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# The Canadian Practitioner and Review.

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## Original Communications.

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### THE PRODROMATA OF INSANITY.\*

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Some years ago a paper, bearing a title very similar to that upon which I now venture, was presented before the Harveian Society of London by one of England's most eminent alienists. The subject was dealt with comprehensively, and so great a variety of symptoms prodromal to mental disease were presented that, it is said, every one who heard the paper went away in a great state of perturbation; every one discovered that he possessed, on his own account, some of the symptoms indicative of oncoming insanity. In the face of such an experience, by one whose fame is for all time established amongst those who favor psychiatry, it surely requires courage, as well as presumption in me, to come before you with a paper on the prodromata of mental disease.

Lest you fear that you may, like those of the Harveian Society, be stimulated to an unpleasant degree of introspectiveness as my paper proceeds, a disclaimer of evil intent at the outset may be reassuring. There is to be no attempt at exhaustiveness in this paper. It will not venture even a superficial glance at the whole psychiatric field, but will deal only with the more common forms of mental derangement—those with which the general practitioner is more or less intimately acquainted. And because it is presented by one whose

\* Read before Canadian Medical Association, Halifax, August, 1905.

work is done in a hospital for the insane, it must not be regarded as authoritative, for the asylum physician has little opportunity of learning about the earlier manifestations of insanity, which necessarily come under the observation of the general practitioner. As a matter of fact, we of the psychiatric specialty, after a long period of observance of our medical brethren who exploit other lines, have concluded that it is time that we, too, assumed the convenient expedient of poking the responsibility for our ignorance upon some other branch of the profession, and the special reason for bringing my paper into being is to secure an opportunity to call the attention of the family doctor to the splendid opportunity he has of contributing towards our enlightenment by thorough study of early symptoms and careful estimate of their relative importance. The majority of patients coming to institutions for the insane are incapable of giving a reliable account of the development of their disorders, and the asylum physicians must necessarily depend almost entirely upon the histories which accompany patients. The meagreness of such histories frequently bears testimony, of the silent yet eloquent sort, to lack of interest in mental cases on the part of many physicians in general practice. Yet it is generally conceded that no other illness compares in fatefulness with mental disease; there is none which causes greater distress to friends; none more dreaded, or from which recovery is more devoutly to be wished for; and none which more intimately touches individual, family and nation, or which is of greater import from sociologic or economic viewpoints.

When with these facts we have also to consider that insanity is rapidly increasing in civilized countries, and that it is a condition which is often arrested in its incipency, we have surely a sufficient combination of reasons why the general practitioner should regard mental disease as of no less importance than other conditions which he is called upon to treat, and should lead him to a careful study of mental abnormalities.

It is rather a peculiar circumstance that the majority of physicians are especially interested in the one form of mental disease from which there can be no recovery—general paresis. It is very desirable that an early diagnosis should be made in this disease, because of the fact that it often manifests itself in a profligacy which may bring financial ruin to patient and family, or in a moral lapse which may lead to unfortunate legal complications, and cause great mortification to friends.

Physical symptoms, especially pupillary phenomena, tremor of lips and tongue, exaggeration of knee-jerk and some blunting of cutaneous sensibility, are commonly to be determined very early in the disease, and are of such diagnostic importance that they should always be looked for in an individual approaching the age of thirty-five or forty, whose general behavior has undergone notable change.

It is not generally recognized that the type of general paralysis has undergone considerable variation of late, and that the mental manifestations are often those of nervous exhaustion, rather than the expansiveness and grandiosity which have colored the classical picture of the disease. Frequently there are early complaints of disordered digestion, lack of energy, disturbed sleep, difficulty in concentrating thought, failure in memory and uneasy sensations in the head, which are told with such an air of concern and with such minuteness of detail as to convince the physician that he has a case of neurasthenia to deal with, and should a careful physical examination be omitted the real condition may be quite overlooked. The danger of this error is increased because of the fact that general paralysis is very prone to occur just at the "neurasthenic age." In some instances the earlier stages of general paralysis are characterized by mental depression, and one might at first think he had melancholia to deal with. The physical symptoms are really the only constant ones in the disease, and they should always be looked for in the first examination of any mental patient. There is, perhaps, no form of alienation in which it is more desirable to have the patient committed to an appropriate institution at the earliest possible moment. Certain it is that if we are ever to escape from the unvaried fatality with which the disease has thus far confronted us, we must diagnose at the very beginning and institute treatment at once.

Several recent writers have attempted to trace a close analogy between general paralysis and a condition which is especially apt to appear during the years of adolescence—the dementia precox of Kraepelin's conception. The term dementia precox is not ideal, but so large a company of authors have heaped their criticisms upon it that there appears to be no further need for abusing it, and so it is accepted for the purposes of this paper. The condition is one which, in its earlier stages, may present itself in at least two, and possibly in three forms, but it is generally characterized throughout its course by a peculiar suspension of emotional activity, and nearly always ends in a state of profound apathy and indif-

ference, rendering the patient quite unfit for anything but institutional life. It is a very common form of mental disorder, including a considerable majority of all cases occurring under twenty-five years of age, and offers an extremely unfavorable prognosis. It seems, moreover, to have been rapidly increasing in frequency of late years. For these reasons, and also because it contributes the greater proportion of the demented to the population of our asylums, it is a variety of mental disease which should receive most earnest consideration.

Just as a blunting of the moral sense may be one of the first signs of general paralysis, so the development of bad habits may be prodromal of dementia precox. A reasonless depression is also an early symptom in a fair proportion of cases. Lack of attentiveness, frequently recurring dreamy states, and especially failure to show natural affection for and interest in parents and friends, are very suggestive symptoms. A state of depression, accompanied at the very onset by vivid hallucinations or confused delusions, generally indicates dementia precox. A tendency to silly laughter and grimacing, flightiness and weakness of judgment are all more or less indicative of this disease. It is not until the condition has become very advanced that failure in comprehension or impairment of memory becomes noticeable.

Kraepelin limits the use of the term melancholia to cases showing a rather characteristic depression, and which generally appear in the involuntal period—either coincident with or following upon the climacteric. Apprehension and depression are constant features, but delusions need not be present, and there may, in fact, be no intellectual defect until the condition has lasted for a long time. Such patients often suicide in spite of the absence of delusions; a fact which is attested to by a long list of self-ended lives. The early recognition of the disorder is consequently of great importance. Amongst the symptoms which first become manifest, certain sensory symptoms deserve consideration. One of these is headache, or, perhaps, more correctly, a peculiar distressing sensation, which is usually persistent and not relieved by sleep, which is often accompanied by variously described paresthetic sensations and sometimes by vaso-motor disturbances, and which has often associated with it a feeling of weariness and incapacity, and an indefinable fear. Insomnia is another early symptom, which, while by no means limited to melancholia, is especially important in connection with this disease. It should always receive most careful attention. Loss of muscular tone, with

a feeling of weakness and a flabby state of the muscles, class amongst the prodromal symptoms of melancholia, and constipation—frequently of a most obstinate type—is extremely common. Digestive disturbances, with consequent nutritional defect and loss of weight, often coexist. The mental symptoms appear gradually, as a rule, and slowly increase in intensity. Some emotional depression may be noted early, but memory remains good for a long period, and the patient is frequently able to talk intelligently and usually without manifest effort during this time.

In the forms of insanity which tend to recur, there is offered an especially good opportunity for studying the early symptoms. The recurrent manias and the recurrent melancholias of the older writers have, with certain other psychoses, been grouped by Kraepelin under the term manic-depressive insanity. The applicability of this term becomes apparent to any one who has had an opportunity of studying several attacks of mental disease in a single individual, for it is found that each attack presents features of its own, that some are especially characterized by exaltation, others by depression, while still others show an admixture of exaltation and depression, and yet, as far as can be determined, the pathologic condition is the same in each instance. The symptoms premonitory of either phase of this psychosis may be divided into objective and subjective. Among the objective symptoms which often indicate the advent of a maniacal attack may be cited unusual alertness, quickened muscular reaction (especially indicated in unusually rapid play of the muscles of facial expression and of gesturing), a tendency to over-activity, and often an improvement in the general "set-up" of the individual. There are sometimes attacks of muscular twitching, sometimes tremor—especially when finer movements, such as those of writing, are attempted, and very often an unusual degree of loquacity. Subjective symptoms of an approaching manic attack include a feeling of unusual well-being, widened and increased interest in the affairs of life, and apparently lessened need for food and sleep. These symptoms may be present for some time without there being any noticeable flaw in mental action; in fact, the period may be one characterized by exceptionally good mental work. But if they are abnormal to the individual, and especially if there be predisposition to mental disease because of heredity or a previous attack, they are strongly presumptive of oncoming excitement.

While, in a general way, objective symptoms predominate

before an attack of excitement, subjective—or in other words sensory—symptoms are most prominent in antecedence of depressed states of mind. A series of symptoms may precede the depressed phase of manic-depressive insanity, which correspond very closely with those which have been described as premonitory of melancholia. Comparative youth, a bad inheritance, and especially the history of a previous attack of mental trouble, point to the depressed phase rather than to melancholia, and an early appearance of indecision and of loss of capacity for effort, add to the likelihood that an attack of the depressed phase of manic-depressive insanity is impending.

Many attacks of mental trouble have their incidence in an attack of acute bodily illness. The various febrile psychoses, and some of the cases of collapse, delirium, etc., are especially to be thought of in this connection, but an attack of manic-depressive insanity, melancholia, or dementia precox, may be determined in this way. The infectious diseases are most likely to be followed by mental disorder, and typhoid seems to be particularly apt to leave behind it a mental warp. Sometimes the mental symptoms so obscure the clinical picture that the underlying general disease may be overlooked. Psychical enfeeblement in the spheres of comprehension, thought, memory, emotion and action, suggest a coexisting physical condition, making its damaging influence felt in all these directions, and it is especially associated with an acute infection that such mental symptoms are found. Occasionally mental symptoms may really antedate other symptoms of an acute febrile process.

My paper is intended to be suggestive. Enough has been outlined to show that, even with our present knowledge, the watchful family doctor may often be able to detect mental disorder in its incipiency—when the greatest likelihood exists of improvement under treatment. Of course in estimating the importance of prodromal symptoms, one should give full value to the natural temperament of the individual. In a predisposed individual, such symptoms as have been noted may be of the most serious import, while in one whose family history and personal past are good, they may mean but little. It may at times be very difficult to determine when one has to deal with prodromata and when with an actual attack. Much observation will be necessary before our knowledge will have attained anything like a satisfactory degree of accuracy.

## GASTRIC ULCER.\*

By JOHN FERGUSON, M.A., M.D.,  
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### I. HISTORICAL.

Gastric ulcer is no new disease, nor is its recognition of recent date. Hippocrates treated Pericles for gastric pain, and speaks of black vomit and other symptoms that point to the fact that he had met with cases of gastric ulcer, though he did not recognize the ulcer as the cause of the pain, vomiting and hemorrhage. The same can be said with regard to Galen. Many centuries elapse before there are any positive statements of the recognition of gastric ulcer. When the sixteenth century, however, is reached some very clear and specific records of cases are to be found.

During that century John Bauhin mentions the case of a young woman who died of a perforated ulcer, the stomach after death containing blood, and the abdominal cavity gas, fluids and remnants of food. Another case is recorded by Donatus to the effect that the coats of the stomach were eaten through near the pyloric opening. There are other instances of ulcer with perforation, callous cicatrices, hemorrhages, and one with a fistulous opening, found in the writings of that period; and also several instances of deformity of the stomach, such as transverse contraction, attributed to gastric ulcers. Among the writers who have handed down to us descriptions of such cases may be mentioned Sommering, Morgagni, Mangold, and others who practised and made dissections during the seventeenth and eighteenth centuries.

Voigtel gave a very careful account of the disease in the early part of the eighteenth century. He states that these ulcers may be surrounded by hardened edges, but at other times such a condition is absent; there may be a perforation, and the stomach walls look as if a piece had been cut out. At times the gastric tissue is contracted and condensed. Such language approaches very closely in accuracy to that employed by modern pathologists. Towards the close of the same century Matthew Baillie gave an excellent account of gastric ulcers with many well arranged clinical observations, and some good illustrations, drawn from his own post-mortem investigations. About the same time the Italian physiologist,

\* Read at meeting of the Toronto Medical Society, February 1st, 1906.



Spallanzani, advanced the view that ulceration of the stomach was due to a process of self-digestion. This view was also urged by the celebrated John Hunter, who held that they were due to erosion of the stomach walls by the gastric juice.

But this view fell into disfavor, and many crude theories were offered to account for the ulcerative process. In the early years of the nineteenth century Carswell and Morin again took up the question and urged that the disease was the result of chronic inflammation of the stomach, derangement of the circulation in its walls, and the action of its own secretions. One of the most interesting events in the history of the subject is the report of a case in 1818, when Chaussier proved that a death was due to perforation after chronic ulceration, and not to poison as alleged. In the second and third decades of the eighteenth century, four names stand out very prominently as having added much to our knowledge of gastric ulceration, namely, Lainé, Rauseh, Cruveilhier, and Abercrombie. In the writings of these observers it is apparent that simple ulcer was sometimes confused with malignant disease, but we also learn from their writings that care should be taken to clearly differentiate death by perforation from death by poison. This was a distinct advance in our medico-legal knowledge. In 1829-35 appeared the volumes of Cruveilhier's pathology. They contain an amount of material of an anatomical, pathological and clinical character which place him in the very front ranks among the great medical names of the world. He points out acute and chronic ulcer, cicatrization, contraction, perforation, hemorrhage, malformation of the pylorus, and many other facts now well known and admitted.

This brings the historical study of the subject down to the time of the later pathologists, such as Rokitansky, Virchow and Trousseau. The first of these gave a description of the anatomical appearances that must ever remain as models of their kind. In 1855, Virchow announced his famous views on the necrotic origin of ulcers caused by hemorrhages into the mucous membranes. This view was taken up by many others and much experimental work was performed to prove that ligation of the portal vein and the various gastric arteries caused ulceration of the stomach walls; and here the names of Müller, Pavy, and Ebstein are worthy of special mention. Before passing from this brief review of the historical study of gastric ulcer, it is only fair to state that the term *ulcus ventriculi* was first employed by Peter Frank, about 1800.

Surgical intervention for gastric ulcer dates from Rydygier's operation in 1881.

## II. ETIOLOGY.

In 1786 John Hunter taught that the gastric juice did not attack the healthy mucous membrane, because of a specific property of the living cells which he called "The vital principle." No better explanation for the immunity of the mucosa of the stomach to the action of its own secretion has ever been offered. Bernard held that the non-digestion of the mucous membrane was due to the property in the epithelium that prevented the absorption of the gastric juice. Stricker thought that the mucus formed in the stomach protected its surface. Pavy claimed that the alkaline blood prevented the digestion of the stomach tissues. Hunter's and Pavy's views are the only ones that have the weight of clinical and physiological evidence in their support.

In the great majority of cases of gastric ulceration there is a state of hyperchlorhydria on the one hand, and anemia and reduced blood alkalinity on the other. It is quite true that there are cases of gastric ulcer in which the amount of hydrochloric acid is below normal; but there must be present some offsetting condition that enables such a type of gastric juice to act upon the gastric mucosa.

From clinical observation, post-mortem investigation, and experimental research, it has been accepted as established that the following conditions play the most important part in the etiology of ordinary ulceration of the stomach:

1. Hyperchlorhydria, hyperacidity, or hypersecretion of the gastric juice.

2. A reduced vitality, or lowered resistance of the mucous membrane.

3. Changes in the blood, such as reduced alkalinity in chlorosis.

4. Some form of local bacterial infection, causing thrombosis, embolism, or necrosis of tissue.

Under one or other of these headings almost every case of gastric ulcer can be classified. Instances of the disease, due to the swallowing of some corrosive chemical or overly hot liquid, or to injury from a spicula of bone, a blow from without, or certain occupations causing pressure, would come under the division of reduced vitality or lowered resistance on the part of the mucous membrane, which would permit of the self-digestion of the enfeebled portion of the mucous surface by the contained gastric juice.

Some authors contend that many instances of gastric ulcer are due to infection by some micro-organism. The methods by which these organisms act are now much better known than was the case a few years ago. It is admitted that they may cause thrombosis or embolism of the vessels, or establish a local inflammation in the glands of the stomach, with far-reaching consequences on the vitality of the part affected, and the readiness with which it may break down into an open ulcer. Robson and Moynihan are of the opinion that most cases of ulcer of the stomach are of septic origin, a view that is likely to gain in favor.

Age and sex are potent factors in the etiology of gastric ulcer. It is a matter of common clinical knowledge that women suffer most frequently, and during the menstrual period of life. This may be due to their occupation in domestic capacities for servant girls often suffer; or it may be caused by the chlorosis so common among young women, giving rise to an altered condition of the blood, with a lowering of its salts and an increase of the hydrochloric acid in the gastric juice; or it may, again, be brought about by the periodic congestions of the abdominal viscera before, and their depletions after each menstruation. The decaying of the teeth, the changes constantly going on in the pelvic organs, the events incident to childbearing and nursing, all open up many avenues for sepsis, as well as for changed states of the blood and the gastric juice. This is the period of life in which Virchow's theory that thrombi and emboli are principal causes, may fairly be admitted as having a large measure of truth in it.

At a later period of life, but in a very different way, the vascular system may play a very important role in the causation of the disease. As the result of "the strenuous life," alcoholism, lead poisoning, syphilis, gout, auto-intoxications, and the many infections, the arterial system begins to undergo degenerative changes. Arterio-sclerosis is now no longer regarded as a condition affecting the radials and a few of the peripheral arteries. It is admitted to play an important part in the causation of many visceral affections. The brain, the kidneys, the digestive organs, all may suffer. In this way may readily be explained the blocking up of some of the channels of blood supply to the stomach, and a local lowering of the vitality and resistance that ends in the formation of ulcers, such as we know to occur in men who have passed mid life.

Whatever views may be held on the resistance of the tissues in the etiology of gastric ulcer, and how a lowered resistance may be brought about, there can be no two opinions on the part played by the gastric juice itself. It has long been recognized that true gastric ulcer only occurs in such parts of the alimentary canal as are reached by this fluid, namely: The lower end of the esophagus, the stomach, the duodenum, and the small intestine in the case of a gastro-enterostomy. With truth these erosions have been called peptic ulcers.

Speaking more specifically with regard to age, the following table from Welch is very instructive:

Age .....	1-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	over 100
No. of Cases .....	1	32	119	107	114	108	84	35	6	....	1
Totals .....	33		226		222		119		7		

In the matter of sex and location, it has been noted that ulceration of the stomach is twice as frequent among women as among men, whereas in the case of duodenal ulcers four males suffer to one female.

### III. VARIETIES AND SITE.

It has long been known that gastric ulcers assume a variety of clinical forms, each with its characteristic anatomical features. W. H. Welch has classified them thus:

1. Latent ulcers without symptoms, and discovered only at an autopsy.
2. An acute form of ulceration which ends in speedy perforation, with few symptoms or none, preceding the fatal attack.
3. The hemorrhagic form, in which, after a brief course, and, perhaps, with few symptoms, there is a severe loss of blood.
4. The gastralgic form, in which there is dyspepsia with pain and vomiting as the leading symptoms.
5. A chronic hemorrhagic form with recurrent attacks of bleeding, accompanied by pain, vomiting, and other symptoms.
6. A form in which there is severe cachexia. This is usually the terminal stage of one of the other forms, but may come on rather acutely, as if the disease was a rapid cancer of the stomach.

7. That form which runs a very chronic course, with periods of apparent recovery, only to be followed by relapses, or the formation of new ulcers.

8. Those cases in which there is the formation of much cicatricial tissue, causing stenosis of the pyloric opening, or contortion of the stomach, such as hour-glass contraction.

In addition to the foregoing clinical types there are the anatomical characteristics which belong to the acute and the chronic forms. In the acute gastric ulcer the lesion is usually small, and it presents a clean-cut, funnel-shaped appearance, as if the tissue had been punched out. There is no induration and the surrounding parts are smooth and normal. The chronic ulcer, on the other hand, is usually larger and generally presents indurated edges which have lost the clean-cut, sharply-defined appearance of the acute ulcer.

Ulcers may vary greatly in depth, from the merest superficial erosion to those which spare only the peritoneal layer, or effect a complete perforation of the viscus.

In about 20 per cent. of all the cases there are more than one ulcer. With regard to location they may be divided thus: 37 per cent. on the lesser curvature; 30 per cent. on the posterior wall; 12 per cent. on the pylorus; 9 per cent. on the anterior wall; 6 per cent. at the cardiac end; and 7 per cent. on the fundus and greater curvature. About 5 per cent. of all adults show, by autopsy, to have had gastric ulceration.

#### IV. COURSE AND SEQUELS.

The course of gastric ulcer is very varied, from the most acute to the very chronic types. Statistics show that about 75 per cent. of all the cases recover. The actual death-rate has been variously estimated by different writers. Leube admits a death rate of 25 per cent.; Lebert, 10 per cent.; Welch, 15 per cent.; Fenwick, 20 per cent.; and Bulstrode, 18 per cent. Hemorrhage causes death in from 3 to 5 per cent. of the cases, and perforation in from 6 to 10 per cent., according to the investigator.

Apart from hemorrhage and perforation, gastric ulcer may give rise to a number of very serious sequels, such as cicatricial stenosis of the pylorus, hour-glass contraction of the stomach, the occurrence of cancer on the site of ulcer, the formation of chronic abscess, and the development of a progressive form of anemia. It is not known how often these sequels follow ulceration of the stomach. In the case of cancer, however, considerable thought has been given to the subject; and with

the result that cancer is found to occur generally in the same parts of the stomach as do ulcers. In very many of the cases of cancer of the stomach, there is the history of a pre-cancerous period, which most clinicians regard as indicating the presence of an ulcer. Some writers, particularly Talma, contend that at least 13 per cent. of the cases of ulceration of the stomach become malignant. Chronic, deep ulcers in the posterior aspect of the stomach may form adhesions prior to the occurrence of perforation, and thus give rise to an abscess, the usual subphrenic variety. Such adhesions may form when the ulcer is otherwise located than on the posterior wall, though very much less frequently.

Stenosis of the pylorus and hour-glass contraction of the stomach are among the most common and troublesome of the sequels of ulceration. The pylorus, though not actually involved in the diseased process, is usually found contracted, but the stenosis, which is a sequel to ulceration, is the true organic narrowing of the passage, due to the shrinkage of scar tissue. This narrowing may be very extreme and practically prevent the passage of the contents of the stomach, except its more liquid portions. A second effect of this stenosis is a gradual dilatation of the stomach, with all the digestive disturbances that such a misfortune brings in its train.

With regard to hour-glass contraction, it must be admitted that the condition is much more common than it was at one time thought to be the case. This condition was formerly regarded as of congenital origin, but it is now known to be almost invariably caused by ulceration of the viscus, or by malignant disease, the result of such ulceration. The constriction is usually about the middle of the stomach, but there may be more than one contracting band. The disturbances to digestion caused by this condition are very distressing. The normal peristalsis of the stomach is seriously interfered with. The cardiac pouch not emptying itself properly, the products of digestion in it undergo decomposition, and this portion of the stomach becomes dilated. In that portion of the stomach between the constriction and the pylorus there is often an accumulation of the most foul character imaginable, which frequently regurgitates into the cardiac pouch, and may then be vomited, or keep up a state of fermentation and the eructation of offensive gas.

Another sequel to gastric ulcer is the occurrence of a severe and pernicious form of anemia. This may be due to chronic

sepsis from decomposition of the stomach contents, to frequent loss of blood, to faulty digestion and malassimilation, to the development of malignant disease where an ulcer had been, or to the train of nervous disturbances that may follow ulceration and their effects upon metabolism and nutrition.

#### V. SYMPTOMATOLOGY.

The symptoms of gastric ulcer vary very much, but there are a number which are sufficiently constant to enable a diagnosis to be made with a strong probability of accuracy.

1. *Hemorrhage*.—This is a very constant symptom of ulcer of the stomach, and occurs in a large proportion of the cases. The amount lost may be slight, or profuse; and may occur once, or be repeated many times. It has been estimated that 3 per cent. of all patients who suffer with gastric ulcer die of hemorrhage; and that according to different authors from 50 to 80 per cent. vomit blood. Probably every case of the disease is accompanied by more or less hemorrhage, either vomited or passed by the bowels, giving rise to the melena stools. This table, from Hemmeter, gives the distinguishing features between hemorrhage from the lungs and the stomach:

LUNG.	STOMACH.
1. Blood bright red, foaming.	1. Blood is dark red, partly coagulated, frequently mixed with food, sometimes acid.
2. Physical signs point to a pulmonary or cardiac affection, the stomach may be affected secondarily.	2. Physical examination evinces a gastric or hepatic affection, or stasis in partial circulation.
3. Pulmonary hemorrhages followed by rusty-colored sputa for days (generally), but there is no blood in the stools.	3. Gastric hemorrhages are frequently associated with tar-colored stools.
4. Physical signs of pulmonary or cardiac disease, moist rales, etc.	4. Physical examination of heart and lungs usually negative.

2. *Pain*.—This is a very constant symptom. It is described as a burning, gnawing, boring, tearing, or pressing character, situated in the epigastrium, or felt in the left side of the lower dorsal region. In some cases the pain is very severe, amounting to the most acute distress. It comes on usually soon after taking food, and gradually increases until the stomach is emptied by vomiting by the usual course of digestion. The pain varies with the character of the food, being usually severer after solid than liquid aliments. In a

few cases the pain is lessened by the ingestion of a moderate quantity of food, a result which seems to be due to the neutralization of the acidity of the gastric juice. Mansell Moullin claims that pain is due to irritation of an inflammatory nature affecting the sensory nerves in the peritoneum and induced by the movements of the stomach. The following table from Anders will assist in differentiating ulcer of the stomach from gastralgia.

## GASTRIC ULCER.

## GASTRALGIA.

- |   |  |
|---|--|
| 1. History of certain occupations:—Anemia, Chlorosis, Amenorrhea, Tuberculosis, and diseases of the heart.                                  | 1. History of Neurasthenia, Neuralgia and Hysteria common.                         |
| 2. Most frequent from fifteen to thirty-five years of age.  | 2. Most frequent before or near the menopause (in the female).                     |
| 3. The paroxysms of pain usually come on at a definite period after eating.   | 3. Paroxysms more frequent when the stomach is empty than soon after meals.        |
| 4. Eating rarely relieves the pain.   | 4. Eating usually brings relief.   |
| 5. Tenderness on pressure over a certain limited area in the epigastrium.   | 5. Tender spot absent. General hyperesthesia of the skin often present.            |
| 6. Pressure usually aggravates, and only occasionally relieves patients during paroxysm of pain, not during the intervals between seizures. | 6. Pressure almost always relieves the pain.                                       |
| 7. In the intervals between the attacks gastric disturbances, more or less severe, are present; also tender point frequently.               | 7. In the intervals between attacks no gastric disturbances present, as a rule.    |
| 8. Hematemesis present in nearly one-half of the cases.   | 8. Hematemesis absent.   |
| 9. General health often much impaired, particularly late in the affection.  | 9. General health less affected than in ulcer.                                     |
| 10. Physical signs of mass may be present.  | 10. Signs of tumor always absent.  |
| 11. Dilatation may co-exist in the late stages.   | 11. Dilatation never present.  |
| 12. Hyperacidity of gastric juice usually present.  | 12. Hyperacidity present only in serious cases of gastralgia with gastric catarrh. |
| 13. Improvement follows rest and regulation of diet.  | 13. Regulation of diet has no effect.  |

3. *Vomiting*.—"Vomiting, next to pain, is the most frequent symptom," says Anders. If it contains blood it is of importance as a symptom of the disease. The blood may be so altered by the gastric juice as to appear as the characteristic



coffee-ground vomit. Usually the vomiting occurs shortly after taking food up to a period of two or three hours afterwards, and usually brings relief. The vomited matter almost always contains an excess of hydrochloric acid. It is not uncommon for the vomiting to occur at the height of the paroxysm of pain. The vomiting is caused by the irritability of the stomach, stenosis of the pylorus, or hour-glass contraction. Sometimes the vomiting occurs apart from the taking of food, and may come on in the night or early morning. In such cases the vomitus is usually composed of pure gastric juice, highly acid. The persistent vomiting may cause marked emaciation.

4. *Gastric Cancer and Ulcer*.—It is sometimes difficult to distinguish cases of carcinoma of the stomach from those of ulcer. Prof. W. H. Welch gives the following table as an aid in the diagnosis of these two conditions:

GASTRIC CANCER.	GASTRIC ULCER.
1. Tumor present in three-fourths of the cases.	1. Tumor rare but may be present.
2. Rare under forty years.	2. May occur at any age; over one-half the cases under forty years.
3. Average duration, about one year; rarely over two years.	3. Duration indefinite; may be for several years.
4. Gastric Hemorrhage frequent but rarely profuse; most common in the cachectic state.	4. Gastric hemorrhage less frequent than in cancer, but oftener profuse; not uncommon when the general health has got a little improved.
5. Vomiting often has the peculiarities of that of dilatation of the stomach.	5. Vomiting rarely referable to dilatation of the stomach, and then only in a late stage of the disease.
6. Free hydrochloric acid usually absent; lactic acid present.	6. Free hydrochloric acid usually present in excess.
7. Cancer fragments in washings or in vomitus.	7. Absent.
8. Secondary tumors in liver, peritoneum and lymphatic glands.	8. Absent.
9. Rapidly advancing loss of strength and flesh with developing cachexia.	9. Cachectic appearance usually less marked and of later occurrence than in cancer.
10. Epigastric pain more continuous; less dependent upon taking food, less relieved by vomiting, and less localized than in ulcer.	10. Pain is often paroxysmal; more influenced by taking food, oftener relieved by vomiting, and more sharply localized than in cancer.
11. No improvement or only temporary in course of the disease.	11. Sometimes a history of several attacks; usually a marked improvement by regulation of diet.

5. *Physical Signs.*—These are few and not very definite in character. Tenderness is generally found on palpation, though it may be absent. In some cases the spot where the pain is felt is excessively tender to pressure, which is a valuable diagnostic sign. In some chronic cases a thickening of the tissues may be felt, especially towards the pylorus. When these indurations become adherent to adjacent organs, the condition may resemble very closely carcinoma of the parts.

6. *Perforation.*—This occurs in from 6 to 7 per cent. of all cases of gastric ulcer, and one author in Wood's Reference Hand-book gives 15 per cent. It is, therefore, of much importance to recognize the condition at once, as it is necessarily a surgical complication and requires immediate attention, the results of operative treatment in these cases being much better when resorted to early after the rupture.

Moynihan divides cases of perforation into the acute, in which the stomach walls give way suddenly, and there is a free escape of its contents into the peritoneal cavity; the subacute, where, for some reason, the escape of the stomach contents is more gradual and the symptoms less urgent, due to a very small opening, an empty stomach at the time, or some omentum closing the opening; and the chronic, in which the ulcer has slowly eaten its way through, and a protective peritonitis has formed, with adhesions to surrounding organs or parts, causing a localization of the escaping gastric contents and the formation of abscesses.

The symptoms and signs of perforation are usually sudden. The patients are taken with sudden collapse, though in some instances they can make some exertion. Perforation generally follows some physical effort, vomiting, an injury, or a hearty meal. The onset of the pain is sudden, and is referred to the epigastrium, but it soon spreads. Soon there is difficulty in breathing, and a deep inspiration may become impossible. As the graver symptoms develop, the face becomes anxious and pinched, and there is usually great restlessness. There is usually accelerated pulse. At first there may be no fever. The abdomen may be flat and tense, or distended, and the muscles are rigid. Tenderness is mostly confined to epigastrium. There may or may not be dulness in this region, and the liver dulness may not be obliterated. A gurgling sound of the escaping liquids may be heard. Vomiting may occur after perforation has taken place. The pain is continuous.

In the Practitioner's Guide, by Carr, Pick, Doran and Duncan, the symptoms of the acute cases are given as "sudden

onset of abdominal pain, extreme collapse and sometimes vomiting, the abdomen becoming distended and the breathing thoracic." In the cases of chronic perforation, the same work states that the adhesions localize the symptoms to the upper part of the abdomen, and an abscess may result in the liver, spleen, pancreas, under the diaphragm, or extend into the lungs or pleura. Should the adhesions break down, a general peritonitis follows.

7. *Hour-Glass Contraction*.—This condition is far more common than was formerly thought to be the case. It may be recognized by the following symptoms:

(1) If the stomach tube is used and the stomach washed out, a certain amount of the fluid may be lost, having gone into the second cavity.

(2) If the stomach be washed out till the fluid returns clear, there may be a sudden escape of foul fluid from the lower cavity.

(3) If the stomach be palpated and a splash obtained, the use of the tube to empty the first pouch does not remove the splashing sound, owing to the fluid that remains in the lower pouch.

(4) By giving a portion of a seidlitz powder the first pouch can be seen to distend, and in a short time the distention passes on into the second cavity.

(5) The sulcus due to the constricting band has been sometimes made out.

(6) Auscultation of the stomach will generally detect the sound of gases and liquids passing from one cavity to the other.

## VI. THE MORTALITY.

Wood's Reference Hand-book gives the mortality for men at 22, for women at 6, and for both at  $8\frac{1}{2}$  per cent. Anders gives the death-rate in all cases as about 20 per cent.; Bulstrode gives a mortality of 18 per cent.; Welch's cases gave 15 per cent.; Heydenreich's, 25, and Fenwick's 20 per cent. From a large number of cases, Max Einhorn thinks there is only 50 per cent. of permanent cures under medical treatment. G. G. Sears gives 21 per cent. of failures. Greenough found that out of 187 cases, only 40 per cent. remained well after a period of five years. These percentages must be increased by those cases which have died of perforation, melena, or chronic ill-health due to gastric ulcers, and in which a diagnosis was never made. It may safely be said that the mortality does not fall under 20 per cent. of all cases. This shall be shown to be of importance

when the surgical treatment is considered. Add to the foregoing mortality the chronic suffering, the repeated relapses, the later ill-health, and the possibility of cancer, and it will be seen at a glance that the treatment of gastric ulcer on purely medical lines leaves much to be desired.

## VII. TREATMENT.

The treatment of gastric ulcer is now admitted to be both medical and surgical.

1. *Medical Treatment.*—The treatment of ulcers of the stomach in their early stages, and when there are no serious complications, should be medical. Cases in the young are more amenable to such treatment than are those in older men and women.

(a) The first essential in treatment is absolute rest in bed. The patient should not be allowed to go about the house, and, in most cases, should be enjoined to use the bed pan. Many cases suddenly relapse by not insisting upon a lengthy enough period in bed. This should be at least two or three weeks, but may require to be indefinitely extended.

(b) The second essential in the management of gastric ulcer is the proper feeding of the patient. In some cases the stomach is so extremely irritable that it will not bear any food, or even the blandest of liquids. In such cases the feeding must be carried on wholly by the bowels. A word of warning must be raised against the custom of allowing the patient too much water or to be given ice to suck. This does not permit the stomach to obtain sufficient rest, and frequently induces vomiting. There are cases, however, where the rectum is so unmanageable that it cannot be depended upon entirely. By care, however, much may be done to train it to retain nutrient enemata. The lower bowel should be washed out with a quart of warm water prior to the administration of the nutrient liquid. These injections should contain about four ounces and be composed of peptonized milk, or thin gruel, to which may be added the yoke of an egg. Peptonized beef-tea or meat extracts are also useful. To these injections may be added occasionally a few drops of liquor opii to lessen the sensitiveness of the rectum. These enemata should not be given too frequently; and sometimes a small quantity of alcoholic stimulant may be added to them.

Any nourishment by the mouth should be at first of the blandest character, such as milk diluted with water or lime water. Raw egg mixture, beef-tea, raw beef juice, or some of

the meat extracts may be tried. Some of the lightest of the invalid or infant foods may also be employed. These various nutrients may be peptonized. Leube's meat extract, milk gruel and buttermilk may suit some cases. In the feeding by the mouth it is of importance not to allow the patient too much at a time, and to make up in quantity by ordering some liquid nourishment often. In cases of extreme irritability of the stomach it may be very helpful to wash out the stomach with a weak soda solution. If a soft tube is carefully employed no harm will come from its use. The utmost care must be taken when the patient is again permitted solid food, and such articles as contain coarse and irritating particles, such as small fruits, must be avoided.

The least amount possible of chloride of sodium should be allowed the patient, as the hydrochloric acid of the gastric juice requires chlorine for its formation. This is important.

(c) The medicinal treatment is of much importance. The bowels should be kept open by means of some mild saline, and one of the best is Carlsbad salts, or its artificial substitute, sulphate of sodium, 50; bicarbonate of sodium, 6; chloride of sodium, 3. Many writers attach considerable value to the exhibition of bismuth carbonate, which may be given in doses of 20 to 30 grains every four hours. Fleiner gives 2 to 3 drachms in water in the morning. Nitrate of silver has long held an important place in the therapeutics of this disease. It is of undoubted value in some cases. Carbonate of magnesium and sodium are also useful alkalies for the correction of the hyperacidity of the stomach. Opium or morphine may be required for the relief of the pain, and the latter may have to be injected under the skin. Small doses of the extract of belladonna may be used. The hypodermic administration of digitalin, gr. 1-30, and strychnia, gr. 1-30, may be called for should the pulse become very weak. To correct the acidity of the gastric contents and prevent auto-digestion of the stomach, Hemmeter recommends *magnesiae ustae, sodii carbonatis* and *potassii carbonatis*, each, grams 5, and *sacchar. lactis*, grains 25. Of this mixture half a teaspoonful is placed dry upon the tongue every three hours.

(d) Hemorrhage demands prompt and careful attention. A number of remedies have been proposed for this complication of gastric ulcer, but none of them can be relied upon. Tannic acid in 15 grain doses every fifteen minutes until three or four doses have been administered, is highly recommended by some. Others have spoken well of alum, of which a tea-

spoonful may be dissolved in a glass of warm water, the patient drinking the solution gradually. Drinking half a pint of a 2 per cent. solution of gelatin has recently met with much favor. One of the most recent claimants for attention is adrenalin, which may be given in 5 minim doses of 1-1,000 solution, and repeated as required. Hemmeter speaks highly of the hypodermic use of ergotol in 20 to 30 minim doses, while others advise in the same way 2 or 3 grains of ergotin. If there be pain with the hematemesis, morphia gr.  $\frac{1}{4}$  should be given subcutaneously. In addition to relieving the pain, it is an adjuvant to the other means employed. The application of an ice bag over the stomach has found advocates, while others have spoken as strongly of hot fomentations. Tripier has advised copious hot water injections into the bowel. It may be necessary to resort to intravenous or intra-tissue injections of normal saline. Many years ago I recommended the application of elastic bands, or a firmly applied bandage, high up the extremities, as a means of withdrawing blood from the viscera, and I have still great confidence in the practice in all forms of internal hemorrhage. During the period of vomiting the patient must be kept absolutely quiet, not being allowed to sit up in bed, and being compelled to use the bed pan and urinal. No food, or liquids should be allowed by the mouth, and the least amount possible by the rectum in order that the blood pressure may be kept low.

2. *The Surgical Treatment.*—The treatment of gastric ulcer has acquired an added interest of late years, owing to the prominent part taken in it by the surgeon. That he has saved many lives that would have been lost, and relieved many sufferers who could not have been improved without his aid, there is no doubt. While this is true, it is still too soon to determine how lasting some of these cures may be, as we know that an ulcer may remain healed for a long time and then open up again, or a new one form. In like manner, after the patient has left the hands of the surgeon, however much benefited, the same conditions may reappear. The conditions for which the surgeon may be called upon to perform an emergency operation are uncontrollable hemorrhage and perforation. The conditions for which he may operate at some selected or convenient time are chronic ulcers, pyloric stenosis, and hour-glass contraction. In these three latter conditions surgery has accomplished much, and, with added experience, is destined to achieve a brilliant future. But these operations belong rather to the field of gastro-plastic surgery, and will not be discussed

at present. The two operations upon which I shall offer a few remarks are those for hemorrhage and perforation.

(a) *Hemorrhage*.—Mr. Moynihan states that “the one character that the hemorrhage should possess to warrant the performance of an operation is recurrence; recurrence, too, at intervals, which, becoming gradually curtailed, do not allow the patient to make up in the interval the ground which he loses in the attack.” He has operated upon 22 cases, which from appearances and the nature of the hemorrhages would most likely have terminated fatally, and with 19 recoveries and only 3 deaths.

Joseph A. Blake states “that a single large hemorrhage, without previous symptoms referable to ulcer, should not be operated upon, but when there have been antecedent symptoms operation should be performed. Cases suffering from a recurrent hemorrhage should be operated upon.” With this opinion, Dr. W. Gilman Thompson concurs in his article.

Recently, Mr. Frederick Eve reports two cases of duodenal ulcer, with severe hemorrhages, treated by the operation gastro-enterostomy, both patients making good recoveries.

Dr. Edward M. Buckingham reports a case of successful operation for hematemesis. About sixteen years ago Dr. Atherton, then in Toronto, successfully operated for gastric hemorrhage.

Other cases could be collected to show that this complication in its most desperate and uncontrollable form may be made the subject for successful surgical intervention.

(b) *Perforation*.—On this subject there are now many cases on record. At the recent meeting of the Canadian Medical Association, Mr. Caird gave details of 18 cases operated on for perforation, with 7 deaths, and one of these was quite hopeless before operation.

Alfred A. Young records three cases of operation for perforation, with two recoveries, and one death, following a secondary operation for subphrenic abscess.

T. J. Wood mentions a case he operated on 52 hours after the perforation had occurred, in which recovery took place.

F. B. Lund records three cases of perforation with operation and recovery. In one case there was some suppuration in the abdominal wall, and in another a rather slow convalescence.

B. G. A. Moynihan, in a recent paper, relates 22 cases of perforated ulcer operated upon, and with 14 recoveries and 8 deaths.

These cases could be multiplied by a search through the literature of the subject. Enough has been said to prove the aid of the surgeon should be sought in all cases of suspected perforation.

(c) *General Results of Surgical Treatment.*—Heydenreich states that the death-rate in gastric ulcer does not fall much below 25 per cent.; and that in the cases of the disease surgically treated, which he has been able to collect it fell to 16 per cent.

In the Hunterian Lectures, five years ago, Robson and Moynihan collected 184 cases of operation on gastric ulcer, excluding those for hemorrhage and perforation, with a death-rate of 16 per cent. In their recent work upon the subject, they state that the death-rate should not exceed 5 per cent. in cases operated on for gastric ulcer, excepting the emergency cases of bleeding and perforation. They go on to say: "In those treated surgically in the worst and most complicated cases, the results are so striking that it is incumbent to urge most strongly that, although cases of gastric ulcer should first be submitted to medical treatment, yet if such treatment fails to cure in a reasonable time, or if relapses occur on the resumption of solid food, then medical should give place to surgical treatment."

It would appear that the death-rate in operations for hemorrhage of the stomach may be placed at about 15 per cent., for operations in cases of perforation at about 40 per cent., and operations when the time is favorable, about 5 per cent. It is certainly reasonable to expect, as it becomes more generally the custom to operate early in perforation cases, the result will be much better.

In conclusion the medical treatment may be summed up in the words of Boardman Reed thus: (1) Quiet the pain; (2) allay vomiting; (3) prevent dilatation of the stomach; (4) preclude or arrest hematemeses, and (5) prevent perforation.

The claims for surgical treatment are thus set forth by Robson and Moynihan: "For intractable or relapsing gastric ulcer it is, in the greater number of cases, the only satisfactory method of dealing with these refractory cases, and operation should be resorted to at a much earlier period than has hitherto been the custom, and always before the patient is so far reduced by pain and starvation, or the supervention of serious complications that weakness and anemia render any operative procedure hazardous."

Mikulicz says: "The danger to life from gastric ulcer is at least not less, but far greater, than the danger of a complete modern operation."



## ANTE AND POST-PARTAL EXAMINATIONS.\*

By FREDERICK FENTON,  
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*Mr. Chairman and Gentlemen,*—A few months ago I read a short paper touching upon some of the points contained herein, but I believe the subject is sufficiently important to warrant a further reference to the matter, and trust that those of you before whom the question was discussed on a previous occasion will bear with me, if I find it necessary to repeat some things which were said at that time.

### ANTE-PARTAL EXAMINATIONS.

Under this heading I include: (a) General examination of mother. (b) Urinary examinations. (c) Special abdominal examination, including pelvimetry. (d) Vaginal examinations.

*General Examinations.*—The history of the patient will, of course, have a great deal to do with the extent of our general examination, but a careful examination should always be made of her heart at a period sufficiently long before the probable date of confinement to allow of the timely adoption of measures for her safety in case a cardiac lesion should be found.

The examination of the lungs at the same time can easily be carried out, and should always be done where there is anything in the history or appearance of the woman to suggest the probability of pulmonary trouble.

The routine investigation of the condition of the heart and lungs, not only at times gives most valuable information where least expected, but serves very frequently "to break the ice," with timid and bashful primiparæ, and make other examinations less embarrassing and consequently more thorough.

*Urinary Examinations.*—It is scarcely necessary for one to refer to the routine examination of the urine during pregnancy. These examinations should begin at the fifth month, and be continued at intervals till the pregnancy is terminated.

While it is true that there is a transient albuminuria in from 5 to 10 per cent. of pregnant women, and that eclampsia may occur without albuminuria, these may, I think, be regarded as the exceptions which prove the rule, that evidences of nephritis are found in the urine of women preceding an eclamptic seizure.

\* Read before the Ontario Medical Association, June, 1905.

*Abdominal Examinations and Pelvimetry.*—By our examination and measurement of the pelvis we endeavor to, and, to a degree which is of value, do, secure useful information regarding the size and shape of the pelvis; by our abdominal examination we can diagnose the position and presentation of the fetus and form some idea as to the size of its head. One must not interpret the findings by external pelvimetry too literally, but in a general way. The internal measurements of the pelvis do not bear a constant relation to the external, many things entering into the question which one cannot calculate absolutely. But in spite of this, one can get useful information by this method of examination and its routine use is advisable.

Pelves may readily be divided into two great classes, viz., those which are certainly of a sufficient size for an average child to pass through, and those which may not be.

Having placed a case in class No. 1 we have no more anxiety on that score, while if it is assigned to class No. 2 we should make an internal examination of the pelvis, and settle the question definitely.

It would be superfluous for me to describe the method of making abdominal examinations, since many here are familiar with the procedure, while those who have not been in the habit of making them can find full descriptions in any recent textbook on the subject.

A point which has been frequently raised in connection with the diagnosing of position and presentation by external examination about the beginning of the ninth month, at which time I would advocate it, is the fact that not infrequently the position will have changed before labor commences, and that, therefore, the information one has obtained is unreliable. That is not of much consequence, since the changes in the position of the fetus, which occur in the last two or three weeks, are usually from what one might term abnormal, to normal positions. Thus an occipito-posterior may change to an anterior, or a breech to a vertex, but seldom the reverse. Having examined, at the end of the eighth month, and found a vertex presentation in an anterior position, one can almost bank on it that the same condition will be found at labor; if, on the other hand, there be not a vertex presentation, or if the position is posterior instead of anterior, such may be found to have changed before or in the early part of labor. The knowledge that two or three weeks before there was an abnormal position or presentation, will put one on his guard, and he will be care-

ful either to corroborate his previous diagnosis or ascertain by sure and certain signs what change in the position of the child has occurred in the interim. But not only can one diagnose the position and presentation of the child with greater ease and certainty, and less disturbance of his patient by external than by vaginal examination, but information as to the condition of abdominal wall, tumors, multiple pregnancy, dead child, etc., may be gathered which cannot be learned per vaginam at all, or only so late as to be of little service.

*Vaginal Examinations.*—Having made the diagnosis of position and presentation early in the ninth month and verified it, if possible, by the same method on first seeing the patient in labor, I make a vaginal examination, mainly for the purpose of ascertaining the condition of the cervix.

While one can distinguish between a vertex and non-vertex presentation per vaginam without difficulty, as a rule, I must confess that I do not care to trust too much to the tip of my finger for the recognition of the position of the head. Early in labor the presenting part is too high for satisfactory examination, while late in labor the caput tends to obscure things. When it is necessary to make a careful diagnosis per vaginam, I prefer to anesthetize the patient and pass as much of my hand into the vagina as is necessary to allow me to feel some feature sufficiently distinctive to settle the matter beyond all doubt.

By making a diagnosis before labor has set in, which, in the vast majority of instances will be correct, one can reduce the number of vaginal examinations to a minimum, greatly to the comfort and safety of our patients.

#### POST-PARTAL EXAMINATIONS.

These will, of course, include the ordinary examination of temperature, pulse, etc., which give us valuable information as to the general condition of the patient, but no special information as to the progress of involution.

Examinations for the purpose of determining the size of the uterus on successive days of the puerperium, was first done by Charpentier, of Paris (1880), who first attempted to do so by the daily use of the sound, but shortly abandoned that method for the pelvimeter, which he used by introducing one arm into the vagina, holding it against the cervix, while an assistant placed the other end on the fundus. Such procedures were too difficult and dangerous to secure adoption, and consequently died an early death.

It was not for another fifteen years (1895) that anything further appears to have been written on this subject, when Dr. T. B. Stevens and W. S. A. Griffith reported before the Obstetrical Society of London the results of their investigations.

Their measures were external entirely, that part of the uterus lying above the symphysis being measured both vertically and transversely, the former being the more important and reliable. The instrument used for the taking of the measures was an ordinary two-foot rule.

In the following year McCann (*Brit. Med. Jour.*, 1896), recorded the results of observations made by him on the progress of involution. He used an ordinary tape-line and measured from the symphysis to the top of the fundus in the middle line.

These gentlemen recorded their observations on an ordinary temperature chart, the 100 deg. line being taken as the top of the symphysis, each degree above representing one inch.

This method of regularly measuring the height of the fundus above the top of the symphysis, and the charting of the same, was introduced into the Toronto General Hospital in the year 1901 by Dr. Adam Wright, and some of the material for this paper has been obtained from the records there, the balance being from private cases.

In the making of these measurements certain rules must be followed, otherwise one is apt to get results which may be misleading:

1. The measurements should be made daily and preferably as near as possible at the same hour each day.
2. The patient must have passed water within a very short time before measuring, and the obstetrician should satisfy himself that the bladder has been emptied, especially in the first two or three days of the puerperium.
3. If the bowels have not moved within twenty-four hours care must be taken that the rectum is not overloaded. Neglect of these last two precautions is probably the most frequent source of error.
4. The uterus should be gently massaged for a few minutes before measuring, so that one may always measure it in the same condition, and not in a state of contraction one day and that of relaxation the next.

Having excluded these sources of error one will find the fundus from five to six inches above the top of the symphysis pubis on the day after labor, and, if all be well, below the symphysis, in the vast majority of cases, by the end of ten

days or two weeks. The rate and regularity of the fall may be influenced by certain things, some of which may be looked upon as pathological, and others as physiological. The progress of involution may be delayed by: 1. Multiparity. 2. Advanced years. 3. Lactation. 4. Prematurity of labor. 5. Prolonged labor. 6. Retention of secundines or blood clot. 7. Septic infection of the endometrium. 8. Lacerations of the cervix. 9. Grave disturbances of health from any cause.

The curve in a primipara is normally about half an inch lower than in a multipara. The descent of the fundus is rapid for the first few days, after which it becomes more and more gradual.

Failure of the fundus to fall on the day following confinement is very frequently found to be due to distended bladder, but if such occurs on subsequent days and continues for three or four days it will usually prove to be due to one of three of the causes of delayed involution referred to above, viz., retention of secundines or blood clot, septic infection of the endometrium, or laceration of the cervix.

The older the woman and the larger the number of children she has had, as a rule, the slower will be the fall of the fundus. Lactation has been found to impede rather than accelerate the progress of involution. Grave disturbances of health from intercurrent disease not necessarily connected with the pregnancy, will, of course, affect the removal of the excess of uterine tissue, just as it would influence other vital processes.

Failure of the fundus to descend for three or four days, or its sudden or gradual rise to a higher level than it had been, should lead one to make an investigation as to the cause, especially so if pulse rate or temperature be elevated. With elevated pulse and temperature it will probably be found to be septic in nature, and the sepsis will have extended to, or originated in, the endometrium.

Involution will not necessarily be interfered with, because there is sepsis, but only if the sepsis involves the uterus itself, causing local irritation or inflammation, with the accompanying swelling and engorgement.

Cessation of involution for a few days, with normal pulse rate and temperature, will, in a large percentage of the cases, be found to be due to laceration of the cervix.

One sees a chart every now and then, which apparently will not go according to rule, but just in this connection I may say that I have come to look with some suspicion upon measurements taken by any one not familiar with the anatomy of the

pelvis and abdomen. Too much should not be left to a nurse. They frequently produce the most extraordinary involution lines, which are quite incorrect. The following working rules have been drawn from a goodly number of carefully kept charts, upon which I base my remarks:

1. Where the fundus is falling there is no necessity or justification for the exploration of the uterine cavity. If sepsis exists it must be looked for elsewhere.

2. If involution has not progressed for three or four days a careful examination should be made of the genital tract.

3. Sub-involution, associated with other evidences of sepsis, indicates that the uterus is at least a point of infection, if not the only one, and as such requires our immediate attention. Remove all foreign substances and disinfect the endometrium, but do so with all gentleness. We should not forget that nature has ways of her own of preventing the entrance of infection to the blood and lymph streams, and should hesitate to break down (curette) her barriers until we have something better to substitute for them.

4. Sub-involution, with no suggestion of sepsis, is most frequently due to one of two causes, viz., retention of secundines or clot, or laceration of the cervix.

In the first case it is only necessary to remove the foreign substance. The treatment of cervical tears at this time is still a moot point, but, for my own part, I may say that the results of repair at the end of the first week have been most gratifying. Not infrequently when exploring, according to the above rule, nothing has been found other than what appeared to be an unusual amount of lochia, frequently mucous in character, on disturbing the cervix, with the result, however, that the desired effect was secured. Apparently there was some obstruction to drainage, and the act of examination disturbed things sufficiently to remove the obstruction.

## DIABETES.

BY DR. ARNOLD LORAND, CARLSBAD, AUSTRIA.

Diabetes appears generally in people who are fond of rich food, especially of much meat and carbohydrate. Under such conditions it will develop the sooner in people whose work causes a strain upon their nervous system, such as lawyers, physicians and diplomats. It is interesting to note that diabetes develops spontaneously in dogs only when they are fed with albuminous and sweet food, and more readily if the animal be of a nervous temperament, like a fox terrier. This kind of food in large quantities may exercise, after a certain time, a deleterious action upon those glands which control metabolism, like the thyroid and the pancreas. By experiments which he has made in company with Prof. Minkowski, Dr. Lorand has found that in dogs, whose pancreas has been extirpated, the thyroid shows histological alterations, indicating a condition of hyperactivity, like that found in Graves' disease, or by Chalmers Watson in fowls, which have been fed exclusively on raw meat. Before Chalmers Watson, Dr. Lorand found by clinical observations that abundant meat food exercises a deleterious action upon the thyroid. On the other hand, it has been found by Toboleff that rich carbohydrate food induces a degeneration of the islands of Langerhans in the pancreas, to which, according to the vast majority of authors, is attributed an important role in the development of diabetes. According to the researches of Dr. Lorand, diabetes is due to two main causes, viz., degeneration of the pancreas; second, hyperactivity of the thyroid. Diabetes after mental emotion is due to subsequent alterations of the thyroid, which may go so far that even Graves' disease might come on suddenly after such a cause. It is a fact that glycosuria, or diabetes, is very frequent after all conditions of hyperactivity of the thyroid gland, whereas in the opposite condition, myxedema, it is impossible to produce even alimentary glycosuria after the largest doses of glucose. All diabetic dogs have entirely lost their sugar after extirpation of the pancreas.

It is an important factor to detect diabetes in its beginning. Many diabetics show no subjective symptoms whatever of their disease, not even thirst. The urine of each patient should be examined, no matter what is his ailment. It is neces-

\* Résumé of an address delivered at a meeting of the Toronto Medical Society.

sary to give a test dinner in case no sugar is found, taking into consideration that many light cases of diabetes do not eliminate any sugar even for months. By giving a test dinner of  $\frac{3}{8}$  ounces of grape sugar two hours after breakfast, the life insurance companies could be protected from severe losses. Diabetes treated from the beginning is very promising. The main object is to prevent the appearance of diacetic acid, as it is this substance, with following acid intoxication, that ends the life of diabetics. To prevent it no severe diet should be given, as exclusive diet of meat and fat surely might bring it about after a certain time. Meat should be limited in every case, especially in severe cases. The diet should be mixed, little meat, green vegetables, a few eggs, cream, and, in severe cases, much milk and no meat. Apples, peaches and oranges, in certain quantities, are much recommended. Bread, graham-bread, should always be given. In severe diabetes much alkali should be given, especially by the rectum, so as not to injure the stomach. Carlsbad waters might give good results, especially in cases without cachexia. In severe cases, although the symptoms will get better, the sugar may sometimes persist and also diacetic acid. Drugs are of no use for a long continued treatment, but antithyroidin may influence beneficially, especially the nervous symptoms.



## ODE TO THE SURGEON.

BY PRICE-BROWN.

The surgeon to-day is a warrior bold,  
Prepared for grim conflicts as of old;  
But with desperate armies far and near  
Of numerous forms of bacteria;  
So with rigid face and keen eye set,  
He bids all forms of cocci: "Get."

Staphylococcus aureus,  
Streptococcus, too,  
Bacillus tuberculosis,  
The pneumococcus crew;  
Klebs-Loeffler and Von Hoffman,  
Freidlander's pneumococ.  
Tetragonus Neumann,  
*Et al propter hoc.*

For swearing by science he firmly has will'd,  
That all kinds of cocci must surely be kill'd,  
Hence on authority sagely given  
Before his patient has been shriven  
Of his severe and dread disorder,  
The germs must die, and that by order.  
Staphylococcus aureus, etc.

So the fight goes on at a terrible pace  
With washing and scrubbing all over the place;  
Tili, in the operating chamber,  
Over the walls of which they clamber—  
Douched in bichlor. and acid carbol.—  
The cocci cannot even gambol.  
Staphylococcus aureus, etc.

So millions within and myriads more,  
Which swarm impressively round the door,  
Determined to thwart the surgeon's will  
And deftly baffle his keenest skill,  
At once in horror give up the ghost,  
A terrified and slaughtered host.  
Staphylococcus aureus, etc.

Still the patient's body must be shaved,  
 A full foot round the part depraved,  
 And antiseptis by protargol,  
 Chloridum, green soap, acid carbol.,  
 With chloride compress overnight  
 To fit him roundly for the fight.  
     Staphylococcus aureus, etc.

The surgeon's hands are washed so clean,  
 That the outer skin can scarce be seen,  
 With green soap and antiseptics, too,  
 Scouring him righteously through and through,  
 So gown'd, capp'd, visored, gauntletted well,  
 He's ready to face even death's knell.  
     Staphylococcus aureus, etc.

But death can't steal as in days of the past,  
 Germ life being dead, death's vanquished at last;  
 For the wise surgeon, backed by the skill  
 Of the trained nurse, well tested by drill,  
 Does his work grandly, faith guiding his knife,  
 And with his keen blade, he saves the man's life.  
     Staphylococcus aureus, etc.

Yes, triumph in science brings triumph in art,  
 Men proudly fulfilling their thrice-honor'd part,  
 To aid the stricken, to knife foul disease,  
 To lengthen men's lives regardless of fees,  
 To stand as true surgeon, physician and friend—  
 Is as noble a life as heaven can send.

Staphylococcus aureus,  
 Streptococcus, too,  
 Bacillus tuberculosis.  
 The pneumococcus crew;  
 Klebs-Loeffler and Von Hoffman,  
 Freidlander's pneumococ.  
 Tetragonus Neumann,  
*Et al propter hoc.*

# Progress of Medical Science.

## OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. McILWRAITH, FRED. FENTON AND  
HELEN MacMURCHY.

### Phthisis and Pregnancy.

O. Burkhardt (*Deut. med. Woch.*, June 15th, 1905) gives the details of the histories of a number of cases, and reaches the following conclusions: (1) Pregnancy does not exercise, *eo ipso*, an unfavorable influence on the course of a tuberculosis of the lungs; cases do well at times in high altitudes. (2) Cases of progressive phthisis can become stationary during the course of a pregnancy, and the prognosis is then favorable. (3) Abortion does not benefit the lung condition; on the other hand it might do much harm. (4) Artificial abortion must, therefore, be limited as far as possible, and the indications which the author feels inclined to give for it are (a) the severest degree of phthisis, and (b) when hyperemesis gravidarum exists. (5) At the birth emotional excitement and bleeding must be reduced to the lowest measure possible (at times artificial delivery, care for satisfactory involution of the uterus, chloroform); suckling must be forbidden. (6) The treatment of the phthisis in high altitudes must be continued for from four to six months after the delivery, even in mild cases with favorable prognosis, in order to avoid late disturbances.—*Medical Age*.

### The Treatment of Eclampsia.

John W. Byers (*Lancet*, September 9th, 1905) says that if the attack cannot be warded off the following is the proper procedure:

Treat the convulsions with morphine used subcutaneously. Keep the patient on her side, purge freely, use saline infusion, allow no liquids. In a word, as Gooch advised long ago, "take care of the convulsions and let the uterus take care of itself."

Make an effort to eliminate the poison by purgation, hot packs, and by saline infusion.

If labor has not set in treat the convulsions, but do not induce premature action of the uterus. If labor has begun and the patient is in the second stage and the os dilated, give chloroform and deliver by forceps if possible, or by turning. If, however, morphine and purgation with saline injections have been tried and the patient is not improving, dilate the cervix and deliver.

For the convulsions after delivery use morphine, purgatives and saline infusion.

In the prophylaxis of eclampsia rest, milk diet, warm baths, and purgatives are the best methods.—*N. Y. Med. Jour.*

### Hyperemesis Gravidarum.

Dirmoser (*Zent. fur. Gyn.*, September 30th, 1905) describes observations made by him on twenty cases of vomiting of pregnancy, from which he advanced the theory of auto-intoxication. He has recently observed a case of eclampsia with pernicious vomiting. It occurred not at the end of pregnancy, but at the close of the third month, and there was only a small amount of albumin in the urine. He believes that there was a relation between the pernicious vomiting and the eclampsia. The poison produced by the hyperemesis caused the eclamptic seizure. Possibly this poison was acetone, which was found in considerable amount in the urine of this patient. The cause of the toxin production is believed to be not the fetus, but the increased amount of work falling upon the gastrointestinal tract. The growing fetus, through a reflex effect on the secretory function of the vagus nerve, influences the metabolism of the mother, and the intermediate product of the transformation of albumin are thrown into the circulation instead of being excreted by the kidney. This theory is supported by the finding of indoxyl, skatol, acetone and acetic acid in the urine and the increase of urobilin, peptone, etc. Eclampsia is due to an increase of ammonia compounds, the sign of a failing excretory action. The liver, instead of transforming the products of albumin into such as are eliminated by the kidneys, throws them into the circulation. Among these are a number of ammonia compounds, leucin, glycocol, etc.; which are regarded by Zangenmeister as a cause of eclampsia. Others believe the cause of the poisoning to be rather the lack of digestive power of the intestine than the failure of the liver.—*American Journal of Obstetrics.*

### Treatment of Abortion in General Practice.

F. Moebius deals with the treatment of abortion in general practice, leaving theoretical discussion of the mechanism, etc., untouched. (*Therap. Monat.*, Sept., 1905.) While he holds that the most rational and physiological method of treatment is the expectant treatment, he considers that this is only safe for the patient if she is in hospital, and that such an expectant treatment as one would carry out must be fraught with danger

if the patient is not continuously watched by trained medical practitioners. The bleeding may come on quite suddenly and profusely, and before the doctor can be with his patient it may be too late. The question to decide is how best to empty the uterus completely and rapidly. This must be done with the least danger and with the greatest possible protection to the patient. All instrumental methods are to be avoided. This applies equally to the curette, the abortion forceps, and all other instruments. He then proceeds to describe the method which he believes to be the safest to follow. When the os and the cervix are patulous to the finger, he immediately clears out the uterus digitally. When two or more fingers can be passed into the organ, the procedure is easy. If only one finger can be passed, the operation may be found extremely difficult, and then it is better to plug, and two or three days later the whole ovum may be found just behind the plugging. As a rule, however, the difficulty does not lie so much in the detaching of the placenta as in the emptying of the detached portions from the uterus. This can be secured by washing the cavity well out by a powerful irrigation, care being taken to avoid bringing air into the uterus. The finger should not be removed from the uterus until everything has been detached from the wall of the organ. If this is impossible, much care must be taken to disinfect the finger again before reinserting it. As soon as the uterus has been emptied the organ contracts powerfully. This may be taken as a guide as to when all has been removed. If the water returns clear on irrigating one may be sure that the organ is empty. When the os is scarcely or not at all dilated, one should plug the cervical canal, and, if possible, the uterine cavity. Vaginal plugging has disadvantages. It may induce pains and the bleeding may soak through the packing. The only disadvantage of packing the uterus is the risk of sepsis, and this must be overcome by employing well-prepared iodoform gauze and care in the plugging. The necessary instruments are: Two vulsella, a medium-sized Sims' speculum, an irrigation tube, a long pair of plugging forceps (Düh.ssen's), and a catheter. The gauze should be kept in a special box, which can be held between the knees while one is plugging. For the cavity he uses gauze of 3 cm. (a little over 1 in.) in breadth, while for the cervix the breadth is 5 cm. (about 2 in.) The plugging may be left for forty-eight hours, and the temperature carefully watched. In conclusion, he speaks of the uses of dilators, which he does not recommend as a routine treatment.—*British Medical Journal*.

## OPHTHALMOLOGY AND OTOTOLOGY.

IN CHARGE OF J. T. DUNCAN, M.B., M.D., C.M.

### Paraffin in Deformities of the Nose.

It has now become so common to inject paraffin to remedy deformities of the nose, that some account of its occasional effects upon the eye will be of interest. Professor Uthhoff (*Berlin. Klin. Wochenschrift*—translated in the *Post-Graduate*) has an article on the subject in which he gives notes of two cases. In the first case, the "saddle nose" was of seven years' standing, supposed to have been caused by an injury. The paraffin was injected on three different occasions—the intervals being of five and eight months, and the melting point was low (of the paraffin), viz., 43 deg. C. During the third injection (the quantity is supposed to have been 1.3 g.) the patient suddenly noticed the left eye becoming blind. This she could instantly detect, as the physician had placed his hand over the right eye during the injection. There was no pain, but some lachrymation and several attacks of vertigo on her way home. According to her statement, on the day following the injection, the left eye became considerably turgescient, but an expert examination made on that day revealed no material inflammatory or turgescient manifestation. There was, however, at that time the ophthalmoscopic picture of embolism of the *arteria centralis retinae*, showing the characteristic opacities of the retina about the papilla, and in the region of the macula lutea with the reddish-brown spot in the fovea centralis. Eight days afterwards the fundus was examined again by a second ophthalmologist, who found the same condition. The eye was absolutely blind. The only treatment attempted was a puncture of the anterior chamber, with massage of the globe, but no benefit resulted.

A number of similar cases have been published, which Professor Uthhoff proceeds to discuss. He goes into many details, and comes to the conclusion that in the case above noted, the small particle of paraffin which produced the embolism must have passed through the pulmonary artery before entering the central artery of the retina. In using soft paraffin (melting point up to 45 deg. C.) a number of pulmonary embolisms have occurred, chiefly when the paraffin has been employed for gynecological purposes. Hard paraffin is much less likely to cause embolisms.

The injection of hard paraffin in non-fluid state by means of a screw-syringe seems to offer especial advantages, in that the

material is pressed through the canula in the shape of thin threads by means of a screw device and deposited at the desired spot, having previously been aspirated into the syringe in a fluid state.

Our author's second case was entirely different. In it the eyes were not damaged, but the paraffin passed into the lids, causing enormous swelling of the parts. The man, aged 57, was kicked in the face by a horse, with the resultant deformity of a saddle-nose. To correct this deformity, the attending physician made three paraffin injections in the latter part of 1904. The material probably was soft paraffin, but its melting point and the exact details of its administration could not be learned.

Until the end of February, 1905, the result was comparatively satisfactory, the bridge of the nose being filled up. About that time, on a rather warm day, patient had exerted himself with garden work, causing profuse perspiration. Then he felt a sudden itching and pressure in both eyes which he proceeded to rub in consequence. In the course of a few hours they became strongly swollen, and the surrounding portion of the face was involved in the inflammation.

The physician was at once called, who pronounced it a case of "erysipelas." Treatment, however, was unsuccessful, and the patient was quite unable to see, unless he, by his fingers, separated the lids to a slight extent. Ultimately a small portion of the skin of one lid was excised, when the microscope proved that the inflammatory proliferation was caused by the penetration of the paraffin into the eyelids. All other treatment being useless, pieces were cut out of the lids, by making large semi-circular cuts into the skin, parallel with the orbital margin, and passing as deeply as necessary. Healing took place without trouble, and the patient could ultimately open the lids to a slight extent and use his eyes.

**Astigmatism a Cause of Vomiting in School Children.** By AARON BRAV., M.D., *Philadelphia-New York Medical Journal* and *Philadelphia Medical Journal*, August 26, 1905.

The author speaks of the frequency of vomiting in children during their school term and of the obscurity of the primary cause. He cites three cases from his practice in which the vomiting was due to errors of refraction and concludes that vomiting is frequently caused in school children by astigmatic errors of refraction.

That astigmatism should be a cause of vomiting is by no means difficult to understand when we consider the dilemma in which the astigmatic patient finds himself. In all other errors of refraction, if the child fails in his effort to see distinctly he will give up the endeavor and place himself in a condition of rest. The astigmatic subject, on the other hand, can see almost all letters, but they are indistinct. A confusion arises due to the unequal refracted rays of light that enter the various unequal refractive meridians and often disturb the equilibrium of the child, which equilibrium depends much upon the normal condition of the eyes. Dizziness and vertigo result, followed by attacks of vomiting.

The vomiting due to astigmatism is always preceded by a sense of dizziness and occurs without any gastric pain. On inquiry the physician will always elicit the fact the little patient has considerable annoyance in preparing lessons, as the letters "jump" or run together. It may be laid down as a rule that vomiting in school children not preceded by a sensation of fulness, distress in epigastrium, epigastric pain, eructation of gases, regurgitation of fluid, heartburn, fever and chills is caused by astigmatic errors of refraction. The toxic form of vomiting which is occasionally met with in children and which closely resembles vomiting due to astigmatism is of uremic origin and is always accompanied or preceded by headache, dizziness and nausea, and is mostly independent of gastric pain.

**Conservative Treatment of Severe Injuries to the Eye.** By  
F. ALLPORT (*California State Journal of Medicine*)

Speaking, in the first place, of enucleation, he remarks that many eyes are taken out that, by patience and care, might have been saved. Such cases usually occur among workmen, and when a case of severe injury presents itself many surgeons take the easiest way and remove the injured eye. The author pleads for *conservative* treatment; wait and treat in all cases where there is a good chance.

Foreign bodies in the eye are spoken of in connection with the giant magnet. The author speaks highly of the use of this powerful means of treatment in proper hands, but deprecates its "unwise and unskillful use by surgeons who regard it as merely a powerful machine by which steel, etc., can be forcibly extracted from an eye without regard to method," and thinks such use increases the danger of sympathetic ophthalmia, as "through such use many eyes are spared" which should have been removed. He considers the chief use of the Haab magnet



to be when the foreign body is in the anterior chamber, but, if in the vitreous chamber, he prefers the scleral opening and small magnet.

**The Importance of Slight Deafness in Children.** By GORDON KING (*New Orleans Medical and Surgical Journal*, September, 1905).

The writer wishes to impress upon the general practitioner the fact that perfect hearing is one of the most important factors in the intellectual development of children, and that a moderate degree of deafness may be seriously harmful to its after-life. Taking the statistics of Reichert, Weill, Gelle and Bezold, he points out that at least 20 per cent. of school children have defective hearing, and this after eliminating severe forms, which are usually sent to special institutions. Slight degrees of deafness are often put down to inattention, and punished as such. The author thinks that in every school the children, as they join, should be carefully tested in order that such cases of slight deafness may be recognized and appropriately treated.

## Editorials.

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### THE METRIC SYSTEM.

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We are told that there is a strong probability that the Dominion Government will shortly, *i.e.*, within a year or two, make the metric system compulsory. The *Toronto Mail and Empire* states that the subject has in the past been regarded as an academic one, but in the near future it will become a practical one. It is expected that Professor MacLennan will shortly go to different parts of Canada with the object of educating public opinion.

The metric system originated in France in 1790, and has been adopted by forty-two other countries, *i.e.*, by all civilized and semi-civilized countries, excepting Great Britain, the United States and Russia. It was adopted by the U. S. Pharmacopeia of 1890, and is largely used in certain sections of the United States. It is generally conceded that the system, while simple and uniform, affords a facility of computation which renders it superior to all other systems of weights and measures.

Professor MacLennan gives the following reasons why the system should be adopted:

1. It is orderly, clear and logical.
2. There are no specific trade tables, such as avoirdupois, wine measure, grain measure, etc.
3. The single ratio of ten is involved, thus making calculations extremely simple.

From a purely medical standpoint one of the chief difficulties is that of writing prescriptions. In order to minimize such difficulties, as far as possible, it has become the custom in things medical to use only two metrical terms, the gramme (gm.) and the cubic centimetre (c.c.).

## SECOND INTERNATIONAL CONGRESS ON SCHOOL HYGIENE.

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Preparations are well on the way for this international event, which occurs once in three years, and it is expected that under the Presidency of Sir Lauder Brunton, and with the assistance of practically all influential persons who are interested in this truly national, as well as international movement, the Congress will be a great success.

A Local Committee has just been formed in Toronto, with the Hon. Dr. Pyne, Minister of Education, as Hon. President; Prof. Wm. Oldright, of the University of Toronto, as President, and Inspector James L. Hughes as Secretary.

It is the desire of the Local Committee to create an interest in the work of the Congress among all education authorities and others engaged in teaching, to diffuse information about the Congress among teachers, medical practitioners, architects, societies, municipal authorities, etc., and to interest manufacturers and builders in the exhibition of school appliances, equipment and construction to be held in connection with the Congress.

Further, the Toronto Local Committee has been requested to suggest subjects of first importance for general discussion, and to suggest names of those who would be likely to read papers, or in any way contribute to the proceedings of the Congress, and to promote the success of the Congress by obtaining the appointment of delegates, and inviting all who are interested to attend the meeting, which will be held in London, August 5th to 10th, 1907.

The membership fee is one guinea, and a number of the Local Committee, including the President and Secretary, have already signified their intention of being present at the London meeting, the Organizing Committee for which is already hard at work.

## FEMALE MEDICAL STUDENTS AND THE UNIVERSITY OF TORONTO.

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We are informed by the daily press of Toronto that there is a probability that the University of Toronto will open its doors to women students of medicine in the near future, and that the Ontario Woman's Medical College will cease to exist as such. The matter has been considered by the Medical Faculty, the Senate, and the University Commission. No formal report has as yet been given to the public, although the main features of the above statement are probably correct.

The Ontario Medical College for Women was organized about twenty-two years ago, chiefly by the efforts of the late Dr. Barrett, a teacher in Upper Canada College, and lecturer on Physiology in the Toronto School of Medicine. It is stated in the last annual calendar of the Medical College for Women that "The College was founded, and has been maintained, at great sacrifice upon the part of the subscribers and staff, in order to vindicate the principle that the sexes should not be taught medicine together." It is expected that under the new regime the principle of separate education will still largely prevail.

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## THE NICHOLAS SENN CLUB.

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We believe that no city in the world has made more rapid advances in practical medicine and surgery during the last two decades than Chicago. We know at the same time that no surgeon of that city had done more to encourage the profession to push forward in the American strenuous way than Nicholas Senn, who is about as well and favorably known in Canada as in the United States.

We learn from *Surgery, Gynecology and Obstetrics*, that the profession of Chicago have formed a club with the above title in honor of Dr. Senn. It is stated that "The principal object of the club is to publish a 'Festschrift' in honor of Dr. Senn, but already many other plans have been proposed by which the club may advance the cause of scientific research, and also

promote good fellowship in a common cause. Under the skilful guidance of the President, Dr. Henrotin, the Nicholas Senn Club, with a single bound, has taken its place among the leading clubs of Chicago.

“The idea of the club, as well as the publication of the *Festschrift*, was a happy one. Dr. Senn’s position in our profession is an unique one, and it requires only the magic of his name to carry such a movement to success. The emblem adopted by the club—a crossed pen and scalpel, with the words ‘*Nil sine labore*’ inscribed beneath—is a most fitting one, and accurately represents the lifework of this distinguished surgeon and author, and the principle on which it has been founded.”

The first annual dinner of the club was held on the evening of December 18th, and much enjoyed by those present. We are told that the organizers have decided not to confine the membership to the profession of Chicago, and that there is already a list of non-resident members.

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### THE REGULATION OF PROSTITUTION.

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Almost from prehistoric times prostitution has been one of the blots of civilization, and every great empire has had at some period of its existence to face the problem of lessening the disease and death which followed in the train of the courtesan. Japan perhaps first suggested and adopted segregation of the prostitute—a system still in force in the land of the rising sun. The Romans also confined these women to certain parts of the city, chiefly in the cellars—(*fornix*, a vault, from which is derived our word *fornication*). In more recent times, European nations have suggested the regulation of prostitution, seeking, by means of medical inspection, to prevent venereal disease, while at the same time giving it governmental sanction, and placing it in the same category as the liquor trade. This method of dealing with the problem has been in force in France and Belgium for many years—long before the discovery of the gonococcus, and even before it was definitely

settled that syphilis was contagious in its secondary manifestations. In some cities of the United States the same plan has been tried, but for the most part found wanting. Yet as embryo legislators are constantly coming forward with a new scheme to regulate prostitution out of existence, including generally in their programme, medical examination, it is necessary for physicians to be acquainted with the statistics of the case.

The sum total of all the evidence accumulating for half a century points to the fact that a medical examination, even if performed every day by a competent and painstaking physician, affords no guarantee whatever against contagion. A skin lesion so small as to escape the examiner, may convey the virus of syphilis, while diagnoses made from vaginal and cervical swabs, are notoriously uncertain, so far as the gonococci are concerned.

Furthermore, wherever prostitution has come under government control, the number of men visiting brothels has greatly increased, and, in spite of the utmost vigilance on the part of the inspecting physicians, some of the men have been infected. These persons certainly have a grievance against a government, which is, to some extent, responsible for their disease.

Statistics have been published, it is true, to prove that medical control is most successful, and the advocates of this method would have us believe that the reported cases of venereal infection arose from clandestine prostitutes, rather than from those in public houses. But the former are much the less likely to become diseased, because their clientele is limited, and because they are generally removed from "those veritable dens of debauchery, where liquor is employed as a matter of course to destroy men's will power and drive them to commit irreparable sins." There can be no doubt of course, that even the most superficial and perfunctory inspection will detect some infected females, who will be sequestered, but this good is more than counterbalanced by the increased number of men previously continent, who avail themselves of prostitution because they think all danger of contagion is removed.

As a matter of fact, medical control has been such a con-

spicuous failure wherever it has been tried, that the Society of Sanitary and Moral Prophylaxis, in dealing with the social evil, does not propose to discuss at its meetings any papers advocating regulation.

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### NOTES.

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The medical staff of Grace Hospital, Toronto, are fitting up a fine pathological laboratory and an electrical room, which will be when completed, we believe, one of the finest on the continent.

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The International Medical Congress at Lisbon in April is expected to attract a very large number of foremost medical minds. A large party will go from England by steamship, the vessel to be moored within easy distance of the meeting place of the Congress, and thus to remain as headquarters throughout the entire period of the excursion. All the discomforts of hotel overcrowding will be avoided in this way, and at the same time the expense be considerably reduced.—*Ex.*

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#### Von Bergmann Made Senator for Life.

Kaiser Wilhelm has recently appointed von Bergmann member of the Upper House of Parliament (Herrenhaus) for life. This is the first time that such an honor has been conferred on a member of the medical profession.

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#### New Medical Society Formed

The Essex County Medical Association was formed January 26th at Windsor, Ont. Dr. James Brien, Essex, was appointed Honorary President; Dr. Hughes, Leamington, President; Dr. Samson, Windsor, Vice-President, and Dr. McKenzie, Kingsville, Secretary-Treasurer. All the physicians in Essex County will be canvassed, and an endeavor will be made to unite the entire profession in that county.

**Successor to Nothnagel at Vienna.**

Nothnagel's vacant chair has been offered to Quinke, of Kiel, and to Strümpell, but each declined the honor. Von Noorden, of Frankfurt-on-the-Main, was then proposed by the Vienna faculty of medicine, and late advices state that von Noorden has accepted.

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**Rockefeller Institute Scholarships.**

The Rockefeller Institute for Medical Research offers for 1906-7 scholarships to assist investigations in experimental pathology, bacteriology, medical zoology, physiology and pharmacology, and physiologic and pathologic chemistry, to be carried on in the laboratories of the institute in New York City. The value of these scholarships ranges from \$600 to \$1,000. They are open to men and women who are properly qualified to undertake research work in any of these subjects, and who will devote their entire time to it. Applications and credentials should be in the hands of the secretary of the Rockefeller Institute, Dr. L. Emmet Holt, 14 West Fifty-fifth Street, New York City, not later than April 1st, 1906. The announcement of the appointments is made about May 15th. The term of service begins preferably on October 1st, but, by special arrangement, may be begun at another time.

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A very important announcement has come from Quebec. Dr. Page has been appointed Chief Medical Inspector in connection with immigration at the Port of Quebec. Those who have noticed with much alarm the numerous steamboat accidents which have occurred on the St. Lawrence in recent years will be pleased to learn that Dr. Page has also been named Government Oculist, and as such it will be his duty to examine the eyesight of the members of the Quebec Corporation of Pilots.



## Personals.

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Dr. Allen Baines, of Toronto, left for a month's trip to Jamaica, February 28th.

Dr. George McDonagh expects to return from Honolulu to Toronto, and resume practice about March 20th.

Dr. R. J. Wilson was elected Chairman of the Board of License Commissioners, Toronto, February 27th.

Dr. Crawford Scadding and his daughter "Toppie" sailed from New York for the Mediterranean, February 16th.

Dr. Opie Sisley (Vict. '88) spent December and January in New York, where he was engaged in post-graduate work.

Dr. Charles Murray, of Toronto, left for New York, January 20th, and sailed for the Mediterranean, February 24th.

Professor A. B. Macallum, of the University of Toronto, has been made a Fellow of the Royal Society of London, England, for services in research work.

Miss Sadie Gladstone, formerly head nurse at the "Pavilion," Toronto General Hospital, was married to Mr. Robert Strachan, of Fort William, February 20th.

Dr. M. H. Embree (Tor. '04), one of the interne staff of the Toronto General Hospital in 1905, has gone to Parry Sound, and is one of the acting surgeons in Dr. Stone's Hospital.

Dr. S. H. Westman (Tor. '96), who has spent the last two years in London, England, recently paid a brief visit to Toronto, and returned to England, sailing from Boston, February 20th.

Dr. W. B. Hendry (Tor. '04) went to Cuba in January. He expected to return to Toronto early in March and commence practice at 197 Carlton Street, the office and house formerly occupied by Dr. McFaul.

Dr. S. T. Rutherford, of Listowel, has sold his practice to Dr. Frederick Large, who took possession at the first of the year. Dr. and Mrs. Rutherford left on the 24th inst. for Naples, Italy, sailing *via* Boston on *SS. Canopic*, of the White Star Line. They will travel for about two months through Italy, Switzerland, France and the British Isles. The Doctor intends taking post-graduate work in London, Berlin and Vienna for six or eight months.

## Obituary.

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### J. W. R. BOYER, M.D.

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Dr. Boyer, of Barrie, died of typhoid fever, February 12th, aged 62. He was not engaged in active practice.

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### GEORGE PRINGLE, M.D.

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Dr. Pringle, 632 Church Street, Toronto, died February 16th, aged 72. He graduated, M.D. (McGill) in 1855, and practiced for many years in Eastern Ontario. He removed to Toronto about fifteen years ago, but poor health prevented him from doing much work. He was much liked by the comparatively few who had the privilege of his acquaintance.

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### REGINALD FULTON.

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Mr. Reginald Fulton, only son of the late John Fulton, M.D., died at 135 Beverley Street, Toronto, February 16th, after a brief illness from pneumonia, aged 34.

## Book Reviews.

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**The Diseases of Infancy and Childhood.** Designed for the use of Students and Practitioners of Medicine. By HENRY KOPLIK, M.D., Attending Physician to the Mount Sinai Hospital; formerly Attending Physician to the Good Samaritan Dispensary, New York; ex-President of the American Pediatric Society; member of the Association of American Physicians, and of the New York Academy of Medicine. Second Edition. Thoroughly revised and enlarged. Illustrated with 184 engravings and 33 plates in color and monochrome. New York and Philadelphia: Lea Bros. & Co. 1906.

Dr. Koplik's work in his own specialty is too well known in Canada to require any lengthy notice, and his book, when it first appeared, was most cordially received. This is the second edition, in which certain parts have been brought up to date, more especially the section on Infant Feeding. The illustrations and letter-press are not excelled by anything in pediatrics. The volume as a whole is most intensely practical, and meets all the requirements of a busy practitioner.

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**A Text-Book on Modern Materia Medica and Therapeutics.** By A. A. STEVENS, A.M., M.D., Lecturer on Physical Diagnosis, University of Pennsylvania; Professor of Pathology, Woman's Medical College of Philadelphia. Fourth edition, revised. Octavo of 670 pages. Philadelphia and London: W. B. Saunders & Company. 1905. Cloth, \$3.50 net. Canadian Agents: J. A. Carveth & Co., Toronto.

The new 4th edition of Dr. Stevens' *Materia Medica and Therapeutics* has just been published, close upon the issuance of the Eighth Decennial Revision of the *Pharmacopeia*, to which it has been adapted. New articles appear on scopolamin, ethyl chloride, theocin, veronal and radium, together with new material on radiotherapy, and the changes in the names and strength of various drugs, as called for by the new *Pharmacopeia*, have also been made.

Of all the good works before us on this subject, this one can be said to be amongst the best.

# Selections.

## SURGICAL HINTS.

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In most instances, so-called spasmodic stricture of the urethra is really a spasm of the external vesical sphincter due to irritation, commonly the result of prostatic disease.

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An intractable eczema of the nipple may be the precursor of cancerous disease, and if it does not yield to treatment the necessity of excision of the affected area should be considered.

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In old men suffering with hemorrhoids it must not be taken for granted that the existing symptoms are solely attributable to this affection, but it must be determined by thorough rectal examination whether there is not present an enlargement of the prostate, which of itself often gives rise to rectal disorder.

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The application of strips of fly-blister or of cantharidal collodion around a joint which is the seat of gonorrhoeal arthritis sometimes marvellously relieves the pain and functional disturbances. Care must be taken, of course, not to apply the cantharides over bony surfaces to avoid ulceration. The Paquelin is also an excellent means for this purpose.

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The injection of sterilized olive oil into the urethra will often facilitate the introduction of bougies through what at first sight appears to be an impassable stricture. In fact, as long as a patient can force urine, even if only drop by drop, through a strictural urethra, there is every likelihood that by delicate manipulation an instrument can be introduced.

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In operations upon the nose and throat during the cold season of the year the possibility of pneumococcus infection must always be considered, since this organism is commonly found in the nose and the traumatism of the mucous membrane by the operation in connection with the lowered vitality of many of these patients favors its propagation and extension to the pulmonary tissues.—*International Journal of Surgery.*

### Conclusions as Regards Uterine Curettage.

Practically 60 per cent. of uterine curettage is unsuccessful. Considerable curettage is damaging, some are even fatal. The damaging results of curettage are myometritis, salpingitis, peritonitis, cellulitis, sterility, perforation—in short, the distribution of infection. Uterine curettage has produced more damage than benefit. Curettage produces relief in about 25 per cent. only of atrophic and maldeveloped uterus. The damage inflicted by curettage on the other seventy-five per cent. overbalances the relief secured by the 25 per cent. The relief secured by curettage in subjects of anemia, neurosis, malnutrition is largely due to the preparatory and subsequent operative treatment, the anatomical and physiological rest, and the favorable mental impression on the patient. Some of the damaging effects of curettage must be credited to the usual accompanying uterine dilatation and some to the trauma of the traction forceps. There are no recognized standard rules for uterine curettage. There is no operation in gynecology that requires greater skill, knowledge of pathological conditions, or extensive experience than curettage.

Uterine curettage is indicated in an extremely limited number of subjects. The chief use of the sharp curette in gynecology should be for diagnostic purposes, and the mounted fragments of the endometrium present the most brilliant of microscopical views. The employment of the sharp curette on the endometrium is as irrational, harmful, and unnecessary as it would be on the nasal mucosa, for both nasal mucosa and endometrium possess no submucosa. Trauma and infection act similarly on both mucosæ. Does the specialist in nose and throat curette the nasal mucosæ? The apparent simplicity, security and innocence of uterine curettage have induced excessive use and abuse by general practitioners, amateurs and general surgeons without proper indications.

The abuse and misuse of the curette may be observed in: (a) Puerperal subjects (abortion, miscarriage, labor) distributing infection and emboli; (b) nondevelopment and atrophic uteri (inflicting wounds, atria for the distribution of infection); (c) in uterine myomata (hemorrhage and producing wounds for infection); (d) in sterility (inflicting wounds for the distribution of infection); (e) in endometritis (gonococcus, streptococcus, staphylococcus), producing wounds which exacerbate and distribute the existing infection; (f) in uterine perforation.

It should be remembered that in uterine curettage the chief

danger is not that the operator may introduce sepsis during the operation, but that the damage due to the wounds inflicted will give rise to a triad of infection and the existing sepsis that he exacerbates. The employment of the sharp curette in the uterus has caused more suffering and death than any other gynecological instrument. The sharp curette is the most dangerous and cruel of gynecological instruments. It is cruel, because it inflicts untold suffering. It is dangerous, because it inflicts on the adjacent and genital visceral tracts acute and chronic disease with sterility and occasionally death. The object of the curette is to produce a new surface endometrium by destroying the surface of the old one. The method is too dangerous and too risky. The nose and throat specialist does not try nasal curettage to speculate what might happen after the operation. Contracting, distorting cicatrices of the endometrium subsequent to curettage of a damaging character should be expected. Practically the curette has done more harm than good.—*Byron Robinson, N.Y. Med. Jour.*

#### Action of Tea.

According to Brunton, tea may interfere with nutrition in three ways: First, by lessening the feeling of hunger; second, by rendering food less digestible, and third, by interfering with the digestive power of the stomach. At the same time that it thus lessens the nutrition of the body it enables the person to use up much more energy than he or she would be able to do without its aid, and the consequences of this are most evident in the effect on the nervous system. Although tea prevents the sensation of fatigue from being felt for a while, yet exhaustion is going on, both in mind and body, and this usually at length causes disinclination to either mental or bodily exertion, and tends to destroy the power of doing any useful work, either mental or physical, even when the attempt is made. Power of self-restraint is diminished and the person becomes nervous, unduly sensitive, timid and emotional. Not infrequently ringing in the ears is felt, giddiness, headache, sometimes very severe neuralgia and tremulousness. The tremors seem to be more readily induced by green tea than by black tea, and Brunton has known of one case in which two or three cups of green tea were sufficient to induce marked tremor. Neuralgia is very apt to occur in nervous people who are able ordinarily to take a great deal out of themselves, either by sheer force of will or under excitement, and are thus more liable to reduce themselves below normal than those of more lymphatic temperament.

Neuralgia has been described as the prayer of a nerve for better blood and more of it, and tea, by enabling these people to take even more out of themselves than they otherwise could, will render their neuralgia more severe and more continuous. It is evident that a similar result is to be expected in regard to other nervous functions, and that the stability of the brain may be so seriously impaired that the combination of starvation and stimulation, produced by excessive tea drinking, will certainly produce a tendency to mental derangement, even if it does not actually determine its onset. In addition to its action on the nervous system, however, tea is a powerful stimulant to the circulation, and, if abused, will lead to feebleness of the pulse and to palpitation. All teas are not equally injurious. Ceylon and India tea are preferred by many people to China tea on account of their aroma and stimulating qualities, and, so long as they are taken in moderation and prepared in the right way by simply infusing for two or three minutes, and then pouring the water off from the leaves, they will suit healthy people very well. Whether on account of the higher proportion of tannin they contain, or some other reason which we do not yet know, they are not so good for weak digestions as China tea, which, especially if it is prepared in the way just recommended, by infusion for two or three minutes only, is less likely to cause dyspepsia than other kinds of tea. The physiologic action of tea is usually attributed almost entirely to the alkaloid, theine or caffeine, which it contains, but Brunton does not think that this can be the case because green tea, which contains no more of the alkaloid than black tea, has a much more powerful effect on the nervous system, an effect which cannot be explained by the somewhat larger proportion of tannin, and must, he thinks, be due to some other constituents in the leaf. Green tea and black tea are not obtained, as many people suppose, from different varieties of the plant, but only differ in their method of preparation; the leaves which form the green tea being roasted in a pan shortly after they are plucked, while those that form the black tea are allowed to undergo a form of fermentation before roasting. Brunton sums up his paper as follows: Tea when properly prepared, and taken in moderation, is both useful and agreeable. When taken in too great quantity, or along with meat, when too strong when infused too long, or still more when boiled or stewed, it is apt to produce digestive troubles. When taken in excess it may produce nervous symptoms of the most serious character, and facilitate, if it does not actually produce, mental degeneration.—*Practitioner and J.A.M.A.*

## Miscellaneous.

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### Sacredness of Human Life.

A man is now confined in prison in France awaiting trial for the murder of his wife. He is the mayor of the town of Danpierre, and had always been considered a person of exemplary character and fine mental attainments. His wife had suffered for years with an incurable malady and he had been a devoted attendant at her sick bed. Her pain was so agonizing that she implored him to end her misery. Finally, he yielded to her pleadings and killed her. The crime—for crime it is in the eyes of the law—has been widely discussed by the medico-legal scientists of Europe. A similar case occurred in the United States a few years ago. The wife of a resident of Florida was an invalid, and having no hope of recovering her health, she begged her husband for a drug, which he administered, causing her death. He was convicted. There is an advanced school of thinkers in this country who assert that in certain circumstances it is justifiable to anticipate the slower processes of disease. That question has been discussed by medico-legal bodies in the United States and in Europe, but there is no organized body of scientists which has endorsed the principle that human life may be ended by physicians or others to secure release from pain. The physician practices his profession on the principle that where there is life there is hope. Life is sacred, and it seems impossible to defend the destruction of it solely to destroy pain. Much that is reckless and apparently cynical is heard nowadays about the advisability of putting to death certain classes of persons for whom there seems to be no hope in life—the afflicted, the maimed, the “degenerate.” No good is likely to come of such suggestions, while discussion of the subject may influence morbid persons to commit acts which are criminal according to law, whatever the underlying purpose of the deed may be.—*Baltimore Sun*.

### An Experiment in Seasickness.

Seasickness is not generally considered a serious disorder and its victims do not get the sympathy they deserve, considering the amount of human happiness that is even temporarily destroyed. Occasionally, however, it is a very serious matter to individuals and its public importance may perhaps be estimated from the fact that to it has been attributed the influencing of the fate of nations by the limitations of their sea power



which it caused. It is not altogether surprising, therefore, that there exists in France and possibly elsewhere in Continental Europe, a "League Against Seasickness." This body, it is reported, proposes to charter a steamer and invite some 600 physicians to sail from Hamburg, Antwerp and French ports to Lisbon at the time of the International Medical Congress. It is expected that experimental study of the subject will be conducted, and that in this way practical tests of the various methods of treating the condition can be carried out. The projectors should consult naval architects in the selection of the vessel or in the provisions for its outfitting and ballasting. If they secure a sufficiently lively craft, and the Bay of Biscay and other seas are propitious or unpropitious, according to the point of view, some valuable subjective and objective testimony may be educed. The experiment will be worth watching.—*J. A. M. A.*

#### Chloroform Death without Chloroform.

Prof. Raymond, of Paris, relates in the *Progrès Médical* for January 13th that when he was a student his professor was lecturing one day on the danger of death from chloroform and how to avoid it, talking over a patient who evidently understood little of the lecture except the words danger and death. When Raymond approached to begin to administer the chloroform the patient passed into syncope before a whiff of chloroform had been given, and it was a long time before he could be resuscitated. In a recent suit for damages for a death during chloroform administration, it was proved that the patient had been much afraid of the anesthetic, and had said to one of the assistants: "You will come to my funeral, wcn't you?" Raymond concludes that death may occur from sheer dread of the chloroform, and that the witnesses of such an accident are not responsible for the fatality.

#### The Irrational Stand of the Antivivisectionist.

The enormous sacrifice of animal life to provide the meat for the extra feasting at Christmas is the subject of comment by the *Medical Press* (London). "Man's merriment in this instance," it says, "is inseparably connected by long tradition with an enormously devastating sacrifice of life among the lower animals. . . . How many antivivisectionists, whose mental attitude commands our sympathy although not our respect, have ever paused to consider the inwardness of the Christmastide slaughter? Have they ever looked analytically

on this picture of the butchers' and the poulterers' shops on the one hand and on that picture of the scientific laboratories on the other? Here we see a vast sacrifice of life, representing a vast amount of cruelty, with the sole purpose of providing folk with extra food for their Christmas enjoyment. There we see carefully planned research carried out under the most humane conditions known to science, with one single end and aim, namely, the preservation of human life from suffering and from death. The great fundamental distinction between the two sacrifices of the life of the lower animals in the two instances under consideration is that one is intended merely to satisfy the greedy maw of jovial man, while the other is intended to save him from bodily ills of all kinds. How can a sane intelligence condone the butcher and condemn the vivisectionist? If any one said of the butcher what is said every day in the week about the vivisectionist, the antivivisectionist would retort that the objections were sentiment gone mad. Yet all the while he swallows the camel of animal food, but strains with restless and incessant bitterness against the gnat of vivisection. The life of the lower animals is subservient to him for food, for labor, for clothing, for ornament, for anything and everything in his narrow world, in short, save for the one high purpose of acquiring the knowledge of preserving the health and the lives of his fellow men. As men grow more intellectual and reasoned in their outlook, so will they be likely to regard the question of vivisection in its true perspective."—*J. A. M. A.*

### The Successful Practitioner Reads.

There is something radically wrong with the man who has "no time to read." If he hasn't the time he should take the time, just as he should to eat and sleep. How else can he know what is going on in the medical world and what advances are being made? Does it ever occur to him that the reason he lost that case yesterday was because he is already behind the times—even though he is out of college less than five years? The fact that very likely would have saved the life was in the magazine . . . which he never took the trouble to open. No matter how successful he may be, sooner or later he will be replaced in the affections and confidence of the community by young Jones, who has hard scrabbling enough now, . . . but who is forging to the front, because he has "time to read." It's a strange thing, but you never hear of any men of the first eminence in the profession who have no time to read. Yet

they must be busy or all signs fail, for how else did they attain their eminence except by knowing things that others did not know, and doing things that others could not do. Read? Why, these men are continually reading. In their "spare moments" they not only keep up with the profession, but keep ahead of it. . . . "No time to read?" My dear friend, it isn't so. The trouble is that you are too lazy; . . . you had rather take a nap or have a "quiet smoke" after the labors of the day, or spend your time in some other idle way than to get right down to this building business—this making of better doctors. Gradually, how gradually you can hardly say, you got "out of notion," and now you delude yourself with the belief that you are "too busy!" My poor friend, you are going to have time enough "for reading" or anything else after a bit. Really, wouldn't it be better to take a little time right now, and keep "in the swim?" "Work?" Of course, it is, but it pays.—*Am. Jour. Clin. Med.*

**Middle Ear Suppuration in Diabetes**—By GROSSMAN (*Internat. Centralblatt für Ohrenheilkunde.*)

In Lucae's clinic there have been admitted since its existence ten cases of middle ear suppuration in diabetics. Of these nine were acute middle ear suppurations, and one an acute exacerbation of a chronic suppurative condition. In one case both mastoids were opened. Author gives history of cases and then discussed them individually. He follows with an explanation as to which position may be taken in order to get a clear picture of the course of middle ear suppuration in diabetics, and a proper relation of cases of diabetes which came to mastoid operation, as compared to operative cases in non-diabetics. According to the experience of the Berlin clinic there were 22.7 per cent. of operative cases in diabetics as compared to 56.3 per cent. in non-diabetics. Grossman arrives at the following conclusions: 1. A particular frequency of middle ear suppuration in diabetes cannot be proven clinically. 2. But an otitis media in diabetics leads more often to disease of the mastoid process than in non-diabetics. 3. The cause is not due to an individual local disposition, but due to the decreased powers of resorption and a greater decline of the mucous membrane, early arteriosclerosis in diabetes, and a change in the composition of the fluids. 4. A characteristic form of mastoiditis diabetica does not exist. 5. Operative interference is as a rule borne well, even though the prognosis must be guarded.—*The Medical Fortnightly.*