

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- |                                     |   |                                     |   |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/>            | Coloured covers /<br>Couverture de couleur  | <input type="checkbox"/>            | Coloured pages / Pages de couleur   |
| <input type="checkbox"/>            | Covers damaged /<br>Couverture endommagée   | <input type="checkbox"/>            | Pages damaged / Pages endommagées   |
| <input type="checkbox"/>            | Covers restored and/or laminated /<br>Couverture restaurée et/ou pelliculée   | <input type="checkbox"/>            | Pages restored and/or laminated /<br>Pages restaurées et/ou pelliculées   |
| <input type="checkbox"/>            | Cover title missing /<br>Le titre de couverture manque  | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/<br>Pages décolorées, tachetées ou piquées  |
| <input type="checkbox"/>            | Coloured maps /<br>Cartes géographiques en couleur  | <input type="checkbox"/>            | Pages detached / Pages détachées  |
| <input type="checkbox"/>            | Coloured ink (i.e. other than blue or black) /<br>Encre de couleur (i.e. autre que bleue ou noire)  | <input checked="" type="checkbox"/> | Showthrough / Transparence  |
| <input type="checkbox"/>            | Coloured plates and/or illustrations /<br>Planches et/ou illustrations en couleur   | <input checked="" type="checkbox"/> | Quality of print varies /<br>Qualité inégale de l'impression  |
| <input checked="" type="checkbox"/> | Bound with other material /<br>Relié avec d'autres documents  | <input type="checkbox"/>            | Includes supplementary materials /<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/>            | Only edition available /<br>Seule édition disponible  | <input type="checkbox"/>            | Blank leaves added during restorations may<br>appear within the text. Whenever possible, these<br>have been omitted from scanning / Il se peut que<br>certaines pages blanches ajoutées lors d'une<br>restauration apparaissent dans le texte, mais,<br>lorsque cela était possible, ces pages n'ont pas<br>été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion<br>along interior margin / La reliure serrée peut<br>causer de l'ombre ou de la distorsion le long de la<br>marge intérieure. |                                     |   |
| <input checked="" type="checkbox"/> | Additional comments /<br>Commentaires supplémentaires:  |                                     | Continuous pagination.  |

# The Canadian Practitioner and Review

Vol. XXXV. TORONTO, DECEMBER, 1910.

No. 12

## Original Communications

### THE BORDERLAND OF MEDICINE AND SURGERY IN DISEASES OF THE KIDNEYS, WITH SPECIAL REFERENCE TO LITHIASIS, TUBERCU- LOSIS AND TUMORS\*

BY H. B. ANDERSON, M.D., L.R.C.P. (LOND.), M.R.C.S. (ENG.),  
Associate Professor of Clinical Medicine, University of Toronto.

In the management of renal diseases, as with those of other organs, there are some which by common consent and practice fall to the physician, others to the surgeon, while in the case of many the best results are to be obtained only by the co-operation of both, the work of one in diagnosis and treatment being complementary to that of the other. Belonging to the province of the physician may be mentioned the various forms of Bright's disease. This may be granted notwithstanding the enthusiasm with which many a few years ago regarded Reginald Harrison's capsule-splitting operation in conditions of renal tension and Edebohl's more questionable operation of decapsulization in cases of subchronic and chronic nephritis. Although at that time these procedures appeared to some to indicate another successful invasion by the surgeon of the special domain of the internist, it is now generally conceded that the early hopes entertained of the value of these operations have not been realized, and that except in a very limited field, little reliance is to be placed on their efficacy. While in medicine we must always be prepared to readjust our opinions to accord with newly discovered facts, it was difficult for the physician and pathologist to understand the *rationale* of decapsulization for the relief of a systemic condition

\*Read before the Medical Section of the Academy of Medicine, Toronto, March, 1910. The Surgical Aspect was presented by Dr. S. Cummings.

wherein the ultimate result depends more on the *cardiac* than the *renal* involvement.

In tumors, on the other hand, *when once the diagnosis is made*, the case belongs to the surgeon—the physician's only role being to assist in the palliative treatment of inoperable cases. I have said *when once the diagnosis is made* advisedly, because tumors are seldom recognized as such at first, the patient's attention being usually early directed to the *pain* or *hæmaturia* for which he applies to the physician for relief. The latter must therefore be prepared to appreciate the significance of these symptoms, and if unable to arrive at a diagnosis, to avail himself of the assistance of X-ray examination, cystoscopy, ureteral catheterization, ureteral meatoscopy, etc. Even in cases where surgical technique is necessary for diagnosis and where surgical operation offers the only hope for eradication of the disease this preliminary investigation by the physician should not be undervalued, as the results obtained will depend not only on the local lesion, but are often determined by the general condition of the patient, such as the state of the heart, the arteries, the blood, and the renal capacity—factors which the physician's training enables him to more accurately appreciate in their bearing on the particular case. This, it appears to me, is too often lost sight of, to the detriment of the patient.

In tuberculosis the delimitation of territory is still debated though at the present time the trend of opinion is unquestionably in favor of nephrectomy as soon as a diagnosis is made unless precluded by widespread dissemination of the disease or involvement of the other kidney. It is a curious fact that in this disease surgeons often take the more conservative view, while physicians are among the strongest advocates of radical measures. *A priori* one might naturally have looked for better results from general methods, tuberculin, etc., in the management of renal tuberculosis, but both clinical and pathological evidence go to prove that complete eradication apart from nephrectomy is so uncommon and the ultimate results are usually so bad, that one is not justified in counselling reliance upon medical treatment alone. The earlier the condition is recognized and the more localized the lesion the more strictly surgical must the case be considered. Contrary to the teaching of former times more recent investigation in which cystoscopy and ureteral catheterization have been of the greatest value, has shown that *hæmatogeneous infection of one kidney is the usual primary condition*, and that the ureters and bladder are secondarily involved. The other kidney in time is likely to be implicated or more general dissemination

occur. These considerations are worthy of the most serious consideration in determining our procedure in a given case. While experience has shown that involvement of the ureter and bladder does not preclude the possibility of successful surgical treatment, yet obviously it renders the outcome more uncertain. Involvement of the other kidney however is a contraindication to operation. While extensive dissemination of the disease to other parts or even a localized lesion in one lung, is generally considered as a contraindication to operation, it would be interesting to know the effect in a limited and improving pulmonary lesion of the removal of an advanced tubercular kidney. In a case of this sort recently under my observation the advanced renal involvement so absolutely precluded the possibility of recovery that, balancing the danger of shortening the patient's life in the faint hope of success against the otherwise inevitably fatal issue in a few months, I was prepared to suggest operation. The case was referred to Dr. Trudeau for opinion which was emphatically against any surgical interference. Though the pulmonary condition showed evidence of continued improvement the patient died in six months. Trudeau was probably right still one cannot help but wonder if the one hope of relief, though a forlorn one, was given the patient.

That marked improvement and even apparent cure occurs under medical treatment is quite true. In the case just referred to the clinical history showed conclusively that a serious illness four years previously was the beginning of the trouble. The patient's general health had been completely restored (with the exception of a symptomless pyuria), and under the physician's advice she was allowed to marry, the quiescent renal disease again showing evidence of activity before the birth of her first baby. Had nephrectomy been done during this quiescent period complete eradication of the disease might reasonably have been hoped for.

In the case of a young girl referred to me by Dr. Hazelwood of Bowmanville with a history dating back some five years, under medical treatment she gained 15 lbs. in weight and her general health was quite restored. Owing to the persistence of slight pyuria and attacks of severe pain however nephrectomy was done by Dr. McKeown with a most satisfactory result. The kidney was only slightly enlarged but showed not only old fibro-caseous lesions but more recent small caseous foci and miliary dissemination. The excellent condition of the patient's general health did not prepare one to look for such extensive, active renal mischief.

While tuberculous disease of these organs can be diagnosed in a general way by ordinary medical procedure and bacteriological examination, yet as this falls short of a complete diagnosis in not being able definitely to locate the seat of the lesion and in determining the condition of the ureter, bladder, and especially of the other kidney, operative interference is not warranted without the more definite information to be obtained only by cystoscopy, meatoscopy and ureteral catheterization.

In urinary lithiasis as with tuberculosis, the patient usually first consults a physician, upon whom therefore falls the responsibility of recognizing the character of the case. Careful attention to the history of the case and the attendant symptoms, combined with urinalysis, usually suffices for this purpose. The subsequent management whether medical or surgical has to be determined in each case. In renal or ureteral lithiasis where the pain, attacks of colic, hæmaturia and pyuria are not marked or occur only at long intervals, and there is no evidence of blocking of the ureter and damming back of the urine with subsequent infective pyelitis or pyelonephritis tending to destroy the organ, then medical treatment should be given a fair trial. Every physician knows that under proper dietary, alkalies, urotropine, turpentine, mineral waters, saline catharsis, etc., complete relief may be obtained in many cases. Some authorities speak highly of the value of glycerine in doses of 50 to 100 c.c., which is said not infrequently to produce painful crises, with expulsion of the calculus. That ureteral calculus may be expelled after months of impaction was shown in a case referred to me by Dr. H. R. Frank of Brantford last December. The patient had been suffering for some time from frequently recurring attacks of severe colic, hæmaturia, pyuria, cylindruria, etc. Calculus was diagnosed but its seat could not be located. Dr. Cummings by an X-ray examination and ureteral catheterization, demonstrated the calculus in the lower end of the ureter. The patient returned home, had several recurrences of the colic, one of which occurred about a month ago when he was on the street. There was urgent desire to urinate, and during this act the calculus was expelled and the patient completely relieved of all his symptoms. In ureteral calculus injection of oil into the ureter is sometimes followed by extrusion of the calculus. There are many cases however especially those in which *painless hæmaturia* is the only symptom, where in the early stages it may be impossible for the physician to determine whether the case is one of calculus, tumor, interstitial nephritis, ruptured varicose veins, or other cause of this phenomenon. The difficulties presented and the fallacies of our

usual clinical signs will be discussed more fully later. In these cases the early diagnosis is so essential to rational treatment that X-ray examination, cystoscopy, meatoscopy and ureteral catheterization should be resorted to at once. It is scarcely necessary to say that in every case where operative treatment is deemed advisable that the exact location of the stone and the condition of the other kidney should first be determined by these means. In bilateral ureteral calculus and in calculus anuria operation is always indicated. It is perhaps unnecessary to call attention to the frequent occurrence of ureteral calculus. I have had six cases diagnosed as such during the past year, and in three of them the exact seat of the calculus was determined by X-ray examination. In two of these Dr. Cummings operated and removed the calculus, and the patients are now well. In another the calculus, as before stated, has extruded spontaneously. As a rule it is impossible to distinguish with certainty a renal calculus from one in the ureter by medical examination alone. At times a calculus impacted in the lower end of the ureter may produce purely vesical symptoms. Rectal or vaginal palpation of the ureters may be of value in some instances, but cases are reported where enlarged glands along the ureters have led to erroneous conclusions. In two cases of mine with calculus impacted in the lower end of the ureter the patient complained of a peculiar paræsthesia and numbness extending down the outer side of the thigh. I have not seen this symptom mentioned elsewhere and whether it has any localizing value or not one is not warranted in saying.

Speaking generally, it may be said that the elaboration of the surgical technique of cystoscopy, ureteral meatoscopy, ureteral catheterization and X-ray examinations during the past dozen years in urinary diseases, constitutes one of the most brilliant developments in practical medicine of any period. They have elucidated the pathology and have given certainty and precision to diagnosis in conditions previously obscure or only guessed at and have made possible the successful treatment of many cases formerly beyond our help. At the same time these methods are not to be considered exclusive of, but rather as supplementary to the medical investigation of the case. As before stated, in many cases the medical examination is sufficient for a diagnosis which enables the physician to direct the treatment of the patient. The more precise methods of local diagnosis possessed by the surgeon are required in every doubtful case or whenever operation is contemplated. The following reasons may be adduced against their employment as routine measures in every case:

1. They are not always necessary in order to arrive at a sufficiently accurate working diagnosis.

2. Patients frequently object, on account of the discomfort and expense involved until simpler procedures have been fairly tried.

3. The technique is difficult requiring not only manipulative skill of a high degree, but much experience in interpretation of results.

4. The discomfort and not infrequently dangers attendant in these examinations must be borne in mind. These are often discounted by the surgeon, and with skilful operators are no doubt greatly minimized, yet cystitis, pyelonephritis or other trauma not infrequently result. These dangers, however, are of secondary importance in cases where the diagnosis cannot otherwise be made.

Segregation of the urine is advocated by some as simpler in technique and less liable to do harm. It is certainly of value in some cases but neither in accuracy nor in completeness of the information furnished can it be compared with the measures before mentioned.

Just here may I refer to the value of the tests that have been recommended in recent years for estimating renal permeability or as an index to renal sufficiency. One need not refer to the technique as this is well known. The methylene blue test is open to the same objection which applies to the estimation of urea as an index to the excretory capacity of the kidneys. The inference is not warranted that because the organs can excrete one substance normally that they have an equal capacity with reference to others. The test has not proven of much practical value. The blue color imparted to the urine however enables one in making a cystoscopic examination to recognize the fluid more readily, as it is ejected from the ureter and thus assists the examiner in locating the ureteral opening.

More was hoped from the phloridzin test, as healthy renal epithelium was considered to be necessary for the transformation of this substance into glucose. Recent investigations however have shown that in animals after nephrectomy sugar is found in the blood after the injection of phloridzin; and if this be so, a *phloridzin diabetes* can no longer be considered an index to the functional capacity of renal epithelium. Dr. Parker, house physician at St. Michael's Hospital, has applied these tests in a number of patients under my care but in none did they furnish us with information of any value.

Urinary lithiasis, tuberculosis, tumor, etc., are frequently

characterized by a fairly distinctive course, yet the diagnosis usually depends upon the differentiation of symptoms varying in character and degree, more or less common to all of them. These symptoms may arise primarily from the disease itself, or often secondarily due to a superadded infection, or from the mechanical effects of the lesion upon the urinary passages. Thus pain, hæmaturia, pyuria, interference with the normal function of the kidneys or failure of the general health may occur in any of these conditions. The difficulties in the way of diagnosis are further increased from the fact that in all of these conditions *multiple foci of involvement* may be present in a given case, affecting widely separated areas of the urinary tract. As it is usually for one or more of the symptoms above mentioned that the patient first seeks relief, I wish to consider a little more in detail some of the points in differential diagnosis—(1) of the diseases themselves, (2) of the location of disease, (3) the difficulties presented, and (4) the limitations of the ordinary diagnostic methods.

(1) Pain as a general and localizing symptom. This is one of the commonest and most useful diagnostic symptoms in these diseases, yet it is well known that it may sometimes be entirely absent in any one of them. While often fairly characteristic as in renal colic, yet in many cases neither its presence, character nor distribution can be depended upon either to indicate the nature or location of the trouble. Thus blood clot, particles of tumor, obstruction from kinking of the ureter in nephroptosis, pressure of tumors upon the ureter from without, or infections, may all produce symptoms closely simulating renal colic.

Again right-sided ureteral calculus may so closely simulate appendicitis as to deceive even experienced surgeons. In two of the cases of this disease which I have seen during the past year appendicitis had been diagnosed and the patient operated upon without relief.

In rare instances the pain may be on the side opposite to the lesion. This was the case in a patient of mine in whom tumor of the left kidney had been diagnosed and the patient operated upon. Intermittent profuse hæmorrhage had continued, and the tumor enlarged so as to be readily palpable on the right side. She was operated on by Dr. E. E. King and a large hypernephroma removed, the patient making a good immediate recovery, but ultimately died in nine months from pulmonary metastases.

Tumors of the bladder occurring as they so frequently do near the ureteral orifice, may produce pain in the *con spounding*



*kidney*, while at other times calculus in the lower end of the ureter may produce vesical symptoms.

In a case which I had with Drs. Uren and Silverthorn in St. Michael's Hospital during the past summer the patient suffered from intense pain above and to the left of the umbilicus. A firm tumor could be palpated in this region, movement of which caused the pain to radiate into the left inguinal region. The patient's general condition did not permit an operation, and at autopsy we found a hypernephroma completely surrounding the upper part of the ureter. Here the urinary findings were entirely negative.

That even cystoscopic examination, ureteral catheterization, X-ray, etc., may at times fail was shown by a case which I recently saw with Drs. A. Adams and Cummings, in which recurring attacks of pain, apparently typical of renal colic, were entirely negative to these methods.

Next to pain, possibly hæmaturia is the symptom for which patients most commonly consult the physician. While this symptom is often associated with others which help to establish the diagnosis, it often remains for a long time the only evidence of trouble. This *symptomless hæmaturia* was well recognized by the older clinicians, Sir Wm. Gull speaking of some of them as renal epistaxis. Anyone with a large experience in urinary analyses will recognize it as one of the most difficult of all urinary conditions to diagnosticate. It is now more generally recognized than formerly that it may be an early symptom of interstitial nephritis or may occur at intervals throughout the course of the disease. It may even be due at times to an area of nephritis localized in one kidney.

Fenwick says interstitial nephritis accounts for 12% of cases of painless hæmaturia. French authors were the first to emphasize the importance of this symptom, and described cases characterized by it as hæmorrhagic nephritis. Cystoscopic examination has shown that the hæmorrhage is often from one kidney only. In my experience these cases are not at all uncommon. A typical example came under my observation a year ago last summer. A young man of 17 years of age in February, 1908, had his tonsils removed and a few weeks later began to suffer from profuse hæmaturia. This would abate for a short time to be followed by exacerbations. Hyaline, granular and blood casts were always present. X-ray and other examinations were all negative. Under rest, careful diet, calcium salts, turpentine, etc., he has gradually improved, though slight albuminuria, cylindruria and microscopic hæmaturia still persist.

As painless hæmaturia also occurs at times in tumor, tuber-

culosis of the kidney and calculus, the differential diagnosis is a matter of much importance. The more profuse hæmaturia is especially characteristic of tumor and interstitial nephritis, and at times of ruptured varicose veins.

Most of the standard works in urinary diagnosis describe various means by which the source of the blood may be determined. While separately or together these methods are often of value, in many cases they are entirely inadequate and some of them in my experience are quite useless. In Watson and Cunningham's recent work, in this connection, reference is made to the diagnostic significance of the color of the urine, the distribution of the blood in the two or three glass test, the quantity of the blood, whether continually or intermittently present, the shape and arrangement of the corpuscles (*rouleaux*), the association of the blood with other elements as casts, crystals, pus, particles of tumor, special type of epithelium; the reaction of the urine; specific gravity and amount of albumin. In many difficult cases of symptomless hæmaturia all of these tests may be applied with most painstaking care, and yet it is impossible to draw safe inferences from them.

The color for instance will depend upon the quantity of the blood, the length of time it has been retained before voiding and the reaction of the urine. The inference that in *renal* hæmaturia the blood is more evenly distributed in all portions in the three glass test is often correct, though I have seen cases of *renal* hæmaturia in which the first glass contained the most blood.

As to the quantity, it is usually most profuse in cases of tumor, though in a given case it may be equally profuse in interstitial nephritis. Whether it is intermittently or continually present is of little help, as in most of the difficult cases that come under one's observation it is intermittent. As to the size, shape and arrangement of the red cells, this depends more on the reaction of the urine and the length of time that it has been retained than on the etiological factor producing the bleeding. The association of the blood with other elements is equally unreliable. In the first place the amount of blood obscures the microscopic field in many cases. Much reliance is usually placed on the presence of casts as pointing to the renal origin of the hæmorrhage but in view of recent experiences this cannot be considered a safe guide in all cases. Epithelial and blood casts have most significance, but hyaline and granular casts are so frequently found in renal tumors, pyelitis, ureteral calculus and vesical conditions, with ascending infections, back pressure or other causes of vascular disturbance of the kidneys, that they cannot be

taken as certain indications that the hæmorrhage is from the kidneys. In one of my cases in which Dr. Cummings demonstrated the calculus in the lower end of the ureter, both hyaline and granular casts were repeatedly found in the urine.

The predominating type of epithelium is even a much less reliable guide than the presence of casts. Those who speak of the value of this sign do not seem to take into account the transitional character of the epithelial lining of the urinary passages, the type of cell depending on the layer from which it is derived. Moreover, if the nature of these diseases is considered it will readily be seen that the epithelial lining of the whole tract is often subjected to at least superficial irritation and often multiple involvement. My opinion however is not based on theoretical considerations, but on disappointment at the practical assistance afforded by a study of the character of the epithelium in the deposit. I have never found it of the slightest value in a difficult case and believe it is one of those signs passed from text-book to text-book which is so useless in practice that it might well be discarded. As to the presence of crystals they may occasionally offer a hint as to the underlying condition, but crystals of various kinds are so commonly found in urine in ordinary routine examinations where there is no evidence of any renal disease, that one would be very careful in attaching much importance to their presence in an obscure case. Bits of tumor may occasionally be found and assist in diagnosis, but in practice this is not common, and moreover they would usually give no clue to the seat of the trouble. As to the reaction of the urine, where it is ammoniacal, the disease is most likely to be in the bladder, but we are not equally warranted in excluding the bladder because the urine is acid in reaction. The urine may become ammoniacal in any situation where there is retention and infection with bacteria capable of producing decomposition of urea, so that the reaction of the urine is only of relative localizing value.

An excess of albumin compared with the amount of blood would be suggestive of renal involvement, but that this inference is not always warranted was shown in the case of a lady who consulted me a few days ago on account of a profuse attack of hæmaturia which she had had about a month previously. The urine at the time of my examination was practically free from blood, but contained 3% albumin by bulk, some pus cells, hyaline and granular casts and some calcium oxalate crystals. Cystoscopic examination by Dr. Geo. E. Wilson demonstrated a small sessile tumor near the left ureteral orifice. This tumor, by back

pressure or by producing vascular disturbance in the corresponding kidney, was apparently the cause of the large amount of albumin in the urine. Ascending infections of the kidneys may account for an excess of albumin in proportion to the quantity of blood.

It will be readily conceded that the diagnosis depends more on the whole clinical picture or on an association of symptoms rather than their significance taken separately, and one is frequently able to make in this way a remarkably accurate estimate of the case. Yet that there are limitations to the shrewdest calculations based on these methods is only too frequently experienced.

## THE EARLY DIAGNOSIS OF PHTHISIS\*

BY DR. JOHN A. MACGREGOR, LONDON, ONT.

*Mr. President and Gentlemen:*

In thanking you for the honor which you have conferred on me by requesting me to present a paper before your Society, I am fully cognizant of the serious responsibility which I have incurred in accepting. No apology seems necessary for reviewing the data which will lead to an early recognition of chronic pulmonary tuberculosis, a condition which all too frequently presents itself in a hopelessly advanced stage.

Probably in no other disease does the ultimate restoration to health and usefulness depend so much on detection in its incipency. In quite the majority of cases the evidence available is sufficient to furnish this early diagnosis if we appreciate the significance of the early symptoms, conduct a careful physical examination—often on more than one occasion—and interpret the import of the early physical signs. Unfortunately we are all, on occasions, more or less remiss in our duty in this respect and delayed and erroneous diagnoses are too often responsible for the incidence of the later phases of softening and excavation which so greatly impair the prospect of recovery.

The early diagnosis implies a recognition of the “incipient” case in which the lesion is a limited, usually apical or sub-apical, infiltration, and is associated with but slight, or even no, constitutional symptoms.

In quite a number of cases constitutional manifestations appear in advance of the corroborative physical signs. In not a few cases physical signs of greater or less extent, and denoting more or less activity are encountered in the absence of general symptoms.

Of importance is the discovery of a more or less intimate exposure to a possible source of infection. This may be in the home or place of employment. It may be in the person of a parent or other relative, a fellow-employee or a personal friend. In but few instances can the source be said to be unknown. The information may not be obtained at the first inquiry. It may have been forgotten and be recalled at a later visit. The illness of the suspect may have passed muster for “chronic bronchitis,” “asthma,” “stomach trouble,” and the tuberculous nature may

\*Read before the West Elgin Medical Society, March 21st, 1910.

be denied. However, an inquiry may reveal a condition of debility or a cough of long standing which will in most cases justify one in characterizing the process as tubercle.

Of the early manifestations, a vague, ill-defined onset, with loss of energy, inability to sustain physical or mental effort, slight impairment of nutrition and digestive disturbance is all too easily misinterpreted and the patient informed that he is run down or suffers from debility or neurasthenia. The development of pulmonary symptoms in those in apparently good health we are too ready to look on as an obstinate cold or an attack of grip which tends to hang on. The patient who suffers from a series of colds, more especially if they persist during the summer, or the subject of anæmia or chlorosis, should be subjected to a rigid general and physical examination.

A large percentage of patients who later develop tuberculosis are habitually light in weight, a condition which is probably predisposing. Slight loss of weight noted by weekly appeals to the scale occurs in many cases, but the average weight may be maintained, or a considerable gain occur, in the presence even of a moderately active lesion. Pronounced loss of weight is a feature rather of the later phase, as is also any notable loss of strength.

In the incipient stage a regular noting of the temperature is of great importance, and I cannot emphasize this too strongly. The observation should be continued over a period of some few days, and preferably at two-hour intervals. It is necessary to see that the thermometer is properly placed, and is maintained so for three minutes, as the registration of slight degrees of fever requires a longer time than the more pronounced elevations. The morning temperature, and, not infrequently, the afternoon as well, may be subnormal—97° to 98° F.—in those with impaired metabolism, and this may, in conjunction with other findings, be of much diagnostic value. Generally speaking, a daily general range of temperature, slightly above the normal, should direct suspicion towards tuberculosis. These rises, slight though they may be, may be noted only following physical exercise, or at the time of the menstrual period in women.

Of scarcely less importance is the observation of the pulse. At times it is of normal frequency or shows some lowering of tension. In the majority of cases there is more or less tachycardia or what is of equal importance, a condition of irritability, the frequency rising to 80 to 100 with but slight physical exertion or emotion.

Sweats are significant of secondary infections connected with the late stages; but quite early one frequently observes a clammy moisture of the palms of the hands.

The presence of cough may be denied by the patient, but commonly one notes its unconscious occurrence during the examination as a short hack, with or without some moisture.

The expectoration, if any, in early cases possesses no diagnostic characteristics. It is mucoid and frothy and of bronchial origin, and the absence of tubercle bacilli, even on frequent examination, is not to be construed as negating phthisis. They appear only when the tuberculous foci are breaking down, and are a late manifestation.

A more or less persistent huskiness of voice, though slight, should excite suspicion, even though the laryngoscope reveals only a catarrhal process, and demands a thorough investigation.

Hæmoptysis is not infrequently the startling feature which determines the patient's first visit to the physician or brings the physician to a sudden realization of the gravity of the situation. In most instances, especially if it is at all pronounced, it is significant of the later excavative period, but it may occur comparatively early as a staining of frothy bronchial sputum. One must be careful to exclude other causes, such as a slight epistaxis, a mitral stenosis, or an acute catarrhal process of the upper respiratory tract as causes.

In the great majority of cases in which the hæmoptysis is supposed to denote the inauguration of a tuberculous deposition, it is actually the evidence of renewed activity in an old, more or less quiescent, lesion.

Little or no stress can be placed on vague pains in the chest wall, which may be complained of early. They are noted as the manifestation of a phobia. Rarely they may be the result of an early apical pleuritic involvement. Of paramount importance is the recognition of the tuberculous nature of the so-called primary pleuritis of both the dry and serous varieties. They are not rarely credited to exposure to cold or to rheumatism.

The exudative type is frequently latent, and if the effusion is but slight is commonly overlooked unless the physical examination is carefully conducted. This pleuritic involvement is often the precursor or associate of an apical localization as well as the basic fibroid phthisis.

In these early cases the examination of the blood offers nothing of diagnostic importance. The pallor of the patient may be in marked contrast to the actual blood findings, which frequently are normal. A slight anæmia of the secondary or of the chlorotic type may be present, while the leucocyte count remains within the normal range.

The appearance of physical signs adds corroboration to a

diagnosis which should be pretty well established as a rule from the history and general symptoms. As early evidence they are not as a rule of themselves of signal value, as by the time one can from the physical signs say that the patient is suffering from phthisis in the so-called first stage excavation is already proceeding. At an early period, physical examination may yield a completely negative result, a point not to be overlooked. One is too often ready to declare the lungs "all right" on an all too superficial examination. In all instances the patient's chest should be bared to the skin, and it is often wise not to venture too positive an opinion without one or more than one subsequent examination.

Inspection and palpation furnish but little information in incipient cases, though occasionally one may note some diminution of apical respiratory excursion or a slight retraction.

Percussion as usually applied is not of much value until quite extensive pulmonary infiltration has occurred, but one may elicit slight narrowing of the "suspender" zone of resonance, and with greater care as to technique, some muffling of the normal resonance or even slight elevation of pitch may be determined with even very limited lesions.

The earliest physical signs are usually furnished by a careful auscultation. Harshness of respiration, especially involving the expiratory murmur, which may or may not be prolonged, with an apical limitation, bearing in mind the physiological differences between the two sides, is suggestive. The addition of an occasional sticky click or a pleural friction, or ever so few fine rales at the end of inspiration, which may be brought out only with a deep inspiration or after a cough, is ominous.

An increased transmission, together with an elevation of the pitch of the whispered voice, is a valuable sign which can be elicited early.

Definite bronchial breathing denotes considerable consolidation of pulmonary parenchyma, and with or without any notable moist sounds is a manifestation of a well-established lesion.

Much is claimed by some for the fluoroscope in detecting incipient cases, but though I have had no personal experience with its use I am of the opinion that a lesion of sufficient extent as to make itself evident by this means would give rise to significant physical signs. The promiscuous use of the tuberculins as a short cut to a diagnosis I cannot too strongly condemn.

But with a provisional or established diagnosis based on various combinations of symptoms and physical signs one may seek confirmation by recourse to some of the specific tuberculin



reactions. With the original subcutaneous and the more recent Von Pirquet methods of application I am not familiar, but I am convinced of the value of the Moro and Calmette reactions. The objections to the use of the latter urged by some may be well sustained, but my own experience, based on a limited number of cases, confirms the opinion that, used in eyes free from irritation, its employment is quite harmless, while its reaction is quite distinctive.

Unfortunately these reactions do not distinguish between healed lesions and those more or less active. The absence of reaction in the terminal phases, owing to the exhaustion of the cell activities, is of little moment, as the tuberculous nature is usually only too readily recognized.

Here again let me impress the value of the general manifestations in the early recognition of pulmonary tuberculosis. A period of ill-health with disturbance, though slight, of pulse, temperature and digestion, loss of relish for food, trifling physical incapacity, slight loss of weight and anæmia precedes, in the majority of cases, the development of the physical signs which at first are often indefinite.

The laity to a great extent, and, unfortunately, many of the profession, appreciate pulmonary tuberculosis only when cough, expectoration, wasting, hectic and exhausting sweats become prominent features and signal a stage of the disease precluding the re-establishment of even a reasonable measure of health, or what is, unfortunately, more common, presaging an impending dissolution.

In conclusion, gentlemen, I shall be grateful to you for suggestions which will be of further aid in the early recognition of this scourge, so capable of amelioration or cure in its incipiency, but which, when it has progressed to its later stages, levies so extortionate a toll of human life and adds so much to the burden of human suffering.

## MEDICAL "PROCESS BUILDING"

JOHN HUNTER, M.B., TORONTO.

Visitors to our National Exhibition always find much that interests them in watching the various processes through which the raw material has to be passed before the finished article is produced. The medical colleges, now open, are the "process buildings" through which the "raw material," the medical students, pass the successive stages on the way to full equipment as physicians and surgeons.

The character of the raw material entering our colleges is graded by the will-power, mental aptitude and diligence of the pupils; and by the efficiency of our primary and secondary schools. A medical student who does not want his whole career as a physician handicapped, should not enter his college without a broad and thorough literary training—humanitarian and utilitarian. His efficiency in Latin and Greek will greatly aid him in understanding and remembering technical terms. Any physician who cannot read French and German intelligently, and rapidly, has only a somewhat second-class literary qualification for medicine. Translations are valuable, but one loses much of the inspiration that comes with reading in the original language. The physician's influence over many of his patients; his status in the profession and in his social circle, are, at least, as much indebted to his literary refinement as they are to his scientific attainments. Through neglect, or inability to acquire a liberal education in youth, the absence, or want of it, is only too lamentably noticeable in the ranks of our profession. Many of the papers read at our medical meetings are crudely written, and the discussions that follow give but little evidence of mental culture. While those of us "who are getting gray" may put up an excuse for our illiteracy by saying when we were young "times were hard" and secondary schools "few and far between," but the youth of to-day have no excuse for being illiterate other than their own indolence.

Taking it for granted with the unparalleled facilities nowadays for acquiring a liberal education, that no ambitious young man would think of entering upon a medical course without it, should he, after matriculation, or far better still, after graduation in the Arts course, adhere rigidly to the curriculum devised by his college? Emphatically no. It may be quite true that the curriculum has been the work of intelligent, experienced men, yet "the exhausting humdrum of so-called practical routine drill, which sometimes unfortunately fills all the hours of the day and night would never make a capable physician." The student

cannot acquire self-reliance and the scientific spirit too early. He may by the " cramming process " be able to pass creditable examinations, and perhaps graduate with honors, and yet be a very unreliable and unscientific physician. It is quite customary to rather belittle research work, by saying that much of it is not practical. The physician who can make a " snap diagnosis " and give his patient something to relieve him is the practical man! the veritable " Johnny on the spot ! " It does not seem to matter much to him how ignorant he may be in regard to the structures and functions involved in the morbid process, so long as he can " hold his patient. " It is the absence of this scientific spirit that makes so much of our work empirical, or, in other words, haphazard.

The student who is satisfied with what knowledge he can acquire from teachers and text-books cannot be preserved from hopeless deterioration and inefficiency. Let him listen respectfully and attentively to his teachers, and read as many of the best text-books and journals as possible, but he must acquire an insatiable thirst for that scientific knowledge only to be found first-hand in the dissecting room, laboratory and sick-chamber. Pure science, like the vascular current, which branches out and supplies every tissue in the body with nutriment, illuminates every pathway in the art of medicine. The physician who has made a careful study, *e.g.*, of the structures and function of the stomach, is in a much better position to treat morbid gastric conditions than one who is ignorant of both, and says to his patient: " Oh, you have a sour stomach; I'll give you something to settle it. "

Unlike the artisans in the " Process Building, " who can turn out the finished article, the college professors can only do the initiatory work. The youth who has just graduated should be able to say:

" Yet I feel as glad I'm living as does anyone I know;  
All my life is still ahead of me, ambition's tide at flow. "

If possible to avoid it, the young physician should not " set up " for himself on leaving college. Probably more men have had their whole professional career impaired by an undue haste to get " a practice " than have been ruined by rum, lust or gambling. That mediocrity of success, everywhere so evident in the ranks of our middle-aged men, is largely due to this cause. The young graduate who simply follows the routine of the college curriculum does not acquire the self-reliant, scientific spirit so essential for his life-work. He settles down at once in some village, town or city, and as he has simply memorized his work one case will be of about equal interest with another—scabies will be

on a par with tuberculosis. He will not likely trouble himself with taking a history of his cases, so that at the end of each year or decade he will have only an elusive memory to guide him in the way of experience. An early marriage, the care of a home, exploits in real estate, in mining or other stocks, excursions in municipal, provincial or dominion politics—these, with the drudgery of the daily routine in practice, will occupy all his time; mid-life is soon reached, the possibility of any improvement in his methods vanishes and one more is added to the ranks of mediocrity. In the primitive stage of a community's life such a type of physicians might deserve some respect, but in an advanced stage of civilization mediocrity in medicine is inexcusable.

How are recruits from a non-progressive class to be kept out of the ranks of the medical profession in Canada?

1. Let our colleges, while demanding an adequate knowledge of the fundamental subjects laid down in the curriculum, yet encourage original research work and the development of self-reliance and resourcefulness in each individual student. Is it not far better to have students challenge the statements of teachers and text-books, and to give a reason for doing so, although they may be in error, than to have them, like sponges, simply absorb what they read and hear and give it out again, unassimilated, at the examination table? (2) Let the young graduate seek a hospital appointment or an apprenticeship with some progressive and experienced physician for two or three years. (3) Let him eschew love, business and politics until he has provided himself with an efficient laboratory equipment, a large and carefully selected library, and has travelled pretty extensively and made himself familiar with the best work being done in British and foreign hospitals. With some such literary and technical equipment as outlined above, with an insatiable thirst for more knowledge; with dauntless courage and tireless industry our young physicians would be a splendid acquisition to our ranks and be of inestimable service to any community in which they settled. Every student and graduate should catch some of the spirit so vividly expressed in the parlance of the "Sunny South":

“Yo've got ter dig de garden  
 Ef yo' want to have de rose,  
 Yo've got to keep a wo'kin'  
 Wid yo' shovels an' yo' hoes;  
 Yo've got ter git up early  
 An' keep busy all de day  
 Ef yo' want ter gather pansies  
 In de happy month o' May.”

## SECTION OF OPHTHALMOLOGY AND OTO-LARYNGOLOGY, TORONTO ACADEMY OF MEDICINE\*

BY DR. J. PRICE-BROWN.

*Gentlemen:*

I desire to express to you my sincere appreciation of the high honor you have conferred upon me by electing me to the responsible position of Chairman of this Section. I need scarcely say that it is with feelings of gratitude on the one hand and temerity on the other that I accept this office. The gentlemen who have filled this chair in the past have been distinguished not only by the faithfulness with which they have discharged the duties devolving upon it, but also by the erudition and scientific knowledge which they have manifested when occasion required. The onus of the chair has increased from year to year, and the manner in which its dignity and influence have been sustained has called forth, I feel sure, the willing support and high appreciation of every member of the Section.

This year, by your favor, based upon the process of alternation from ophthalmology to oto-laryngology, and on the principle of *seniores priores*, the occupancy of the chair has fallen to my lot, and I assure you that I shall perform the duties pertaining to it as faithfully as I can; and, weak though it may be, with all the ability that I possess, hoping and believing that I shall receive the cordial support and assistance not only of the Secretary and Editor, but also of every other member of the Section.

Let it, if possible, be our banner year!

There is a large measure of charity in the heart of every man, no matter how high he may have climbed the professional ladder or penetrated into the holy of holies of collegiate halls; and while we may rub each other pretty severely when occasion demands it, let us do it in all fairness and with that fraternal *bonhomie* that sharpens the sweetness of the rose and makes the frictions of life the heralds of its pleasures.

In selecting a subject for an opening address there are many themes that could be drawn upon, and it has been suggested that I might combine a brief reference to the long past with a running commentary upon the achievements of the present year in that division of our sectional work with which my professional life is associated.

Looking back over more than four decades to the days of my

---

\*Chairman's address, October 20, 1910

student life, I well remember one of our professors speaking of what he called nasal catarrh as something that covered all classes of intra-nasal disease, but as something that, try as we would, never could be cured. What he meant by catarrh he did not explain, nor did I question; but simply accepted the statement as a fact issuing from the depths of profundity, the correctness of which could not be questioned.

On a similar occasion another professor, whom we all looked upon as rather slow, but so sure that the accuracy of his judgment could never be doubted, announced from the rostrum to a large class of students that absurd and eminently dangerous attempts were being made by certain rash surgeons to pass instruments into the larynx. He sincerely hoped that no member of his class would ever violate the fundamental laws of physiology so far as to attempt such an unwarranted and vicious a procedure.

I will not attempt to burden your minds with any lengthy remarks descriptive of the historic growth of our special sections of medicine. You are all familiar with the salient points. Still it might be well to note that certain divisions of the subjects that demand from us the most painstaking zeal, and the most competent skill, to deal with them successfully, were either entirely unknown or ignored by our professors of a quarter of a century ago.

Bosworth, in his edition of Diseases of the Nose and Throat for 1881, does not mention the ethmoid cells at all, neither does Sajous in 1885. The only allusion that the former makes to the frontal, maxillary and sphenoidal sinuses is to say that he supports Michel's belief that ozena has its origin in chronic disease of the lining membrane of the sinuses. Sajous also supported this theory, which was really ancient of days, as it was taught by Celsus. Yet only a few years ago certain rhinologists advocated the origin of atrophic rhinitis as very plausible and quite new.

This is the old catarrh of which the ancients spoke so freely. Susruta, a learned Hindu, centuries before Christ, spoke of catarrh of the nose, which he treated with sternutatories and ointments. Some of his directions were very explicit. For instance, the patient was ordered to lie on his back and hold the tip of his nose with his finger, while his physician dropped warm oils into his nostrils. During this period the patient was not to get angry, nor speak, nor cough, nor swallow the oil, but simply to spit it out as it entered the throat.

Sanitary laws were not ignored in those early days. Charaka tells us not to eject the mucus or phlegm from one's nose into a place that is crowded. Hippocrates tells us that one of his seven cases of catarrh was cured by coitus. Whether it was an ozenic case or not we are not informed.

Even our novelists have not entirely ignored the catarrhal condition, for Zola, speaking of one of his characters, says, "She smells in her nose as if she were sucking her feet."

Some of the old prescriptions were rather amusing.

Pliny recommends a man whose nose stinks to kiss the nostrils of a he-mule, and that a woman similarly afflicted should kiss the nostrils of a she-mule.

Sometimes the writers broke out into rhyme, as in Ordronaux's translation of "De Rancidine Vocis":

"Oils and raw apples, nuts and oils, 'tis said,  
With such catarrhs as settle in the head,  
And leading to a long, intemperate course  
Of life, will render any person hoarse."

Then comes the cure "De Remedis Catarrhi":

"Fast well and much, eat hot your daily fare,  
Work some and breathe a warm and humid air.  
Of drink be spare, your breath at times suspend,  
These things observe, if you your cold would end."

Coming down from the long past to the actual present, we have arrived at a period when every part of the human body is minutely and anatomically investigated. Instruments have been adapted for the examination of inaccessible cavities, and scientific knowledge has enabled the skilled surgeon to explore and heal and operate upon any section of the eye, ear, nose and throat that from either injury or disease demand his attention.

Of the eye I am not competent, nor is it necessary for me to speak to-night. Our ex-chairman, our venerated, but not by any means venerable, Dr. Reeve, will favor us with one of his ever-valuable papers upon the subject.

Of oto-laryngology, however, I must say a word. The tendency of the multitude of earnest workers, often in the narrow field of a single section is possibly toward too great enthusiasm, pursuing any object in a single line to the farthest end. For years now, particularly on this continent, in our own specialty, the trend has been toward the extension of radical operations. To carry out the principle, which as a general rule is a perfectly good one—that what is worth doing at all is worth doing well—seems to have been the motto. But the literal wording does not always contain the truest meaning.

To remove and obliterate the frontal sinus whenever seriously diseased is the teaching of the day. To perform a radical operation upon the maxillary antrum in all cases of chronic purulent

sinusitis, removing the entire mucous membrane and favoring granulation, is also the teaching widely adopted.

In all cases of deviated septum the operation of sub-mucous resection is the one performed, dissecting off the perichondrium, and removing the part of the cartilage and bone that is displaced in its entirety.

When the faucial tonsils are diseased or hypertrophied, and this hypertrophy is claimed to be a disease, enucleation is adopted as the only scientific and correct method of treatment.

When the œsophagus or inner larynx is diseased, or foreign bodies are lodged therein, we are told authoritatively that it is criminal to attempt to operate upon the parts or to remove the foreign body, except by the use of the direct method, the œsophagoscope or bronchoscope.

Now these methods in selected cases are all good. They all are the products of a vast amount of careful investigation and research of many very eminent men. Yet, are they invariably necessary? Have we suddenly arrived at that heavenly region where perfection is reached?

It is generally believed that laryngology and rhinology and all the other ologies are progressive sciences. We all truly believe that the progress in all of them during recent years has simply been marvellous. But we are not millennialists. We expect the world to exist for hundreds and thousands of years yet; and the rhinologists and laryngologists to practice on the noses and throats of the people during all the centuries; but wherein will be their enthusiasm if the instruments are all made before they arrive on the stage of action? If the flowers are all gathered from the garden and there are no more dizzy heights to scale?

But, thank heaven, the pendulum is always swinging. This year in some regards it seems to have reached its limit, and is slowly commencing the return journey.

Let us examine it for a moment.

Milligan, in speaking of deformity of the nasal septum, says that opinions still differ as to the best form of operation for the treatment of deflected septum—the important aim being to secure by some means patency of the nasal passages in all cases of nasal or laryngeal disease.

Cobb, in his report to the Laryngological, Rhinological and Otological Society, at its recent annual meeting in Washington, refers to fifty cases of resection of the nasal septum of long standing. Most of them were of from four to six years after operation. These are his own words: “In no case examined was there reproduction of the cartilage.”



Richards, in children, has abandoned removal of the cartilage and has adopted a species of resection in which the cartilage is retained, but replaced. He says of his new operation: "There is no sinking in, as no cartilage has been removed, it has only been reshaped."

Mosher says that the difficulties in submucous resection occur most generally in children; and that a number of his adult patients have complained of the scabbing which resulted from the operation and lasted for one or two years.

Lutz says that in all these cases we should remove as little cartilage as possible instead of as much; while Yaukauer, one of the most noted American operators, says that scabbing is one of the worst results that we have to contend with; while he denounces the operation in children, telling us that out of three hundred submucous resections that he has done only six were in children; and in the latter he only removed enough cartilage to insure proper breathing.

And last of all Jonathan Wright, one of the greatest American authorities, gives it as his opinion that in cases of atrophic rhinitis submucous resection should never be done.

Perhaps I may add my own opinion for what it is worth. The aim of the future will not be to do the most perfect submucous resections, removing the offending cartilage and bone and retaining the mucous membrane in the most skilful way possible. But it will be to re-form, re-place, but not to remove the body of the partition wall which nature has placed within the nose of every human being. The cartilage and bone of this partition wall are not diseased, they are simply overgrown, elongated, curved, twisted, bent; and instruments will be devised and operations performed by which, when necessary, sections can be removed or deformities corrected, in such a manner that the solidity of the wall will remain intact; and the normal mucous membrane will be retained in position without the opprobrious scabbing. This may be an idle dream, but I believe it will be accomplished.

It will not be a Watson operation, nor a Sluder, nor a Gleason, nor a Roe, nor an Ashmayer, nor a Price-Brown, but it will be the result of keen and close investigation of many minds into all methods—the result being the adoption of no fixed plan, but the scientific accomplishment of a much-desired end.

Of distinct advancement in the art and science of rhinology during the past year may be mentioned the more general acceptance of Onidi's views upon the anatomical relationship which exists between the posterior ethmoid cells and the optic channels.

Herbert Tillie's pregnant words in reference to the growing

feeling of conservatism in the matter of operating in suppuration of the nasal sinuses, and especially the frontal sinus, are certainly worth remembering.

One of the most notable marks of progress during the past year is the advancement that has been made in the line of bacteriology. The results that have been obtained in the investigation of tuberculosis and diphtheria have led to the more careful consideration of acute affections; and diseases that were supposed to be diphtheria, have, on closer examination, been found to be due to staphylococcus and streptococcus infection. Some of these cases have been attended by serious glandular disease and subsequent anæmia, indicating the necessity of careful attention to the throat in all doubtful cases.

Vaccine therapy is also receiving a larger amount of attention than ever before. Many investigators believe that the preparation of vaccine from the individual patient produces more satisfactory results than when the vaccine prepared and sold by the chemist is used. This looks something like the old style inoculation days, when the virus was passed year after year from child to child.

The control of the administration of vaccines, as advocated so strongly by Sir Almroth Wright, is an important feature that should be of great assistance in the investigation and control of disease. By taking the opsonic index before and after the application of the vaccine, the surgeon should be able to say definitely whether he has or has not a remedy which has an influence upon the resisting power of the tissues. He maintains that this gives a control which cannot be obtained by the mere observation of the results upon the patient—thus adding one more fact to the sum of knowledge upon this new and difficult question.

#### TONSILLOTOMY AND TONSILLECTOMY.

The latter, so strenuously advocated in the United States, made slow progress in England until the present year. Now it is becoming more generally accepted as the best means of operating in cases of chronic disease or enlargement of the faucial tonsils, particularly in adults. There was a spirited discussion upon the subject at the meeting of the Laryngological Section of the British Medical Association. Dan McKenzie believes in complete enucleation when the tonsil is the seat of frequent inflammation or the cause of quinsies; when recurrence follows ordinary tonsillotomy, when there is tuberculous enlargement of the cervical lymphatic glands, and when the tonsils are flat and buried. But he says that simple tonsillotomy is sufficient in most cases for the relief of respiratory obstruction.

St. Clair Thompson says that the operation is as old as Celsus. It has simply been revived. Instead of dissecting out the tonsil, he simply uses the guillotine, pulling the tonsil out of its bed by means of forceps, removing it entirely in the majority of cases in this way. The objection to dissection was the profound anæsthesia required.

Bryan said it was absolutely necessary to remove the entire gland. Otherwise subsequent trouble was the rule.

Dundas Grant said that very excellent results followed the use of the guillotine; but he believed we should have no fixed rule, but practice eclecticism in the choice of operation. He considered that leaving a portion of the tonsil was not a serious matter, possibly a beneficial one, if the crypts were left clear. He moreover desired that the protective character of the capsule should be remembered, and that its complete removal was open to question.

Watson Williams asked what definite information did we possess regarding the physiology of the tonsils? He also questioned whether complete removal was universally required.

As to methods of enucleation, there are many. When at Manhattan Eye, Ear and Throat Hospital last week I saw it done in two instances, one in a man, the other in a boy aged twelve years. As I never saw the operation done in a similar way before, I will briefly describe it.

The patient was deeply anæsthetized under ether. The staff consisted of the operator, the anæsthetist, three assistants and nurses. One assistant held a reflected lamp, another held the tongue depressor. The operator then with an angular knife dissected the upper part of the tonsil away from the pillars anteriorly and posteriorly. Next he slipped the loop of a strong snare over a foretoothed retraction forceps, with which he seized the tonsil and lifted it from its bed, after which the snare was deeply adjusted round the base of the tonsil and the screw quickly tightened by the third assistant, until the tonsil was severed. The bleeding was severe, but not alarming. The adenoids were then removed, the adenotome with the upward sliding blade being first employed, then the curette, and lastly the digit. All being over, the patient was turned on his face in the prone position and wheeled into the recovery room.

A few words in reference to malignant disease. Medical treatment by the use of trypsin and fulguration has not been very satisfactory. Perhaps the same may be said of the use of Rontgen rays. Of radium there is more hope, inasmuch as it could be readily applied by means of the direct method. The wonderful

results as obtained by Dr. Wickham are still fresh in our memories, but it must be remembered that those results were obtained upon the cutaneous field or immediately within the mucous cavities. I do not remember him showing a single case in which he instanced the destruction of malignant tissues situated deeply within the nose or throat. This does not by any means imply that such a thing is impossible. If successful externally, it should eventually be successful internally.

Another subject that has obtained a good deal of attention is cicatricial stenosis of the larynx, and although the methods of Sargnon and Barlatier have many advocates in Europe, the gradual dilatation, as advocated by Delavan and Mayer, seems to be the most favored plan of treatment.

The electro-cautery puncture of the larynx in tuberculosis of that organ is increasing in favor, Dundas Grant and other laryngologists advocating its use. The young lady I showed last winter and show again now, is evidence of its efficiency. Her voice is clear to-day, and she has increased fourteen pounds in weight.

The use of the electro-cautery for the destruction of laryngeal papillomata, too, was strongly advocated by several Fellows of the American Laryngological Association at its annual meeting in June. Drs. Casselbury, of Chicago, Packard, of Philadelphia, and Simpson, of New York, all gave valuable testimony of the complete removal of the growths by its use. Casselbury's words are worthy of note. He says: "The papillomata are soft and easily destroyed, while the vocal chords, being fibrous, have much greater resistance. Attempts to pick off bits of the papilloma with forceps often stimulate regrowth; whereas, after cauterization it does not grow up again in the same spot. In time, all spots can be seared and the disease cured." Of course this treatment without the use of the bronchoscope and an anæsthetic would not be applicable to children.

Among the remarkable operations of the year is one by Greene, of Boston, who transplanted rib cartilage into the nose in a case of nasal deformity, both operations being done on the same man successfully while under ether. The result was excellent and was founded upon two similar operations done by Von Mangold in 1901.

Another remarkable operation, done by Casselbury, was the cutting in two of a large steel pin fixed in the left bronchus, and its removal by lower bronchoscopy, an indication of what can be accomplished by the scientific and dexterous use of the direct method.

The bronchoscope and œsophagoscope and the gastroscope have come to stay. This brings up a point that is being demonstrated at the present moment by Chevalier Jackson, the President of the Laryngological, Rhinological and Otological Society, and one of the most renowned bronchoscopists in America—that is, the still further division of our specialty. Jackson has already announced far and wide that he intends from now onward to devote himself entirely to the use and teaching of the use of tubes. That is, he is to be a lower throat specialist, and that only. Is not this as it should be? Would it not be better in every large community for certain skilled men to set themselves apart especially for this work, and for their laryngological brethren to refer all serious cases, particularly of the retention of foreign bodies, to their care?

When we consider the paucity of cases in which foreign bodies have to be removed from these passages, or the small number of instances in which growths require to be removed from the bronchi or œsophagus or stomach, is it wise for every laryngologist to consider it his duty to purchase the instruments needed, to acquire the necessary amount of practice to make himself skilled in their use, and then to operate upon the first suffering patient that presents himself? It seems to me that it would be a mistake. The old-time skilled laryngologist, who with his throat mirror can map out every part of the inner larynx and even explore the subglottic region, is rarely an enthusiast in the personal use of the direct method. Many times has he removed foreign bodies from the larynx, and not infrequently from the œsophagus, and rarely indeed has he met with failure. Still, he acknowledges the law of progress; and as down into the bronchus he cannot enter, he would gladly refer his case to the competent man who could.

On the other hand, if all young laryngologists were to enter the race, the lack of skill would kill the patient, while the scarcity of patients requiring the use of the bronchoscope would prevent any from obtaining the practice which is essential to the accomplishment of the most perfect work.

I have one other subject to touch upon in my somewhat rambling remarks. And that is the progress that has been made during the past year in otology. Upon this ground I shall be brief, as many of my fellow-members know much more about it than I do. Yet a short synopsis gathered from our otological literature may not be uninteresting. Perhaps in no other department of scientific medicine has there been more discriminating and thorough research made.

Milligan draws emphatic attention to the fact that tuberculous otitis media is very much more common than is usually supposed by otologists. He considers the high mortality of childhood, as well as the irreparable damage to the ear as an organ of special sense, which so often occurs, renders it imperative to recognize early the real nature of the disease, so that preventive treatment may be at once adopted.

In his experience twenty per cent. of hospital children under six years of age, suffering from purulent otitis media, owe the origin of the disease to an underlying tuberculous affection.

Chronic middle ear disease is drawing out much radical treatment upon the mastoid, dissecting everything away but the labyrinth, even invading the semi-circular canals. Last week I had the pleasure of witnessing an operation upon the mastoid at the Manhattan Eye and Ear Hospital. It was very radically done, nothing but the shell and semi-circular canals being left. The patient was a boy aged twelve years. He had been suffering from a running ear from infancy. There was partial deafness, but no other symptoms. The excavation made was very large. The dura was exposed and also the facial nerve. In closing the wound the operator made a T-shaped incision, the long line being behind the ear and deeply into the tissues, parallel and within the original cut. The cross section divided the epidermis of the concha into two portions. The upper one was then attached to the upper division of the external wound and the lower one to the inferior division. Then packing was done and the wound closed.

Jobson Horne, in the joint interests of insurers and insurance companies, lays more stress than ever upon the absence and value of reliable statistics. He says that we should know the average duration of life sufferers from oto-sclerosis; whether a perforated drum increases the life risk; and whether middle ear suppuration without other symptoms should induce acceptance or rejection?

He brought out one curious fact as a result of his investigations, that whereas various degrees of deafness incapacitates the sufferers for certain occupations, this deafness is a direct advantage in others.

I fear, gentlemen, that I have wearied you with my long and rambling dissertation. Still there are many interesting points that I refrain from touching upon, for which I trust you will give me credit. I have tried to keep my own special vagaries in the background, though, do as I would, I could not be entirely successful.

No doubt you will differ from me incidentally, but in this I have the advantage. A chairman in delivering his annual address is something like a clergyman delivering a sermon. His hearers cannot answer him back; although they can wisely lay it up for him, and return his thrusts in due season.

Gentlemen, I am grateful to you for your patient hearing. In the future conduct of our season's work I shall look to you for cordial support and sympathy, and to the best of my ability I shall endeavor to promote the highest interests of our section and faithfully discharge the duties of this high office.

Gentlemen, I declare that the fourth session of the Section of Ophthalmology and Oto-laryngology of the Toronto Academy of Medicine is now open.

# Selected Articles.

---

## A CLINICAL LECTURE ON PROGNOSIS IN PHTHISIS PULMONALIS

---

BY THOS. D. LISTER, M.D. (LOND.),

---

Physician to the Mount Vernon Ho-pital for Consumption; Physician to the Royal Waterloo Hospital.

---

I wish to talk to you about the consideration which should enter into our minds in attempting to make a prognosis in phthisis pulmonalis. To the public, prognosis is quite as important as diagnosis and treatment; one of the earliest questions asked by the patient or by his relatives is, What is going to happen? In phthisis pulmonalis the most experienced people may make mistakes, even after carefully considering everything, and that follows from the nature of the disease. No one can tell, in any case coming before them for the first time, what is the extent of the infection, its amount, or its virulence. And although one may form a shrewd estimate of the patient's resistance, yet the relation between the two remains for some time a matter of doubt. I propose to-day to make some sort of classification of the favorable factors and the unfavorable factors in forming an estimate of the outlook for the individual when we have diagnosed phthisis. Our diagnosis usually depends on physical signs, and many classifications have been adopted, but chiefly into first, second and third stage, or into a group of early, moderate, and advanced, according to the number of lobes affected. We must all recognize that that is a purely anatomical differentiation. It continually happens in patients whom I see in various capacities that they are recommended to do this, that, or the other in the way of treatment because their case is early, moderate, or advanced, on account of the anatomical extent of lung affected. It is obvious if we see a case for the first time and we find only an early lesion of one apex, we cannot tell how far that lesion will spread against the patient's resistance. Early prognosis is a dangerous matter to tackle; that is, on one interview we are very liable to make mistakes; in fact the whole burden of my remarks this afternoon will be to avoid being hasty in giving a prognosis in phthisis pulmonalis. But



we will assume that in the patient before us we have diagnosed phthisis, and that we are asked the question as to what is going to happen to him; is it a case which is going to get well, or one which is going down-hill? Let us attempt to classify the favorable and the unfavorable factors in such a case. For the present I will ask you to disregard physical signs in considering prognosis at the first attempt. You have to consider what effect the disease is producing upon the patient, and is he the sort of patient to be able to resist the effects of an infectious disease like this? Can you measure the amount of virulence or the extent of infection which he has received? Therefore the first question which comes before you is, how did the disease begin? If the onset was sudden and acute, with much fever, the outlook, so far as the onset is concerned, is less favorable than if it has taken a long time of malaise and discomfort before the patient begins to notice the cough, and then it is only a slight dry cough in the morning, and he notices that he gets more tired. If that onset has been hæmorrhagic I would modify what I said. But even then such a case beginning with much fever and with some malaise before pulmonary symptoms begin there may be a slight hæmorrhage, which alarms the patient, and he comes to see the medical attendant. That is a more favorable case than one which begins suddenly with severe fever, and perhaps severe hæmorrhage. But, on the whole, an insidious case is on the favorable side, that is to say, without fever and with but one attack of hæmoptysis. Frequent hæmoptysis is not favorable during the onset of the disease, especially if it is attended with considerable fever. The next point to consider is, how is the disease extending? Is it extending rapidly or slowly? Obviously, rapid extension is less favorable than slow. If there are multiple foci scattered about the lung, it is increasingly unfavorable. Slow extension and localization is much more favorable than rapid extension and the presence of multiple foci.

We now proceed to an examination of the constitutional effects of the disease on the patient. The modern study of phthisis has taught us that the temperature is the most important observation, either in a sanatorium treatment or in forming a prognosis of the case. It is very important not to be guided by a single observation. Certainly for prognosis one must see how the temperature runs under conditions of rest and excitement. In regard to temperature, instability is a very common feature of phthisis, and a wide range of temperature is always an unfavorable symptom, especially when that wide range is easily produced. Obviously the nearer the temperature approaches to

normal the better the chances for the patient. Remittent pyrexia is most unfavorable, and intermittent pyrexia is a little less unfavorable. A sustained temperature of between 100 and 103, even with so short a consideration as we are supposed to have had, justifies a very grave outlook. A small daily range of temperature, which fluctuates between 98 and 99.6, even under conditions of excitement and exertion, is much more favorable, and that temperature will probably fall to normal under conditions of absolute rest. The pulse rate is also of the greatest importance in the prognosis of phthisis. The more the pulse approximates to normal, the better the chance for the patient. But here again instability is of great importance. You know that in sanatoria visitors' day is always shown, in a considerable proportion of the cases, by a rise of two degrees in the temperature after the visitors have left, especially in the cases of less favorable outlook. A pulse of over 100, rising on excitement to 130, is an unfavorable feature. If the physical signs are limited, that is favorable; if extensive, the reverse. But physical signs are much less important than the constitutional symptoms in a disease like phthisis, which spreads in the body by infection. We cannot foretell by physical signs alone what will be the outcome of the case. It has been well said it is important to master one's stethoscope, and not to let the stethoscope master the observer.

Then in regard to the nature of the lesion. A tendency to fibrosis—and many cases of phthisis come before us when they are in the fibroid condition, with cavities—is much more favorable than extensive infiltration. Localized fibrosis means a tendency to heal.

Now with regard to symptoms: cough and expectoration. A slight morning cough is much more favorable than a persistent cough. Cough tends to become a habit in phthisical patients, and should be discouraged, as it tends to spread the disease and also to overstrain the lung. A slight morning cough may simply mean a clearing of the tubes of the secretion during the night. Scanty expectoration, tending to diminish, is much more favorable than profuse expectoration, or a tendency for it to increase in amount. The presence of tubercle bacilli in the expectoration is obviously of very little moment in prognosis. Their absence is important and favorable. But remember much depends on what particular drop of sputum is examined, and where it came from. Its character and content may vary from day to day, and may contain more or less bacilli. The disappearance of the bacilli from the sputum after repeated observation indicates that the disease is going on to arrest. And it is said that a tendency to

clumping is sometimes an unfavorable sign. Other symptoms of great importance are those connected with the digestive organs. A good appetite and digestion and regular action of the bowels are favorable. Diarrhœa in advanced cases is very unfavorable; it either implies tubercular alteration of the bowel or a lardaceous condition of its coats. And of course with digestion goes nutrition. Gradual loss of weight, say not more than 10 per cent. in a year, is much more favorable than rapid loss of weight. But there again, some of the most acute cases I have ever seen have been in very fat people. I remember two patients who came to my out-patient department at Mount Vernon Hospital, both women of enormous rotundity, who succumbed rapidly to acute phthisis. There was no sugar in the urine, they were not diabetic; but there was a family history of phthisis always taking an acute form.

Next we come to the patient's constitution, a phrase which there is nothing to replace. In all observations which have been made for insurance offices it has been clearly shown that a weight below the minimum average weight is always associated with great liability to early death from phthisis. It is an extremely unfavorable feature. If the weight is above the normal, the prospect is favorable. Now physique is also important, *i.e.*, the development of the chest, the absence of signs of past chest deformity from rickets, from nasal obstruction, from narrowing of the lower chest, flattening about the upper chest, prominent clavicles, these are all important in forming an estimate of the probability of the result when a person is attacked by phthisis. But even then one is sometimes greatly misled. Frequently one has seen greatly deformed chests which presented all the stigmata of enlarged tonsils and nasal obstruction, with spinal deformity, with even angular curvature and glandular affections in the neck, which have had phthisis and recovered from it, and eventually succumb comfortably to cerebral hæmorrhage. But those cases are special ones, and not at all the common experience. A history of a slight attack of phthisis in people who have had what was presumably some tubercular affection in childhood suggests that there is something like immunity produced by some forms of tuberculosis, although we should not build great hopes for the future as to immunity in phthisis as we should in regard to scarlet fever or smallpox; and no insurance office prefers a man who has once had phthisis.

Now we come to certain special features of the patient's constitution. Nervous irritability in a patient always means he will do badly; but the phlegmatic, quiet individual nearly always does well. The man who resists instructions nearly always does badly, and, as Dr. Kingston Fowler puts it, "No fool was ever

cured of phthisis." Certain racial peculiarities influence the forecast. I have under my care in a nursing home near by, a Greek gentleman, whom I was called to see at a large hotel in London, who was taken ill with acute phthisis in New York. There it was diagnosed as ptomaine poisoning. He was taken ill again on the liner, and it was diagnosed as enteritis, his attacks of fever being accompanied by acute indigestion, and some diarrhoea as the fever went down. He was taken ill again at Liverpool, the temperature on each occasion being 103 and falling, after three or four days in bed, to normal. On reaching his hotel in London he was again ill, and was transferred to a nursing home. There his state of panic and excitability has greatly interfered with his treatment. The man who gets excitement because his temperature goes up half a degree will probably find it up one and a half degrees next night. It is difficult to say why such cases should be less resistant. It may go with special conditions of metabolism, especially phosphate metabolism. Moreover, patients with a quiet temperament get a normal amount of sleep, whereas the excitable often have insomnia.

Now arises the question of the complications, and the results after treatment. There are complications arising from the infection by the bacillus itself, and there are complications arising from disease in other organs. Complications arising from tuberculosis elsewhere are always grave. Disease of the epiglottis is a little worse than disease of the vocal cord, owing to the dysphagia which is produced by extensive tuberculosis of the epiglottis. Tuberculosis of the pharynx is always unfavorable. The same is true of involvement of the bowels and genito-urinary organs, and naturally also the occurrence of tuberculous meningitis, which is a very common termination of adult tuberculosis, taking in them a very quiescent form, inducing coma. There may be some mental symptoms such as melancholia preceding it. Lardaceous disease also is a favorable complication. Then we have conditions which are not due to the bacillus, disease of the chest wall, such as pneumo-thorax, which, if double, is nearly always fatal. Severe and increasing dyspnoea from obstruction to the circulation or from destruction of the respiratory area, is always unfavorable. An increasing rapidity of pulse, falling, small, collapsing suddenly in a case which has been running an acutely pyrexial course, is always a dangerous symptom. Oedema of the extremities from failure of the pulmonary circulation, or obstruction of circulation by damage to lung capillaries and failure of heart muscle from the toxæmia, is unfavorable. Diarrhoea is a common precursor of a fatal termination; so is violent, unrestrainable hæmorrhage in a late stage. Cases which begin with

hæmoptysis in people who have had robust health are amongst the most favorable we have. The hæmorrhage is not from destruction of tissue, but congestion hæmorrhage; in other words, the lung is holding an indignation meeting on the spot on account of the tubercle bacilli having made their appearance; there is such an acute reaction that a congestive condition results. Very careful examination will reveal, in such cases, a very small patch of diminished air entry and fibrosis. But recurrent hæmorrhages are unfavorable.

With regard to family history, if the patient comes of a family in which phthisis has been rapidly fatal, his phthisis is very likely to be fatal equally rapidly; if he comes of a family who have resisted the disease when it occurred, his case will probably run a chronic course. There is more in the natural immunity of the body than there is in infection in the case of phthisis. All statistics show that phthisis is a disease of poverty, over-crowding, dear food and low wages; it is not a disease which, like smallpox and scarlet fever, spreads irrespective of the depth of the pocket. Therefore pecuniary circumstances influence the prognosis. With regard to age, it is not so favorable in young persons as in people over 45. In women it is less favorable than in men. Pregnancy, on the whole, is a favorable feature; lactation is unfavorable. All women who show evidence of tuberculosis should have their babies hand-fed; they should not be allowed to nurse them. Our population receives much tuberculous milk from tuberculous cows, but the lactating human being ought not to be allowed to feed her young with her milk when she is tuberculous. Fortunately she does not bestow her milk on other members of the population. Twenty per cent. of the milk coming into London is tuberculous.

With regard to prognosis after treatment, I want to show you two brief tables indicating the difference in sanatorium treatment when tuberculin is used and when it is not used. I bring this before you because at the present time makers of drugs in the condensed tabloid-form are pushing these specific modes of treatment in a convenient form for administration, and unfortunately I have come across cases in which tuberculin has been given without a recognition of its great potency for evil. It must be given in carefully regulated doses. Tuberculin T.R. (tuberculin rest), or the remains of the bacillus after the extraction of the toxic substance, is attended by a higher percentage and a more lasting result than cases not so treated. I give you the figures from the Saranac Sanatorium, near New York. Trudeau's figures of cases which he watched for some years after discharge:

EARLY CASES.

	Without T.	C.T.
Five years after discharge.	%	%
Apparently cured .....	63	72
Arrested .....	26	21
Improved .....	7	5
Unimproved .....	1	2

ADVANCED CASES.

	Without T.	C.T.
Five years after discharge.	%	%
Apparently cured .....	13	28
Arrested .....	44	54
Improved .....	27	7
Unimproved .....	13	8

Therefore there is an advantage in most of the figures in getting a lasting cure with tuberculin. I now give you Ritter's figures, from the Hamburg Sanatorium, considered in a different way. They are taken three years after discharge, and are in full work at that time.

	Moderately		
	Early	advanced	Advanced
	cases.	cases.	cases.
	%	%	%
Cases treated without T. ...	72	57	22
Cases treated with T. ....	95	82	50

On the other hand I cannot give you the figures, though I should like to do so, of the enormous number of cases which have been lighted up by the faulty administration of tuberculin. The temperature is by far the safest guide in attempting to administer tuberculin, and the patients should be kept at rest. In skilled hands you can say that the results from the use of tuberculin are better than without it, and the effect is more lasting. But again I would say, do not prognose hastily; the determining indication of the behavior of the case is obtained from watching it at rest and during exercise. That is the reason why sanatorium treatment is more successful than home treatment. In the former, the patient can be kept in order. But I think the place of the sanatorium with regard to treatment of tuberculosis is going to disappear; it is going to be a school which teaches healthy living; and as its object-lesson becomes known to the population, homes will be converted into sanatoria. I do not think it will be necessary to establish an enormous number of sanatoria in the country for the treatment of phthisis; the enhanced knowledge of healthy living will do so much for prevention that organized treatment will become less necessary.—*The Medical Press.*

## LUXURIES AS REMEDIES IN CARDIAC DISEASES

BY MAX HERZ, M.D.

Of all so-called luxuries alcohol, above all, is indispensable at the bedside. Its use as an analeptic in cardiac cases has been unjustifiably neglected. There is no sense in giving a glass of heavy wine or the champagne that is so much prized, just as the strength is finally failing. In every case it must be determined whether the patient is one of the class that re-acts to very small quantities of alcohol, and especially with congestions and palpitation. Usually it will be proper to order a glass of light table wine to the patient confined to bed. In the case of young people, and especially females, a mild, sweet wine should be selected; where repugnance to it has to be overcome, plenty of sugar should be added, and the drink diluted with some aerated water.

Alcohol shows itself to be not only a momentary stimulant, but when the directions given are followed it acts for a longer period as a tonic. In this form it is an excellent vehicle for easily-digested foods. Stokes' mixture is known everywhere.

Almost always in the case of patients suffering from cardiac disease and where feeding is difficult, a good sweetened warm wine and water are taken without difficulty and for long periods. In the case of patients who have been accustomed to alcohol and are disturbed in the night by tormenting dyspnoea from permanent arterio-sclerosis brandy is more of a corrective of taste, or a flavoring material when the attempt is made to unpoison the system by a pure milk diet. By the addition of a moderate quantity of brandy the milk that is so much detested is made to some extent palatable. Experience has taught us that in all forms of arterio-sclerosis, also in angina pectoris, or stenocardiac troubles it may be given as a vascular remedy of great value, along with the bromine and the nitrites that quickly lose their effect.

Very frequently alcohol will perform extraordinarily good service in the treatment of mental disturbance. If the habits and inclinations of the patient are attended to it will not unfrequently happen that by a slight concession the state of the mind of the patient is considerably improved; it may have been that he has got the impression that every enjoyment in life is denied to him, or it may be that the remedy acts directly by the dilation of the vessels of the central nervous system giving rise to a feeling of well being.

As an hypnotic also in cardiac cases alcohol is to be preferred to many of the usual preparations. The form in which it is ad-

ministered, however, is not a matter of indifference. Mostly beer and, especially, from old prejudice, the darker kind made from more high roasted malt, is preferred to wine. The like holds good in regard to rum as compared with brandy. It may be suitably given in a weak infusion of tea, or with milk, or diluted with lemonade.

Black coffee will find an exactly similar field of employment, tea less frequently. Like camphor, it is an excellent cardiac tonic and analeptic, and especially in combination with digitalis it forms a diuretic.

In cases of pronounced muscular insufficiency it causes a feeling of palpitation far less frequently than with healthy or nervous hearts. For this reason it appears to be contra-indicated in cardiac neuroses, also when the pulse is very small, as it frequently is in the exacerbations that seem so threatening. The opposite of digitalis, which apparently slows the pulse through irritation of the vagus, coffee heightens the pulse rate. By preference it is used most in those cases of low cardiac activity, in which the action of the heart is slow or normal; it is to be avoided, on the other hand, in the presence of marked tachycardia or tachyarrhythmia. If a quick reviving effect is desirable, however, the combination with alcohol is useful, especially cognac.

Coffee seems to have the same action as diuretin on the symptoms of sclerosis of the coronary arteries. But it has this evil in common with that, in that it favors the development of extra systole. As this leads to short interruptions of consciousness in cerebral arterio-sclerosis it cannot be made use of in such cases. Moreover, it should not be given in the evening hours, as it will increase the wakefulness already often present. Its action is only desirable in those forms of degeneration of the cardiac muscles where the patient is in almost a continual doze, only starting up at times in distress as the difficulty of breathing becomes greater.

There is opportunity of employing tobacco as a cardiac remedy only in very rare cases. The situation occurs when a patient who is a smoker has been deprived of his tobacco. The attitude of the individual patient varies in such cases. Whilst with one a greater desire for food is manifest, which leads to a wished for increase in flesh, others, on the other hand, complain of unpleasantnesses on the side of the stomach and bowels, especially constipation, which usually has a bad effect on any heart mischief that may be present. Under such conditions a moderate quantity of tobacco may be permitted, but without



diminishing the pleasure by recommending the use of a milder kind instead of that the patient has been accustomed to. I have lately collected a good deal of information regarding the use of the so-called denicotinised tobaccos. A recently-invented process makes it possible to extract from 50 to 75 per cent. of the nicotine without any marked change of the flavor. This process may be carried out not only with raw tobacco but also in cigarettes and cigars already made. In this way a good deal of the poison may be removed from the tobacco consumed by the patient suffering from a cardiac mischief, and to whom the "weed" is a great solace. So denicotinised, he may be allowed the enjoyment of his favorite brand. We need not enlarge on the importance of this as regards the spirits of the patient. Denicotinisation is of importance also on other grounds to abstinent smokers. It happens not unfrequently that men who have been heavy smokers become singularly intolerant after a period of deprivation. Even the half of a cigarette may then cause palpitation, giddiness, or nausea, which may be erroneously set down to unfavorable progress of the cardiac affection. It is, therefore, easily understood that under such circumstances one may wish to produce the desired effect by small quantities of the denicotinised tobacco, just as in the case of morphinists during periods of withdrawal, one may prevent the breakdown by minute doses of the poison to which they have become slaves. Luxuries may largely take on the part of curative agents. This is an advantage, especially in the case of cardiac diseases, when the latter can be replaced by the former. In this way the heaping up of medicines that is often so burdensome may be avoided, material is brought to the organism for which it has an instinctive inclination, the effects of which are better known than those of any medicine that can be continued for years without doing mischief, and which are of inestimable value so much the more for the sick than for the healthy individual, inasmuch as by them a gleam of the sunshine of happiness, however pale it may be, is cast on to the sombre tints of everyday life.—*The Medical Press.*

## DECEIVING THE INSANE

---

N. H. BEEMER, M.D.,

Medical Superintendent, Hospital for Insane, Mimico, Ont.

---

No one has so far satisfactorily explained the almost universal tendency on the part of friends and relatives to practise a cruel deception upon those who are mentally ill and for whom they are seeking admission to a hospital. Indeed, this deception is not practised by the friends and relatives only, but even the attending physician is often found doing the same thing, and there is reason to believe that he may be somewhat responsible for the major part of it.

Fear seems to be the foundation on which lying and deception rest, and the less courage an individual possesses, the more he feels the temptation to use misrepresentation; the greatest liar is commonly the greatest coward, though he may cunningly try to convince and deceive himself into believing that his deception is cleverness in overcoming, or consideration in saving his victims.

The insane are often improperly considered, both by the profession and laity, as a separate class of human beings, and it is often believed that the ordinary amenities of human relationship should be suspended in their management. Without considering the ethics of lying, no one will deny that lying to an insane person controverts the principle of fair play as much as hitting a man when he is down; an insane man's weapons of defence are badly damaged or destroyed, and still he is treated as though they were in good repair and his facility in the use of them equal to that of his assailant.

It is a common experience when a patient is admitted to the Hospital for Insane for him to relate that his intimate friends had advised him that he was only being taken away from home for the purpose of consulting an eminent specialist in reference to his illness, and that as soon as the important advice could be obtained he would be returned to his home. Sometimes it has been represented that he was merely starting on a vacation trip which had been arranged for him in order to provide the rest and recreation necessary for his restoration. At other times he has been made to understand that he was being conveyed to a sanitarium with all the amusements and attractions of a summer watering-place, and that his absence from home would partake largely of the nature of a holiday.

All the foregoing misrepresentations and many others of like character are frequently made by the friends, or relatives, or nurses, or physicians, apparently with the view of securing the

quiet removal of the patient from the home to the hospital, and these misrepresentations are made without the least consideration of the consequences to the patient. Instead of the eminent specialist or the attractive watering-place or the sumptuous sanitarium, the patient will find himself introduced to a hospital for the insane where physicians and nurses preside, and where there are locked doors, restrictions and discipline, and also hundreds of insane patients for companions. The patient will now feel that he has been tricked or trapped into the place by those who were his dearest friends, and that if they have deceived and deserted him, his prospects of returning home, when left in the hands of entire strangers, would not be promising.

The patient's loss of confidence in his quondam friends is at once transferred to the hospital physicians and nurses, and he naturally feels that if he cannot depend upon those whom he has known so long and so well, he will not be able to trust those who cannot be expected to have as much interest in him; and yet, the confidence and trust in the hospital physicians and nurses would be of the greatest importance to him. The agony and distress of this deception in many cases cannot be adequately depicted: to be suddenly separated from all that has made life worth living, including faith in one's friends, must mean the full measure of misery and discouragement.

How, then, it may be asked, shall a patient be quietly conveyed to the hospital if he is not to be deceived by this falsely styled "justifiable fiction"? The answer is to proceed in exactly the same way as would be followed in sending an ordinary patient to a general hospital.

The attending physician may explain to the patient that hospital treatment is necessary, and all the arrangements may be made quite openly and with the same frankness and interest that would attend the preparations for removal to a general hospital. There is no need of secrecy or mystery about the medical examinations by the physicians, and no need of concealment on the part of anyone of their purpose. Sometimes it may be advisable that the attending physician himself should accompany the patient to the hospital, or sometimes a friend outside the family, or some trustworthy person who may be an entire stranger to the patient, or even a constable who is trained in the quiet handling of people may be employed. Whoever may be selected for the service of conveying the patient to the hospital should clearly understand that the patient should not be deceived, and that lying to him would be practising a virtue about on a par with the bravery of a bully who would wantonly strike a defenceless blind man a blow in the face.—*Bulletin Ontario Hospitals for Insane.*

## Editorials.

---

### THE EHRlich-HATA PREPARATION IN SYPHILIS

---

For the past few months medical literature, particularly that of European origin, has contained many references to the Ehrlich-Hata anti-syphilitic remedy, or, as it is commonly called "606." For years it has been Ehrlich's endeavor to prepare a compound which would have a destructive action on organisms of the spirochate type, without causing any damage to the tissues of the host. Atoxyl, which was used in trypanosomiasis, was probably the best known of these preparations, in all of which organic arsenic was the basis. Unfortunately observers soon began to report cases of optic atrophy following the use of this remedy. Hata, in conjunction with Ehrlich, prepared the substance dioxy-diamido-arsenobenzol, and as 605 preparations had previously been experimented with, the new synthesis was called for short "606." Small quantities of this preparation have been distributed to various clinical centres, and it is said reports are to be received on 30,000 cases before the substance is given to the profession. Almost without exception favorable results have been reported. Cases refractory to mercurials and iodides have responded almost magically to the new drug. Two observers have reported cases of congenital syphilis being cured by the child nursing at the breast of its mother, who had received an injection of "606." Whether the "cures" will be permanent, particularly for the later nervous manifestations of the disease, we will be able to tell better ten years from now, but for the present, from a review of the literature, it would appear that Ehrlich had attained his goal and conferred a boon on mankind greater, perhaps, than medical science has ever done before.

---

### MISTAKEN DIAGNOSES

---

In a very instructive paper in the *J. A. M. A.* (Oct. 15th), Cabot analyzes 1,000 autopsies and compares them with the

clinical findings, and his observations on the general result are most interesting. He finds, for instance, that they diagnosed mitral stenosis correctly in only 69% of cases and aortic stenosis in 61%. The errors in the latter condition lead him to the conclusion that aortic stenosis may exist despite the presence of an accentuated aortic second sound and a "water-hammer" pulse. In long-standing cases of "rheumatic" endocarditis, aortic stenosis is almost always present, whether there are physical signs or not. Aortic regurgitation was diagnosed correctly in 84% of the cases—a high percentage because the previous post-mortem experience has taught them to disregard diastolic murmurs unless there are vascular phenomena to correspond.

Chronic myocarditis, on the other hand, was accurately "guessed" in only 22% of cases, and Cabot thinks that the correct diagnosis is only a guess since there are no clinical symptoms and no physical signs constantly associated with this condition. Practically the same thing may be said of arteriosclerosis, in which, however, they were fortunate enough to estimate 60%. One-half the thoracic aneurisms were missed, sometimes because too great reliance was placed upon the X-ray findings. Five times there came the difficulty of deciding between aneurism and mediastinal tumor; in every case the autopsy showed aneurism.

In the respiratory system we find lobar pneumonia correctly diagnosed in 74% of cases and broncho-pneumonia in only 33%. It is always safe, when you have the signs of bronchitis, but the patient is too sick for simple bronchitis, to call it broncho-pneumonia.

Acute phthisis was correct in 59% and miliary tuberculosis in 52%. Cabot finds radiography of little use in early tuberculosis, agreeing in this respect with nearly all internists.

In the urinary system only 16% of the acute nephritis cases were diagnosed. It was overlooked entirely in 62%. But they were right in 74% of cases of chronic glomerular nephritis and 50% of chronic interstitial nephritis.

The other percentages of interest were: Cerebral hæmorrhage, 67%; cerebral tumor, 72%; septic meningitis, 64%;

tuberculous meningitis, 72%; gastric cancer, 72%; peptic ulcer (gastric or duodenal), 36%, and cirrhosis, 61%.

He sums up his conclusions as follows:

"1. Never make a diagnosis of uræmia in a patient seen for the first time in an acute illness characterized by coma or convulsions. Such diagnoses rarely turn out right.

"2. Never make a diagnosis of ptomaine poisoning without definite chemical evidence. General peritonitis or a tabetic crisis is usually the correct diagnosis.

"3. Make no diagnosis of hysteria, neurasthenia or psycho-neurosis in a patient whose symptoms begin after the forty-fifth year. The actual diagnosis is likely to be arterio-sclerosis, hyperthyroidism, dementia paralytica, or pernicious anæmia.

"4. Diagnoses of tertian malaria in patients whose symptoms resist quinine more than three days are almost invariably wrong.

"5. Bronchial asthma beginning after 40 usually spells heart or kidney disease.

"6. Epilepsy beginning after 40 usually means dementia paralytica or cerebral arterio-sclerosis.

"7. Typical migraine is often a symptom of unrecognized brain tumor or chronic nephritis.

"8. Most cases of 'bronchitis' mean tuberculosis, broncho-pneumonia or multiple bronchiectasis cavities.

"9. Aside from the immediate results of acute infections (such as scarlet fever, diphtheria, tonsillitis and pneumonia) 'acute' nephritis usually turns out to be chronic.

"10. Acute gastritis and gastralgia usually mean appendicitis, gall-stones or peptic ulcer.

"11. Pus in or near the liver is often mistaken for serous or purulent pleurisy, for it produces identical signs in the right chest posteriorly.

"12. An X-ray of the shin-bones may give the first hint of an active syphilitic process in the joints or internal viscera."

---

### THE CRIPPEN TRIAL

---

One of the most interesting articles respecting this celebrated trial appeared in the *London Times*. The writer expresses the

opinion that it has shown as no other trial before did that in the struggle of law against crime justice is now armed with new and formidable weapons, without any special reference to dramatic incidents connected with wireless telegraphy in mid-ocean, nor to the fact that criminals now find that the world is virtually smaller than it was. He has chiefly in mind the medical and surgical evidence. No one can study it without being convinced that forensic medicine and kindred branches of knowledge have made great advances. Compare the evidence of the experts as to hyoseine tests, of its presence and its action, with that of the experts in another famous case of poisoning—Palmer's case—and it will be seen that prodigious strides have been made. The trial will be memorable too for another reason. The man who had committed one of the vilest of murders and cruelly mutilated the body of his wife was popular, and to all who knew him he seemed genial and kindly. The callousness which he showed after he had committed the murder was great, but more marvelous was the calm which he maintained throughout the trial, the demeanor of innocence so counterfeited as to deceive any one who forgot the evidence, and the imperturbability with which he stood cross-examination and sought to support one falsehood by another. The story disclosed in this trial reveals possibilities in human nature of superficial geniality combined with absolute callousness, a kindness of disposition coupled with an incapacity for pity which the annals of crime have not often equalled.

---

### MEDICAL EXPERT EVIDENCE

---

It is generally understood that the so-called medical expert evidence given in our courts is often exceedingly unsatisfactory and occasionally discreditable to the profession.

*The British Medical Journal* in a short article on the subject refers to various incidents in the life of the late Sir Robert Christison, for some time Professor of Materia Medica in the University of Edinburgh, as described in his autobiography, edited by his sons and published by the Blackwoods. It is fairly

well known in Canada that Sir Robert for some time acted as "unacknowledged standing medical counsel for His Majesty's interest," and in that capacity always took care to look at both sides of the question.

He relates one case which is interesting and rather amusing in a trial for poisoning with arsenic. Dr. — was employed to make a muddle of the professional testimony, and this was how he set about it: He said he had great experience of diseases and in pathological dissections. There was nothing in the symptoms of the deceased during her life nor in the appearances of the dead body, which he had not seen twenty times as arising from natural causes. "But Dr. —," said the Lord Advocate, "the symptoms which you have here detailed, and which you say may have arisen from natural diseases, are also such as arsenic may produce. Are they not?" "They may all be produced by natural diseases." "So you have already told us. But may they not also be produced by arsenic?" "They may, but natural diseases may equally cause them." "You need not repeat that information, Doctor. Give me a simple answer to my simple question. May these symptoms be produced by arsenic? Yes or no?" "Yes." "Now, Dr. —, you have also told us that the appearances found after death were such as natural disease may produce. Are they not also such as may be produced by arsenic?" "Natural causes may account for them all," etc., through the same round of fencing until he was compelled to admit that arsenic would produce them. "Now, Dr. —," continued the Lord Advocate, "you have the evidence—the arsenic having been found in the stomach, are you satisfied that arsenic was discovered there?" "My Lord, I am no judge of chemical evidence." "Then, Dr. —, in that case I must tell you that it will be my duty to represent to the jury and judges that arsenic was unequivocally detected, and I ask you this: Suppose arsenic was detected. what, in that case, do you think was the cause of these symptoms and of these signs in the dead body?" "Natural disease might cause them all." "Yes! Yes! We all know that. But suppose that arsenic was found in the stomach what then would be your opinion as to their cause." A



pause on the part of the Doctor—now run to earth. "Do you not think, Sir, that in that case arsenic was the cause?" Softly and reluctantly came the inevitable answer, "Yes." "One more question then and I have done. In your opinion did this person "die of poisoning with arsenic?" "Yes." "Have you any doubt of it?" "No." Then, sotto voce (audibly enough), "What the devil brought you here?"

---

## THE LABORATORY OF THE HEALTH DEPARTMENT OF TORONTO

---

The City of Toronto and its M. H. O., Dr. Hastings, appear to have been particularly fortunate in their selection of a man to take charge of the laboratory. Dr. George G. Nasmith has been appointed Director of the Laboratory of the Health Department. Dr. Nasmith was born in Toronto 32 years ago and received his preliminary education at the Jarvis Street Collegiate Institute. He graduated B.A. from the University of Toronto in 1900. After graduating he specialized in natural science and became Doctor of Philosophy in 1903. He was for about eight years first assistant in the Provincial Laboratory. Dr. John A. Amyot, the Director of the Laboratory, has a high opinion of the attainments of Dr. Nasmith. He believes the city might canvass the whole Dominion and not secure a better man for the position. Dr. Nasmith was the first assistant appointed to the Provincial Laboratory, and he has shown himself a first class research man. His special work has been chemistry, but in recent years he has perfected himself in bacteriology.

---

## LEPROSY

---

Fortunately we have in Canada but little of that terribly loathsome disease leprosy. The history of the colony afflicted with leprosy in New Brunswick is interesting. There is no certainty where the disease came from, but there is a tradition to the effect that about ninety years ago two afflicted sailors ship-

wrecked on the Gulf shore were taken in and cared for by the hospitable inhabitants of the district. For some years after they left there was no sign of any ill-effect from their visit. Two generations afterwards, however, the disease attacked the descendants of those who had cared for the unclean lepers. After the disease had existed for some time the Government took definite action in the interests of the unfortunates. About fifty years ago the Lazaretto was instituted in the town of Tracadie, where the patients were placed and cared for under the superintendency of a physician. This institution, as is well known, is in existence, but it is believed that the disease is gradually being stamped out.

There is no more magnificent and heroic work done in Canada than that of the devoted women who have given up their lives on behalf of the lepers. Sixteen nuns of the Sisters of Providence Order live in the pest house and minister to the victims. They do all the work of the establishment and actually dress the sores which cover the majority of the sufferers. They apparently have no fear of contagion, in spite of the fact that many of their predecessors have died of the disease, which has been called tubercular leprosy. We understand that there are at the present time about twenty patients in the Lazaretto.

---

### THE ONTARIO MEDICAL COUNCIL

---

Considering all the circumstances in connection with the last sessions of the Council, it is somewhat remarkable that there will be contests in only four divisions for the present election of members. Since the creation of a new constituency in the Sault neighborhood there are 18 divisions, and in 14 of these members are elected by acclamation. Of these the following ten were members of the Council: Dr. J. McArthur, London; Dr. T. W. Varden, Galt; Dr. H. S. Griffin, Hamilton; Dr. W. R. Merritt, St. Catharines; Dr. R. J. Gibson, Sault Ste. Marie; Dr. J. S. Hart, West Toronto; Dr. Horace Bascom, Uxbridge; Dr. W. Spankie, Wolfe Island; Dr. J. Lane, Mallorytown, and Dr. M. O. Klotz, Ottawa.

In Division No. 1 Dr. G. R. Cruickshank, of Windsor, takes the place of Dr. Hoare, Walkerville, resigned. Dr. A. B. Welford, Woodstock, takes the place of Dr. J. A. Cormack, St. Thomas, resigned. Dr. A. D. Stewart, Fort William, is the member for the new constituency, and Dr. T. W. G. Young, Peterborough, takes the place of Dr. S. C. Hillier, resigned.

In Division 4 Dr. J. A. Robertson, Stratford, is opposed by Dr. A. T. Emmerson, Goderich.

In East Toronto Dr. E. E. King is opposed by Dr. Cassidy.

In Division 6 Dr. J. Henry is opposed by Dr. Frank Porter, Waubashene.

In Division 14 Dr. A. E. MacColl, Belleville, is opposed by Dr. T. S. Farncomb, Trenton.

---

## THE CONGRESS OF OBSTETRICS AND GYNAECOLOGY

---

The Tenth International Congress of Obstetrics and Gynaecology was held at St. Petersburg from Sept. 22 to 28. The attendance was fairly good, but not as large as was expected. The business was admirably conducted, the discussions were excellent, and the treatment of the visitors was exceedingly hospitable. Besides the ordinary discussions in Congress, additional opportunities were given to the outsiders for visiting the various hospitals and clinics, which are numerous, well equipped, and ably conducted. There are in the city 15 lying-in hospitals, containing altogether 347 beds, in which during last year there were 19,347 patients admitted and treated.

In many of these hospitals private patients can enter on payment of arranged amounts. The payment of 15 roubles (about \$10.50) includes the whole attendance during a stay of ten days, or smaller sums are charged according to the circumstances of the patient. Thus it happens that over forty per cent. of all the confinements in St. Petersburg take place in the municipal maternities. The *British Medical Journal*, in commenting on this fact, says its advantage cannot be over-estimated, since all means are given for the safety of the patient—the best medical skill, most careful nursing, strictest aseptic arrangements, all combined with attention to the convenience and comfort of the recipients.

## CREMATION

We are told from time to time that disposal of the bodies of the dead by cremation is making steady progress, especially in Great Britain, the United States, Germany and South America. In looking over the literature on the subject one finds many favorable opinions expressed in very methodic and sometimes rather unique form.

At the opening of the Birmingham Crematory in 1903 Bishop Gore said: "What I should desire when I myself die is that my body be reduced rapidly to ashes, so that it may do no harm to the living, and thus in accordance to the Christian feeling be laid in the earth—earth to earth, ashes to ashes, dust to dust—with the rites of the church. I do not see that there is any serious Christian argument against such a practice, and from a sanitary point of view it has numerous advantages."

With reference to any sentimental objection, the *British Medical Journal* expresses the view that, although the sudden reduction of the body of a loved one to a handful of ashes is at first something of a shock, still it should be easy to convince thinking persons that cremation is far less horrible than burial. Cremation does in an hour what the natural process of decomposition may take years to accomplish. Tender memory of the dead is more likely to be maintained by the thought that there is no foulness nor corruption, but only a small quantity of inoffensive ashes where the remains are buried.

Guy de Maupassant wrote an account of the cremation of an Indian Prince which appeared in the Paris *Figaro* in 1884. After describing the scene, he says: "I have therefore seen a man burned on a funeral pyre, and that has given me the desire to disappear in the same manner. In this way everything is finished at once, man hastens the sole work of nature instead of retarding it by the hideous coffin in which he rots for months; the flesh is dead, his spirit has fled, the fire that purifies disperses in a few hours that which was a human body and throws it to the wind. It makes of it air and ash instead of loathsome corruption. It is clean and wholesome. Putrefaction underground

in that closed box wherein the body changes into a black and stinking pulp is repulsive and abominable.”

The following clause is taken from the will of the late Mr. W. P. Frith, R.A.: “Believing that the duty of the individual to his kind includes providing for such final disposal of his body as is sure to be least detrimental to those who survive him, and believing that the modern process of incineration provides the cleanest and safest mode of such disposal, I hereby solemnly express to my survivors exactly my earnest desire and request that on my decease my body shall be cremated at such convenient place as shall furnish the proper facilities.”

Notwithstanding all that has been said, however, in favor of cremation of the bodies of the dead, the sentiment against the process is still almost overwhelming in all parts of the civilized world.

## Notes

---

### VACANCY ON HOUSE STAFF AT MUSKOKA FREE HOSPITAL FOR CONSUMPTIVES, GRAVENHURST

---

Experience and training in the early diagnosis of tuberculosis, in chest, nose and throat work, and complications. Opportunities, if desired, for laboratory work. Two hundred patients in these two institutions. Total resident staff of six physicians. Comfortable quarters in new and separate Administration Building. Six or twelve months' term. Apply Dr. W. B. Kendall, Physician-in-Chief.

---

The American Public Health Association will hold its 1911 meeting in Havana, Cuba, from December 4 to 9. The prospect of having the Association again in Havana has aroused the warmest interest among the physicians there, the Secretary of Sanitation, Dr. Varona, being particularly interested. The Academy of Medicine has offered its building for the general section meetings. The Hotel Sevilla will be the headquarters of the Association. A few years ago a meeting in Havana would probably have discussed yellow fever. The changed situation in Cuba with respect to that disease is shown by the fact that yellow fever has been so completely extinguished on the island that the local physicians desire rather that tuberculosis be given the most prominent place. The question of the milk supply will also be considered.

It is hoped at this meeting that the recently organized Sociological Section, and the Section on Sanitary Engineering, which was tentatively authorized by the Milwaukee meeting, may be put upon substantial foundations.

---

### ACCIDENT TO DR. HARVEY

---

The many friends of Dr. A. R. Harvey, of Orillia, felt the deepest regret when they heard that he had met with a very serious accident far back in the woods of Longford Township, about 40 miles north of Orillia, Nov. 5. The doctor was mistaken for a deer by a guide and shot through the left arm and forearm. We are told that one of the bones of the forearm was

fractured and the ulnar artery injured. The doctor immediately bound up his arm in such a way as to check the hæmorrhage. Fortunately Dr. N. A. Powell, of Toronto, was in the party and at once took charge of Dr. Harvey. He placed him in a canoe and paddled him twelve miles through a chain of lakes to meet motor cars sent from Orillia. The other doctors of the Red Tan Hunt Club who were present cleared the trails and carried the canoe over the portages in the gentlest manner possible. Dr. Arthur Ardagh walked fourteen miles by night through the bush to the nearest settlement and then drove seventeen miles to Washago to reach a telephone, and Dr. Gilchrist coming from an adjoining camp gave valuable help on the trip out. We are pleased to say that at last accounts Dr. Harvey was doing well.

---

### SMITH'S FALLS HOSPITAL

---

The corner-stone of the new Public Hospital for Smith's Falls, Ont., was laid October 2nd. The building will have a frontage of 76 feet with a depth of 131 feet. Milton pressed brick will be used in the construction. There will be three storeys, and it is expected the hospital will accommodate about fifty patients and the cost will be about \$30,000. The beautiful four-acre lot upon which the building will stand was the gift of Mrs. M. E. Chambers. It is hoped the building will be completed early next summer. The institution will be known as the Chambers Memorial Hospital.

## Personals

---

Dr. Jas. S. Simpson has commenced practice at 112 Avenue Road.

Dr. W. Blake Gibb of Toronto has returned from Vienna, where he has been engaged in special work.

Dr. H. Glendenning has moved to 258 Wellesley Street, the residence lately occupied by Dr. C. J. Hastings.

Dr. Edmund Boyd, Toronto, was successful in passing his examination for membership of the Royal College of Surgeons in October.

Dr. Frederick C. Harrison, Toronto, has returned from England and commenced practice at 134 Bloor Street West, with an office also at 643 Ontario Street.

Dr. M. M. Farnham of Copper Cliff is to be an associate coroner for the District of Nipissing, and Dr. W. R. Patterson of Sudbury is to be an associate coroner for the District of Nipissing.

Dr. H. E. Heyd was elected President of the American Association of Obstetricians and Gynæcologists at its 23rd annual meeting, recently held at Syracuse. We present our congratulations. Dr. Heyd is a Canadian well known to many physicians, especially in Brantford and Toronto.

We are pleased to announce that Dr. Frederick Winnett, of Toronto, has quite recovered from his attack of typhoid fever during his stay at Aldershot, England. He went over to England with the Q. O. R. Battalion, and with a number of his fellow officers became ill soon after their arrival in England. It is supposed they were poisoned by germs in clams which they ate on shipboard.



# Obituary

---

## LEONARD LUTON, M.D.

---

Dr. Luton, of St. Thomas, died at his residence in that city Nov. 1st, aged 75. He was one of the Homœopathic members of the Ontario Medical Council from 1890 to the time of his death, and was president of that body in 1898.

---

## WILLIAM C. GILDAY, M.B.

---

Dr. W. C. Gilday, 7 Moss Park Place, Toronto, died of suppurative endocarditis, after an illness of seven weeks, October 18, aged 28. He graduated M.B. from the University of Toronto in 1905. He then spent two years in St. Michael's Hospital, after which he spent three years in London and Birmingham, England, where he took special courses in diseases of the eye, ear, throat and nose. He had just commenced practice in his specialty when his illness began.

---

## EDMUND HENRY DILLABOUGH

---

Dr. Edmund Henry Dillabough, of Hamilton, died October 25th, aged 76.

## Book Reviews

---

*Radium Therapy.* By DR. LOUIS WICKHAM and DR. DEGRAIS, translated by S. ERNEST DORE, M.A., M.D., M.R.C.P., with an introduction by SIR MALCOLM MORRIS, K.C.V.O. Illustrated, with figures and colored plates in the text. 306 pages. 1910. Price, \$4.50. London: Cassell & Co. Toronto: D. T. McAinsh & Co.

Coming from the pen of the man who is the recognized authority on the subject of radium therapy, and who has, by his researches, placed radium in the front rank of modern therapeutic agents, such a work demands the close study of everyone who regards himself as a modern physician or surgeon.

Following a short introductory chapter, in which Dr. Wickham tells us how he first took up the study of radium, and of the founding of the Radium Institute in Paris, the rest of the book is divided into three parts. In the first part the physics of this scientific curiosity are discussed, and in a way that will appeal to layman and physicist alike. The methods of extraction, the properties, physical and chemical, and the composition and nature of the radiations and emanation given off by radium are taken up, and the reader will be sure to find many erroneous ideas corrected by the time he has reached the end of this section.

The second part deals with the use of instruments for applying the agent to the many and varied pathological conditions in which it can be employed, and it is interesting to see the ingenious contrivances, to which resort has been had in many cases. Here we find the method of "cross-fire" discussed, by which a regular bombardment of the tissues may be carried out by placing a piece of apparatus on each side of the tissues requiring treatment, and also the use of screens, by which the rays may be filtered and the particular ones, adapted to the case in question, may be selected.

In part three, which forms by far the larger part of the book, and which will be found of the greatest interest to the clinician, the therapeutics of radium are discussed under eight headings, viz.: (1) carcinomata and other malignant growths; (2) cheloids and disfiguring scars; (3) angiomata; (4) pigmentary nævi; (5) muco-cutaneous tuberculosis; (6) analgesic action in pruritus, neuralgia, etc.; (7) various diseases; (8) gynæcology. This section is well illustrated with some beautifully prepared colored plates, which convey, even better than the text, the marvelous

results which have been obtained. It is plain that in the treatment of cheloid, vascular nævi and superficial epitheliomata, no other agent can for one minute be compared with radium. But, according to the authors, we are to look for even greater results, and certainly from the few cases they report of visceral malignant tumors, the future has much in store. The hope of Dr. Wickham is that by a proper association of surgery and radium therapy many serious visceral neoplasms may be treated with success. Surgery must devise new methods by which instruments containing radium may be applied "to the treatment of any particular carcinoma, according to its position, extent and gravity." In this way we will be able to treat growths of the bladder, uterus, œsophagus, stomach, etc.

And yet, while the authors are most optimistic, they are still truly scientific in their view of the subject, and therefore very conservative. They are not in any way associated with or responsible for the exaggerated statements which have come from other sources. Radium should only be used in such cases after the fullest consideration "lest patients should be deprived of other methods of treatment, which may sometimes be of greater value."

To anyone desirous of obtaining a thorough grasp of the present position of radium in therapeutics, we can thoroughly recommend this work. The translator has done his work well, and has given us a most readable book. It is a fascinating subject in which one could possibly pardon an author for indulging in some flights of fancy. But such is not the case here. The scientific spirit pervades the whole book, and as an example of what scientific medicine should be we commend it.

F. C. H.

*A Manual of Chemistry.* By ARTHUR P. LUFF, F.R.C.P., Physician to St. Mary's Hospital and Joint Lecturer on Medicine at St. Mary's Hospital Medical School, and HUGH C. H. CANDY, F.I.C., Lecturer on Chemistry in the London Hospital Medical College. New and enlarged edition, illustrated. 622 pages. 1910. Price \$2.25. London: Cassell & Co. Toronto: D. T. McAinsh & Co.

Chemistry is every day playing a larger part in modern medicine, and the present fourth edition of this manual recognizes the importance of an intimate knowledge with chemical laws and facts on the part of the present day student. It presents the essentials of the science, and particularly their relation

to medicine, showing the practical bearing of the subjects discussed. At a time when there is a danger of turning out graduates, who are greatly lacking in the clinical application of the sciences, such a book is very welcome.

The subject is discussed in six sections. Part I deals with the laws and underlying principles of chemistry. Parts II and III take up inorganic chemistry, while Part IV is occupied with organic chemistry. In Part V, arithmetical chemistry is taken up, while Part VI treats of chemical analysis. As the name implies it is essentially a beginner's book, and as such can be recommended to a place on every student's bookshelf.

*Some Considerations of Medical Education.* By S. SQUIRE SPRIGGE, M.A., M.D. Cantab. London: Bailliere, Tindall & Cox. 1910.

That the problem of medical education in Great Britain is one demanding serious consideration is apparent to anyone reading this interesting little book. "The old order changeth, yielding place to new," but sometimes it takes a long time to do it. To medical educationists the material collected here will be of great interest, while to the prospective post-graduate student it should be invaluable as giving him a complete insight into the system of medical education in Great Britain.

*A Text-Book of Mental Diseases.* By EUGENIO TANZI, Professor of Psychiatry in the Institute of Higher Studies of Florence. Authorized translation from the Italian by W. Ford Robertson, M.D., C.M., Pathologist to the Scottish Asylums, Edinburgh, and T. C. Mackenzie, M.D., F.R.C.P., Medical Superintendent Inverness District Asylum. New York: Rebman Company, 1123 Broadway. Cloth, \$7.50.

This work and the one following from the press of the Rebman Company are of such a high degree of merit that Canadian readers may well be surprised when they begin to realize the perfection which has been attained in Italian medicine. Although the average English-speaking physician is not aware of it, the Italians are well up in the front ranks of psychiatry, as this volume amply demonstrates. Seldom have we come across a translation so well done. The whole book reads like a novel. This is a work which every general practitioner will find of the utmost value.

*Clinical Commentaries Deduced from the Morphology of the Human Body.* By PROFESSOR ACHILLE DE-GIOVANNI, Director of the General Medical Clinic, University of Padua. Translated from the second Italian edition by John Joseph Eyre, M.R.C.P., L.R.C.P.S.I., D.P.H. New York: Rebman Company, 1123 Broadway.

This book seeks to present the study of disease in a new way, based on the morphology of the human body. The author has many new and interesting facts which the translator has turned into readable English. There is a great deal of food for reflection contained between these covers, perhaps not all of it in accord with our orthodox ideas, but it is all the better for that.

*The Diseases of Women.* A Handbook for Students and Practitioners. By J. BLAND-SUTTON, F.R.C.S. (Eng.), Surgeon to the Middlesex Hospital, and Senior Surgeon to the Chelsea Hospital for Women; and ARTHUR E. GILES, M.D., B.Sc. (Lond.), F.R.C.S. (Edin.), Surgeon to the Chelsea Hospital for Women, and Gynæcologist to the Tottenham Hospital. Sixth Edition, with 123 illustrations. New York: Rebman Company, 1123 Broadway.

This useful manual contains many additions in this, the sixth edition. There is a new chapter on Injuries of the Uterus, which shows the dangers which may follow on a very minor operation. The questions of fibrosis uteri and adenomatous disease, to both of which subjects Bland-Sutton has devoted much study, are well taken up. There is a special chapter on the appendix as a pelvic organ. The text is clear and concise and the book in every way fulfills the purpose for which it was written.

*The Essentials of Histology, Descriptive and Practical.* For the use of Students. By EDWARD A. SCHAFER, F.R.S., Professor of Physiology in the University of Edinburgh. New (8th) edition, thoroughly revised. Octavo, 571 pages, with 645 illustrations. Cloth, \$3.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

The eighth edition of this well-known text-book will be well received by teacher and student alike. It is in our opinion the best work of its kind extant, and the fact that it has come through so many editions shows that this opinion must be shared by others. The subject is covered in fifty chapters, each suitable for a convenient amount of class work. Points in technique are explained fully, so that the book may be used as a laboratory manual. The illustrations are numerous and very clear as to the

points to be emphasized, and are in both black and colors. There is no doubt that this edition will prove as popular as its predecessors among the students of this subject.

*Pathogenic Micro-organisms, including Bacteria and Protozoa.*

A Practical Manual for Students, Physicians and Health Officers. By William H. Park, M.D., Professor of Bacteriology and Hygiene in the University and Bellevue Hospital Medical College, and Director of the Research Laboratory, Department of Health, New York City; and ANNA W. WILLIAMS, M.D., Assistant Director of the Research Laboratory. New (fourth) edition, thoroughly revised. Octavo, 670 pages, with 196 illustrations and 8 full-page plates. Cloth, \$3.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1910.

Since the last edition of this popular work many facts have been added to our knowledge of a great number of the micro-organisms and protozoa. The subject of bovine tuberculosis and its relation to the human type of disease, the great advance made in the preparation of many of the vaccines and sera, such as, for instance, the antimeningococcal serum, and the recent work on the etiology of infantile paralysis, are all discussed in this new edition. The prophylaxis and cure of trypanosomiasis and the work on trachoma are also taken up. Chapters have been included dealing with the micro-organisms concerned in agriculture and in some of the important fermentations.

It is a book which appeals to student, practitioner or laboratory worker alike, and will give the reader a thorough grasp of this most important branch of modern medicine.

*Hand-Book of Obstetrics.* By R. CADWALLADER, A.M., M.D., Assistant in Obstetrics. University of California, Medical Department, San Francisco, Cal. With 104 illustrations in the text. Philadelphia: F. A. Davis Company, Publishers, 1908.

The author of this small Hand-Book of Obstetrics has endeavored to condense into a small volume the essential facts of obstetrics. The illustrations are practically all taken from the works of Graudin and Jarman, Edgar, Gilliam and a few other authors, full credit being given in each instance.

## Selections

---

### The Physiological Activity of Many Products of Regressive Metamorphosis and Their Role in Pathology

An article on this subject appears in the *Nowoe Medizinsje*, 6-10, by Dr. F. M. Lifschitz. The writer's attention has been chiefly directed to the influence of these products on the blood pressure. Alloxan increases the blood pressure, slows the pulse, and increases its amplitude. This appears to take place through the action of the substance on the vasomotors, as well as on the centre for the vagus nerve. Paraban acid also increases the blood pressure and the amplitude of the pulse. This substance appears to act on the muscles of the heart, on the vasomotor centres of the medulla oblongata, and the centre for the vagus. Guanidid and ammonium carbamate increase the blood pressure by their action on the vasomotor centres and the blood vessels. Indol, skatol, phenylacetate, phenyllpropionic acid have only a slight and passing influence on the blood pressure. Acetone bodies have a lowering effect on the blood pressure, slightly accelerate the pulse, and increase its amplitude, depending on the depressing influence of these substances on the vasomotor centre in the medulla oblongata and the centre for the vagus. Oxybutyric acid (neutralized by soda, and given by the mouth) caused increase of blood pressure, slowing of the pulse, and sometimes increase of its amplitude. Lecithin caused increase of blood pressure, principally in animals that had been rendered anæmic by loss of blood (venesection). Lecithin is apparently useful in the animal organism, especially where it has become weakened by illness. The split products of lecithin, glycerophosphoric acid and trymethalmine exert a marked influence in raising blood pressure.

Although some of these products have not yet been found in the test-tube, they are in all probability present in the animal system. The most recent investigations into physiological chemistry support this view, as some nitrogenous substances have been found in the organism that were previously unknown. The study of these substances is of great importance from a practical point of view. Possibly further research will throw light on the pathogenesis of some of the functional neuroses.—*The Medical Press*.

### The Treatment of Convulsions. C. H. Chapin, M.D., *Leucocyte.*

The child is placed upon a table or upon some one's lap in such a manner that a number of measures can be simultaneously carried out. Some cracked ice is called for, placed in a handkerchief or other thin material, and spread over the occiput and vertex in such a manner as rapidly to cool the brain. If ice is not available, cold compresses wrung out of water at the lowest temperature that can be procured may be employed. The feet and legs are at the same time plunged in a pail containing hot water to which one or two tablespoonfuls of mustard has been added. Caution must here be exercised, as in the confusion the water may be too hot. The writer has obtained practically the same results by the use of this partial bath as by complete submersion, and a simultaneous use of other measures is thus made possible. The bowel is at once washed out, using any available apparatus. In a large number of cases this is followed by the expulsion of undigested masses, and the convulsion ceases. The two drugs which the author has found most serviceable are the bromides and chloral hydrate. Young infants are very tolerant of the drug, and from 3 to 5 grains may be given at once and given every ten minutes, care being taken that the solution is actually swallowed. To be sure of this last point, it is well to depress the tongue with a spoon when the remedy is given so that the fluid may reach the pharyngeal muscles and thus be carried to the stomach. If the convulsions do not cease, the use of chloral hydrate will be found more powerful. From 3 to 5 grains dissolved in half an ounce of water is passed into the rectum, and retained there until absorption. For intractable cases a few whiffs of chloroform may be employed from time to time to check the excessive severity of the convulsion.—*American Medicine.*

---

### **Poliomyelitis**

H. E. Robertson and A. J. Chesley (*J. A. M. A.*) report six cases with autopsy. From these they conclude: "1. Acute anterior poliomyelitis is a specific infectious disease characterized pathologically by general toxæmia affecting the parenchyma of the heart, liver and kidneys and the lymphoid tissues of the body, but spending itself locally on the structures of the spinal cord. 2. Grossly the cord is congested, and on transverse section shows softening and often hæmorrhages in the grey matter of the



anterior horns. 3. In the cord the infectious agent is located in the perivascular lymph channels of the anterior portions, especially invading the grey matter, but extending to the white matter and pia and occasionally the posterior horns. The brain stem and nasal ganglia may be involved. In the cord the medulla and cervical and lumbar swellings are particularly affected. 4. The characteristic lesion consists of collections of cells in the perivascular and pial lymph channels and tissue spaces of the anterior horns. Of these cells the polymorphonuclear leucocytes appear early and are relatively few in number. They are soon displaced by endothelial cells arising from proliferation of the lining endothelium and lymphocytes coming from the blood and lymph streams. 5. Oedema of the interstitial tissue and degeneration and destruction of the ganglion cells are always present. 6. The vessels are congested, their walls degenerated, and the capillary branches in the grey matter irregularly distended and often ruptured, giving rise to hæmorrhages, which always intensify markedly the amount of destruction. Thrombosis was not observed. 7. Early degeneration of nerve fibres from the anterior roots is a constant feature. 8. Stains for micro-organisms were uniformly negative."—*Medical Record*.

---

### **Camphora Monobromata**

For subcutaneous use Cassin and Girard recommend the use of a 10 per cent. solution of monobromated camphor in olive oil, previously purified in the well-known way by means of alcohol. This solution may be put up in ampoules containing 1 c.c., and is easily sterilized; the injections are quite painless and harmless. The authors used subcutaneous injections with excellent results in psychic excitability occurring during typhoid fever, in psychic disturbances following menorrhagia, in syphilitic encephalopathy and in obstinate and painful contractions of the muscles of the neck, and in a case of paralysis agitans. They also give good results in obstinate hyperemesis gravidarum when used alternately with physiological serum.—*Merck's Report*.

## Miscellaneous

---

### The Hypodermatic Tablet as an Emergency Agent

If there is one class of therapeutic agents which more than another should be chosen with discretion and judgment, the hypodermatic tablet represents that class. When he administers a preparation hypodermatically the physician wants prompt action, and he wants to be certain that he is going to get it. To have that assurance he must use a tablet that is active, that has definite strength, that dissolves promptly and wholly. Cheap tablets, poorly made tablets, tablets concerning which there is the slightest doubt as to medicinal quality, may well be left alone. And there is no need to err in the matter of selection. Hypodermatic tablets of the better sort are easily obtainable. Perhaps the brand which comes readily to mind is the brand which is exploited so extensively to physicians under the familiar caption of "Five Seconds by the Watch." The makers, it is hardly necessary to add, are Messrs. Parke, Davis & Co., who guarantee their hypodermatic tablets unequivocally as to purity, solubility, activity and stability.

---

### An Unconventional Cough Syrup

There are "cough syrups" without end. Some of them, it is needless to say, have little or no therapeutic value. Conversely, there are some that no physician need hesitate to prescribe. One of these—Syrup Cocillana Compound (P., D. & Co.)—is so exceptional in many particulars as to be worthy of special mention just now, when coughs are so plentifully in evidence. By its name no one would recognize it as a preparation for "coughs" and "colds," and this, in connection with its general efficiency, constitutes one of its chief claims to distinction. It is a product which the layman knows nothing about. It does not encourage counter-prescription or self-medication. It was designed especially with reference to the needs of the prescriptionist.

The formula of Syrup Cocillana Compound, which, of course, is plainly printed on the label, is quite unusual. Let us briefly consider its components: *Euphorbia pilulifera*—serviceable in the treatment of chronic bronchitis and emphysema; wild lettuce—a mild and harmless narcotic, useful in spasmodic and irritable coughs; cocillana—valuable expectorant, tonic and laxative, ex-

erts an influence on the respiratory organs similar to that of ipecac; syrup squill compound—serviceable in subacute or chronic bronchitis, as an expectorant, and as an emetic in croup; cascara—the bitter glucoside of cascara sagrada, useful for its laxative action; heroin hydrochloride—a derivative of morphine and extensively prescribed in the treatment of cough, especially of bronchial origin; menthol—stimulant, refrigerant, carminative and antiseptic, serviceable in coughs of pharyngeal origin.

Syrup Cocillana Compound would seem to be worthy of extensive prescription.

---

Pope said,

“The learn'd reflect on what before they knew.”

As the winter approaches, conditions prevalent with the season will present themselves for the consideration of the physician.

At this time it might be well to recall that Antiphlogistine, applied thick and hot, will offer immeasurable relief in those cases of bronchitis, tonsillitis, laryngitis, pleurisy and other throat and chest affections you will be called upon to treat.

Satisfactory therapeutic results invariably follow the application of Antiphlogistine, and to guard against substitution it is well to specify an original package, thus protecting your patient as well as yourself.

---

### The Romance of Medicine

Sir Arthur Conan Doyle, speaking to some London medical students, told several stories illustrating what he called “the romance of medicine.”

The fashion of wearing wigs, for instance, was due to a skin disease which produced bald patches on the august head of Francis I. of France. He got a wig and his courtiers followed suit, just as they all whispered when he had an attack of laryngitis.

“One can trace for many years,” says the same authority in the *Lancet*, “certainly from 1802, the inception of that disease which killed Napoleon at St. Helena in 1821. In 1802 Bourrienne said: ‘I have often seen him at Malmaison lean against the right arm of his chair and, unbuttoning his coat and waistcoat, exclaim, “What pain I feel!”’

“That was perhaps the first allusion to his stomachic and

hepatic trouble; but from then onward it continually appeared, like Banquo at the banquet. He could scatter the hosts of Europe and alter its kingdoms, but he was powerless against the mutinous cells of his own mucous membrane.

#### SUFFERED FROM CANCER.

“Again and again he had attacks of lethargy, amounting almost to collapse at moments when all his energy was most required. At the crisis of Waterloo he had such an attack, and sat his horse like a man dazed for hours of the action. Finally the six years at St. Helena furnish a clinical study of gastric disease which was all explained in the historical post-mortem examination, which disclosed cancer covering the whole wall of the stomach and actually perforating it at the hepatic border.

“Napoleon’s whole career was profoundly modified by his complaint. There have been many criticisms—not unnatural ones—of his petty, querulous and undignified attitude during his captivity; but if his critics knew what it was to digest their food with an organ which had hardly a square inch of healthy tissue upon it they would, perhaps, take a more generous view of the conduct of Napoleon. For my own part I think that his fortitude was never more shown than during those years—the best proof of which was that his guardians had no notion how ill he was until within a few days of his actual death.

“History abounds with examples of what I have called the romance of medicine. Look at the men, for example, who were the prime movers in the French Revolution. They were a diseased company—a pathological museum. Was Marat’s view of life tainted by his loathsome skin disease, for which he was taking hot baths when Charlotte Corday cut him off? Was the incorruptible but bilious Robespierre the victim of his own liver? Was Couthon’s heart embittered by his disfigured limbs?

#### REVOCATION OF EDICT OF NANTES.

“These are the problems where medicine infringes upon history, and these are the illustrations of the philosophy which is only open to the medical thinker. How many times do the most important historical developments appear to depend upon small physical causes? There is, for example, the case of the revocation of the Edict of Nantes. By this measure the whole history of France has been profoundly modified, because by that action there were driven forth the Huguenots.

“Now, how came Louis XIV., who had always held out upon

this point, to give way at last to the pressure of Mme. de Maintenon and his clerical advisers? The answer lay in one of his molar teeth. It is historical that he had for some months bad toothache, caries, abscess of the jaw, and finally a sinus which required operation, and it was at this time, when he was pathologically abnormal and irritable, that he took the step which has modified history. Great results may depend upon a king's jaw or a statesman's digestion."—*Mail and Empire*.

---

The glass blowing industry and the manufacture and repair of X-ray tubes has been entirely neglected in Canada until now, and the Thermos Bottle Co., Limited, 12-14 Sheppard Street, Toronto, have undertaken this work. They have expert German glass blowers and have all the special appliances necessary to manufacture and repair X-ray tubes. This departure should be appreciated by the profession, and in any communication mailed to them will receive prompt attention. The writer knows personally that they are doing most excellent work in X-ray repairs.

---

### Important Physical Signs in the Diagnosis of Incipient Pulmonary Tuberculosis

P. H. Ringer (*New York Medical Journal*) refers to a unilateral shoulder droop, hollowing of the supraclavicular fossa, or its flattening without its becoming hollowed, etc. Palpation should be done with the pulps of two fingers. In percussion importance is attached to a shortening of the note with a heightening of the pitch over one apex. Another sign of value is the expansibility of the bases of the lungs, both in front and behind. The earliest respiratory change noted is granular, rude, or rough breathing.—*Medical Record*.

---

### Dermatitis from Application of a Mercurial Lotion. TISSIER and CORPECHOT, *Le Progres Medical*.

A healthy woman, aged 32, was admitted to hospital at the end of her sixth pregnancy. She stated that after her previous confinements, except the first, she had suffered from an eruption of the lower abdomen, inner surface of the thighs, and around the anus. This she attributed to the use of lotions of corrosive sublimate for washing the parts during the puerperium. There

# Duncan, Flockhart and Co.'s Capsules of the Formates

(No. 342) Format Comp.

R	<i>Sodium Formate</i> - 2 Grs.
	<i>Potass Formate</i> - 2 Grs.
	<i>Calcium Formate</i> - 3 Grs.
	<i>Quinine Formate</i> - 1 Gr.
	<i>Strychnine Formate</i> $\frac{1}{80}$ Gr.

## Dose

One or two Capsules three times a day, followed by a copious drink of water.

This form of administering the Formates is one largely in vogue for increasing tone in those who go in for physical exertion, such as athletes and men who are very actively engaged, who are merely run down and not suffering from any illness, but require a sharp tonic. The Formates are also useful in the treatment of Chronic Rheumatism.

**R. L. GIBSON, 88 Wellington St. W., Toronto, Ont.**

*Sample on Request*

## The Ideal Cod Liver Oil Preparation

# Maltine with Cod Liver Oil

"Patients who are unable to tolerate the purest and most carefully prepared Cod Liver Oil can readily take and assimilate it in combination with 'Maltine.' The taste of the Oil is almost entirely concealed, and what suspicion there is of it is not at all unpleasant."

—*British Medical Journal*

For Sale by all Druggists  
Sample on Application

**The Maltine Company**  
Toronto, Ont.

Szinnyei there was a distinct fall of systolic pressure in 13, a rise in 7. A fall of diastolic pressure was present in almost all cases; it usually appeared on the second day, and amounted to 5 to 80 millimeters. The pulse amplitude is usually increased, and this is the truest indicator for the action of the drug. The diuretic effect appeared on the second day in 11 cases, on the third day in 3 cases and on the fourth day in 2 cases. In four instances the amount of urine voided on the first day exceeded the amount of water injected. Very rarely, the effect is delayed to the fifth to seventh day. The pulse is sometimes slowed before diuresis sets in, but as a rule both phenomena appear at the same time. In the former case there are usually more advanced changes in the myocardium. Disagreeable after-effects on the part of the stomach (anorexia, nausea and vomiting) were seen in four cases. The doses employed were usually 0.4 Gm. during the first two or three days, then 0.3, 0.2, 0.1 Gm., according to the reaction. It is important to use large doses at the beginning of the treatment, and then to gradually taper off. The smallest amount employed for a treatment was 0.9 Gm., the largest 3.2 Gm., the average 1.0 to 2 Gm.

The author concludes that digipuratum is an absolutely reliable drug, indicated in all cases of decompensation. It should be supplemented by an intravenous injection of a cardiac tonic where there is urgency.—*Therap. Monatshft.*, Aug. and Sept., 1910.

---

Florence has recently devised and recommended a new reagent for testing for both bile and blood in urine. The solution keeps well, and is made up as follows: Pyridine, 50; alcohol, 50; chloroform, 50; and zinc acetate, 7.5 parts by weight.

When used, two or three cub. cm. of the urine and twice as much of the reagent are mixed up together in a test-tube. On standing the lower layer will be colorless in the absence of bile pigments or blood. If urobilin is present it will show a fine green fluorescence. If biliverdin is present it is green at first, and also slowly develops fluorescence. Blood pigment gives it a tint varying from pink to cherry red. The intensity of the color is, broadly speaking, quantitative. The solutions give very clear spectroscopic bands.—*The Hospital*.

---

The seventh International Congress of Dermatology and Syphilography will be held at Rome from September 25 to 29, 1911, under the presidency of Professor T. de Amicis, of Naples.