or lactose, and removes from the liquid a small quantity of butter, which is entangled with the film of albumin

which forms on the surface of the milk. He also thinks that boiling increases the quantity of the free soluble phosphates, and concludes, in opposition to the studies of Randolph, that boiled milk is equivalent, if not superior, to raw milk.

The correct solution of the problem probably lies in the class of cases to which the milk is administered. There is no doubt whatever that raw milk is more digestible than boiled to the healthy individual, and it is an undeniable fact that boiled milk is far more constipating, and that an attempt to place a patient upon a diet of boiled milk would more certainly tend to disorder digestion and assimilation than a similar attempt with the raw article. In Bright's disease, diabetes, and similar conditions in which a milk diet is desirable, we may therefore conclude that raw milk is the liquid to be employed, whereas, in cases of diarrhœa, the boiled milk is by far the best preparation. We have already pointed out in earlier leading articles that both raw and boiled milk have their digestibility very much increased by being somewhat diluted with any sparkling water, or by the addition of a sufficient quantity of salt to give a distinct flavor.—*Therapeutic Gazette.*

THE ADMINISTRATION OF SODIUM SALICYLATE IN RHEUMATISM.

In Ziemssen's clinic the salicylate of soda is given per rectum in cases where it is not well borne by the stomach, or from any cause administration per os is contraindicated. When necessary, the rectum is first cleared out, and then, by means of a 7-inch sound, a solution of six to eight grams natrio-salicylate in 100 c.c.m. of water, to which 1½ grams tr. opii is added, is injected. The results are excellent.

Ruel recommends, in such cases, the local application of acid salicyl., and claims as good results as when administered internally. The following salve may be used twice a day, and covered over with oiled silk or any impermeable stuff: Acid salicyl., 10 to 30 grams; alcohol abs., 100; ol. Riemi, 200; chloroform, 10 to 15. Bourget also found the external application of salicylic acid to the affected joint very effective, and recommends it very highly. He applies an ointment similar to the above, and combines with it the internal administration of 1 to 2 grams of salacetol daily.

Salacetol is a new salicylic preparation, which is highly recommended as an intestinal antiseptic.—*Therapeutische Monatscheft*, June, 1894.

OBSTETRICS

IN CHARGE OF

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THE TREATMENT OF SEVERE ALBUMINURIA ASSOCIATED WITH PREGNANCY.

In a paper read before the London Obstetrical Society, Dr. Herman concluded a valuable series of observations on albuminuria associated with pregnancy and labor. Every practitioner who observes his cases must have noticed that there are at least two main groups of kidney disease in this association. Albuminuria, in a more or less marked degree, is a very common complication of pregnancy, but in a large proportion, the majority, of the cases it does not lead to any of the graver symptoms to which pregnant albuminuric women are liable. In a certain number of such patients, however, not only is the disease acute in its onset and violent in its manifestations, but we get the dreaded eclamptic convulsions which threaten the life of the mother and jeopardize that of the unborn infant. The risks dependent upon the renal disease are, then—first, the life of the mother; secondly, that of the fœtus; and, lastly, the danger of the acute phase giving place to a chronic form of Bright's disease after delivery. The main points which still call for discussion are the means of distinguishing between the cases which are likely to comport a grave sequel and the best method of obviating the danger of visual defects and renal disease as a sequel. Dr. Herman tells us that the acute form attacks mainly women who are pregnant for the first time, and he points out that when the albumin in the urine consists mostly of serum albumin the prognosis is grave. It is, therefore, necessary for the practitioner to accustom himself to testing for the presence of paraglobumin as compared with serum albumin. One of the common symptoms associated with the albuminuria of pregnant women, as in albuminuria from other causes, is failure of vision, attributable to the presence of albuminuric retinitis, and

possibly sub-retinal hæmorrhages. In the graver cases this may go on to complete loss of perception of light. Although in most cases the cæcity passes off more or less when delivery has been safely accomplished, this is by no means always the case, and the preservation or protection of sight becomes one of the points to which treatment must be directed. Now, the treatment of the albuminuria of pregnant females is practically confined to the induction of premature labor. As soon as the uterus has been emptied, the symptoms usually promptly subside; indeed, the promptness of this subsidence is one of the most remarkable features of renal disease associated with pregnancy. The speakers, in the discussion that followed, accepted this conclusion, and did not hesitate to recommend that the uterus should be emptied forthwith in all really serious cases of albuminuria associated with pregnancy. The child is sacrificed, it is true, but its chances of survival in the presence of eclampsia, or even of severe albuminuria, are small indeed, so that this fact cannot and ought not to be allowed to weigh in the balance, especially as the mother is thereby rescued from one of the most terrible complications that can threaten the pregnant woman. Then, too, in the cases presenting indications of albuminuric retinitis. These are always severe cases, and most of them die if left unrelieved. Moreover, the further the case is allowed to go on the greater is the damage done to the delicate structures of the eye, and the greater are the risks of permanent impairment of vision. This is a serious point well worthy of consideration, and in future obstetricians will be well advised if they adopt the suggestion to empty the uterus as soon as, at latest, ophthalmoscopic examination reveals the familiar and easily recognized signs of albuminuric retinitis. There remains, as an additional reason for adopting this course, the fact that even in women who either do not have, or who survive, the fits, the kidneys do not always recover from the disturbance to which they have been subjected, and the patient not unfrequently remains the victim of chronic Bright's disease. On these grounds, therefore, severe albuminuria ought to be added to the list of indications for the induction of premature labor without waiting for the supervention of eclamptic convulsions before coming to a decision. This is not a specialist's question. It is one which any practitioner may be called upon to consider at any moment, and it is to be hoped, in the best interests of his patient, that he will henceforth recognize the extreme and manifold gravity of the risks attending the continuance of albuminuria in pregnant women.—*The Medical Press.*

The Treatment of Eclampsia.

Kronig (*Centralblatt fur Gynakologie*, April 21, 1894), in discussing the treatment of eclampsia at the Eleventh International Medical Congress

at Rome, stated that as long as so little of the etiology and pathological condition of eclampsia is known, a rational therapeusis cannot be formulated; at present it is limited to the combating of the convulsions. The average mortality by this treatment is from twenty to thirty per cent. He believes that while the convulsions are controlled by narcotics, the eclampsia as such continues to exist. The course of the condition can be unfavorably influenced by large doses of narcotics. In the Leipziger klinik the treatment by morphia has been given up for one and a quarter years. Its place has been taken by forcible delivery in the eclampsia of pregnancy or of labor. In Leipzig to the present time there have been eighteen cases with one death—*i.e.*, 5.5 per cent. mortality. By the use of this method there are two points especially to be observed:

(1) The controlling of the hemorrhage.

(2) The observance of asepsis.

In two-thirds of the cases there was more or less violent hemorrhage from cervical tears.

The hemorrhage was controlled in all the cases by tamponnade of the utero-vaginal canal with aseptic gauze. The twenty per cent. iodoform gauze advocated by Dührssen should not be used on account of the accompanying kidney complication. For the same reason intra-uterine irrigation with antiseptics should not be employed from the diminished excretion by the kidneys of any that might be absorbed. Asepsis must be especially and rigidly observed in this operation. Despite the greatest care, over one-half of the operated cases are infected; the infection limiting itself in the most of the cases to the endometrium. Recovery follows in most of the cases rapidly.

The treatment of eclampsia in the Leipziger klinik is the following:

Narcotism only during the operation.

Forcible delivery.

In threatening œdema of the lungs, venesection, abstracting six hundred to eight hundred grammes of blood.—*University Medical Magazine.*

Air in the Veins in Cases of Placenta Prævia.

Freudenberg (*Centralbl. f. Gynak.*, No. 20, 1894) dwells upon Henck's case of fatal air embolism in the course of a placenta prævia labor, recently reported in the *Zeitschrift fur Geburtshulfe*, Vol. xxviii, 1894. Freudenberg lays great stress on Henck's observation, that when an extensive area of placenta was separated in his case, an unusually large quantity of liquor amnii was discovered. In Kramer's similar case there was excess of liquor amnii. Air enters the veins, Freudenberg believes, when the abundant fluid rushes out so rapidly that the uterus cannot steadily contract on the

speedily diminishing contents. Birnbaum always advised that in turning, in cases of placenta prævia, after the rupture of the membranes and the grasping of the foot, the operator's hand should be kept quiet in the vagina as a tampon, so as to prevent too rapid escape of the liquor amnii. Between the pains the operator's other hand should be kept on the abdomen, pressing the fundus, lest the uterine wall should, by its relaxation, leave a space in the uterine cavity, and thus allow air to enter the veins. Freudenberg always takes this precaution, and does not find that it in any way interferes with the manipulations required under the circumstances for delivery.—*British Medical Journal.*

THE USE OF THE CATHETER AFTER LABOR.

Recht (*Journ. de Médecine et de Chirurgie Practiquer*, May 25, 1894) shows that on the evidence of repeated observations micturition is almost always spontaneous. In 6,666 labors under Pinard's care in the course of the last four years, the catheter has been used only twenty times, and in the 1,920 labors last year only three times. Pinard objects very strongly to routine use of the catheter, which even in skilled hands often sets up cystitis. The practice in Paris lying-in hospitals is, however, very varied. At the school of midwives nearly every newly-delivered patient has the catheter passed. Maygrier, at the Pitié, delays the use of that instrument until twelve hours have elapsed after labor without the patient being able to pass water voluntarily. Bar allows a maximum of eighteen hours; Parak and Budin, twenty-four; Tarnier, thirty-six; Champetier de Ribes, forty-eight. Ribemont Dessaigues, at the Hôpital Beaujon, objects to the catheter as strongly as Pinard. Boissard finds that not only is there danger of cystitis when the catheter is passed after labor, but the patient is liable to lose the power of voluntary micturition for many days through nervousness.—*British Medical Journal*, June 9, 1894.

CENTRAL LESIONS AT BIRTH A CAUSE OF MELENA NEONATORUM.

Preuschen (*Centralblatt fur Gynakologie*) contributes an outline of his researches relative to the relation of lesions of the central organs occurring during birth to melena neonatorum. In repeated post-mortem examinations he had observed erosions of the gastric mucous membrane; hæmorrhagic infarctions of the lungs, and at the same time tolerably extensive blood extravasations were present under the tentorium, on the cerebellum, crura cerebelli, ala cinerea or corpora quadrigemina, and once on the surface of the cerebral hemispheres. He was thus induced to make observations on rabbits. A solution of chromic acid was injected into portions of the brain to be examined, and thereby were

obtained lesions accompanied by melena. The infarctions in the lungs and stomach were not always associated. The gastric extravasations were sometimes the size of a pin's head, and, although generally scattered, were mostly in the cardiac region, fundus, and great curvature, but were seldom found in the antrum pylori. In other cases the extravasations followed the vessels. Occasionally there were large, isolated extravasations, 1 to 2 cm. long and broad. In other experiments, pieces of sponges and laminaria were placed in various parts of the brain, and paraffin was injected between the brain surface and calvarium. The same results as in the former experiments followed in the stomach and lungs.

The literature of melena gives ninety-two cases, with fifty-one deaths and forty-six autopsies. Leaving out the older cases, to the third decennium of this century, thirty-seven cases remain; of these only five give evidence of careful and complete examinations on the brain. In thirty-one the associated lesions were found.

Concerning Air-Embolism in Placenta Prævia.

Freudenberg, of Dresden (*Centralblatt fur Gynækologie*, No. 20, 1894). During the last six years three cases have been reported from the *Berliner Klinik* of sudden death in placenta prævia through the entrance of air in the veins. In these cases it has been known that the cause of death was the above named, and not through chloroform or from other causes. The last case described by Henck, the patient was seized with a violent pain as soon as the foot was drawn out of the vulva; she strained, projecting from the vulva a thick stream of blood-colored amniotic liquor. Freudenberg reasons that this manner of escape of the amniotic liquor is to be as far as possible prevented. The performance of version and the extraction of the foot is in no way rendered more difficult if the manipulation be carried out slowly and with care that the amniotic liquor is evacuated as evenly as possible. In this manner the uterus contracts regularly on the slowly-decreasing contents, and the fundus sinks continually deeper, while the external hand seeks, in the pause between the pains, to prevent, as far as possible, a relaxation of the uterine muscle and a rising of the uterus. The more amniotic liquor is present the more rigid must be our caution in the above manner to meet the possible danger. Also after the full extraction of the foot the operator or his assistant must control the uterus through energetic kneading, and prevent any relaxation of this organ, as in this alone lies the danger of air aspiration through the bared lumen of the veins.—*University Medical Magazine.*

GYNÆCOLOGY

IN CHARGE OF

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Tuberculosis of the Cervix Uteri.

Meyer (*Archiv für Gynakologie*, Bd. 45, Heft 3) reviews the literature and reports a case of tuberculosis of the cervix uteri. The views of the several observers who have written upon this subject differ widely. Rokitansky believed that tuberculosis of the cervix is always limited. Lebert believes it never occurs. Paulsen describes it as tubercular erosion of the cervical canal, and says it never invades the vaginal cervix. Kiwisch has reported a case of tubercular erosion of the vaginal cervix. Mosler found it in four out of forty-six post-mortems made upon women who had died of tuberculosis, and Kolb and Hegar gave similar results. All observers, except Friedlander, believe it occurs only secondarily. Friedlander, in making a post-mortem upon a woman dying of apoplexy, found a tubercular area the size of a cent on the vaginal cervix, abundantly covered with miliary tubercles, containing giant-cells, and surrounded by a small round-cell infiltration. Meyer reports the following case:

A woman, 30 years of age, III-para, family history negative. In 1878 she had pneumonia, and the next year perityphlitis. At six years of age a small nodule appeared on her right cheek, which, when it was removed, in 1879, was diagnosed as lupus, and had reached the size of a quarter of a dollar. It reappeared after four years, and was again removed in 1889. Since this time the patient has been healthy. Since 1886 menstruation had become progressively irregular and profuse, and in the interval between menstruations she had leucorrhœa.

Vaginal examination. Uterus small, normal in position, and movable. The cervix is somewhat enlarged, hard, and nodular. Adnexa normal. The cervix presents a livid erosion which bleeds easily. The uterine cavity measures three inches. Thinking the cervix the seat of beginning carcinoma, a portion of the cervical tissue was excised for microscopic examination. The result was negative, but, as hæmorrhage

continued, the cervix was amputated. Sections through the amputated cervix showed a circumscribed area of tuberculosis in the vaginal portion of the cervix, very near the cervical canal, composed of tubercles half the size of a pea surrounded by small round-cell infiltration. The tubercles contained many giant-cells with peripheral multiple nuclei, the remaining ground substance being indistinctly seen. The specimens were strained for tubercle bacilli, but none were found. That the condition was not a gumma is shown in the fact that there was no cell-proliferation of the blood-vessel intima, and the history and examination of the patient gave nothing characteristic of syphilis. That the giant-cells were not those found in granulation tissue is positive, since no granulation tissue was present. Meyer, although no tubercle bacilli were found, believes the condition undoubtedly tubercular, as the tissues described are only characteristic of this disease. That the disease was primary he is quite positive, since no other lesion could be found, and she had been free from lupus since 1889. Even if lupus were present, the relation between it and tuberculosis is not definitely known, the present general opinion not being in the affirmative. That it was not secondary to tuberculosis of the tubes and uterine mucous membrane is shown in that they were found to be normal. Menstruation for three months following operation was normal, it then again became irregular and profuse, and has continued thus for three months. Otherwise the patient is perfectly healthy, there being no vaginal discharge, and no possible manifestation of tuberculosis anywhere. That the hæmorrhage was not due to the lesion is shown in its recurrence after operation. Should this patient not present further symptoms, the case will represent an almost unknown primary tubercular lesion.—*University Medical Magazine.*

Ligation of Uterine Vessels in the Treatment of Uterine Myomata.

Rodygier (*Centralblatt für Gynakologie*, 1894, No. 13), who advocated in 1889 and 1890 the ligation of uterine and ovarian arteries in cases of uterine myomata, writes now: "I prefer to-day the extirpation of the tumor to the ligation of the uterine blood vessels, except in cases in which strong contraindications make the radical operation inexpedient." The following case has led him to this change of view:

A woman, æt. 32, came to the hospital on account of severe flooding which was caused by a uterine myoma (size not given). An operation was performed December 21st, 1891, when both the uterine and ovarian arteries and the smaller arteries of the broad ligaments were ligated. The recovery was speedy, and she left the hospital January 21st, 1892.

The flooding had ceased entirely. The patient presented herself again March 3rd, 1893, stating that the flooding had reappeared in October, 1892, and had increased in severity. The tumor was also much larger. The patient was very anæmic, and a radical operation had to be postponed until her condition would have improved. But she did not rally, and died March 8th, 1893. Post mortem not obtainable.—*American Journal of Obstetrics.*

Pelvic Abscess and Vaginal Puncture.

An excellent article on "The Treatment of Pelvic Abscess by Vaginal Puncture and Drainage," by Dr. Clement Cleveland, appears in this issue, and furnishes much food for reflection. The author absolutely fixes his position, and anticipates all cavil, while he establishes his work, at the same time, on the true scientific basis, by the first rule which he has laid down for his own guidance in the matter of vaginal puncture *versus* extirpation. This he expresses as follows: "In regard to the condition of the patient —whether to puncture the supposed abscess without opening the abdomen, or to open the abdomen and then puncture, depends entirely upon my judgment of her ability safely to endure the laparotomy." The doctor here announces two very important things. First, he acknowledges that extirpation is the *ideal* operation, and, secondly, he insists upon the paramount right of the individual judgment of the operator as to which of the two procedures is indicated in each particular case. This latter dictum is so plainly true, and the question of personal equation must so necessarily enter into every operation, that it would seem a commonplace unworthy of mention; yet we constantly hear men insisting upon the adoption of the same method of treatment—out of several equally justifiable ones—in every case, quite ignoring the particular circumstances and conditions which determine the peculiar complexion of each case. The operator himself must be the judge of the significance of these, and it is his by right to decide as to the form of operation indicated. The list of interesting cases which he narrates seems fully to justify his decision in favor of vaginal puncture in each individual case.

In these days of *unscientific* abdominal surgery—we say it advisedly—it is most hopeful when men of prominence in this branch call attention to the importance of the patient's life as a factor in the choice of operative measures. This factor is apt, to some extent, to be overlooked just now by the *following* majority, who become dazzled too often by apparent brilliance and the charm of the word "radical." "*Rerum fames novarum*" is, undoubtedly, the motto of our day, when men who glory in their emancipation from old ideas quite fail to realize their slavery to the new.

There are but two points in Dr. Cleveland's paper to which exception may be justly taken, and these are, first, the too sweeping character he appears to give to his opposition to the breaking up of *firm* intestinal adhesions; secondly, the ignoring of what, in our opinion, is a very important contraindication, *cæteris paribus*, to vaginal puncture. Dr. Cleveland is very positive in regard to the first proposition noted. He says: "Experience has taught me profound respect for intestinal adhesions, and I never, now, attempt to remove them either with the fingers or scissors, when they are firm and extensive." We believe this is the only place in the whole paper where his statement is uncompromising in its scope, and is not regulated by scientific moderation. This is especially noteworthy, for the great merit of his article, as a whole, lies especially in this valuable and unusual quality.

Granted the patient's condition at the time of operating will warrant the extra time and increase of shock inflicted, we fail to see the objection to removal of all intestinal adhesions which may be removed by manipulation, even to the extent of moderate rupture of the gut itself. In these days of easy and efficient closure of intestinal tears, we do not believe the existence alone of firm and extensive adhesions to be any contraindication to the removal of the pus sac. Of course, there is danger of rupture of the sac itself to be considered—a far more dangerous matter than that of the intestine—and there are intestinal adhesions which would tempt only an idiot; but, generally speaking, we believe our efforts at separation of these adhesions should not stop at the limit quoted above.

Our second objection refers to the omission of the very important part these and other peritoneal adhesions not infrequently play, when firm, in abscess both of the tube and of the ovary. The tough walls of the sac, in these cases, are often rendered incapable of contracting after vaginal puncture, and the direction of the cavity is so distorted by these adhesions, especially when there exist attachments to the rectum or bladder or both, that proper drainage becomes impossible. Such a case as this will finally require a secondary laparotomy for the removal of the sac, with generally a much weakened condition of health, and greater danger of sepsis from the presence of the opening below. The intestinal adhesions, which were tried and abandoned, have also become more resisting, as a rule.—Editorial in *New York Journal of Gynæcology and Obstetrics*, June, 1894.

SURGERY

IN CHARGE OF

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THE CAUSE AND PREVENTION OF NEURALGIA IN AMPUTATION STUMPS

Witzel (*Centralbl. f. Chir.*) holds that neuralgia after amputation is not caused, as is generally supposed, by the formation of neuromata at the ends of the divided nerves. He states that if such were the case it would be necessary to lay aside the amputating knife. The neuralgic pains, he believes, are due to adhesion of the neuromatous swelling, to the end of a bone. In order that its functions may be properly performed a nerve should move freely in its sheath. The structural elements which serve the special functions of a nerve are during life extremely delicate and almos fluid. The ordinary movements, therefore, of an adjacent joint would interfere with the structure and functions of the nerves of a limb if these nerves had no longer free range of movement in the direction of their long axes. In two cases of neuralgia after amputation in which Witzel had opportunities of dissecting the stumps he found thick neuromatous swellings at the ends of the divided nerves, which were bound down by tough cicatricial tissue to the ends of the bones. It is evident that during movements of the stump at the nearest joint the fixed nerves must be stretched, those on the flexion side during extension and those on the extension side during flexion. In neuralgia caused by confinement of a nerve in a mass of callus the pain, it is held, is due to the prevention of the nerve's movement and not to its compression. As a preventive treatment Witzel recommends that in every amputation as much attention should be paid to the nerves as to the large arteries, and that the former should be pulled away from the flaps and divided high up. Attention should be particularly directed to this precaution in cases of amputation at the ankle and shoulder.—*Epitome, British Medical Journal.*

Anatomical and Surgical Relations of Intracranial Neurectomy of the Fifth Nerve and Removal of the Gasserian Ganglion.

Intracranial neurectomy of the fifth nerve and the removal or destruction of the Gasserian ganglion must now be given its place as one of the most beneficial as well as one of the most brilliant and difficult operations in surgery.

Rose and Hartley have given us very definite directions as to the mode of opening the skull and general surgical technique, but I have failed to find an exact statement by any one of the relative positions of the foramina, the ganglion, and arteries. It is with the hope of adding to our knowledge of these anatomical and surgical relations that, at the suggestion of Dr. W. W. Keen, I have lately made a careful study of the interior of twenty skulls taken, in the most part, from the collection in the Mütter Museum of the College of Physicians. My aim has been to establish by accurate measurements the distance between the foramina of exit of the second and third branches; and to establish definitely their relationship with the foramen spinosum, the carotid canal, and the depression or fossa for the ganglion. As is well known, this ganglion, a reddish-gray band of ganglionic matter slightly curved in its long axis so as to present a convexity forward and outward, rests upon a depression in the petrous portion of the temporal bone. From the convex antero-external border, three large bundles of nerve fibres arise.

The *first*, or ophthalmic division, is the smallest, and is purely sensory in function. It arises from the upper portion of the ganglion, enters the cavernous sinus, and passes forward in contact with the outer wall of the cavernous sinus, through the sphenoidal fissure into the orbit.

The *second*, or superior maxillary division, also a sensory nerve, passes out through the foramen rotundum and enters the orbit through the spheno-maxillary fissure.

The *third*, or inferior maxillary, the largest of the three divisions, consists of two portions; the larger, or sensory root, arising from the inferior angle of the ganglion, and the smaller, or motor root, passing beneath the ganglion. This latter accompanies the sensory root, and joins it after it emerges from the foramen ovale.

A small branch, the *recurrent*, passes into the cranium through the foramen spinosum along with the middle meningeal artery. This divides into two small branches, to be distributed to the dura mater and to the lining membrane of the mastoid cells.

As will be seen by this short account of the three divisions of the fifth nerve, it is impossible to make a definite section of the first division without doing great damage to the cavernous sinus, the third, fourth, and sixth nerves, and the carotid artery.

We must be content to cut the attachments and remove or destroy the ganglion, and with it the second and third divisions as they pass through the foramen rotundum and foramen ovale.

The middle meningeal artery, as it enters the cranium through the foramen spinosum, must frequently be wounded or torn through in our endeavors to reach the ganglion. For this reason it is often wiser to ligate and deliberately cut it than to run the risk of tearing it as it passes through the foramen; when by any chance this occurs, our only means of controlling the hemorrhage is by packing the foramen or the ligation of the external carotid artery below the origin of the internal maxillary artery.

In going over these skulls carefully, I have found such a great inequality in the measurements between the two sides that I have made a definite note of these variations, and give in my table the greatest, the least, and the mean measurements.

The distance between the centre of the foramen spinosum and the centre of the foramen ovale varies from 3 to 13 mm. The centre of the foramen ovale to the centre of the foramen rotundum varies from 9 to 18 mm. The centre of the foramen spinosum to the centre of the foramen rotundum varies from 11 to 24 mm. The centre of the foramen ovale is anterior to the centre of the foramen spinosum from 3 to 9 mm.

The centre of the foramen ovale is internal to the centre of the foramen spinosum from 3 to 9 mm. The centre of the foramen rotundum is anterior to the centre of the foramen spinosum from 13 to 20 mm. The centre of the foramen rotundum is internal to the centre of the foramen spinosum from 6 to 16 mm.

The distance from the centre of the foramen rotundum to the centre of the fossa for the Gasserian ganglion varies from 11 to 23 mm. The centre of the foramen ovale is distant from the centre of the fossa or groove for the ganglion from 3 to 13 mm. The width of the bridge of bone between the foramen ovale and the carotid canal varies from 1 to 13 mm.

The diameters of the foramina have been determined to be as follows: The *spinosum* varies from 1 to 4 mm. The *ovale* varies from 4 to 9 mm. The *rotundum* varies from 1 to 4 mm.

It will be seen by these measurements that the relationship between these different points is by no means constant, and in operating we must realize the fact. In the majority of instances the foramen spinosum with the middle meningeal artery is far enough away from the foramen ovale and the third branch of the nerve to enable us successfully to cut the latter without wounding the blood vessel. On the other hand, the spinosum may be so nearly in a line with the ovale that to reach it without

wounding the middle meningeal artery would be impossible. In some of the reported cases of the operation, where mention is made of alarming hæmorrhage, I am convinced this state of affairs existed.

For this reason, whenever the exposure of the third branch of the nerve is at all difficult, the surgeon should at once search for, ligate the artery, and cut it across, before attempting to find the nerve. This ligation of this artery is not very difficult, and will at once give much greater freedom of action.

The size and shape of the foramina vary in the different skulls; especially is this so with the ovale, which is at times perfectly round. The rotundum is most constant in its shape, and its variations are of little importance to the surgeon. The spinosum varies much, and in one instance there are two distinct foramina on the left side.

The character and sex of the skull seem to have little bearing upon the relative position of the foramina, with the exception that a broad, flat skull usually shows a greater distance between them, and it has been impossible to fix upon any rule by which these variations may be anticipated.—WILLIAM J. TAYLOR, M.D., in *Philadelphia Polyclinic.*

NOTE ON THE STERILIZATION OF CATGUT BY BOILING IN OLIVE OIL.

Catgut subjected to the ether-alcohol-bichloride process is unreliable as to its asepticity, and if kept long in bichloride becomes brittle and hard. Catgut in juniper oil is unreliable. Sterilization by boiling in alcohol is practised to some extent. Without considerable apparatus the method is difficult and expensive. Heat sterilization is more desirable and more efficient than chemical action, and, I think the best medium is olive oil. This is cheap, non-irritating, non-inflammable, and has little or no odor. To try this medium a series of experiments were made, having two objects in view:

(1) As to the possibility of sterilizing catgut by heat.

(2) The physical effect of high temperature upon it.

Three pieces of gut, each a yard long, were wound on glass slides immersed in olive oil in a two-ounce, salt-mouth, glass-stoppered bottle, sealed, and the whole placed in a water bath, and the vessel covered. The temperature was raised to boiling point (212° F.), and kept there for three hours. For some reason the oil became turbid and cloudy, but cleared up again after two or three days. This marred the appearance very much, and before it was discovered that it would clear up of itself some eight or ten samples were put through and then laid aside. After satisfying myself that the gut was not impaired, a sealed jar containing a single roll was sent to Professor Adolph Gehrmann, of the College of Physicians and Surgeons, Chicago.

These few tests, while not exhaustive, appear to justify the following conclusions:

Catgut can be rendered sterile by heating in oil to a temperature of 212° F. for three hours.

The method is reliable, cheap, and rapid.

The quality is not impaired, and gut so treated is more satisfactory as to strength and smoothness than if subjected to the ether-alcohol-bichloride process.

A temperature higher than 212° F. is not necessary for sterilizing, and is an injury to the gut.—B. L. Eastman, M.D., in *Annals of Surgery*.

[We have been sterilizing our catgut for some time by placing it in a metal box provided with a screw cap (Tiemann), and filling up with a ten per cent. solution of carbolic acid in almond oil. The cap being well screwed, the box is placed in an Arnold's sterilizer for two hours. The method of sterilizing in oil is quite as efficient and much simpler than any other yet suggested.—L.M.S.]

Tubercular Peritonitis.

A new method of treating tubercular peritonitis with exudation, by Nolen-Leiden (*N. Y. Polyclinic*). The favorable results which have been secured by laparotomy in this affection have raised the question as to which factor in the treatment the favorable issue is due. Considering each of these factors, it seemed that the contact of air with the peritoneal surface of the intestines must be the therapeutic agent. It, therefore, seemed advisable to try the effect of air injected into the peritoneal cavity, and, with the conviction that no harm could result, the author made the experiment in three cases. In all of these cases the results were satisfactory in that the ascites never returned. After puncture with a small trocar, a portion of the fluid is allowed to escape, and then air is forced in by the reversed action of an inspirating syringe, the air being sterilized by passage through sterilized cotton, and warmed by bubbling through warm water. The injector is stopped before distension of the abdomen has taken place, and the air withdrawn. The following day some tympanitis may be present, which is never a serious complication. The advantage of the procedure over that of laparotomy, and especially in children, will be readily apparent.—*St. Louis Medical and Surgical Journal.*

GENITO-URINARY AND RECTAL SURGERY

IN CHARGE OF

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GONORRHŒAL PERITONITIS.

Chaput (*Bulletins de la Soc. Anat. de Paris*) reports the case of a girl, aged 17, who had suffered from abdominal pains for a fortnight, and was admitted with all the symptoms of very acute peritonitis. Abdominal section was performed. A quantity of creamy yellowish pus was found in the pelvis; the entire intestine was congested. On raising the right Fallopian tube, it was found to be dilated. Its fimbriæ were deeply injected. On pressing the tube with his fingers, Chaput caused a drop of creamy yellowish pus, of the same appearance as that in the pelvis, to issue from the ostium. The same condition was detected in the left tube. In order to protect the peritoneum from the septic stumps of the tubes when the appendages were removed, Chaput left the ends of the ligature silks hanging out of the abdominal wound, and a strip of iodoform gauze was pressed into Douglas's pouch. The patient in a few days had obstruction from paralysis of the intestine. An artificial anus was made, but afforded no relief, and the patient died. No mechanical obstruction could be found; the violence of the peritonitis had caused paralysis of the intestine.—*Epitome, British Medical Journal.*

[It has not been demonstrated by any means that all cases of "pus tubes" are the result of gonorrhœa. In the case reported no history is mentioned of gonorrhœa, nor was any microscopical examination made of the pus. Why is it termed gonorrhœal peritonitis?]

GONORRHŒAL ENDOMETRITIS.

Lantos (*Klinische Zeit und Streitfragen*) gives good advice as to the care with which uterine therapeutics must be used in cases of gonorrhœal infection. When the uterine cavity is clearly involved, the physician must

at once set to work to cure it lest the disease spread to the tubes. Lantos here, however, warns us not to be too enthusiastic. The hasty use of the curette, or even of carbolic crystals, solid chloride of zinc, and other powerful caustics has set up the gravest complications. Even more gentle intra-uterine medication is perilous when the appendages are already involved in the infectious inflammatory process. Hence should there be the least tenderness in either lateral fornix, the patient must be kept at rest for a few days, warm injections, etc., being administered. Whenever the condition of the genital tract shows that the endometrium may be safely treated, a Playfair's probe dipped into a 1 per cent. solution of sublimate should be introduced into the uterine cavity. A still better method is the washing out of the uterus with a 1 per cent. chloride of zinc solution by means of a double current catheter. When the cervical canal is made sufficiently wide, the uterus must be plugged with iodoform gauze. —*Epitome, British Medical Journal.*

[I drew attention to the necessity of local uterine treatment in gonorrhœa occurring in the female in a paper on "Uncured Gonorrhœa," but did not warn against too early interference.—E.E.K.]

A New Bloodless Operation for the Excision of Hæmorrhoids with Healing by First Intention.

Dr. H. M. Bishop, of Los Angeles, in the *Therapeutic Gazette*, June 15th, 1894, describes a new bloodless operation for hæmorrhoids as follows: Put the patient in the lateral or dorsal decubitus, make the perinæum aseptic, and dilate the sphincter. Clamp the base of the hæmorrhoids with suitable forceps, in an even manner, leaving room on each side to put pieces of rubber tubing, 5 or 6 mm. in diameter, lumen, 1 mm., and ends sealed between the forceps and the healthy tissues. Secure the tubing by sutures passed through the base of the hæmorrhoids, and wound round the tubing. Remove the forceps and excise the tumor close to the tubing with flat scissors. The elastic pressure exerted by the rubber tubing prevents any hæmorrhage, and keeps the edges in perfect apposition. Pass strips of moist borated gauze into the rectum, leaving the ends protruding from the anus. The catgut sutures soften in due time, and permit the tubing to come away.

PEDIATRICS AND ORTHOPEDICS

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Periods of Isolation for Contagious Diseases of Childhood.

In the course of a report on this subject, Ollivier (*Gazette Médicale de Strasbourg*) makes the following rules:

For scarlatina, variola, varioloid, and diphtheria, the period of isolation, before the child is allowed to return to school, should be forty days counting from the first day of invasion.

For measles and varicella sixteen days will be sufficient.

For pertussis isolation should be prolonged to three weeks after complete cessation of the characteristic kinks.

For mumps, ten days after the disappearance of the local symptoms.

Nasal, buccal, and pharyngeal irrigations with antiseptic solutions should be employed, and soap bath and rubbing of the entire surface and scalp should be a necessary preparation before returning to school.—*American Journal of the Medical Sciences.*

Some Cases of Diseases of the Skin.

Case 25. *Erythema Multiforme.* Marie E., thirteen years of age, presented herself at the Skin Dispensary of the University Hospital with an eruption consisting of shot to pea-sized, bright-red papules, for the most part discrete, but in a few places confluent, situated upon the extensor surfaces of the wrists and forearms and upon the backs of the hands. The eruption was attended by slight itching, and had appeared three days before the patient's visit to the Dispensary. A saturated solution of boracic acid was ordered to be applied several times a day for the relief of the mild pruritus; no internal treatment was considered neces-

sary. Upon the patient's return three days later the eruption was much paler, and within a week had completely disappeared. Eighteen months later the patient again presented herself with a new attack, which differed in no respect from the first one.

In most cases of multiform erythema active treatment is not necessary, since there are few or no subjective symptoms, and the eruption disappears spontaneously in one to three weeks.

The disease is one readily recognized, but might be mistaken by the inexperienced for papular eczema; it differs, however, from this affection by the bright-red color of the lesions, their larger size, and the absence of severe itching.

CASE 26. *Ringworm of the scalp.* E.C., a boy aged five, was brought to me for advice concerning a disease of the scalp characterized by the presence of numerous dime to dollar-sized circular patches partially devoid of hair, and covered with fine grayish scales. While the greater number of these patches were pale, a few of the larger ones were red and dotted here and there with small pustules. Upon close inspection, numerous short, broken, dry, lustreless hairs were to be seen which could be readily extracted with the forceps. Examination of these hairs with the microscope revealed large numbers of the spores characteristic of ringworm. The disease was of several months' duration, and was still spreading. The following ointment was directed to be rubbed into the diseased portions of the scalp once a day with considerable friction, the hair having previously been cut short:

R. B. Naphthol..... ʒi.
Petrolati..... ʒvii.
M.

In addition, the entire scalp was to be thoroughly washed every second day with hot water and a superfatted soap containing sulphur and salicylic acid. Under this treatment, which was most faithfully carried out by the child's attendants, improvement was immediate and continuous, and at the end of three months the hair was growing vigorously, and no new patches were to be found. As a precautionary measure, however, the treatment was directed to be continued for another month or six weeks.

Ringworm of the scalp is an unusually obstinate disease, and only yields to the most vigorous treatment intelligently pursued. Unless the applications are well rubbed in so that the hair follicles are penetrated, good results are not to be hoped for from any form of treatment.

CASE 27. *Eczema Rubrum.* J.B., a boy three years of age, was brought to me for the treatment of an eczema of the face and hands which had existed for a year or eighteen months. In the face the disease was

limited to the cheeks, which were bright red, oozing abundantly; the hands were less acutely inflamed, the skin being thick and covered with crusts. The itching was intense, occurring in paroxysms during which the little patient was uncontrollable, and scratched his face until it was raw and bleeding. Ointments many and various were prescribed from time to time, but these not only failed to improve the condition of the skin, but invariably increased the itching, so that this form of treatment had to be abandoned. The local treatment was finally limited to the use of lotions, and of these the familiar calamine lotion proved of great service during the moist stages of the disease. When the oozing had ceased and the skin had grown paler, a lotion containing five drops of the liquor carbonis detergens to the ounce of water was used with decided benefit, relieving the itching and lessening hyperæmia. After several months of patient and careful treatment, which was practically limited to the employment of the above-mentioned lotions, varied in strength according to circumstances, a cure was effected.

As a rule, ointments are far more serviceable in the treatment of cutaneous diseases than any other form of application; but, as the foregoing case illustrates, occasionally facts of every kind disagree. In such cases we must limit ourselves to the use of lotions or the gelatine preparations devised by Unna and others; and although these often succeed admirably, yet they can scarcely be regarded as entirely replacing greasy applications in effectiveness. Patients in whom this idiosyncrasy exists are apt to require long treatment and careful discrimination in the choice of remedies.—*M. B. Hartzell, M.D., in Archives of Pediatrics.*

SPORADIC CRETINISM CURED BY TREATMENT WITH THYROID GLAND.

In the *British Medical Journal*, June 2nd, 1894, two cases are reported, one by Telford Smith, and the other by Dr. Realton. The children were brothers, and were, in every respect, typical cretins. Improvement in every respect, physically and mentally, began at once when the children were given thyroid, at first as the raw gland, and later in the form of tubloids. Photographs of the children are shown, and the transformation from the deformed, stunted, thick-lipped, open-mouthed, and idiotic condition to a state in which the deformities have completely disappeared, and in which the countenance is bright and expressive of intelligence, is truly remarkable. So great is the change that it would be extremely difficult to recognize them as the same individuals. To illustrate the change produced physically, Dr. Realton reports in his case an increase in height of four inches in one year. In the two years preceding treatment he had grown but three-quarters of an inch.

PATHOLOGY

IN CHARGE OF

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Anatomy and Pathology of Carbuncle.

Nosologically, carbuncle is one of the acute suppurative inflammations of connective tissue, and hence is generically related to osteomyelitis, parenchymatous abscess, acute abscess and furuncle, as well as other suppurative diseases of the skin. The essential unity of the group is shown when we consider that all have a local origin, all involve the same histologic structure, and all are due to the invasion of the same pus coccus; or at least one of the pyogenic cocci. The differences in clinical history, the divergence in pathologic process, and the various modes of termination which are found when we compare the several diseases of this generic group with each other, are determined by differences in the anatomic structure of the region or organ concerned. These differences are quite as marked in the skin of different regions of the body when they are compared with each other, as are those found in one organ when compared with other organs. These variations in histologic anatomy relate to thickness, density, toughness, elasticity, vascularity, the surrounding attachments, and the amount and mode of disposition of the adipose tissue.

It is these variations in histologic structure of the skin in different regions of the body, or the structural differences in the various strata of the skin in a given region, that determine whether in a given case of invasion by the pyogenic coccus we shall have a superficial pustulation, as impetigo; or a deeper and more extensive suppurative process, as furuncle; or a still more deeply seated and extensive one, as acute subcutaneous abscess, or carbuncle, as the case may be. When the coccus invades the mouth of the hair follicle, sebaceous gland, or sweat gland, and is arrested there, we have impetigo or one of its congeners. There is

little tension, no stasis, no obstruction to the outflow of fluids or pus, and no slough.

When the deepest part of the epithelial structures of the follicle, or the sebaceous or sweat gland is invaded, a true furuncle is the result. Here there is a degree of obstruction to the outflow of fluids and pus on account of the depth and partial closure of the passageway. Hence we have tension, stasis, liquification (pus), a limiting wall, and in the centre a cone-like slough, which consists of the remnants of the gland or follicle surrounded by as yet undigested connective tissue, especially fibres of the yellow elastic tissue.

But when the pus coccus passes beyond the epithelial layer of the skin into the cutis vera, the result is either an acute abscess, with its circumscribed cavity filled with digested connective tissue and inflammatory products, or, on the other hand, a carbuncle with its dense infiltrated mass of undigested connective tissue, without any circumscribed cavity. Whether it be an abscess or a carbuncle will depend on the histologic structure of the skin of the particular region invaded. The region of predilection of carbuncle is "the dense and fibrous integuments over the posterior median line of the body." The skin of this region is characterized by:

(1) Its extreme thickness, especially the relative thickness of the cutis vera.

(2) The aponeurotic-like density of the papillary layer, and its having few and small openings.

(3) The more direct connection of the subcutaneous tissue with the reticular part of the true skin, as one continuous structure.

(4) The number and size of the polygonal spaces found in the subcutaneous and reticular strata, caused by the diverging and interlacing bundles of dense and not easily dissolved fibrous tissue which make up the framework of these strata. These polygonal spaces are chiefly occupied by adipose tissue constituting the paniculus adiposus, and a delicate network of fine easily digested connective tissue.

(5) The presence of Warren's fat columns, extending from the adipose tissue below to the base of the follicles of the lanugo hairs above, with their horizontal branches.

(6) The dense, tendon-like, cone-shaped fibrous bundles which extend from the base of the adipose columns obliquely to be inserted into the muscular fascia beneath.

The pus coccus having passed down and invaded these tissues, a focus of inflammation is begun, and we have all the factors and conditions necessary for the production of a typical carbuncle. The delicate network of areolar adipose tissue succumbs readily and liquefies, and, as ten-

sion increases, pus is forced to the surface through the slender adipose columns into the hair follicles as the only means of escape. Thus we have the numerous pus points, and eventually the cribriform condition of the surface of the skin so characteristic of carbuncle. As tension increases, the inflammation is forced to extend laterally further and further from the original focus through the polygonal spaces and channels occupied by the rapidly dissolving delicate connective tissue and fat. Thus we have the characteristic peripheral extension and the broad, flat, indurated mass pressed between the still resisting dense papillary layer above and the muscular fascia beneath, which are still firmly bound together by the tendon-like cones of fibrous tissue. If now an incision be made into this mass, there would be seen the numerous small pus points and channels, but no proper pus cavity; both of which conditions are well-recognized features of carbuncle. The process continues until the skin over the original focus becomes necrotic and sloughs away, thus reducing the tension and peripheral pressure, and we have the first step towards the natural limitation of the disease. But if this infiltration and induration have already extended so far as not to be influenced by this diminution of tension, it will continue to spread indefinitely, or until the sloughing process following in its wake has gained on it sufficiently to entirely arrest the peripheral tension. After all the long-resisting, dense, fibrous parts described above, which began to die with the skin, have yielded and sloughed piecemeal, we have the crater-like cavity co-extensive with the indurated mass.

It is said that carbuncle may occur on any part of the body, but this is not correct of true typical carbuncle conforming to a fixed definition. We cannot have a typical carbuncle without continued surgical tension in inflamed tissues, one part of which resists the digestion or liquefying process of suppuration longer than other parts.

Many cutaneous inflammations are loosely called carbuncles, when they are simply abscesses. But as the characteristic features of the carbuncular skin are only typical in certain regions of the body, and are found more or less perfectly or imperfectly in other regions, it will often happen that a suppurative inflammation of the skin and subcutaneous tissue cannot be definitely classed either as a carbuncle, an abscess, or a furuncle; or that the characteristics of one predominate, while those of the others are present in some degree.

Chloride of Sodium in Pneumonia.

The quantity of chloride of sodium excreted in the urine by a healthy adult is about one hundred and fifty-four grains in twenty-four hours. It

is derived from the blood, and it follows that if the salt is deficient in this fluid it will be likewise diminished in the urine. Now, it is found that in pneumonic fever the blood is deficient in these salts, and it is generally believed that this is attributable to the exudative process going on in the lungs. Beale, who studied this subject exhaustively, came to the following conclusion: (1) Chloride of sodium is totally absent from the urine of pneumonic patients at the period of complete hepatization; (2) it reappears during resolution; (3) it exists in the blood in the greatest abundance when it appears most largely in the urine, and *vice versa*; (4) it exists in large quantities in the pneumonic sputa; (5) there is reason to believe that it is determined toward the inflamed lung, and is reabsorbed on the resolution of the process.

Chloride of sodium appears scantily in or is absent from the urine in other diseases besides the one under consideration, *e.g.*, bronchitis, pleurisy, phthisis, cholera, rheumatism, typhus fever, cerebral abscess, etc.—*The Journal of the American Medical Association.*

On the Frequency and Importance of Otitis Media in Sick Children.

Dr. Rasch, of Copenhagen, has examined the middle ear in 61 post-mortem examinations of children up to two years of age. The middle ear was normal only in 5 cases (8 per cent.); in 46 cases (75.5 per cent.) suppurative otitis media was found in either one or both ears, and in 8 cases (14.5 per cent.) simple catarrhal otitis media was present. Otitis media was observed in nearly all the children who had died of broncho-pneumonia (43 cases), but had not been diagnosed during life, on account of the membrana tympani being rarely perforated, although pus was found in 77 per cent. of these cases. Several of the children had exhibited brain symptoms, sometimes so marked that meningitis was diagnosed during life, while the post-mortem examination revealed no affection of the brain or its membranes; the author therefore calls attention to this source of error in diagnosis in cases of broncho-pneumonia. In 43 cases the exudate was examined more minutely, and in 33 of these pneumococci were present. Whenever pneumococci were found, the tympanic membrane was without perforation. Perforation of the membrane was, on the whole, a very rare occurrence, appearing only in 4 of the 61 cases examined. The author is inclined to believe that broncho-pneumonia in infants plays a rôle in the etiology of deaf-mutism, the otitis media extending to the internal ear.—*Hospitals-Tidende*, Nos. 18-20, 1893.

Editorials.

REPRESENTATION IN THE NEXT COUNCIL.

THE complexion of the next Medical Council of Ontario will certainly be very materially altered, especially as far as the territorial representatives are concerned. At present there are twelve of these. Four will not be candidates for re-election, viz., Drs. Day, Miller, Fulton, and Orr. As Drs. Bergin and Rogers are both in the new division, No. 17, one must of necessity stay at home. There is thus no possibility of the return of more than seven. If seven were re-elected, there would be among the territorial representatives seven old and ten new members. It is not likely, however, that more than five old members will be successful (there may be less). We may have, therefore, twelve or thirteen new and four or five old territorial representatives.

It is difficult to say anything definite as to partyism in the new council. The *happy family* business will be, to a large extent, disturbed. Probably this will do no harm. Some active and aggressive "Defence" men will be there. They may be a minority even of the territorial representatives, but they are certain to exercise some influence, we think, in the right direction. A number of the new members will have no strong party predilections, and are likely to avoid extremes on either side. We are glad to know that many of these are exceptionally good men, who may be expected to do credit to themselves and their constituents.

We have no precise information respecting the collegiate representatives, but understand the changes will not be many. It will be a matter of pretty general regret that Sir James Grant is not likely to return. The University of Toronto is quite satisfied, so far as we know, with its representative, Dr. Britton, and will probably send him back. Dr. Thorburn is likely to be re-elected as the representative of the Toronto School of Medicine. After his entrance to the council he went rapidly to the front, and is now recognized as one of the most influential members. So far as we know, the other "school men" have satisfied their constituents, and under such circumstances are likely to be re-elected.

THE DEFENCE ASSOCIATION AND THE UNIVERSITIES.

WE publish in this issue a letter from Dr. Sangster in reply to certain editorials, or portions of editorials, which appeared in THE CANADIAN PRACTITIONER of last month. In making our comments from time to time, we have endeavored to be just to all parties who have taken part in the Medical Council war of the last three years. We certainly do not desire to be considered in any sense the champion of the universities, if they oppose in any way the general interests of the medical profession of Ontario. Surely all will admit that a conflict between these corporations and the professional public is not likely to accomplish any good purpose. If the universities were actuated by purely selfish motives, they would never have encouraged the formation of a Medical Council. Free trade in medical education, without the interference of any central examining body, generally suits the ideas of weak, cheap, and selfish universities in all parts of the world.

We have no desire to offend the feelings of Dr. Sangster or any other prominent member of the Medical Defence Association. THE CANADIAN PRACTITIONER was the first independent medical journal that recognized the respectability and power of that association, and expressed its views in that direction on many different occasions, especially after it appeared that the council, or certain of its members, were inclined to *jockey* the association out of existence by a little parliamentary sharp practice. We have endeavored, however, to do justice to all parties, and, in pursuance of such a course, have pleasure in publishing Dr. Sangster's letter in full, although we cannot see that it contains anything like a reasonable answer to our main contention, that our universities did not act in a spirit of "pure selfishness" in assisting to organize a body which so seriously curtails their powers and money-making facilities.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNÆCOLOGISTS.

WE have much pleasure in again announcing that the next meeting of the American Association of Obstetricians and Gynæcologists will be held in Toronto, Wednesday, Thursday, and Friday, September 19, 20, and 21. The provisional programme will be found in another portion of this issue. This society was organized in 1888 at a meeting held in Buffalo, and since that time annual meetings have been held in various cities in the United States. As the name will indicate, the society

is American, but it is American in the broadest sense of the word. As Past-President Montgomery once expressed it: "The association is not limited to the United States, but only by the boundaries of the western continent."

In response to cordial invitations certain Canadian physicians have become members, and have received the kindest sort of treatment from their brethren of the United States. A Canadian occupied the presidential chair in 1892, and another has been an active member of the council for three years. The Canadian members are: Dr. Praeger, Nanaimo, B.C.; Dr. Howitt, Guelph; Dr. Griffin, Hamilton; Drs. Nevitt, Ross, Cameron, Machell, and Wright, Toronto. There are in the association altogether ninety-six ordinary fellows, two corresponding fellows, and twenty-eight honorary fellows. The ordinary fellows are all residents of North America, and an examination of the programme will give some idea of their distribution. The Atlantic coast, the Pacific coast, Canada, the Northern, Midland, and Southern States, each and all, do their share in furnishing members. It is expected that in the near future some physicians of South America will be elected as fellows.

We are instructed by the officers of the association to extend a cordial invitation to all physicians to attend any or all of the sessions. It is expected that the meetings will be held in the Normal School building, in St. James' Square. The programme is an excellent one. It looks as if our friends from the United States were making an extra effort to make the Toronto meeting an exceedingly interesting one. The pronounced ability of those who have signified their intention to come over and take an active part in the proceedings will insure success in this direction. The local committee is making the necessary arrangements, and asks for the active co-operation of physicians both inside and outside Toronto.

THE FINANCES OF THE ONTARIO MEDICAL COUNCIL.

MATTERS of finance in connection with the Medical Council have been so thoroughly discussed in both the lay and medical press that we considered it unnecessary in THE PRACTITIONER to devote much space to the subject at the present time. However, as no one expects to get an impartial opinion from a subsidized journal, we consider it a duty which we owe to our readers to make some reference to these financial questions.

It is an exceedingly unfortunate thing for the council that certain petty irregularities were allowed to continue for some time. Overcharges for travelling allowances, Pullman car luxuries, boarding by the

day, etc., do not reflect any special credit on those concerned in such questionable transactions. These are, of course, small matters, but they are none the less indefensible on that account. As a matter of fact, they very seriously handicapped the council in its contest with the Defence Association. In the same connection, we regret that certain men should have been blamed for pernicious customs which they did not inaugurate.

The Legislative Committee spent over $900 as expenses incurred in connection with the enactment of certain amendments to the Medical Act by the Ontario Legislature. We consider such expenses were legitimate up to a certain point; but believe, at the same time, they were excessive. Such expenditure was especially undesirable when the whole question became simply a fight between the council and the Defence Association.

A great deal has been said about so-called speculation in real estate. The electorate has a perfect right to discuss the purchase of certain property in Toronto and the erection of a building, but such offensive terms as "gambling," "reckless wastefulness," "clandestine methods," and many others of the same sort, are surely unnecessary. We have always thought that the council had a right to purchase a lot and erect a building. A piece of land was bought in a very good situation, and a handsome, substantial building was erected. It was deemed expedient and economic to have a building which would yield a revenue. We believe that every step in connection with the whole business was taken only after careful deliberation, and the work in connection with the building was carefully supervised. If, as some contend, it can be sold with advantage, and that a new building can be erected on some other site that will answer all the purposes of the council and cost less money, the matter is worthy of careful consideration. Such a *deal* might be almost as much like "real estate speculation" as the purchase of the present site and the erection of the building; but we will certainly not object to the scheme for any reason of that sort. We think it well to consider this important subject as still *sub judice*. At the same time, we hope that any new scheme that may be placed in definite shape will receive careful consideration by the new council.

MEDICAL COUNCIL EXAMINATIONS.

THE examinations of the Ontario Medical Council during recent years have generally been satisfactory. The examiners have been selected with due deliberation, and generally on their merits. The large proportion of rejected candidates has shown sufficient rigidity. Occasionally an injustice is done, but always unwittingly, we believe. When the results

of the last examination, held in April, were announced, the name of Dr. Hugh A. Johnston did not appear on the list, although he had previously passed his final (or, more correctly, fourth year) examination at the University of Toronto with great credit to himself, as shown by the fact that he was awarded a silver medal. His success at this examination was not exceptional. He had worked faithfully for four years, and had passed all his previous examinations with high honors.

It is sometimes considered quite a joke when a medallist of one of our universities is rejected by the council. It is, however, a very serious matter for the unfortunate victim. It certainly was so in this case, because, as a consequence, a very worthy and industrious young man probably lost a very valuable appointment in the Toronto General Hospital.

Dr. Johnston applied to the council for a reconsideration of his case. His request was granted, and, after an investigation of some sort (we know nothing about the particulars), he received his license to practise. The council thus acknowledged that a mistake had been made. This was, perhaps, not a very dignified action, but it was a just one.

The question naturally arises, Is it not possible to avoid such an unfortunate accident? There is, of course, a certain amount of chance with a man of average standing; but a man standing high in honors for four years, and accustomed to examinations, should always be sure of a simple pass. We think, if there had been a meeting of the examiners, according to the ordinary custom that prevails in most examining bodies, that the mistake would have been discovered before the results were made public. We believe there should always be a meeting; and, in addition, we think the decision of the Board of Examiners after such meeting should be *final.*

Correspondence.

"THE OLDEST PHYSICIAN."

To the Editor of THE CANADIAN PRACTITIONER:

SIR,—Dr. Case, of Hamilton, may be the oldest physician in Ontario There is, however, an older than he on the Ontario Medical Register. refer to Dr. William A. R. Gilmour, of Three Rivers, P.Q., a provincial licentiate of 1830. Dr. John Barnhart, of Owen Sound, is third (1834).

Yours truly,

JOHN W. MCCULLOUGH,

Alliston, July 23rd, 1894.

LODGE PRACTICE.

To the Editor of THE CANADIAN PRACTITIONER:

DEAR SIR,—In your journal of July, Dr. Bowerman has the temerity to defend that modern outrage on the medical profession—to wit: lodge doctoring. In his reply to my communication he has wandered far from the points of issue in the case. He tells us that, in two Ontario societies, some 51,000 men have their doctoring done for a mere trifle.

Does he call that philanthropy? Shall the medical profession be the slave of the lodges because a number of them have broad-minded and practical business men in their ranks?

How can any physician expect to afford to attend one hundred or more men for $1 to $1.50 per member per year for a number of years? Why, a great many of those persons will require attendance daily for weeks and months at a time, and, as the members of the lodges become older, as they must, this attendance will become greater.

Dr. Bowerman loses sight of the fact that the lodge members intend to remain as such as long as they live, and, as they advance in years, the medical attendance will also increase. The doctor forgets that sound business principles should be applied in contracting to attend these lodges. And, at such low rates, no satisfaction can be given to patients. It may

be all very well for the first five or ten years, but, after that, these lodge doctors will begin to find out their mistakes in accepting such contracts. Dr. Bowerman has failed to answer a single argument in my communication of June last.

These lodge doctors need not suppose that they are the only philanthropists in the medical profession. Why, sir, people who require our consideration are outside the ranks of the members of lodges.

Away with such a silly institution as lodge practice!

F. T. BIBBY.

Port Hope, July 31st, 1894.

To the Editor of THE CANADIAN PRACTITIONER:

SIR,—With your kind permission, I shall briefly reply to Dr. A. G. Bowerman on "Lodge Practice." In the first place, I shall remark that Dr. Bowerman's letter is a rushing torrent of words without argument on the real question.

Fraternity is a grand thing, but it should not all be adverse to the doctor. The usual fees paid, say, of one dollar a member for attendance, and one dollar for examination when the applicant enters the society, is altogether too low, and Dr. Bowerman, I fear, would not like to defend such fees over his own signature.

Then the medical attendant is elected to attend a certain number of men for a year, and, as a consequence, to a great extent loses his freedom, his method of treatment, and the number of visits he ought to make. One of the great points in a successful lodge doctor is to please the members.

Next, the doctor is under the watch of that wonderful organization, known in the lodges as the "Sick Committee." This committee often take it upon themselves to wig the doctor soundly in the lodge for not having visited the patient often enough, and for other things that may not just suit the minds of this important portion of the lodge.

But we have consultations all deranged. A certain person belongs to several societies, and gets all the doctors around him in consultation; but, worse than that, goes to the several lodge doctors alternately.

Again, I have known cases like this. A man is in three lodges. They supply doctor and medicine. He has a bad cold and goes to doctor No. 1. The bottle he gets he gives to his wife. He then goes to doctor No. 2 and gets a bottle, which he gives to his son, also down with the grippe; and then he goes to doctor No. 3 and gets a bottle, which he takes himself. Will Dr. Bowerman defend this?

Now we are getting juvenile courts and lodges started. In time everybody will be in lodges, and all the practice will be lodge work. The

father in the Sons of Canada, the mother in the Daughters of England, the daughter in the Sisters of Temperance, and the son in the Juvenile Court of Foresters have all their medical attendant. The whole family is thus supplied with four physicians for four dollars a year! I remember one family where there were three cases of sickness, all attended by different medical men, and at the same time. Three doctors running around the same house in the same days. What a glorious opportunity for misunderstandings!

Then we have the annual canvass for the election of lodge doctor. There are two doctors in the lodge, and each has his friends. There is an election, and Dr. A. gets there. The other doctor and his friends are out, of course. During the year every opportunity is watched for to discredit Dr. A., and at the end of the year he is voted out. After the vote is over one of the "brethren," who was most eager to defeat Dr. A., comes up to him and hypocritically regrets that he did not get it again.

This, and much more of such dirty mess, is what Dr. Bowerman is trying to defend. It is really painful to behold a medical man taking such a stand. We sincerely hope that, though many may do some lodge practice, Dr. Bowerman will be the only one found defending it.

M.A., M.D.

DR. SANGSTER ON COUNCIL MATTERS.

To the Editor of THE CANADIAN PRACTITIONER:

SIR,—I am rather surprised and somewhat hurt at the tone and tenor of certain editorials in your last issue. I esteem THE PRACTITIONER very highly, and always read it with profit and pleasure. Our association is indebted to you for fair and honest criticism in the past, and for some words of approval; and your occasional references to my own efforts have always heretofore been just, and, at times, even generous. You have managed to avoid taking sides with either the Council or the Defence Association, and if you have become a little restive, now and then, when the privileges and assumptions of the educational bodies were rudely handled, or the so-called "vested rights" of the universities questioned, it excited no surprise and called for no comment. It would, indeed, be passing strange if, with your alliances and life-long associations, you could see eye to eye on certain subjects with those of us who look at such things from a purely professional standpoint.

I do not purpose now entering on any discussion in support of our claim for professional autonomy. We can agree to leave that question to the future. Possibly, in the fullness of time, we shall have to ask the

Ontario Government for a Commission to hear arguments and to take evidence on oath respecting the matters at issue between us and the universities. We have no doubt whatever of our ability to establish before such a Commission—both by incontrovertible argument and by the mouth of living witnesses—that our contentions are correct, our cause just, and our claim irresistible. Meanwhile, you express surprise that we are not content with what we have secured, since, in view of the recent amendments to the Act, the appointees in the Council will be "expected simply to consider matters pertaining to curriculum and the examinations." Allow me to ask you, sir, whether you can perceive any present indication that the appointees in the Council design to accept the situation—any intention on their part to thus limit their functions until they are forced to do so by special legislative enactment. The Printing Committee—which threw away $600 of the money the profession, in the specious name of a contract with one of the members of the Council—is composed of a homœopath, two appointees, and two elected men, one of whom claims that he opposed the report. And did not nearly every appointee in the Council further, by voice and vote, this corrupt act? Is not the chairman of the Finance Committee the representative of a defunct educational body? Is there a single committee of the Council that does not boast the presence of one or more appointees? Does this look like limiting their functions to matters of curriculum? And are you any longer surprised that we are not satisfied?

You quote a short passage from one of my letters, and profess to find in it all sorts of abominations—"bitter denunciation," "attacks on private character," and efforts to turn love into "bitter hatred." How near, sometimes, is sentiment to bathos! Such cheap appeals to the clanship of medical alumni for opposition, right or wrong, seem out of place in the editorial columns of a reputable and ably-conducted journal like THE PRACTITIONER, and might be fitly left to your $600 contemporary. The passage quoted contains within itself an ample refutation of the charges you make. I may, however, remind you that the utterly selfish motives on the part of the medical schools, which prompted the creation of the Medical Council and the institution of the Medical Act, were fully exposed in the address delivered by the president of the Council in 1892. That address was published with the approbation of the university appointees, and if I mistake not, received the indorsement and the encomiums of THE PRACTITIONER. Its explanations of the how and the why the Acts of 1866 and 1869 were procured are substantially correct, and the "motives" are now a matter of history. You claim that in adverting to the acknowledged selfishness of the educational bodies I am "attacking members of our profession whom we respect." Does not this border on the ridiculous?

Such a contention, if sustained, would put an end to the criticisms of all public bodies. I have always felt and freely expressed the highest respect and admiration of the personal qualities and professional eminence of the two gentlemen whom you specify by name, and a brief reference to them at the end of my letter to the *Mail* on the 25th ult. may be taken as evidence of that fact. But does my recognition of their private and social excellence and their professional standing preclude me from adversely criticizing any or all of the public bodies with which they may chance to have been at one time or another connected? Are we debarred from freely animadverting upon, or even from severely censuring, the public acts, the official jobbery, and the extravagance of the Medical Council because we believe or know that some or all of its members are personally pure, and entitled to admiration and respect? If you can show that, contrary to the generally received opinion in the profession, and the actual knowledge of those of us who were at the time in the mêlée, the schools were not actuated by purely selfish considerations in procuring the Medical Acts of 1866 and 1869, by all means do so, but let us not import into the discussion of the question hysterical appeals to a spurious *esprit de corps* of university graduates.

I am not preaching a gospel of hatred, nor am I trying, nor have I ever tried, "to turn the love which many of our medical graduates feel for their *alma mater* into bitter hatred." I am amazed that you could permit your pen to formulate against me a charge so unjust and so uncalled for. I am myself not only a graduate, but an ex-professor of Victoria University, and I entertain for her as warm a love, and as filial a respect, and as true a loyalty as any graduate in this province feels for his *alma mater*. Yet I have not thought, and I do not think, that affection for, and fidelity to, my university involves the necessity of, or indeed is compatible with, a servile acceptance of her acts and contentions, right or wrong. I think it impolitic and undignified for any university to continue to meddle with the government of the medical profession in this province, in the face of the clear indication that such interference is, at length, almost universally regarded as unjust and offensive. I think that in continuing to appoint a representative to the Council—even for curriculum purposes alone—after she has ceased to teach and to grant degrees in medicine, my *alma mater* is clearly and distinctly placing herself in the wrong; that even though the presence of her appointee in the Council may have the sanction of law, it is, nevertheless, an unwarrantable intrusion, calculated to arouse feelings of animosity, and to hurt her prestige. If I still had a seat in her senate, I would from it emphatically proclaim my opinion to that effect. Not being thus favored, I frankly, yet lovingly, express to her, through the public press, my con

viction that her position, in this matter, is no longer tenable, and that prudence should dictate to her the wisdom of withdrawing therefrom while she can do so voluntarily and with dignity. You *must* know that there are hundreds of medical graduates in the province who feel on this subject as I do, and whose love and veneration for their respective universities is, nevertheless, not a whit inferior to your own. Are our tender solicitude for our *alma mater's* good repute and our faithful vigilance in warning her of peril an evidence of bitter hatred, or calculated to beget bitter hatred? Do they not rather evince a higher fidelity and a warmer love than the indifference that cares not to guard her from wrongdoing, or the interested selfishness which would urge her to continue in a course certain, in the long run, not only to alienate her medical alumni, but to arouse the angry opposition of the whole body of medical men in the province.? I should be sorry to repay the knowledge I drew from her maternal paps by a treachery so heinous.

While reflecting on the ex-president of the Council for his strained attempt to defend all the actions of the Council, right or wrong, you think my treatment of him is neither just nor courteous. Permit me to say that when Dr. Campbell, even from the ex-president's chair, attempted to interfere in an election with which he had no business to meddle, and ventured to insult the whole Defence Association—which, I may remind you, embraces the major half of the profession—by insolently and without cause ascribing to its directorate "the tactics of the demagogue and the language of Billingsgate," he placed himself outside the pale of courtesy. Had the chief officer of the Council, in the preparation of his address, confined himself to facts and couched his strictures in the language of truth and honest intent, no one would have had ground of complaint, or would have cared to remember that it was delivered by a homœopath lifted by circumstances for the moment out of his native obscurity. The ex-president's remarkable production is the result of a species of literary evolution. It made its appearance in its primitive form as an address delivered to the Canadian Institute of Homœopathy, and published in the second number of the Council's subsidized journal. Its second element was a letter published a few months ago in the same periodical. Emboldened by our forbearance, Dr. Campbell had the hardihood to rehash these two concoctions, with sundry new "moral attenuations," into an electioneering pamphlet for the service of the territorial element of the Council. In both his former literary efforts, he made himself ready for a spanking, and was suffered to escape. This time he has ventured to present himself before us entirely *sans-culotte*, and he is likely to receive the cobbing he so richly merits.

JOHN H. SANGSTER.

Port Perry, July 31st, 1894.

Book Reviews.

THE MEDICAL PROFESSION IN UPPER CANADA, 1783-1850. An historical narrative, with original documents relating to the profession, including some brief biographies. By Wm. Canniff, M.D., M.R.C.S. Eng., author of "The Principles of Surgery," "Settlement of Upper Canada," etc. Toronto: William Briggs, 1894.

It is fairly well known to the profession in Toronto that Dr. Canniff was for many years engaged in collecting material for this very interesting book. Some of the records which he has collected would probably have been entirely lost if it had not been for his untiring efforts. In giving us a history of our profession the author has certainly furnished a valuable contribution to Canadian history. He has told us how much the medical profession of Upper Canada has done in the way of building up this country. He has included a number of brief biographies of distinguished physicians of this province. The profession of Ontario ought to feel very grateful to the able and worthy author, Dr. Canniff, who has given us a work of such great value. As to the publisher, William Briggs, we have only to say that he has done his share of the work in an admirable manner.

PRACTICAL URINALYSIS AND URINARY DIAGNOSIS. A manual for the use of practitioners and students, with numerous illustrations, including colored photo-engravings. By Charles W. Purdy, M.D., of Chicago, author of "Bright's Disease and Allied Affections of the Kidneys," "Diabetes: Its Causes, Symptoms, and Treatment," etc.

Part I. is devoted to the general subject of "Analysis of Urine," treating in detail of urine composition, organic and inorganic constituents of normal and abnormal urine, physical characteristics, volumetric, gravimetric, centrifugal, and all other methods of analysis The various processes and methods of detection, determination, calculation, etc., of all pathological manifestations and substances in the urine, with their causes and clinical significance, including the urine as a toxic agent, all forms of urinary sediments, casts, etc., are discussed.

Part II. is devoted to "Urinary Diagnosis," and discusses fully all forms of urinary and renal diseases, including anatomical considerations, regional relations of the kidneys, ureters, bladder, and the renal pelvis, also their physical examination, etc., clinical diagnosis of urinary and renal diseases. The diagnostic value of the urine in acute infectious diseases is clearly and scientifically set forth, the author giving special prominence to the relations of the chemistry of the urine to physiological processes and pathological facts.

In the Appendix is presented the highly important subject of "Examination of Urine for Life Insurance."

It has been the special aim of the author to furnish the student, physician, and surgeon, in one convenient volume, the essential features of our present knowledge of the urine and urinary diagnosis, thoroughly up to date, and in a systematic, concise, and practical form.

The well-known house of The F. A. Davis Company, 1914 and 1916 Cherry street, Philadelphia, will issue the work in September, 1894. Price, $2.50.

The following book and pamphlets have been received :

NEPHRITIS IN ITS SURGICAL ASPECTS. By Edward L. Keyes, New York. Reprinted from *The American Journal of the Medical Sciences.*

CONGENITAL OCCLUSION OF THE POSTERIOR NARES. By William Scheppegrell, A.M., M.D., New Orleans. Reprinted from *Annals of Ophthalmology and Otology.*

INTESTINAL APPROXIMATION, PATHOLOGICAL HISTOLOGY OF REUNION, AND STATISTICAL ANALYSIS. By Dr. J. B. Murphy, Chicago. Reprinted from *The Chicago Clinical Review.*

A SYSTEM OF GENITO-URINARY DISEASE, SYPHILOLOGY, AND DERMATOLOGY. By various authors. Edited by Prince A. Morrow, A.M., M.D. In three volumes. Published by D. Appleton & Co., New York. Toronto agency, Geo. N. Morany, 63 Yonge street. Subscription only. Volume III., "Dermatology."

Medical Items.

THE CHAIR OF PATHOLOGY AT GLASGOW.—Dr. Joseph Coats has been appointed Professor of Pathology in Glasgow University.

DR. J. S. LYNCH, one of the oldest and most highly respected physicians of Winnipeg, died in the general hospital of that city, July 23rd.

DR. FELIX SEMON, Physician for Diseases of the Throat, St. Thomas' Hospital, has had the title of "Professor" conferred on him by the Prussian Government.

THE Boylston Prize for 1894 has been awarded by the University of Harvard to Dr. Norman Walker, of Edinburgh, for an essay on the "Histological Varieties of Cancer of the Skin."

THE MEDICAL GOLDEN RULE.—"I feel constrained for once to give you a golden rule. It is never to speak ill of any of your fraternity, whatever you may think. You will do yourself no good, and it will only be thought that you are jealous."—*Dr. Chesterfield's Letters to his Son.*

T. T. METCALF, M.D., of Independence, Ky., says: "I have given Sanmetto a thorough trial in chronic cystitis with prostatic enlargement, and find it superior to all other remedies. It not only relaxes the spasmodic condition, but has a soothing effect on the mucous membrane of the urethra and bladder. All my patients speak more favorably of Sanmetto than any other remedy they have ever used."

SIR JOSEPH LISTER.—The Council of the Society of Arts has, with the approval and sanction of the President, His Royal Highness the Prince of Wales, awarded the Albert Medal to Sir Joseph Lister "for the discovery and establishment of the antiseptic method of treating wounds and injuries, by which not only has the art of surgery been greatly promoted and human life saved in all parts of the world, but extensive industries have been created for the supply of materials for carrying the treatment into effect."

ANTIKAMNIA.—This is a combination of elements belonging to the coal-tar group, and is an American product. It is a white crystalline powder, odorless, and has a slightly burning taste; soluble in hot water and in diluted alcohol, but not in cold water. It acts as an antipyretic, analgesic, and anodyne. The importance attached to this drug, I think, is due to its anodyne and analgesic power, and the celerity with which it acts. As an antipyretic in fevers, it acts more slowly than antipyrin, but is not attended with as much depression

of the cardiac system and cyanosis. Whenever a sedative and an analgesic together is indicated, this remedy meets the demand. In severe headaches it is the remedy *par excellence*.—C. A. JULIAN, M.D., Louisville Medical College, in *N. C. Medical Journal.*

M. PASTEUR ON RABIES.—M. Pasteur addressed the following reply to a lady who recently wrote to him for information respecting the symptoms of rabies: "M. Pasteur has had pleasure in receiving your letter of May 31st. The bite of a dog is only dangerous when the dog has got rabies. If there is any doubt in respect to this, the manner in which it may be found out is the following: Put the dog that has bitten where it can do no further harm. Have it examined by a vet., and if it has the rabies its characteristic symptoms will not be long of being observed, and the animal will certainly die in eight days. If at the end of that time no symptoms of rabies has been observed, the bite cannot cause hydrophobia, and there is no reason that the animal should be destroyed."—*New York Medical Record.*

In the list of persons to whom Lord Rosebery has just granted pensions under the Civil List we note the following: Mr. John Beattie Crozier, in consideration of his philosophical writings and researches, £50; Dr. Thomas Gordon Hake, in recognition of his merits as a poet, £65; Mrs. Alice Margaret Hassall, in consideration of the services of her late husband, Dr. Arthur Hill Hassall, £50. Dr. Beattie Crozier graduated as M.B. in the University of Toronto in 1872. His writings, which are highly thought of by Mr. Herbert Spencer and other leaders of modern thought, include "The Religion of the Future," published in 1880, and "Civilization and Progress: Being the Outlines of a New System of Political, Religious, and Social Philosophy," a second edition of which appeared in 1888.—*British Medical Journal.*

MEAT-EATING, VEGETARIANISM, AND MANNERS.—A good deal has been said, recently, about the bad temper caused by meat-eating, and, by implication, of the mild gentleness of those who subsist on roots and herbs. The *National Popular Review* is moved to champion the flesh-devouring man, and says: "The Hindoo professional assassin or murderer is probably as cold-blooded and ferocious a being as one may imagine. The Chinese are great vegetarians. Rice, beans in the green state, cabbage and large spinach, watercresses, and fruits enter largely into their diet. They are, besides, very fond of fish, and yet there is nothing more bloodthirsty and bellicose, more wild or more unmanageable, than the Chinaman when aroused. On the other hand the native Californians, like the dweller on the wild pampas of South America, who lived on an exclusive beef diet, were generous, self-composed, and not in the least given to either strife or bloodshed."—*Boston Medical and Surgical Journal.*

PROFESSOR BILLROTH AS AN OPERATOR.—The general public, not unnaturally, assume that a great surgeon is necessarily a most skilful operator, a mistake not infrequently made by the profession also. Ingenuity, however, and boldness in devising operations are very different attributes from the manipulative skill, decision, and tact required to carry them out. Professor

Billroth united the two sets of qualities in a very conspicuous manner. Yet it was always the guiding intellect rather than the manual dexterity which impressed itself on the spectator. Truth to say, in the actual performance of an important operation Billroth showed no very marked superiority over his fellow-surgeons. He avoided any show of brilliancy or flourish, went steadily to work, erred, if at all, on the side of slowness, and was neither more nor less discomposed by any complication or untoward event than any one else. The finish of his operative work was rather the result of his immense experience than of any remarkable aptitude. Nevertheless, as an operator, he must be held to have justly earned a very high place.

MR. GLADSTONE'S EYESIGHT.—We are authorized to state that a careful examination was made of Mr. Gladstone's right eye on Thursday, the 19th inst., exactly eight weeks after the operation for cataract. The eye is, and has for some time been, strong and quiet. In the earlier period there was rather more than the usual ciliary redness, and for a short time, at about the end of the first week, there was some threatening of inflammation of the iris; the pupil, however, dilated promptly and widely under the influence of atropine, and no iritis occurred. Though the lens was hard, and came out easily, the pupil is now sufficiently obstructed to render a needle operation necessary sooner or later, the operated eye being, in its present state, somewhat less useful than the other. With the other eye, which is affected by immature cataract, Mr. Gladstone can still, with the aid of a weak solution of atropine, see to write and to read good print moderately well. Mr. Gladstone is remarkably well and very vigorous, but he is troubled with an occasional slight return of his old ailment if he walks too much.—*London Lancet.*

REWARDS FOR FECUNDITY.—The Province of Quebec has a law bestowing one hundred acres of government land upon every father of a family who has twelve living children, issue of a lawful marriage. Up to the present 174,200 acres of rich agricultural land have been given away in bounties to 1,742 fathers of twelve or more children, who have complied with the conditions of the act. Not all of these proud fathers, however, are satisfied with the amount of the bounty, for instances of families of twenty or more children are not rare, and the fathers of these want a proportionately higher reward for their patriotic efforts. One old gentleman, Mr. Paul Belanger, of River du Loup, wants three hundred acres, and bases his claim upon the fact that he has thirty-six living children. Another claimant for an increased allowance is Mr. Theoret, of St. Genevieve. His wife, who is but thirty years of age, has presented him with seventeen children. She has just given birth to triplets for the second time in five years, and has had twins three times. Mr. Theoret hopes to acquire a large portion of the province if his wife will continue to do her share.—*New York Medical Record.*

THERAPEUTICS OF SYRUP OF FIGS. — The medical profession should understand at once the composition of "Fig Syrup," so extensively advertised in the leading medical journals of this country. Its laxative properties are obtained from the well-known drug, senna. The company make no secret of

this, but simply claim that they have succeeded in obtaining the active principle from the senna in such a manner that it can be so combined with other agents as to give a pleasant mixture. The natural taste of senna is both nauseous and bitter, decidedly disagreeable in odor and taste. To overcome these objections the drug has been prepared in a number of ways. But in the form of the Fig Syrup it is a most palatable preparation, to which the youngest child or most fastidious lady could not object. Bartholow says that senna "is highly prized" by many patients as a remedy for habitual constipation. He also states that it does not cause inflammation or hypercatharsis, and its purgative action is not followed by intestinal torpor and constipation. He further adds that "it is a very safe and serviceable cathartic."

CHEAP TEMPERANCE DRINKS.—We have once again received a strong denunciation of temperance reformers for not having discovered a cheap, palatable, and popular teetotal beverage. The advocates of abstinence are not, however, specially blameworthy in this matter. Repeated attempts have been made, by the offer of handsome prizes, by abstainers and others, to stimulate the production of such a drink, but the issue hitherto has been failure. In a well-known attempt of this kind, of the forty-seven competing beverages it was truly said that the attractive were intoxicating, and the unintoxicating repulsive. There are several varieties of effervescent, pleasant, non-alcoholic drinks, such as orange and lime-fruit champagnes, but a still and pleasing liquor has not yet been forthcoming, at least such a one as would prove acceptable to the public. Whoever succeeds in producing such an article will speedily make a competency. This achievement ought not to be beyond the resources of modern manufacture. Meantime, we know no more refreshing drink, especially in hot weather, than lemon juice in iced water, but it ought to be drunk moderately. Ginger beer in penny stone bottles, or "home-made" selling at a penny a bottle, is an extremely pleasant, wholesome drink, to our palate more acceptable than champagne of whatever brand. It is far more refreshing than the costly ginger ales of commerce, of which the price is at least three times as high.—*British Medical Journal.*

INGLUVIN is the name given to a preparation made from the gizzard of the domestic fowl. It is a yellowish, gray powder of a faint odor, and almost devoid of taste. It is insoluble in water. Ingluvin is put up by its manufacturers (Messrs. William R. Warner & Co., of Philadelphia) in 5-grain tablets. Ingluvin is compatible with alkalies. Its virtues reside in a peculiar bitter principle which enters into its composition. It is prescribed in the same doses and combinations as pepsin. Ingluvin was introduced to the notice of the medical profession about 18 years ago. It is of special benefit in the relief of sick stomach. This substance may be given with success when vomiting depends upon organic affection of the stomach, as in acute and chronic gastric catarrh and in gastric ulcer. Nausea, due to disease of other abdominal or pelvic viscera, as the liver, kidneys, uterus, and ovaries, is likewise relieved by the administration of this remedy. It allays the gastric irritability which accompanies tabes-mesenterica and marasmus. Vomiting produced by over-indulgence in liquor has been subdued by its powers. It has been found of

advantage in cases of sea-sickness, and in the relief of the gastric irritability of bottle-fed babies. Its peculiar province, however, is alleviation of the vomiting of pregnancy, in which it approaches the character of a specific. As every one knows, this difficulty is frequently very intractable, and one approved remedy after another may be used without avail. To those who have witnessed repeated failures of medication, ingluvin can be recommended as one of the most efficient remedies which we possess for the relief of this distressing symptom. Ingluvin is likewise beneficial in dyspepsia, when produced by functional inactivity. It is able to promptly check the diarrhœa which is caused by indigestion. By reason of its influence upon the stomach and bowels, ingluvin is capable of marked service in cases of cholera infantum and cholera morbus. From the preceding account, it will be seen that ingluvin possesses an exceedingly important sphere of usefulness. Ten grains I found generally a sufficient dose. In some instances 20 grains were required, while in the milder forms of indigestion a 5-grain tablet, after each meal, accomplished the desired purpose. To infants I gave the remedy in doses of 1 or 2 grains.

THE DISCOVERY OF CHLOROFORM.—The *Century Magazine* for January contains a paper on "Sir James Simpson's Introduction of Chloroform," written by his daughter. Following up the American discovery of sulphuric ether as an anæsthetic, we are told of Simpson's infinite pains and frequent disappointments in his search for a more effectual means of avoiding the agonies of operation. Sir James was daring even to rashness in his experiments, and, as a rule, tried the effect of agents upon himself, more than once endangering his life in doing so. The account of the first trial of chloroform reminds one somewhat of the Bacchanalian orgies of Squire Western and his bucolic companions, and, despite the weighty interests with which the sitting was fraught, we cannot repress a smile at the ludicrous disappearance of the investigators "under the table." On returning home after a weary day's labor, Dr. Simpson, with his two friends and assistants (Drs. George Keith and Mathews Duncan), sat down to their somewhat hazardous work in Dr. Simpson's dining-room. Having inhaled several substances, but without much effect, it occurred to Dr. Simpson to try a ponderous material which, on account of its great weight, he had hitherto regarded as of no use. It happened to be a small bottle of chloroform. It was searched for, and recovered from beneath a heap of loose paper, and, with each tumbler newly charged, the inhalers resumed their occupation. Immediately an unwonted hilarity seized the party; they became bright-eyed, very happy, and very loquacious, expatiating on the delicious aroma of the new fluid. The conversation was of unusual intelligence and quite charmed the listeners—some ladies of the family and a naval officer, a brother-in-law of Dr. Simpson. But, suddenly, there was a talk of sounds being heard like those of a cotton mill, louder and louder; a moment more, then all was quiet; then a crash. On awaking, Dr. Simpson's first perception was mental. "This is far stronger and better than ether," said he to himself. His second was to note that he was prostrate on the floor, and that among the friends about him there was both confusion and alarm. Hearing a noise, he turned about, saw Dr. Duncan beneath a chair; his jaw had dropped, his eyes

were staring, his head was bent half under him; he was quite unconscious, and was snoring in a most determined and alarming manner. More noise still, and much motion. And then his eyes overtook Dr. Keith's feet and legs making valorous efforts to overturn the supper table, or more probably to annihilate everything that was on it. After such convincing testimony to its power, Sir James lost no time in publicly proclaiming the virtues of the new anæsthetic.

SEVENTH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNÆCOLOGISTS.

The American Association of Obstetricians and Gynæcologists will hold its seventh annual meeting at Toronto, Ont., Wednesday, Thursday, and Friday, September 19th, 20th, and 21st, 1894. The following is the preliminary programme, subject to amendment until September 1st, namely: (1) President's address, George H. Rohé, Catonsville, Md.; (2) Personal Experience with Pus Tubes: When to Operate, How to Operate, and the Results of Operation, Jas. F. W. Ross, Toronto, Ont.; (3) Relation of Hysteria to Structural Changes in the Uterus and Adnexa, A. P. Clarke, Cambridge, Mass.; (4) Demonstration of a Mechanism of Intussusception (rabbits), Robert T. Morris, New York; (5) Nephrectomy, L. H. Dunning, Indianapolis; (6) Treatment of Distension of the Fallopian Tubes without Laparotomy and Removal, Frank A. Glasgow, St. Louis; (7) Hysteria in Pregnancy, W. P. Manton, Detroit; (8) Relations of Renal Insufficiency to Operations, Carlton C. Frederick, Buffalo; (9) *a*, Importance of Recognizing Septic Puerperal Endometritis Early, and Its Treatment; *b*, Demonstration of a Portable Operating Table for Gynæcological and Abdominal (Trendelenberg) Work, Edward J. Ill, Newark, N.J.; (10) Suspension of Retroflexed Uterus by the Utero-ovarian Ligaments, with Report of Cases, Reuben Peterson, Grand Rapids, Mich.; (11) The Element of Habit in Gynæcic Disease, Geo. F. Hulbert, St. Louis; (12) Some Results of Ether Anæsthesia in Abdominal Operations, I. S. Stone, Washington, D.C.; (13) Report in Abdominal Surgery, Presenting Cases, A. Vander Veer, Albany; (14) Supplementary Paper on Abdominal Section in Intrapelvic Hæmorrhage, M. Rosenwasser, Cleveland; (15) Conservative Midwifery, J. M. Duff, Pittsburg; (16) The Cause of the Thirst following Abdominal Section, Eugene Boise, Grand Rapids, Mich.; (17 The Care of Pregnant Women, W. B. Dewees, Salina, Kan.; (18) The Present Status of the Surgical Treatment of Uterine Fibroids, Lewis S. McMurtry, Louisville, Ky.; (19) *Discussion*—Inflammatory Disease of the Uterus and Appendages and of the Pelvic Peritoneum. (*a*) Introductory Remarks, William Warren Potter, Buffalo; (*b*) Historical Sketch, Edward J. Ill, Newark, N.J.; (*c*) Clinical History, Charles A. L. Reed, Cincinnati, O.; (*d*) Causation and Pathology, Lewis S. McMurtry, Louisville, Ky.; (*e*) Diagnosis and Prognosis, James F. W. Ross, Toronto, Can.; (*f*) Treatment, M. Rosenwasser, Cleveland, O.; A. Vander Veer, Albany, N.Y.; J. H. Carstens, Detroit, Mich.; A. H. Cordier, Kansas City, Mo.; (*g*) Results—(*a*) When Untreated; (*b*) Under Various Methods of Treatment, Joseph Price, Philadelphia, Pa.; (20)

Intercurrent Typhoid Fever in Pregnancy, Thomas E. McArdle, Washington, D.C.; (21) Notes on a Case of Cholelithiasis, Frederick Blume, Alleghany, Pa.; (22) Perineal Operations, Joseph Price, Philadelphia; (23) Remarks Bearing on the Surgical Treatment of Intussusception in Infants, Based on Two Successful Cases, Henry Howitt, Guelph, Ont.; (24) The Limitations of Surgery in the Treatment of the Uterus and its Appendages, William H. Myers, Fort Wayne, Ind.; (25) The Incision in Abdominal Surgery—Methods and Results, J. H. Carstens, Detroit. Mich.; (26) Abdominal Section in Ectopic Gestation, where the Fœtus is Living and Viable, X.O. Werder, Pittsburg, Pa.; (27) Restoration of Intestinal Continuity without Mechanical Devices, William E. B. Davis, Birmingham, Ala.; (28) Hysterectomy for Cancer of the Uterus, E. W. Cushing, Boston, Mass.; (29) Chronic Progressive Atrophy of the Vulva (Kraurosis Vulvæ), Its Pathology and Radical Treatment, Charles A. L. Reed, Cincinnati, O.; (30) The Reason why Patients Recover from Tuberculosis of the Peritoneum after Operation, Robert T. Morris, New York; (31) Report of Two Cases of Injury of the Ureter following Operation for Cancer of the Uterus, L. H. Laidley, St. Louis; (32) Vaginal Fixation of the Uterus as a Cure for Retro-displacements, Clinton Cushing, San Francisco; (33) Hydrosalpinx, A. H. Cordier, Kansas City; (34) *Discussion*—Should Antiseptic Vaginal Douching be made a Routine Practice in the Puerperium? Referees, A. H. Wright, Toronto; Thos. Lothrop, Buffalo; J. Edwin Michael, Baltimore, Md.; A. T. Machell, Toronto; (35) Infectious Diseases during Pregnancy, Dr. A. H. Wright, Toronto; (36) Congenital Diaphragmatic Hernia—Reports of Two Cases, H. T. Machell, Toronto; (37) Report of some Interesting Abdominal Operations, with exhibition of specimens, Rufus B. Hall, Cincinnati.

OBITUARY.

DR. ISAAC WESLEY BROWN, of Beachville, Ont., died at his home, July 20th, 1894, from cancer of the pancreas, as was discovered by post-mortem examination. He became a licentiate of the Medical Board in 1858, and at once went to Beachville, where he practised continuously until a short time before his death. He was successful in practice, and was highly esteemed in the county of Oxford. He was 57 years of age, and left a widow and three children.