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## Original Articles.

## LEUCOCYTES AND LEUCOCYTOSIS.

By D. A. L. Graham, M.B.<br>Resident Pathologisi, Toronto General Hospital.

In discussing the subject of lencocytes and lencocytosis in a paper of this kind, it is only possible to give a bare resume of the question, and to touch on the more important points. It is my endeavor to bring out the clinical significance of lencocytosis, and also to show the value of considering the factors which affect the proper interpretation of a white blood count, so that it may be of definite value in the cliagnosis of various pathological conditions. The first essential in the study is an accurate count from the laboratory. The clinician should not have to concern himself with a possible error in this respect. I shall not discuss the various questions of origin or theories of leucocytosis, as it would be impossible to do justice to such a wide and important subject at this time.

Classification.--The lencocytes, when classified according to origin, make up the following varieties:
I. Lymphocytes 22 to 24 per cent.
(a) Small.
(b) Large.
2. Large mononuclear lencocyte $I$ to 2 per cent.
3. Transitional 2 to 4 per cent.
4. Polynuclear leucocyte 70 to 72 per cent.
5. Fosinopliile 2 to 4 per cent.
6. Mast cell .5 to 2 per cent.

Histology.-The lymphocytes, small and large, belong to the one class, the difference being mainly a matter of size. In differential counting it is costomary to regard every lymphocyte smaller than a red blood corpuscle, that is, from 4 to 7 m . in diameter, as small, and those above that size as large. Many have endeavored to classify these according to the staining characteristics of their protoplasm and nucleus, but we so often find small lymphocytes taking on the characteristic staining of the large mononuclear, or wice versa, that the classification according to size seems to be the hetter, as the lymphocytes so far have no individual significance, lout must be studied as a class. The large mononuclear is a cell larger than the large lymphocyte, that is, 12 to 20 m . in diameter, with a large, round nucleus, generally excentrically placed, and surmunded by a protoplasm, usually containing a few basophile granulations.

The next variety is the polynuclear. with its horseshoe-shaperd neucleus and a cell borly filled with fine nentrophile granules. which granules form an integral part of the protoplasm (Arnold).

The eosinophile possesses a like momphology to the polynuclear leucocyte, but its protoplasm contains a coarse granule. which is acid in reaction. The mast cells have a round or polynuclear faintly-staining nucleus, which is surrounded by coarse purple granules. In speaking of the histology of the white blond corpuscle, I wish to speak of two other cells, the myelocyte and the eosinophile myelocyte. These cells are found in severe or prolonged lencocytosis. and represent the bone marrow precursors of the polynuclear and ensinophile respectively.

Origin.- Just a word as to origin. The white blood corpuscles are derived from the lymphatic glands, bone marrow, spleen, and possibly from certain tissue centres. The original view that all white corpuscles came from one cell, namely, the large lvmphocyte, and that each particular cell represented different stages of development, has been largely replaced by the view of Erlich that the lymphocytes are derivatives of the 1 ym phatic glands, while the remaining forms, the mononnclear, transitional, polynuclear, eosinophile and mast cell come from the bone marrow; the polynuclear and eosinophile from its precursors in the marrow, the myelocyte and eosinophile myelocyte.

Recent researches by Kanthack and Hardy have attempted to show that the large mononuclear or hyaline cells, as he called them, together with the eosinophile, were not of hemal origin, but had their origin in local tissue cells. This point is worthy of note when one considers the large number of eosinophiles
found in definite focal areas, in certain pathological conditions, without any definite relative increase in the circulating blood.

Degencration.-A point often overlooked in the study of the white blood corpuscles in pathological lencocytosis is degenera- . tion. This is always well markel in severe, often prolonged toxemia, with probable failing resistance. In these cases we often get large percentages of both gramular and non-granular forms, in which either a lack of granules or a disappearance or fusion of these, and a breaking down of the normal histological characteristics of the cells exists. This print should more often be taken into accomut, as it is certainly an evidence of active leucocyte destruction.

For clinical purposes we may class all forms of lencocytosis into two groups, Physiological and Pathological.

Physiological Lincocytosis.- We may divide physiological leucocytosis into:
r. Digestive leucocytosis.
2. Leucocytosis of pregnancy.
3. Leucocytosis of newborn.
4. Lencocytosis due to thermal and mechanical influences.

Pathological Leucocytosis.-
I. Part hemorrhage leucocytosis.
2. Leucocytosis in cachectic and malignant conditions.
3. Drug lencocytosis.
4. Toxic lencocytosis.
5. Inflammatory and infection lencocytosis.
6. Ante-mortem leucocytosis.

Physiological Leucocytosis.-Digestive leucocytosis.--In a nomal individual, after a full meal, the increase of white cells is about 33 per cent. (Reider). This increase begins one hour after the ingestion of food, and the maximum is obtained in from three to four hours, followed by a gradual decline. This condition varies somewhat in different nomal individuals, and in different diet. Proteid diet produces a more decided leucocytosis than a vegetable or fat diet. As to the character of the leucocytosis, we get a moderate lymphocytosis followed by a mixed and finally a granular or polynuclear lencocytosis. Marked mention is generally made of the lymphocytosis of digestion. To my mind, this is not justified. In working on the guinea-pigs in conjunction with Dr. Nasmith, we were able to show from numerous counts, extended over a period of time, that the greatest leucocytosis was the polynuclear; that although we had an absolute lymphocytosis throughout, the relative lymphocytosis was not really marked, and is not the essential factor.

This can probably be best shown by the total and differential counts, taken before and at intervals after feeding. The following is an average count of five pigs:

|  |  | Eosin. | Poly. | 'Trans. and Mono. | Vac. | IL. and S. Lymph- ocytis. | Mast Cells. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Before | 6100 | 6.55 | 23.28 | 2.73 | 3.85 | 63.02 | . 18 |
| 2. One hour | 12780 | 8.70 | 39.65 | 2.25 | 3.15 | 45.45 | . 60 |
| 3. Two ours | 10520 | 5.25 | 47.25 | 1. 35 | 2.90 | 42.80 | . 45 |
| 6. Six hours | 7980 | 1.99 | 38.20 | 1.05 | 3.15 | 57.5 | . 25 |

These counts show definitely that we have an absolute lymphocytosis throughout, and a marked absolute and relative polynuclear leucocytosis established for two hours after cligestion, and gradually declining again to normal.

Digestive Leucocytosis.-The failure of digestive lencocytosis may be noted, and is of more or less value as a differential diagnostic point in certain pathological conditions. Digestive leucocytosis is lessened and prolonged or may be even absent in conditions such as torpidity of the stomach and bowels. In chronic anemic cases it is diminished or absent (Reider and Muller).

In patients confined to bed for some time, the results are rather irregular; at times an increase above normal is olotained, again it may be absent. In carcinoma of the stomach no definite digestive leucocytosis is obtained in 90 per cent. of cases; of the remaining to per cent. about 8 per cent. show a slight increase, and the rest give a marked increase. In very advanced cases it is probably invariably absent (Hartung). However, in such conditions as simple stenosis, ulcer of the stomach, chronic gastric catarrh (Schneyer, Capps and Cabot), as well as carcinoma of other viscera (Hartung), a well marked digestive leucocytosis is the rule.

Leucocytosis of Pregnancy.-In the first three months of pregnancy there is no leucocytosis; in the later months we get an increase of varying degrees, especially constant in young primipara. Reider made the following interesting olservation that digestive leucocytosis is absent in nearly all cases of pregnancy in the ninth month. After parturition there is a gradual return to normal.

Leucocytosis of Newborn.-A well marked and absolute and relative lymphocytosis is to be found in the newborn; the number
varies from 10,000 to 25,000 , and is continuous for some time after birth.

Lencocytosis duc to thermal and mechanical means.- - ifter hot and cold baths, massage, muscular exercise not resulting in fatigne, a transient increase in the number of white blood cells is produced. I merely mention this as a factor to be guarded against in determining the significance of a leucocyte count.

Pathological Lencocytosis (Post-hemorrhagic lencocytosis). -Inmediately after an acute hemorrhage a slight diminution in number is found to be followed in a few minutes by a well-marked polynuclear leucocytosis; this is to be found in the pulnonary hemorrhage of phthisis, hemorrhage from cancer of the uterus, ulcer of stomach, hemorrhage from the bowels. In a few isolated cases no leucocytosis is obtained, but in such cases a differential count shows a lymphocytosis to be always present. In general the lencocytosis following hemorthage is in proportion to the extent and rapidity of the loss of blood (Ewing).

Cachectic Lcucocytosis.-Tn cachectic conditions we often get a more or less marked increase, but in the majority of these cases this can usually be traced to some of the other casual factors of leucocytosis, namely inflammation and hemorrhage.

Drug Lcucocytosis.-The arlministrations of drugs produces yet another point to be noted in the interpretation of lencocytosis; such drugs as quinine and atropine produce a slight diminution in number, whereas antipyrin, antifebrin, pilocarpine and probably morphia, produce a considerable increase. Again, irritants, such as free acids and alkalies, produce moderate lencocytosis, whereas vescicants, as copper sulphate, silver nitrate and mercurials, produce a fairly marked increase. Some have attempted to further increase toxic and infectious lencocytosis by the injections of drugs for increasing the number of the polynuclear white blood cells, expecting thereby to increase the resistance of the patient, but their efforts along such lines have not been very satisfactory.

Tortic Levicocytosis.-Examples of this class of lencocytosis are poisoning by ptomaines and coal gases, together with chloroform and ether narcosis, convulsions, acute delirium, and probably uremia may be put in this class. Metabolic products are, doubtless, the active toxic agency in this class of leucocytosis. In acute gas poisoning we get a marked leucocytosis of the polynuclear type. This increase is not due to peripheral stasis, as we were able to show in the study of this condition in the guineapig. In chronic gas poisoning a fairly well-marked increase
is found, accompanied by eosinophilia and a moderate polynuclear leucocytosis. In narcosis produced by ether and chloroform a well-marked increase lasting for a number of hours is found, especially in the former. In acute delirium and convalsions the increase varies directly with the severity of the attack.

Inflammatory and Infectious Levcocytosis.-This is, perhaps, the most important type, and to which may be attached the greatest clinical significance; however, before an accurate clinical picture can be oltained, one must take into account the many aforementioned factors which may affect the true clinical picture represented by vur white blood counts. This can best be obtained by ofviating those factors where possible by accurate coints taken at proper intervals, as before a meal to avoid digestive leucocytosis. before baths, sponges, or massage, so that your result will not be affected by the thermal and mechanical influences before mentioned.

We always get a leucocytosis varying in degrees with the resistance of the patient, and the intensity of infection in pathological conditions, produced by micro-organisms; so we may say that this class of leucocytosis, which always accompanies infectious and inflammatory conditions, must be regarded as indlicative of an attempt on the part of the human organism to resist the invading principle, whatever its nature may be, through the protective actions of the lencocyte. Our index of the intensity of the infection, and the resistance of the patient. must be, in a general way, the degree of leucocytosis, together with the presence or absence of eosimophiles. I shall refer to the significance of the latter point in speaking of eosinophilia.

Eosinophilia.-As the name suggests, eosinophilia is a name applied to an increase of these cells in the blood above the normal 2 to 4 per cent. usually present. It is present, and of considerable diagnostic importance in such skin diseases as pemphigus, eczema, pellagra, lupus, psoriasis, wide-spread urticaria; in bronchial asthma, infection with various intestinal parasites, and in new growths, especially those involving the bone marrow. Again, Neusser has attempted to classify the various neuroses into those with and those without eosinophilia. Eosinophiles are nearly always increased above normal in the later stages of acute infections, and we have come to recognize their presence throughout an acute affection, or their early reappearance; as of extreme value in determining a favorable prognosis. I have been able to demonstrate their reappearance previous to a true crisis in phemmonia, whereas in a previous psendo crisis
they were not found. Some authors in speaking of eosinophilia, have made the statement that in infections as pneumonia where eosinophiles persist or reappear, they never prove fatal. My experience has been far too limited to express any definite opinion on this point. I, however, believe this to be true in most cases. Eosinophilia although referred to definite conditions is symptomatic of a slow or mild intoxication, or in the case of reappearance after an acute attack, indicates that the patient has overcome the infection. I do not think that one should regard acute infection as positively chemiotactic for the finely granular lencocyte or polynuclear and negatively chemiotactic to the eosinophile. For I believe that we would find them in the early stages of this condition, and, as I said before, we certainly find them towards the end of the conditions, where resistance is offered, as proof of this belief that eosinophilia is symptomatic of slow intoxications. I would like to mention a few observations made by us in the study of carbon monoxide poisoning. The following are representative counts which illustrate my point:

|  |  | Eosin. | Poly | $\begin{aligned} & \text { Trans. } \\ & \text { antl } \\ & \text { Mon. } \end{aligned}$ | Vac. | lands. Lymph. | Mast. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Normal | 6.110 | 6.55 | 23.28 | 2.73 | 3.85 | 63.02 | . 18 |
| I. Acute poisoning, 1 hour | 20.700 | 7.75 | 43.25 | 1.75 | 2.00 | 43.5 | 1.75 |
| 2. 8 hours................ | 19.700 | . 0 | 87.75 | 2.00 | 1.25 | . 9 | . 0 |
| 3. 30 hours | 7.400 | 2.25 | 30.50 | 2.25 | 5.5 | 59.5 | . 0 |
| Chronic poisoning | 10.500 | 15.25 | 49.50 | 3.75 | 1.75 | 27.5 | 1.0 |

In the above condition we have the same active toxic agency throughout, that is, the products involved from carbon monoxide poisoning, which are doubtless metabolic.

In acute poisoning we get, early, a slight rise in the percentage of eosinophiles, followed by an absolute absence, at the maximum of the intoxication, then gradually reappearing again, as they always do in resisted infections.

We also have a marked polynuclear lencocytosis. In the chronic form we have an established eosinophilia with a moderate polynuclear leucocytosis.

Lymphocytosis.-By lymphocytosis we refer to an increase in the large and small lymphocytes in the blood. There are very few conditions in the adult in which we get a marked relative and absolute lymphocytosis. There is usually a slight lymphocytosis towards the end in most infectious diseases. In children,
where these cells form a rather larger percentage, especially in the very young, we often get a marked lymphocytosis in such conditions as rachitis, or associated with a polynuclear lencocytosis in infectious diseases.

Resistance.-Operation not often reveals a localized abscess with local peritonitis, where the clinical symptoms are sometimes masked, and we get a low leucocyte count. This condition is associated with a failing resistance, and in these cases a differential count is often valuable; at least, it determines whether we have a true leucopenia or not.

A normal leucocyte count associated with a relative polynuclear leucocytosis indicates a severe infection with a failing resistance. In failing resistance the blood shows the following: A comparatively low leucocyte count, absence of eosinophilia, a relative polynuclear leucocytosis, probably myelocytes, the bone marrow precursions of the polynuclear lencocyte, and degeneration of the white blood cells. This condition was clearly shown in a case recently in the Toronto General Hospital. A white and a differential count was taken on a patient with acute lobar pnet1monia. Shortly before death the whole count was i5,000. The differential count showed an absence of eosinophilia, a relative polynuclear leucocytosis, presence of myelocytes, and marked degeneration, which was indicated by the fusion of the granules in the polynuclear, with fragmentation of the non-granular leucocytes. All cases of failing resistance do not show all the above factors, but one or more are usually present, making it possible for a diagnosis.

I have not attempted in this paper to describe the character of the leucocytosis in the different diseases, but have tried to bring out the factors which affect our count, and to point out the relationship of the eosinophile with the degree of infection and its significance in prognosis. Howeter, I would like to mention a few observations made while in the clinical laboratory of the hospital, in studying the blood in typhoid. In typhoid we get a true leucopenia. Of some twenty cases where a white blood count was made and a positive widal reaction obtained, only one case showed a count over 8,000 ; 20 per cent. were below 4,000; 33 per cent. below 5,000; 60 per cent. below 6,000; 80 per cent. below 7,000 ; and 95 per cent below 8,000 . The one patient giving a count above 8,000 was one sent into the hospital as a case of puerperal sepsis. This low count is obtained quite early in the disease before the widal reaction in the greater majority of cases. This low leucocyte count, combined with a history of continued high temperature, with a pulse below

90 or 100 , is a trio in the diagnosis of typhoid fever, which the hospital records show to be fairly constant.

The writer has made free reference to the following books and papers:

Ewing, Clinical Pathology of the Blood.
Ehrlich and Lazarus, Histology of the Blood.
Da Costa, Clin'cal Hematology.
Sabli, Diagnostic Methods.
Nasmith and Graham, Journal Physiology, Vol. xxxv., 1906.
Kanthack and Hardy, Journal Physiology, Vol. xvii.

## PRURITUS ANI.

By W. C. Abbott, M.D., Chicago, ill.

Some years ago I had under my care a desperate case of pruritus ani. The patient was a physician, who had by reason of intestinal disease been driven to the habitual use of whiskey and morphine. A surgeon had opened the abdomen and found the entire colon contracted, the central cavity being scarcely half an inch in diameter, while into this opened a double row of cellules, in each of which was a hard fecal marble, larger in diameter than the opening into the bowel. By no method could the bowel be kept free from these masses, which were removed at the operation mechanically, but quickly reproduced. The most persistent flushing through a fistula opening into the cecum failed to prevent the re-formation of the scybala.

The patient suffered most frantically from anal pruritus, for which we searched our books and employed without success every remedy that was recommended. Even the anplication of nitric acid failed. The man went out of our hands and a year later committed suicide in a western city. The cause was never declared, and he had in his habits and ailments other sufficient reasons for the awful act. But once a patient came into my office and, laying a revolver on my desk, remarked that if I did not relieve his anal pruritus he would blow his brains out then and there. In that case immediate temporary relief followed an application of compound tincture of benzoin. In later cases similar relief has followed the application of carbenzol, which has the further advantage of not burning like the benzoin, and permitting daily, or rather nightly, use.

But a second case coming to me was that of a man who had
also an enormous fecal impaction, and its discovery was preceded by several months' suffering from pruritus of the most obstinate variety. The itching was felt up in the rectum beyond the internal sphincter.

It occurred to me that the cause of the pruritus was not any local condition of the anal tissues, nor that famous refuge of ignorance, a " neurosis," but was perhaps an irritating discharge from the retained and necessarily decomposing fecal mass. Instead of applying local remedies I administered a few granules of laxatives each evening, and a moderate dose of effervescent magnesium sulphate in the morning. The pruritus at once sul)sided. Since then the patient has been instructed to look upon the itching as an evidence of retention of feces, insufficiency of the daily evacuations.

Like so many cases in which pain is present, the suffering of pruritus is one of nature's methods of calling attention to a difficulty that needs attention. Instead of seeking to smother the evidences of something wrong, we may with advantage investigate the causes of the phenomenon.

Whether many cases of anal pruritus can thus be explained I do not know. Possibly many; it is a matter for observation by the profession at large. But if these cases are confirmed by others we may find in pruritus a valuable aid in diagnosing fecal retention before more serious symptoms arise.

## MEDICAL THOUGHTS, FACTS, FADS AND FALLACIES.

By James S. Sprague, M.D., Stirling, Ont.

The most irreconcilable enemies that one, that is, you and I have, are too frequently those of our own household, and as proof of this statement I have before me two medical journals and one almanac. Both journals have their homes in the United States; neither one is purely ethical, for the word ethical is found to be applicable as an adjective to two, only two United States medical journals, one of which is published in California and the other in Pennsylvania. In neither of these journals can you find any notice or endorsement or reference to a quack or proprietary compound. Think of it, brother,--only two ethical, of the three hundred medical journals in the United

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States! Let a popular Luited States journal, that in Canada has a large circulation, is evidently (?) trying zealously for classification and for being named among or with the minority; but very recently it named the letters of the alphabet, and to each letter there were affixed in regular order, and respectively, the names of many diseases, from A (abscess, asthma, etc.) to Z (Zoster, Herpes), and patent medicines duly advertised in its advertising sheets were named respectively as the cures for the said many diseases, duly recorded.

The two medical jonnals, as first named, not long since had the photogravures, respectively, of a prominent doctor of T- (with whom in 1868 I lived), and the other journal had a reproduction of the engravings of five St. Louis M.D.'s who, contrary to long-established rulings in medicine, had allowed, it would appear, their many specialties, gifts and qualifications and family listories to appear in connection with their photographs reproduced in the most prominent St. Louis newspaper. To doctors, everywhere located, such newspaper advertising is unprofessional, and certainly not ethical, and the journal referred to, in its last issue, contains many criticisms and condemmations of the publication of professional qualifications in the lay press.

The editor of the other journal, in which are to be found the T- M.D.'s " photo," degrees, qualifications, etc., runs as good an almanac, medical publication or monthly, so representative of its class that it can be said to have no equal. Its editor is stated to have said that in mo sense is he willing to be considered a benefactor of or to our profession. Such was needless for statement, for this journal, found freguently on news-stands, and often found in mon-professional hands, advertises and recommends most of its own goods--to the innocents, and those deluded mortals actually pay for the almanac. For them is the pity and censure of those who want to maintain personal and professional respectability, and as regards its producing my photo, my preference would be for the $P — G-$, for the last-named tells its position, and the so-called medical journal, rather almanac, is playing good Lord-good devil with the elect, and the virtuons saints and simers, even to the disgrace of every honorable and every ethical consideration in medicine.

This T-M.D. has, in my opinion, disgraced himself, and any brother who in a weak moment so forgets himself as to copy his example is univorthy of the friendship of honest M.D.'s.

As regards the almanac. it is of the yellow cover, and is hon-
est in having Almanac on its cover; it is true to its name, and in it are the names of three prominent T-- doctors, who praise one of the eight preparations for whose sales the almanac was issued, and is left at every door-even at the door of the doctor, who, with much humiliation, yes, agony and even disgrace, will thank God that he is not as others; but as for himself he will not dishonor himself,-and certainly not his profes-sion,-for there is in him a firm belief that if he does not disgrace medicine, medicine will never disgrace him. Some poet, whose name is unknown, has said:
"Fools' names as well as faces are often seen in dity places."
Brothers, we have plenty of opponents, plenty, too, of men whose names are recorded as fellow Licentiates, who for a mess of pottage have sold, and will sell, their birthright in medicine, and so indifferent are they that they do not see the work-apparent work-and encouragement of those whose efforts are to destroy our standing and usefulness, in order that even greater freedom for proprietary medicine publications be introduced and encouraged. The following is the excerpt:
"That the Ontario Medical Conncil and other similar organizations are bodies of irresponsible men, was the opinion expressed by members of the Canadian Press Association at their meeting in Toronto last week. A resolution was carried authorizing the Executive to protest to the Provincial authorities against the Medical Council and all other like organizations which seek to become close corporations. The subject was discussed from all sides."

Fortunately, our Registrar, the Hon. Dr. Pyne, assisted by our President, Dr. Moorhouse, and Vice-President, Dr. Spankie, will act, no doubt, as defenders of our rights and honorable position, and in so doing they will have the support of our most honorable Medical Council, and others, as Licentiates-honest men, who not only medicine but themselves have honored, but now, and will most gloriously honor. No one man can well and faithfully serve two masters, and among us too often is it apparent that such work is being tried, and as a rule Medicine suffers, and are not my few introductory instances or illustrations sufficient proofs of such delusive attempts? If not, brother, let us read your objections, to be published by this journal, and as a consolation:

[^0]As proof of statements made I enclose a leaf or page from the Almanac, and have marked it Exhibit A. As to the emulsion recommended, it can be truthfully stated that any duly qualified druggist can make a preparation equally as good, if not better, and by so doing he would preserve the honorable relationship once enjoyed by druggist and doctor, now so ruthlessly too often severed by the patent medicine company, and making an honorable pharmacist an ordinary salesman, who sorely laments the ignorance of doctors in pharmacy and even in therapentics. I also enclose extract from the medical journal referred to above to prove that medical ethics in Missouri has had defamers. Yet we must consider that Osteopathy had its orgin in the same State, and Iowa is the home of Chiropractics, and the "hoodoo doctor" is at home down South.
"Hinc lacryme rerum, et mentem mortalia tangunt."Virgil.

Too many in medicine there are who are termed "easy marks"-and too many who would recommend, even to-day, "spermaceti as the sovereignest balin for an inward bruise," or $\mathrm{G}-\mathrm{K}$ - for achylia gastrica or angina pectoris: and, too, there are to be found those

> "that would creep and be civil, And hold the stirrup for the devil; If on a joumey to his mind, Would help him mount, and ride behind."

And even praise, and even give, a quack dope.
Yet it is well not to worry. Stagnant pools, howerer offensive, are said to purify themselves in time.

## REFLECTIONS.

By J. S. Sprague, M.D., Stirling, Ont.

It is well for every one to aroid worry; he will live longer, for, " There are so many gods, so many creeds, so many ways that wind and wind," and although we have control over many diseases, many are placed under expectant treatment, and through nature and the good-will of Divine Providence many so-called visitations of the said Providence will bring back to health nine-tenths of those who have typhoid fever, assisted or not assisted by other than most ordinary care, and with or without antiseptic observances-fresh air and cleanliness, of course, to be well supplied. Doctors, since the introduction and univer-
sal use of the thermometer apparently consider it unnecessary to think, as did the old-time doctor, in order to properly study symptoms. Therefore it is fashionable not to think; yet if you must think, certainly it really is unwise to tell one what you think, for if your hearer thinks or does not think as you do, certainly you are losing much time and breath, and his views will be such as he always held, and your views will be so imperfectly interpreted that you never will be thanked or considered any wiser. Even if you are, or considered to be, " A gigantic genius, fit to grapple with whole libraries," it is always best to listen unless you are a lecturer.

Cato, who lived 95-46 B.C., tells us " I think the first virtue is to restrain the tongue: he approaches nearest to the gods who knows how to be silent, even though he is in the right."

In fact, it is well not to have any decided views. They may change to-morrow, and as a rule they occasion not only distress to you, and too frequently to your friends; many who have had many or few fixed ideas have too often been cruci-fixed. In fact, it is far better to take everything and anything as it comes than to act, or to appear to act, the reformer; such will save a lot of worry for yourself and friends. It also is not a bad idea to be just as you are, for the other fellow is not giving such work any study, and certainly he has as many followers and is considered equally as wise as you, even wiser. Do not attempt to have any personage as your ideal or model; be clifferent in many ways, and as little as possible in any one way; it will tire you. It is contrary to nearly all teachings to do wrong in preference to doing right, yet the fellow who is doing such work is the one who sits among the elders on the front seat -near the horns of the altar; and while comparing notes, quietly recall the following, " and thank God you are not as other men":

> "Full many rogues have honest faces, And lightly trip their Sunday paces, But yet these pious broadcloth types Full oft should wear a garb of stripes; And, heavy fettered, trip as well The lock-step to a prison cell."

Brother, " Gentler pirates never scuttled ships."
Very many have tried to make their mark, and the roadside to the Temple of Fame is well lined with their graves; and if you are lucky in getting a mark it will be known to but very few. and in a very short time the mark will not show,-certainly you will expend a lot of useless labor. It will be as well to hug old habits and resolutions, it is economical ; besides it is worrying
to halter-break new ideas; let some other fellow adopt changes and you will sleep better.

If it is necessary to have a consultant, just watch his every movement, his every word, in fact, keep your eyes and ears open, and regard him with the same caution as you woukd a recognized thief whom by accident you allowed to see your open safe and its combinations.

It is advisable to know as little as possible, and if so unfortunate as to have read very much you will in some unguarded moment say too much and you will be regarded as a bookworm and the possessor of no original ideas; for people want originality. What say you to the adoption of these rules, even now? It is of no use to bother, anyway, and, as stated, no use to study, for if you study you will have spells when you think you must " let your light be seen," and nine times out of ten what you gave for publication will be the result of very mature study and consideration, and the chances are many that if the truth of its reception could be received it would be found that it would appear as a tale that has been toll to many; to others it would appear as not worth considering; to few it would be a treasure, and to the many indifferents in medicine a mine from which many proofs, even denials, endorsements and lisconragements can be selected and disarranged to serve non-ethical interests. Thus, if we must obey the silent monitor, to write, let him "write down the vision and make it plain upon tables, that every man may read it floently," and if a patent medicine is to be lauded, it will be well, certainly, that you name something to that effect in the title of your article. It does make every honest man among us kick his shins and encourages all the furor of our animal nature to do the same more completely to the sneak "ad." writer, or the paid so-called professor. who writes that slop stuff recommending so-and-so (Brown), so-and-so (Jones), etc., and other delusive, purely quack compounds did so-and-so. Our journals medical are filled with such trash. Would our church walls or halls or cloak rooms allow anction sale notices or other similar notices to remain? Would our hymn-books look well with rag-time music and songs. We want many who are capable to tell us what constitutes medical journalism-and by such I mean pure medical journalism-and in previous articles in this Journal I have introduced similar views, and it is pleasing to notice in several of our journals similar interests are advanced by many who, like Dr. John Hunter, of Toronto, are bold enough to come ont from the "don't worry" class and tell us our weaknesses and the strength of our enemies.

# CARCINOMA of the stomach in a patient aged TWENTY-EIGHT. 

By George S. Strathy, M.D., C.M.,<br>House Physician, Toronto General Hospital.

Case I. Mrs. E. L. was admitted to Toronto General Hospital, February 2oth, under the care of Dr. Allen Baines, complaining of vomiting and abdominal pain after eating.;

Her father died, aged 75, of " tumor of the bowels." Mother died, aged 54, of cancer of the stomach. A half-sister of the mother has been operated upon for cancer of the breast. There are two brothers and one sister, all of whom are alive and well.

On January 2, 1907, was admitted to hospital suffering from indigestion and a slight fever of two weeks' duration. Her complaint was thought to be gastritis. No tumor was found, but there was a point of tenderness in the region of the stomach at the left costal border. Under light diet she improved, and on January 17 th left the hospital, continuing in fairly good health till February 9th, when marked symptons of indigestion reappeared. She had difficulty in swallowing and occasionally vomited. She never at any time vomited blood. Appetite was good, but the ingestion of food was always followed by pain in the region of the stomach. There was some belching of gas, and she had lost several pounds in weight. This was her condition on February 2oth, the date of readmission.

Examination.-General appearance healthy, some loss of sul)cutaneous fat, no cachexia, tongue slightly coated, breath has ethereal odor (acetone), and the bowels are slightly constipated. In the epigastrium adjacent to the left costal border a tumor can be seen and palpated; it is tender and moves slightly, if any, with respiration. The mass feels hard, and on its anterior surface a small nodule can be made out. Percussion reveals dulness as high as the seventh rib in the left mammary line and down to within an inch and a half of the level of the umbilicus. A small nodule, seemingly in the omentum, was felt at the level of the left anterior superior spine and two inches internal to it.

Analysis of Gastric Contents after a Test Meal.-Total acidity, 7. Free HCl , o. Combined HCl , 5. Lactic acid, a trace. Microscopically, a few Onnler Boas bacilli and many bacteria; no sarcinæ ventriculi; yeast fungi and starch granules.

Analysis of Urine.-Sp. Gr., 1,024. Reaction, acid. Albu-
men, none. Sugar, none. Acetone, present. Diacetic acid, absent.

Examination of Blood.-Whites, 6,000. Reds, 4,460,000. Hemaglobin, 80 per cent.

Diagnosis.-Carcinoma of the stomach.
March 5 th. Exploratory laparotomy performed by Dr. Geo. Peters. The tissues of the abdominal wall were markedly hyperemic, and on opening the abdomen the stomach was found adherent to the abdominal wall and surrounding viscera. It was not considered advisable to do a gastrostomy, so the wound was closed without anything further being done.

March 9th. Vomits her fluid diet frequently. Nutrient enemata cause a good deal of colicky pain. Pain more constant, requiring morphia. Loss in weight more marked.

March 25 th. Has been somewhat constipated. Pain almost constant. Vomits everything taken by month. Distension of lower part of abdomen. Tumor less prominent. Cachexia and loss of flesh marked. Fecal vomiting began to-day. - March 28th. Died at 3 a.m.

Autopsy Report.-Markedly emaciated; very small amount of subcutaneous fat. Abdomen distended with clear, transparent amber fluid. Adhesions between anterior abdominal wall above umbilicus and the loops of bowel and omentum. Peritoneum generally markedly thickened; over loops of intestine are definite small plaque-like areas of thickening. Intestinal loops are all adherent and lie in the upper part of the abdominal cavity, leaving large space between lowest coils of intestine and the bladder. Pelvic contents are separated from general abdominal cavity by a flat diaphragmatic thickening. Between loops of intestine are old, rather dense adhesions, fibrous in character.

Stomach.-Cardiac orifice somewhat stenosed. Wall is thickened with a nodular surface, showing a posterior wall area 6 cm . in diameter, flattened and pigmented with scarred margins, whole surface fibrous; evidently an healed gastric ulcer. The gastric wall shows a fairly even thickening; it is adherent to tissues behind. Pylorus stenosed. Only part of stomach free from adhesions is the anterior and upper portion around the cardiac orifice.

Large Intestine.-Ascending colon markedly dilated and filled with semi-solid fecal masses. Transverse colon dilated to a point just opposite middle line of greater curvature, where it is definitely stenosed by invasion of outer coat from splenic flexure to sigmoid wall of colon. Mucosa thin and somewhat congested.

Duodemm.-Dilated; mucosa thin and deeply bile stained. Two cm . beyoul pyloric origin the mucosa is infiltrated with new growth.

Definite areas of fibrous tissue are present in the mesentery. No enlargement of mesenteric glands nor glands at hilum of liver. Liver and kidneys show fatty infiltration. Pancreas cannot be dissected out on account of cancerous tissue mass lying between it and sear on posterior wall of stomach, but it seems to be somewhat atrophied. Both oraries and tubes are involved in the fibrous tissue alhesions. Jumor felt near left anterior superior spine was a small cyst, probably parovarian in character. No metastases found in any organs.

Microscopical Diagnosis.--Scirrhus carcinoma.

## COMBINED SCLEROSIS OF THE TYPE OF FRIEDRICH'S ATAXIA

My Georci: S. S'jRathy, M.D, © M., 

$\qquad$
Case II. E. G., age 25 , married, referred by Dr. Donald Mackenzie, of Haliburton. Aclmitted under the care of Dr. Graham Chambers. Complaint, paralysis.

Family History.-Surname of both father and mother was Watt, although there is no consanguinity as far as known. Comes of a very healthy family; father, mother, four brothers and two sisters all alive and healthy. No neuropathic predisposition can be made out. Hushand is alive and healthy.

Personal History.-Born in Renfrew County 24 years ago; has lived all her life in the country; has worked hard, but life has been healthy. She was married six years ago and has only been pregnant once. Mumps and pertussis'were only illnesses previous to present attack.

Prosent Illucss.--About four years ago, two weeks after her confinement, she contracted measles, and was quite ill for three weeks. When she got up she noticed weakness in her legs, and difficulty in walking, particularly going up and down stairs. Shortly after she found difficulty in standing while washing her face, being comnelled to lean against the wall to prevent falling. The clifficulty in walking gradually increased, and about a year ago she noticed that her arms were affected. Patient has never
hat any distumbance of sensation, nor any tromble with batrle or rectu1n.

Present Condilion.-...l'atient is a healthy-foking woman; amarent age, twenty-five years: color is gool; notrition fair ; no apparent wasting; intelligence, areage: mo sign of emotionality; memory maffected. She is umable to stand without assistance. The gait is ataxic, patient can only walk when assisted. In walking the movements of the legs are irregular. the feet being shaffled forvard and brought to the form with a slap, sometimes crossed, and at other times spread widely apart. Speech is somewhat slow and monotomons. This may be party due to loss of teeth. Tongue is tremulons.

Muscular System.-Muscular strength of legs is slightly impaired: arms ahmost mormal. Slight hypotonns of arm and thigh muscles. Muscles of calf are somewhat rigid, and dorsal flexion of ankle is slightly limited. The foot is hollow pes carus) : (lorsal flexion of big toe is continuonsly present: wellmarked Babinski; patellar jerks are absent. Less are ataxic, arms very slightly so. ferinetal refleves of arms absent. . Ubdominal and pharyngeal reflexes present. No tremor except that of tongue. Sphincters of bladder and rectum are normal. There is a slight sooliosis in the mid-romsal region.

Sousory Systom.-Sensations of pain, tonch, bocality and temperature are nomal. There are no subjective sensory symptoms.

The Eycs.-Patient shows slight nystagmus in following an object moved from side to side (ataxia nystammes). \ccommodation for distance and reflex to light are normal. Dises are normal and sight is good.

The other special senses and the cramal nerves are mormal. There are no trophic disturbances, and nothing; abnormal is found in the alimentary, circulatory, respiratory, tegumentary and genito-urinary systems.

During her stay in the hospital an effort was made to teach the patient to walk. Cnder tuition she improved, and when she left the hospital ten days later she was able to stand unassisted and her gait had improved. She can do very fine crochet work.

The existence of inco-ordination in both upper and lower extremities, and of the ataxic nystagmus, together with the presence of Babinski's sign, rigid nuscles of the calf and hollow foot, and with the absence of Argyll Roberston pupil and of all disturbances of sensation and of sphincters, would seem to justify a diagnosis of a combined sclerosis of the type of Friedrich's ataxia.

## Clinical Department.

Vincent's Angina: With Report of Cases. By J. Douglas Blackwood, Jr., M.D., of Philadelphia.

In 1896 , Vincent described a spirillum and a fusiform bacillus occurring together in certain cases of angina of an ulcerative type. This was followed by reports of cases by Bernheim, Mayer, Royster, Crandall, A. Gross, Toebben and many others.

Lesion.-The lesion roduced by the spirillum and fusiform bacillus is ulcerative in type, in contradistinction to that produced by the diphtheria bacillus. When the necrosis is superficial, the necrosed epithelium, on the surface, often hides the depth of the lesion, thus resembling diphtheria very closely. If the layer is removed a distinct tilceration will be seen. While, as a rule, the deposit is easily removed, as reported by Mayer, at times, according to Auché, only the superficial layer is friable, or as mentioned by H. W. Bruce, the whole deposit may be hard to detach.

This deposit, however, is not due to the formation of a false membrane on the surface of the diseased area, but to necrosis of the superficial layers of that area with the formation of an ulcer. The ulcer varies in depth and extent, having perpendicular edges which may or may not be injected, and presents many granulations which bleed easily.
H. W. Bruce divides the process into two types, as follows:

Mild Diphtheroid Type.-This is generally unilateral, superficial, limited in extent, and gives no swelling nor injection of the fauces. There is slight glandular enlargement on the side of the lesion, and a slight elevation of temperature, lasting from 24 to 48 hours. There is no immediate change in the throat condition with the drop of temperature, but the slough finally drops off and an ulcer is revealed which quickly heals.

Ulceromembranous Type.-The condition spreads rapidly over a greater area and is much deeper. There is a slow separation of the slough in to to 14 days, during which time one-half of the tonsil or uvula may be destroyed, followed by granulations which bleed readily and heal rapidly. There may or may not be injection about the edges of the ulcer, according to the severity of the case. There may or may not be fever, and albuminuria is rarely present. Glandular enlargement occurs, but
never goes on to suppuration as it does in the adenitis following or occurring with the streptococcic angina of scarlatina. This type may cause septic pnemmonia and death, as in a case reported by H. W. Bruce. One attack does not confer immunity from subsequent attacks, as stated by Bruce and shown by Case I. of this report.

Mayer states that endocarditis may also follow this disease.
B. fusiformis averages from six to twelve microns in length, being thick in the central portion and thinning ont at both ends. There are Hagella attached, one to each end and two to the sides, giving the bacillus an eel-like motion in a hanging-drop preparation, which, together with its reaction with Lecishman's stain, has led A. E. Wright to think that this micro-organism is not of bacillary origin but has affinities with a trypanosome. It is stained by most of the common aniline dyes and often shows vacuoles and other forms of degeneration, but no spores are demonstrable. It does not grow readily upon ordinary culture media, either under aerobic or anaerobic conditions, except, according to $G$. Angelici, when cocci are added. The same observer also states that acetic acid favorably influences and sugars inhibit its growth. These bacilli often occur in pairs and frequently in groups. Angelici also states that this bacillus is the same as the $B$. hostilis of Seits and can be found in morbid processes thronghout the alimentary canal.

Spirillum.-This is a faintly staining, wavy, long, thin, delicate micro-organism which stains with ordinary aniline dyes, but does not stain by Gram's method. It is considered by many to be a normal inhabitant of the buccal cavity, only becoming pathogenic in the presence of other micro-organisms.

These micro-organisms may be found in pure culture in the diseased areas, especially in those of deep ulceration. When the ulceration is superficial, there is often a polymicrobic infection, the spirilla and fusiform bacilli being associated with streptococci and staphylococci. While De Stoecklin clains that the presence of these micro-organisms preclucles the existence of $B$. diphtheriac, Vincent, Toebben and Auche have reported cases in which the three organisms were present, and R. C. Rosenberger has reported the organisms present in a case of noma. Both of the organisms have been found by Grenet in cases that pive no evidence of stomatitis.

The object of this paper is to report nine cases of this infection in children ranging from two to ten years, which occurred in the Children's Department of the Philadelphia Hospital during the stimmer of igo4. One of the positive smears was made from
the throat of an apparently healthy child who showed no signs of ulceration nor disease of the throat, tonsils, tongue, cheeks, gums, nor lijs. In all, smears were examined from twenty-one children, and of these eight showed the presence of the fusiform bacillus in association with Vincent's spirillum, and one showed the presence of the fusiform bacillus alone. In one case pnetumococci were found in the smear from the throat, while the spirillum and fusiform bacillus were found in that from the gums. The other twelve smears were made from the throats of children in the same department, but showed no signs of either of the micro-organisms mentionerl.

For brevity we will dispense with detailed acoonnts of primary histories and physical examinations of the patients, only giving their initials and the symptoms which they exhibited during this infection.

Casi: I. J. Wi., female. During the course of the infection the patient had broncho-pneumonia, so it is impossible to state to what extent her irregular temperature (which rose as high as 103.2 degrees $F$.) was due to this infection. During the course of the pnetmonia the Patient had two attacks of Vincent's angina, the seat of the first attack being upon the upper lip and lasting three days, being (lescribed in the history as an exudate. The seat of the second attack, which was a true angina, was upon the tonsils and pharyngeal pillars, which were covered with yellowish ulcerated patches. The tonsils were swollen and injected. The patches disappeared first from the tonsils and then from the pillars. The tonsils then became reduced in size and the redness subsided. This attack lasted twenty-two days and there was no glandular enlargement.

Case II. J. D., male. This patient had a slight elevation of temperature. There were a few patches of ulceration on the lips and bleeding from the gums. There was also a white superficial exudate on the tonsils. Examination of the smears from the tonsils showed the presence of pnetmococci but no spirilla or fusiform bacilli, while that of smears from the lips showed these micro-organisms to be present. No glandular enlargement.

CASE III. H. A., male. In this case there was's a sudden rise of temperature in the evening to 103 degrees $F$., followed the next morning by a drop to IOI. 2 degrees $F$., rising in the afternoon to 103.2 degrees $F$. , and dropping the next morning to 99.4 degrees $F$., and then rising to IOI degrees $F$., followed by a gradual fall to normal. Smears from the throat showed the presence of Vincent's spirilla and B. fusiformis. The post-
cervial glands were enlarged upon ahmission and showed no increase in size during the attack, which lasted fomr days.

Case IV. \. W.. Female. There was a sudden rise of temperature to boz. degreen F.., followed by lysis lating one week. During the first four days of the attack the child was slighty comatose, being aroused with diffonlty, but during the remainder oi the attack the child became much brighter. The sites of the lesions were the side of the tongue, which presented a small patch, and the roof of the mouth, upon which were two smatler ones. During the first four days the tongue was heavily coated. It the end of fon days the patehes had entirely disappeared from the tongue and there remaned only a slight redkening of the roof of the month. There was no increase of a previonsly existing glandular enlargement daring the attack. bexamination of smears from the tongue and roof of the momth showed the presence of Vincent's spirilla and $B$. fusiformis.

Case V. M. A., female Examination of smears brom throat showed presence of $V$ incent:s spiritla and $B$. fusiformis. There was no rise of temperature.

Case VI. T. E., male. Examination of smears was positive for spirilla of Vincent and $B$. fusiformis. No glandular enlargement. No fever.

Case VII. P. B.. male. Irregular temperature, first rising to 100.4 degrees $F$., then falling to g8. + degrees $F$., again rising to 10 d degrees $F$., followed by drop to normal by lysis. No glandular enlargement. Smears from throat were positive for Vincent's spirilla and $B$. fusiformis. Attack lasted four days.

Case VIII. J. F., male. Fealthy child. Smears from throat showed presence of $B$. fusiformis but no spirilla.

Case IX. P. H., male. Healthy chilri. Smears from throat showed presence of both Vincent's spirilla and $B$. fusiformis. •

## Summary.

Of these nine cases, seven were of the superficial or mild diphtheroid type of Brace, and two were in healthy children, smears from whose throats showed the presence of $B$. fusiformis and in one instance the association with the spirillum.

The diphtheroid type of cases began with sudden rises of temperature, reaching, as in Case III., an elevation of IO3 degrees $F$. The temperature then pursued an irregular course, varying from 2 to 3 degrees $F$. in its course, or gradually dropping to normal, as in Case IV. In all the cases showing fever the temperature fell by lysis. The pulse and respiration rate followed the temperature curve. As a rule, the patient did not
show any marked constitutional effects except in Case IV., this patient being comatose for the first four davs of the attack.

The seat of the attack was on the lips, tongue, gums, cheeks, tonsils, or pharymx, and in none was there marked destruction of tissule. In none of the cases was there glandular enlargement except that which existed prior to the disease. In all the cases the fusiform bacilli were in greater numbers than the spirilla, thus fulfilling the claims of Bruce. The attack lasted anywhere from four days, as in Case III., to twenty-two days, as in Case I.. the ulcerative condition still persisting after the temperature had become normal.

My thanks are due to Dr. R. C. Rosenberger, director of the clinical laboratory of the Philadelphio Hospital, for assistance on these cases and for gudance in my references.

A pulsating tumor of the os ilium (endothelioma, satroma) may easily be mistaken for a gluteal aneurysm.

If a thrombosing pile is opened before the clotting is complete, it is very apt to fill up again, and may even become edematous and inflamed.

The appearance of pus in the breast of a woman who is not, or has mot recently been, nursing, is suspicions of some unusual form of infection, e.g., tuberculosis.

Bleeding from capillary hemorrhoids high in the rectum usually yields to injections of cold water, or a cold solution of tannic acid. In these cases, howerer, it is important to exclude the presence of an ulcer further up.

When performing an office operation, too great care cannot be taken to sufficiently roll back or remove such articles of clothing as might become soiled. The patient may not say much if he is obliged to draw up a garment wet with blood-but he'll probably think a few things.

Repeated attacks of " indigestion," not obviously due to some other condition, should awaken the suspicion of gall-stones. Most of the patients operated upon for cholelithiasis give a history of having been treated for a long time for "dyspepsia." and in many of these cases the correct diagnosis might earlier have been established.-American Journal of Surgery.

## Physician's Library.

International Clinics. Vol. I. Seventeenth Series. 1907. Philadelphia and London: J. B. Lippincott Company.
An especially valuable volume is this, as there is recorded the progress of medicine and surgery in 1906, 104 pages of the text. This places every reader in possession of the salient advances during the past year. Such well-known writers as Sennr, Barker, Morton, De Schwemitz, Dennis and (allant have contributed exceptionally goorl articles to this volume.

Insanity-Cured by a Nac Tratmont. Details of Twenty-one Cases. By C. IV. Seckling, M.D. (Lomd.), Bimmingham.
Price, 2 shillings. Birmingham: Cornish Bros.. Ltd.
This brochure first gives reasons why dropped kidney causes insanity, and then goes on to give short, concise historics of the cases. Of course the cause of the insanity in these cases is toxic; nephropexy is now quite a common operation. Operations on insane patients is not yet well established in Canada.

Paraffin in Surgery. A critical and clinical study by Wm. H. Luckett, M.D., Attending Surgeon,Harlem Hospital, Surgeon to the Mt. Sinai Hospital Dispensary of New York, and Frank I. Horne, M.D., formerly Assistant Surgeon, Mt. Sinai Hospital Dispensary. 12 mo ; 38 illustrations; ${ }_{1} 18$ pages. Cloth, $\$ 2.00$. New Lork: Surgery Publishing Co., 92 William Street.
This book covers a special field in surgery of absorbing interest both to the surgeon and general practitioner. The research and original investigations made by these authors in the use of Paraffin have exploded many fallacies previously maintained. It presents the Chemistry of Paraffin, the Early Disposition of Paraffin in the Tissues, Physical State of the Paraffin Bearing on its Disposition, the Ultmate Disposition of Paraffin, Technic and Armamentarium. It thoroughly covers the use of paraffin in cosmetic work, such as saddle nose deformity, de-
pressed sats, hemiatrophia facialis, with a large nomber of photographs showing cases before and after operation, with illustrations of micro-photographe of the disposition of the paraffin in the tissues. It also presents other conditions of a functional chamater, where parafinn can be used with service, such as incontinency of urine, umbilical hernia, umbilical and rentral hernia, epigastric hernia, inguinal hernia, etc. The sulbject is presenter in a scientific yet comprehonsve manner.

Full details are given as the method of preparing the paraffin, as well as the method and manner in which it should be injected. This book presents a wide field for the use of paraffin, and a copy should be in every physician's library. It is printed upon heave coated book paper and attractively bound in the best quality of heary red cloth, stamped in gold.

Tics and Their Tratment. By Henre Meige and li. lienomel, with a Preface by Professor Brissaud. 'Translated and edited, with a Critical Appendix, by S. A. K. Wilson, M.A., M.B., B.Sc., Resident Medical Officer. National Hospital for the Paralysed and Epileptic, Queen Square, London, England. London: Sydney Appleton.
A book on Tics is timely, interesting and important, as hitherto not very much attention has been given to these reputedly hammless " movennents of the nerves." The volume, which is the result of many years of olservation on the part of Messrs. Meige and Feindel is one of 350 pages, with a vocabu-, lary of some thirty pages. Although for many years "tic" was practically eliminated from text-hooks of cliseases, within recent years, owing to a closer study of reflex acts, there has taken place a grouping which has resulted in assigning tics, spasms and convulsions to their proper place. The book will prove a useful one on the sulject.

The Doctor's Recreation Serics. Volume VI. Passages from the Diary of a Late Physician. Being a New Edition of Selected Passages. By Samuel Warren, B.C.L., F.R.S. The Series edited by Charles Wells Moulton. Akron, Ohio, U.S.A.: The Saalfield Publishing Co.
This is one of the best of all the volumes of this very entertaining and interesting series. These first appeared in Blackwood's Magazine several years ago. They were collected and
printel in .. me whme complete in 1838 . The first, "Farly Struggles," alone, will well repay any man in the medical profession, in that there are sufficient heartrending trials to sare most young men from ever attempting to enter the medical protession. The style of the writer throughont is direct, oceasionally powerful, at all times trme and maffected. Some art icles treat on sul)jects of most painful experiences in the practice of medicine. yet all are encountering these, even at the present day. It is a lond of real life as seen by an observant medical man.

An Epitomi of Discases of the Nose and Throat. By J. B. Ferguson, M.!., of the New York Post-Graduate Medical school. $12 m 0,2+3$ pages, with $51+$ engravings. Cloth, \$ı.0o net. (Leats Series of Medical Epitomes. Edited by Victor (. Pbobrsien, M.D., New York.) 1go7. Mhiladelphia and New Ionk: Lea Brothers \& Co., Publishers.
The author has presented in concise and practical form the diagnosis and treatment of diseases of the throat and nose. He has planned the book to be helpful to the undergratuate and post-graduate medical student in gaining familiarity with laryngological work, and likewise to the general practitioner, who is often called upon to treat diseases of this region, and who needs to have the chief points in diagnosis and treatment concisely placed at his command. All these classes of readers will appreciate the systematic arangement, the clear directions for examination, the illustrations of preferable instruments and of diseases, and the abmodant formule for the best medication. The Medical Epitome Series, of which this is the latest volume will cover the whole range of medicine, surgery, and the specialties in original books written by recognized authorities, and uniformly priced at one dollar.

In the treatment of hand and finger infections, it is very important to release from bandaging as much and as many of the fingers as possible, and as soon as possible. The habit of bandaging up immovably all the fingers, in the treatment of a lesion of some of them, saves the surgeon time but, except in short cases, it often cripples the hand by stiffening the fingers. American Journal of Surgery.

# The Canadian Medical Protective Association 

## ORGANIZED AT WINNIPEG, 1901 <br> Under the Auspices of the Canadian Medical Association

गHE objects of this Association are to unite the profession of the Dominion for mutual help and protection against unjust, improper or harassing cases of malpractice brought against a member who is not guilty of wrong-doing, and who frequently suffers owing to want of assistance at the right time; and rather than submit to exposure in the courts, and thus gain unenviable notoriety, he is forced to endure blackmailing.

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## COMMENT FROM MONTH TO MONTH.

To be cut down in the prime of manhood and in the zenith of his success, as was Dr. George Peters, is sad, particularly sad when one remembers his strenuous life. He had reached the top notch of the ladder of fame and was one of the best surgeons this country had produced. Indeed, by his original work and unusual ability he was fitted to rank with the leading surgeons in America as well as in the Old Land. His contributions to medical literature were always able. In military circles he was also in the front rank. In the saddle he was a fearless rider. As a lecturer and teacher the full attendance in his classes testified to his ability and to his appreciation by his students. In fact, everything he undertook to do was done well, as well as a clear and strong brain could direct him to do it.

Oronhyatekha, M.D., 1841-19 7, was the mos' celebrated, civilized descendant of a picturespue race. Born on the reserve. near Brantford, Ontario, of the Mohawk tribe of the Six Nations, he began life for himself on his mative soil as a sohoolmaster. Subsequently he entered foronto University, from which institution he was graduated in 1866 . The story of his life prior to this time and afterwards has often been told. how he was taken up by the then Prince of Wales and placed under the tutorship of the late Sir Henry Ackland, at that time Regins: - Professor of Medicine at Oxford, a professorship) now acoupied by a distinguished Canadian. On his return to Canada he received his license to practice in Ontario in $8 \mathbb{K}(67$. He is said to have been the first secretary of the Hastings Comnty Medical Society, and even to have shown at that time a great hacility for organization work. Twenty-six years ago he beame Suprente Chief Ranger of the Indepenclent Order of lioresters. in which connection he obtained a world-wide reputation.

The Bulletin of the Toronto Hospital for the Insane shouid prove a welcome message to every practitioner in Ontario. The title sounds well. It is well to omit the word "asshom." But we find the title of asylum adhered to in the interior, which does not appear to be consistent. It is a new joumal which proposes to devote its pages to the interests of psychiatry in the province of Ontario, and is printed by the order of the Legislative Assembly of the province. Following as it dhes siom after the appointment of a resident pathologist to this institution, it induces the belief that a determined and progressive endeavor is to be made in the study of psychiatrics here, which will be sure to place the subject as it is in Ontario well to the fore amongst the alienists of the world.

Trypsin for cancer, seems to have gone the way of all other sensational cures for desperate diseases, whose wonderful efficacies are first projected through the medium of an enlightened but thoroughly dense-so far as medical matters go--public
press. It will be remembered that the case irom which br. Saleeby drew all his inspirations for his exciting article of ephemeral and doubtful and now alsolutely unauthenticated stability, and which was puhlished in the Pall Matl Gaectic. Was the same case as was described by Dr. Morton as " a most remarkable atrophy of an entire cancerous breast." Quite recently, Dr. Bainbridge of New York, has published a full and correct account of this case: and it turns out that this selfsame breast had not only been treated with injections of trypsin, but had been repeatedly exposer to the X-rays. The tumor was sulsequently examined by several good and competent patlontogists: and whilst it showed in its central parts degeneration of the cancer cells, with increase of commective tissue, it as well showed peripherally "colums of tmmor cells in good condition extending into the lymph spaces." One pathologist stated that the tumor had "the typical appearance of scirrhus cancer." Much as scientific men regret that no cure other than complete and radical operations has as yet been found to cure cancer, they canot do anything else but also regret and deplore this unseemly haste on the part of some who are in such a hurry to inform the public before they inform their own profession that something of scientific inportance has been discovered. Investigators need to be cautioned to make haste slowly.

Malaria and the name of Major Ronald Ross, F.R.S., $a^{\cdots} i_{i}$ these days intimately associated. Is Major Ross tells us the story of malaria, he reminds us that our present knowledge has been the result of over two thousand years of study. In fact, it is a gigantic epic of science. From the writings of Hippocrates and his successors we learn that four humdred years B. C. the Greeks and the Romans were studying malaria, who had at even that remote time distinguished that fevers of this character were not continuous in type, but that they occurred in attacks classified as quotidian, tertian and quartan. They also found out at that time that there was some connection between the disease and marshes and swampy pools, and hinted even at the microbic origin of the disease. Long years passed, and Major Ross tells
us that the next step forward was taken in South America. About the year 1840 it began to be known in Europe that a resident of a town in Ecuador had made the discovery that Peruvian bark was an efficient remedy for malaria. This then acquired fame after it had been used for the agues of Louis XIV. Soon after this, British military and naval surgeons discovered that malarial fevers were common in all tropical and sub-tropical countries. In 1880, Laveran, a French army surgeon, announced to the medical world that he had discovered a parasite in the blood of patients attacked by malarial fever, and the disease became established upon a scientific basis. Now developed the problem as to what the story of malaria had to reveal as to the habitat of these protozoan parasites in external nature. In 1894 , Major Ross was told by Dr. Manson of the latter's theory that these parasites had the ability to transfer themselves from one species of animal to another. Two years afterwards, when almost in despair over ceaseless experiments, his researches were rewarded by discovering in the tissues of a new species of mosquito the very bodies he was in search of. Since that time the history of the study of malaria has been well reproduced in the current medical literature of the day. It is now a subject for the sanitary scientist.

The Ontario Medical Associat on.-The Provisional Programme for the coming meeting has already been issued to the profession of the province. It should prove of interest to every practitioner. Of special moment will be the address in Medicine by Dr. Mazyck P. Ravenel, of the Phipps Institute, Philadelphia, on "The Methods of Infection in Pulmonary Tuberculosis," and the address in Surgery by Dr. George W. Crile, Professor of Clinical Surgery, Medical Department of the Western Reserve University, Cleveland, dealing with the "Clinical and Experimental Observations on the Direct Transfusion of Blood." The Committee have also invited Dr. William Milligan, of Manchester, ex-President of the British Laryngological and Rhinological Association, and Professor Gustave Killian, of Freiburg, Germany, who will be guests of the American Medical

Association a few days later at Atlantic City. Symposia upon "The Profession in Relation to the Public," and on the subject of "Fractures," will open interesting discussions, beside which the programme of papers promises many important topics for consideration. A smoking concert and a dinner are items in the programme under the care of the Committee on Arrangements. The meeting will be held in the Medical Building, Queen's Park, on the 28th, 29th, and 3 oth of May next.

Lumbar puncture is now well established in the diagnosis of such nervous disorders as tabes, general paralysis of the insane, syphilitic lesions of the central nervous system, tubercular meningitis, purulent meningitis, epidemic cerebro-spinal meningitis, serous meningitis, sarcoma of the spinal meninges, and some others. These rules should guide one in the operation: Patient placed on left side. Forward flexure of vertebral column as much as possible. Locate interval between 3 rd and 4 th or 4 th and 5th lumbar vertebrae by line from upper limit of iliac crests. In children, in the middle line. In adults about one-half inch to either side. First sterilize the skin at this point. No anesthetic, unless pain is feared, is necessary, then use ethyl chloride. Push needle slightly upward and towards the middle line in adults. Needle should be three inches long and the piston of syringe withdrawn. If bone is struck withdraw and try again. When resistance ceases, about one inch in child, two and onehalf in adult' stop and allow one to two c.c. to flow. Do not aspirate. Seal the puncture with celloidin or collodion. Keep the patient in bed 12 to 24 hours thereafter. And remember that at least fifteen cases of sudden death after lumbar puncture have been recorded. Usually there is slight headache after the operation.

## News Items.

Dr. W. R. G. Phair, of Winnipeg, is visiting in Cuba.
Smallpox has been epidemic in Charlottetown, P. E. I.
The Montreal General Hospital will be rebuilt at a cost of \$500,000.

The medical course at McGill University has been enlarged to five years.

Dr. H. B. Cushing, Montreal, has returned from graduate work in Germany.

The Royal Jubilee Hospital, of Victoria, B.C., is to have a new nurses' home.

Stratford, Ontario, General Hospital is to have an addition at a cost of $\$ 20,000$.

The mother of Dr. William Osler died in Toronto on the s8th of March in her IoIst year.

Dr. J. A. Smith has returned to Shelburne after taking a post-graduate course in New York.

The Canadian Fraternal Association is interesting itself in combatting tuberculosis in Canada.

The number of patients treated in the Winnipeg General Hospital in February, 1907, was 657.

Vancouver, B.C., General Hospital will spend $\$ 20,000$ more on additional equipment and fittings.

Over half a million dollars will be raised to complete the new Notre Dame Hospital, Montreal.

The St. Catherines, Ontario, Marine Hospital has been presented with a new property worth $\$ 15,000$.

A movement is on foot to establish a Jewish hospital in Montreal, to be called the Mount Sinai Hospital.

The Quebec Legislature has decided not to make the five years' course in medicine compulsory in that province.

Dr. P. H. Bryce, chief medical officer of the Department oi the Interior, has been on an official trip to the Pacific Coast.

The Hamilton Health Association, conducting the Sanatorium for consumptives in that city, has a bank balance of \$28,6I6.99.

If you want good books of standard authors consult our front form page advertisement of Mr . Clinton T . Brainard, New York.

Dr. W. J. Dobbie, late of the Weston free Consumption Hospital, has been appointed superintendent of the Muskoka Cottage Sanatorium.

Dr. Harry J. Watson, of Winnipeg, was recently operated on in the Toronto General Hospital, and we are glad to report that he is recovering.

Dr. Leeming, bacteriologist, of Winnipeg, reports that for the month of February he did 5 I3 tests, as against 375 in the same month last year.

Dr. Flood, a native of the city of Quebec, was frozen to death while engaged with the police detachment under Major Moodie at Fort Churchill.

The Federal Government has presented to British Columbia four hundred acres of land for the proposed sanatorium for consumptives in that province.

Dr. Burns is discharging the duties of medical health officer in Winnipeg during the absence of that city's official medical man, Dr. Corbett, in Italy.

Dr. J. H. Elliott has resigned from the superintendency of the Muskoka Sanitarium, and after a few months abroad will commence consulting practice in tuberculosis in Toronto.

Dr. T. H. Richards, Bracebridge, has gone to Chicago, where he will enter upon a six weeks' post-graduate course at the University of Chicago.

The Canadian Association for the Prevention of Consumption held its annual meeting in Ottawa on the 14th and 15 th of March. Dr. Charles Sheard, M.H.O., Toronto, delivered a popular public lecture on the subject of tuberculosis.

Dr. R. T. Williams, who is giving up his position under the Imperial Government in the West India Islands, is going to Tillsonburg and will assist Dr. Bennett in his practice during the summer.

The Canadian Society of the Superintendents of Training Schools in Canada was organized in Toronto on the 3oth of March. Miss Snively of the Toronto General Hospital was elected president.

Dr. Francis J. Shepherd's recent appointment to the consulting staff of the Royal Victoria Hospital, Montreal, does not mean that his connection with the Montreal General Hospital has been severed.

On the ist of January, roo6, there were in the Protestant Hospital for the Insane at Verdun, Que., 503 patients, and during the year 87 men and 64 women were admitted. The discharges were 1 io and the deaths 3 I.

The Canadian Hospital Association was organized in Toronto on the rst of April. Miss Brent, of the Hospital for Sick Children, was elected president, and Dr. J. N. Elliott Brown, superintendent of the Toronto General Hospital, secretary.

In the recent examinations at the New York City Hospital for house surgeons' positions, two McGill graduates, Dr. A. L. McLennan and H. LeBaron Peters, received first and third place respectively.

A deputation from the Ontario Medical Association, headed by the president, Dr. George A. Bingham, Toronto, and secretary, Dr. Charles P. Lusk, Toronto, waited on the Ontario Government and pressed for the early establishment of a Ministry of Health in this province.

Dr. W. A. Ross, Barrie, who has been spending the winter in the large city hospitals of Chicago, doing post-graduate work, is expected home soon and will resume his practice.

The Deer Park Sanitarium, corner of Heath and Yonge Streets, Toronto, is a clean, tidy, up-to-date private hospital, where patients are well looked after by the superintendent and attendants in charge. The effuipment embraces a very fine Static machine.

A semi-editorlal writer in the Mail and Empirc, Toronto, thinks that the Ontario Medical Council should discipline medical practitioners who make wrong or delayed diagnoses. Whew! If newspapers were fined for all the mistakes they exhibit in one issue of their papers-Gee Whiz!

Dr. James Stewart's place as Professor of Medicine and of Clinical Medicine at McGill University, Montreal, has been filled by the appointment of Drs. F. G. Finley, H. A. Lafleur and Chas. F. Martin. The former will conduct the didactic work, whilst the two latter will have charge of the hospital teaching.

The following appointments have recently been made in militia circles of senior medical officers: Eastern Ontario-LL.Col. W. A. Willoughby, Lt.-Col. R. W. Garrett and Lt.-Col. J. A. McCammon. In Quebec Command-Lt.-Col. H. Trudel, Lt.-Col. J. P. Lord, Major E. R. Brown and Major P. Ostigny.

Owing to lack of funds there will be no more medical inspection of schools in Montreal for the present. It is claimed that since medical inspection was begun six months ago there has been an improvement of seventy per cent. in cleanliness and a like percentage in lessening of infectious diseases amongst the school children of Montreal.

Dr. Samuel Richardson, one of the veteran physicians of York County, passed away in the town of North Toronto on March 26, I 907 . For upwards of thirty years he has practiced on the Crest of Eglinton Hill, and was known in a wide radius of country. He served as coroner for a number of years, and also took part in the municipal affairs of York Township. Early in the winter the doctor was attacked with typhoid and pneumonia, from the after effects of which he did not rally. He was in his sixty-fifth year.

There were admitted to the British Columbia Hospital for the Insane at New Westminster last year i50 patients, 27 more than in the previous year. Of these 108 were males and the balance females. The number admitted from the Yukon was 19. During the year 79 patients were dishcarged, the largest number in any one year since the establishment of the institution.

Dr. William Lane died at his home in New York on March I4th, from heart failure. He was born May 3, I833, in Gainsboro', Canada, and was graduated from Toronto University and obtained his medical education in Cincinnati. He practiced medicine in St. Catharines, Ont., and later at Lockport, N.Y. His wife, two sons and a daughter survive him. He was buried in St. Catharines, Ont.

Tine Canadian Practitioner and Revica', published at Toronto, recently had a long and strong editorial on the uncharitable policy of the management of the Toronto Street Railway in refusing to pay doctors' charges for services rendered in accidents to employees and travellers. Will the Toronto doctors refuse to attend these accidents in future? The courts have clecided that the Railway is only liable where the manager himself has summoned the physician.

Cilanges in the medical staff of the Muskoka Cottage Sanatorimm, made necessary by the resignation of Dr. J. H. Elliott, physician-in-charge, are now in the making. Secretary J. S. Robertson, of Toronto, announces that Dr. Dobbie, for some time in charge of the hospital at Weston, will assume the post. Dr. Elliott will spend the summer in foreign study, and then practice as a consulting physician on tuberculosis in Toronto.

Dr. Domingo Orvananos, of Mexico, president of the American Public Health Association, recently appointed Dr. Robert M. Simpson, chairman of the Manitoba Board of Health, on a committee with Dr. Peter H. Bryce and Dr. Frederick Montizambert to further a project for the establishment of a Dominion Department of Health, under the direct administration of a cabinet minister. Committees were also appointed by the president to urge upon the United States, Cuba, and Mexican governments the advisability of a similar course. This action has been taken by virtue of a resolution passed at the Association's meeting in Mexico last December, in which it was asserted that public health matters could only be satisfactorily dealt with by the formation of national departments of health.

The Alumni of the Manitoba Medical College held their first annual reunion banquet on the evening of the $I$ ith of March. This college has now been cloing work for twenty-four years and has some four hundred graduates. Dr. Westbrook, Dean of the University of Minnesota, one of the college's distinguished graduates, was present and delivered an able address. The following committee had charge of the banquet: Drs. Gordon Bell, E. S. Popham, E. W. Montgomery, C. T. Sharpe and W. A. Vrooman.

Reunion of Trinity Meds.-The old medical graduates and the final graduating class of Trinity celebrated the extinction of Trinity University as a school of medicine by a banquet recently at McConkey's restanrant. Medical men from various parts of the Dominion, and even one from New York, who claim Trinity as their Alma Mater, gathered together to talk over old times and commiserate with one another that the brilliant future each had foreseen for Trinity had been so suddenly cut off. Dr. Geikie, the former dean of the medical faculty, referred in eloquent terms to the hope he had cherished of seeing his beloved university grow and develop into one of the leading schools of medicine on this continent, hopes that were shattered when the amalgamation with the Medical School of the University of Toronto was carried out. Notwithstanding the note of sadness noticeable in the speeches of the older graduates, the pleasure experienced at meeting together with others having so many memories in common was, however, the predominating feeling, and the undoubted success which met the efforts of the promoters of the banquet is likely to make the remion of Trinity Meds. an annual function. The committee who promoted the banguet were: Dr. W. B. Geikie, hon. chairman; Dr. J. A. Temple, hon. vice-chairman: Dr. F. W. Marlow, toastmaster ; Dr. McMurrich, Dr. Pepler, Dr. T. B. Richardson, Dr. Hayden, Messrs. G. H. Worthington, O. A. McNichol, V. T. Sheck, B. S. Cerswell, and James Sprout. The old grads. who responded were: Dr. George P. Ardagh, Orillia; Dr. G. B. Boyd, Coldwater; Dr. T. J. Browne, Streetsville; Dr. C. H. Bird, Gananoque; Dr. J. W. Brien, Essex; Dr. Neil Campbell, Thorold: Dr. T. Donglas, Warsaw: Dr. R. W. Irving, Gananoque; Dr. E. P. Kelly, Orillia; Dr. Lapp, Pontypool: Dr. J. C. McGibbon, Honeywood ; Dr. H. B. Hutton, Port Colborne; Dr. J. Archer Brown, Coboconk; Dr. A. L. Danard, Owen Sound; Dr. C. Bingham, New York: Dr. Luke Teskey, Dr. G. A. Bingham, Dr. Stanley Ryerson, Dr. Sterling Ryerson, Dr.

John Fotheringham, Dr. C. R. Sneath, Dr. J. N. Anderson, Dr. R. J. Dwyer, Dr. Gibb Wishart, Dr. S. Johnston, Dr. D. Anderson, Dr. H. Glendenning, Dr. P. G. Goldsmith, Dr. Charles Trow, Dr. N. A. Powell, Dr. J. L. Bradley, Dr. W. B. Bryan, Dr. Andrew Eadie, Dr. E. H. Greene, Dr. C. H. Thomas, Dr. H. Clare, Dr. J. McConnell, Dr. J. Rowan, Dr. George Strathy, Dr. J. A. Kinnear, Dr. H. Becker, Dr. M. J. Perkins, Dr. A. E. McKay, Dr. A. G. A. Fletcher, Dr. C. B. Shuttleworth, Dr. W. A. Peart, Dr. E. Clouse, Dr. W. B. Kendal, Dr. C. A. Simple, Dr. J. M. McCormack, Dr. M. O. Scott, Dr. A. H. Garratt, Dr. C. A. Campbell, Dr. M. A. Kendrick, Dr. Brefney, O'Reilly, Dr. M. L. G. McGibbon, Dr. Walter McKeown, Dr. W. H. Lowry, Dr. W. S. Harrison, Dr. A. Jukes Johnson, Dr. R. B. Nevitt, Dr. N. Anderson, Dr. J. K. M. Gordon, Dr. H. C. Parsons, Dr. C. P. Lusk, Dr. Reade, Dr. T. H. Ashley, Dr. Henwood, Dr. A. Davidson, Dr. F. C. Stephenson, Dr. John E. King, Dr. G. W. Brand, Dr. Thomas Mason, Dr. Burgess, Dr. F. Fenton, Dr. J. T. Clarke, and Messrs. Albert Crux, M. L. Kendrick, J. L. Bingham, and S. T. White.-Report in Mail and Empire.

Do not operate for foreign body in the knee joint without first excluding dislocation of one of the semilunar cartilages.

Fractures of the neck of the femur in old people sometimes cause no other symptoms than disability. The mildness of the trauma and the freedom from much pain should not deceive one.

In amputations below the knee, insist on active and passive motion in the knee joint at an early date. If this is not done contracture ensues, which makes the application of an artificial limb difficult.

In compound fractures involving loss of continuity do not needlessly remove any piece of bone that has even the smallest attachment. It is surprising how often such pieces heal into the wound and thereby help to save loss of substance.

In cases of renal colic do not make too positive a pre-operative diagnosis of calculus, no matter how typical the symptoms may be. It has happened very often at the time of operation that no stone is found. Fortunately, these cases are nearly always cured by the exploratory nephrotomy.-American Journal of Surgery.

## Publishers' Department

"Ergoapiol" (Smith) : Its Therapeutical Indications; with Clinical Notes.-We desire to call the attention of the medical profession to a new pharmaceutical product possessing valuable therapeutic virtues in many diseases peculiar to women. This remedy is known as "Ergoapiol" (Smith), and since its introduction to the profession it has rapidly gained favor with our best physicians. It is strictly ethical, manufactured from the purest drugs, and advertised only to physicians. It is the result of an original combination of the following remedies: apiol, ergotin, oil of savin, and aloin, all of which are freed from toxic and deleterious substances. These agents are blended in such proportions as to evercome the powerful irritating qualities of each and raise the tonic properties of all. A glance at the therapentical indications of these remedies singly will convince the most skeptical of the virtues of "Ergoapiol", -the result of their combination. Since the days of Jaret, Homolle and Baillot, apiol has gradually grown in favor as a therapeutical agent, but until recently it had one decided drawback, that of containing deleterious and toxic impurities in combination. Recently, through the skill of the never-tiring pharmacist, these have been eliminated, and it can now be prescribed without fear of producing disagreeoble symptoms, but with an assurance that its full therapeutical virtue will be realized. Even in its impure state apiol gained considerable reputation in the treatment of nephritis, dropsical effusions, amenorrhea and dysmenorrhea. Its emmenagogue properties have been greatly enhanced by the removal of all impurities. In small doses it now became a mild aromatic stomach tonic; it is also highly recomended in membranous dysmenorrhea. The therapeutical value of ergotin is too well known to call forth comment here. Combined as it is in "Ergoapiol," it becomes an excellent adjunct to apiol, and adds very materially to the efficiency of the finished product. All students of medicine are aware that oil of savin is a powerful and valuable stimulant to the uterine system, and is one of the most potent emmenagogues known. It is also a powerful gastro-intestinal irritant, and therefore is seldom prescribed alone. But when combined with certain correctives, as it is in "Ergoapiol," it becomes a valuable addition to the drugs already named-apiol and ergotin. Since the discovery of the methods
of producing aloin from the different brands of aloes this drug has become very popular, and has taken the place of the crude drug to a considerable degree. Aloin enters into almost every emmenagogue pill and mixture. Its value as a therapeutical agent is so well known that it is not necessary for us to speak of it in detail, yet we desire to say that its addition to the drugs in question aids very materially in making "Ergoapiol" so valuable a combination. Being a mild stomach tonic, it aids in overcoming the irritable qualities of the savin; also acting as a hepatic stimulant, freeing the portal circulation and relieving the torpid condition of the lower bowel, it goes a great way toward relieving that condition so often present in diseases of women-pelvic engorgement. These qualities make it an ideal adjunct to the emmenagogues mentioned. Our attention was called to "Ergoapiol" (Smith) through a reprint from a St. Louis journal. This reprint gave the names of remedies entering into the combination. We at once concluded that this product would be a useful one, and securing a sumnly we began prescribing it wherever indicated. The results were even greater than we had anticipated. From the beginning we have kept clinical notes of each case, some of which will be recorded in this article. "Ergoapiol" is a mild, aromatic stomach tonic, anodyne, antispasmodic, and hepatic stimulant. It is also a laxative, an ideal emmenagogue in the full sense of the term, and exerts a decided tonic influence upon atonic conditions of the pelvic viscera. It is indicated to a greater or less extent in all forms of dysmennorrhea, viz., atonic, congestive, obstructive and membranous. In true obstructive dysmenorrhea due to actual stenosis of the uterine canal, to a sharp flexure of the organ, or to the valve-like action of a clot or a polyp, it is seldom indicated, because this form of organic dysmenorrhea requires either surgical operations or mechanical means to effect a cure. However, good results may be expected from its use after such operations have failed to complete a cure or to relieve the sufffering. It it even useful in the form where clots cause the trouble by their mechanical obstruction, and we have seen its administration cause the passage of a polyp in one patient. Good results mav be expected from its use in that form of clysmenorrhea known as membranous, due to an exfoliation of the endometrium in the form of a membrane. In amenorrhea it is far superior in value to any remedy we have yet tried, if the cases are properly selected. Amenorrhea due to taking cold at the menstrual period, or caused by shock, can be relieved with the remedy in question. This remedy is occasionally beneficial
in certain forms of metrorrhagia, after operations to remove fungoid or polypoid growths, or after curetting the uterus. It is a remedy of great value in menorrhagia, especially in that form due to fecal impaction, with torpidity of the liver in persons nearing the menopause. Where this trouble occurs in a plethoric and indolent subject the following plan of treatment will generally be all that is necessary: Begin three or four clays before menstruation is due, and give one brisk mercurial purge, then follow with "Ergoapiol," one capstule three times a day. If this plan is carried out for several months at each menstrual period, a cure will be the result. "Ergoapiol" is especially indicated when disturbances of menstruation occur in feeble and anemic women. It should be alternated with some form of iron in such cases. There is a condition in which the patient's menses are regular as far as time is concerned, but the fow is very scant, exceedingly thick, tarry in color, with an offensive orlor. The patient suffers pain and weight in the pelvis and back; is despondent, loses flesh and strength, and may or may not suffer from various reflex disturbances. In this state of affairs "Ergoapiol" will be found a sheet-anchor. Before recording the clinical notes gathered while prescribing the drug under consideration, we wish to call attention to one or two important things before leaving the subject. The first is that form of amenorrhea that is brought about by constitutional disease, such as tuberculosis. In these conditions it is a common occurrence to have women insist on their physicians giving them something to bring on menstruation, thinking that its absence is a catuse of their condition, when the fact is the stopping of menses is only a wise provision of nature to prevent faster decline of vital forces. The course to be pursied is to treat the constitutional disease, and when a cure of the latter has been accomplished this form of amenorrea will generally take care of itself. However, when the patient's general health has been restored, and the function fails to return, then "Ergoapiol" can be prescribed with good results. Our second subject is that of prescribing emmenagogues indiscriminately, withont regard to the cause of amenorrhea. Women who know or suspect themselves to be pregnant frequently consult a physician in the hope that, in the attempt to bring on menstruation, he will really succeed in causing abortion. Whoever, under such circumstances, prescribes "Ergoapiol" with the understood purpose of inducing the menstrual flow, is liable to have criminal charges brought against him in case abortion actually does take place, even as the result of something the woman has taken or done herself. Before pre-
scribing " Ergoapiol" in amenorrhea the physician should satisfy himself that pregnancy does not exist, and in case of doubt he should decline the management of the case, unless he can protect himself by securing some trustworthy consultant who will share the responsibility of the case.-C. W. Canan, B.S., M.D., Ph.D.

On the morning of March 4 th Kress \& Owen, New York, were visited by fire, which practically destroyed the manufacturing end of their business. They had, however, a duplicate plant in storage, and we are pleased to state that after four days and nights of continuous work they were again turning out GiycoThymoline. We regard this as a record.

Sanmetto in Prostatic Irritations, Upethral and Bladder Troubles.-I have used Sanmetto extensively in my practice in prostatic irritations, urethral and bladder troubles, and am well pleased with the results obtained. In cases where the drug is indicated I always feel confident of obtaining good results.-J. A. Dozency, M.D., Logansport, Ind.

I do not hesitate to declare myself a friend of Resinol Ointment and Soap. I have used them with splendid results in herpes, eczema, psoriasis and pruritis. I shall continue to recommend and prescribe them.-Dr. Jose R. Pimentel, Acambaro, Gto., Mexico.

Typhoid Fever.-Typhoid fever has ceased to be a bugbear to the modern physician. Since the sulphocarbolates have been introduced perforation is practically unknown and the victim of typhoid in these days often leaves his bed in ten days. Podophyllin and leptandrin, together with blue mass and soda in small divided doses followed by saline secures an empty prima via. Saline should always follow the above medication. The sulphocarbolates are then pushed, five to ten grain doses, until the stools are odorless. Aconitine, strychnine and digitalin control the temperature easily, and nuclein supports vitality and

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enables the system to dispose of the bacilli in their weakened form. There is often a malarial element present, and quinine arsenate or the Triple Arsenates with Nuclein (Abbott) prove very effective.

On November 8th, 1906, I gave your hyoscine, morphine and cactin compound a fair trial as follows: An Indian woman of the Timphnute tribe at Caliente, Nevada, was badly cut about the head and face as follows: Her upper lip was cut from the antrum of Highmore to the mouth in two parallel cuts resembling a double cleft lip. I gave the tablet as directed in ycur letter. The patient slept quietly during the operation of suturing, and at the end of one hour after the operation she awoke and went about her business with no apparent ill-effects from the anesthetic and no pain. I shall use it in my surgical practice hereafter and will let you know the outcome. I shall also try it in obstetrical work. It looks to me as though you have made a great stride forward in surgical and obstetrical anes-thesia.-W. P. Murray, Caliente, Nevada, in The American Journal of Clinical Medicine, Feb., 1907.

The epidemics of la grippe which have made their annual onslaughts for some years, have taught us that this disease, once considered of no serious consequence, is so dangerous and difficult to treat, that any suggestion regarding medication is always gratefully received. With each succeeding visitation of this trouble, we have found it more and more necessary to watch out for the disease in disguise, and to treat these abnormal manifestations; consequently we have relied upon mild nerve sedatives, anodynes and heart sustainers, rather than upon any specific line of treatment. Most cases will improve by being made to rest in bed and encouraging action of skin and kidneys, with possibly minute doses of blue pill or calomel. We have found much benefit from the use of Antikamnia \& Codeine Tablets in the stage of pyrexia and muscular painfulness. This tablet, containing $43^{-4}$ grs. antikamnia and I-4 gr. sulphate of codeine, is a sedative to the respiratory centres. In the treatment of la gribpe and its sequelæ its value is highly esteemed. In diseases of the respiratory organs following an attack of la grippe, pain and cough are the symptoms which especially call for something to relieve. This combination meets these symptoms, and in


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addition controls the violent movements accompanying the cough. To administer these tablets in the above conditions, place one tablet in the mouth, allowing it to dissolve slowly, swallowing the saliva. Exhibited in the grinding pains which precede and follow labor; in the uterine contractions which often lead to abortion; in the various neuralgias, and in all neuroses due to irregularities of menstruation, this combination affords immediate relief. In these last conditions, always instruct that tablets be crushed before taking.

With their March, 1907, pamphlet Battle \& Co. commence the issue of a series of eighteen illustrations of dislocations, the first being bilateral dislocation of the jaw. These illustrations will complement their illustrations of long bone fractures, and the two series will make a valuable collection of the busy practitioner. Physicians who are not on their mailing list can get them free by application to Battle \& Co., St. Louis.

Physicians in search of a field for practice may not know that they can find out from the Canadian Medical Exchange, conducted by Dr. Hamill, 75 Yonge St., Toronto, practically every medical practice for sale in the Dominion, as well as many places where there is no doctor and the community need one. This information is given prospective medical buyers free of any charge whatever, the only condition being that buyers must agree to hold sacredly confidential, and for their own use only, all information received from the above office. Medical vendors and vendees can secure the goal desired by having their names registered with Dr. Hamill better than by all other methods combined that they might adopt, as practically everything in the market, having merit, is in his office. It is a great convenience to buyers and sellers to thus have one central depot to supply their needs.


[^0]:    " O wad some power the giftie gie us
    Tae see oursels as ithers see us;
    But better still, that ither swells
    Wad see us as we see oursels."

[^1]:    ONTARIO-F. F. King, Toronto ; I. Olmsted, Hamilton; D. H. Arnott, London; J. C. Connell, Kingston; J. D. Courtcuay, Ottawa.
    QUEBEC-F. Buller, Montreal; K. P. Lachapelle, Montrenl; J. E. Dube, Montreal ; H. R. Ross, Queluec; Russell Thomar, Lennoxville.

    NEW BRUNSWICK-T. D. Walker, St. John: A. B. Atherton, Fredoricton; Murray MacLaren, St. John.
    nova scotia-John Stewart, Halifax ; J. W. T. Patton, Truro; H. Kendall, Sydney. PRINCE EDWARD ISLAND-S. R. Jenkins, Charlottetown.
    MANITOBA-Harvey Smith, Winnipeg; J. A. MacArthur, Winnipeg; J. Hardy, Morden. north. west territories-j. D. Lafferty, Calgary ; M. Seymour, Regina.
    BRITI8H CCLUMBIA-S. J. Tunstall, Vancouver; O. M. Jones, Victoria; A. P. MeLennan, Nelson.

