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THE

CANADIAN PRACTITIONER

EDITOR:
ADAM H. WRIGHT, B.A., M.D. Tor.

ASSOCIATE EDITORS:
JAMES F. W. ROSS, M.D. Tor. JOHN CAVEN, B.A., M.D. Tor.
EDMUND E. KING, M.D. Tor.

PUBLISHERS:
THE J. E. BRYANT COMPANY (Limited), 58 BAY STREET.

VOL. XIX.] FEBRUARY, 1894. [No. 2

Original Communications.

PURULENT PLEURISIES.*

BY J. E. GRAHAM, M.D., M.R.C.P., LOND.,
Professor of Medicine, University of Toronto.

PHYSICIANS who have seen many cases of purulent pleurisy, and who have observed closely the course of the disease in each case, will no doubt be willing to testify to the fact of the great variety of the affection; variety as to origin, as to the nature of the contents, and as to the duration of the disease.

Sometimes the symptoms at first presented are those of an ordinary pleurisy, which afterwards develops into an empyema. Then, again, a case may begin as a pneumonia, exhibiting all the signs and symptoms of that disease, and terminate as an empyema. The pleural exudate varies much in character in different cases. It is sometimes sero-purulent, and sometimes uniformly purulent. Often the upper portion is serous, and lower portion purulent. In a number of cases, again, the contents become fetid.

The course and duration of the disease also present great differences; some cases recover after a single aspiration, while in others the discharge

* Read at the Toronto Medical Society, in opening the discussion on Purulent Pleurisies.

may continue for months, or even years. An Estlander's operation may be necessary to close the cavity.

Latterly, an attempt has been made to classify purulent pleurisies according to the bacteriological factor present in each case, and, as I considered this to be of great importance from a clinical standpoint, I concluded to make it the subject of my paper.

Dr. Netter, of Paris, (Charcot's *Traité de Medicine*) has made investigations into a large number of these cases, and has found certain micro-organisms present in each one, and has discovered, moreover, that these micro-organisms play a definite *rôle* in the course and duration of the disease. For instance, in some he found the streptococcus alone; in others, again, the pneumococcus; and in a third set both these forms were present. He, therefore, made the following classification:

A. Purulent pleurisies the result of pyogenic micro-organisms:

(1) Purulent pleurisy due to the streptococcus.

(2) Purulent pleurisy due to the pneumococcus.

(3) Purulent pleurisy due to the less common organisms:

(*a*) Staphylococcus.

(*b*) Pneumo-bacillus of Friedlander.

(*c*) Typhoid bacillus.

B. Purulent tubercular pleurisies.

C. Putrid purulent pleurisies.

Dr. Netter found that in the 109 cases which he investigated the variety of pleurisy depended to some extent upon the age, as shown by the following percentages. In the first series, all the cases were taken together. In the second and third, the adults and children were separated.

(1) Adults and children: Streptococcus found in 44 per cent.; streptococcus and pneumococcus in 2.8 per cent.; pneumococcus in 26.7 per cent.; staphylococcus in 1.8 per cent.; tubercular and putrid, in 24.7 per cent.

(2) Adults alone: Streptococcus in 53 per cent.; streptococcus and pneumococcus in 2.5 per cent.; pneumococcus in 17.3 per cent.; staphylococcus in 1.2 per cent.; tubercular and putrid, in 25 per cent.

(3) In children alone: Pneumococcus in 53.6 per cent.; pneumo- and streptococcus in 3.6 per cent.; streptococcus in 17.6 per cent.; putrid pleurisies in 18.7 per cent.; tubercular pleurisies in 6.5 per cent.

Two or three points of interest are to be noticed in these statistics: The large proportion of cases in which but one micro-organism was found, proving that the disease is not often due to a mixed infection. That the pneumococcus is by far the most frequent organism found in children, while the streptococcus is found in the majority of cases in adults. The

large number of putrid pleurisies in children is also to be noted. The two principal forms will now be taken up and contrasted as to their origin, clinical history, nature of fluid, diagnosis, and treatment.

(1) *Purulent pleurisy, due to the streptococcus.* In 25 out of 62 cases the disease was secondary to lung affections. After la grippe, in 17 cases; broncho-pneumonia, 3 cases; pneumonia, 1 case; pulmonary tuberculosis, 2 cases; cancer, 1 case; dilatation of bronchi, 1 case. In 11 cases the disease followed puerperal infection.

The large number of cases in which la grippe was the primary disease is explained by the fact that these investigations were made by Dr. Netter in Paris during the season in which that disease was epidemic.

The pneumococcus form either follows a pneumonia or occurs primarily. In the great majority of cases pneumonia is the primary disease. The fact of the frequency with which empyema follows pneumonia is well established by the following statistics:

In the Koenigsberg clinic, pneumonia existed as the primary disease in 32 per cent. of the cases; at Berne, 22 per cent.; Helsingfors, 23 per cent.; Vienna, 28.6 per cent.; Hamburg, 39 per cent.; Berlin, 34 per cent.

This, sometimes called the pneumonic, form occurs much more frequently under thirty years of age, as shown by the following figures: Under 10 years, 93 cases; between 10 and 20 years, 62 cases; between 20 and 30 years, 60 cases; between 30 and 40 years, 30 cases; between 40 and 50 years, 22 cases; between 50 and 60 years, 6 cases; between 60 and 70 years, 7 cases; over 70 years, 1 case.

The pleurisy may occur during the attack of pneumonia, or it may commence towards the termination of that disease, the fluid increasing rapidly in quantity after the crisis. In the majority of cases, the pleurisy appears after the defervescence of the pneumonia. In a case which I recently saw with Dr. Bryans, the pleurisy began towards the termination of the pneumonia, and the fluid increased rapidly after the crisis. On the tenth day a small amount of fluid was withdrawn, in a few drops of which the pneumococci were found by Dr. John Caven; and on the fifteenth day the fluid had increased so enormously that it was necessary to aspirate, when 24 ozs. of pus of a greenish tint was drawn off. In this the pneumococci were the only organisms found. At the commencement of the disease the ordinary signs and symptoms of lobar pneumonia were present. A free opening was afterwards made, and thorough drainage established. The patient is doing well. The pneumonic form of empyema, of which this case is a good example, was described (by Gerhardt, in 1881) as a separate clinical variety. It is interesting to know that both the pneumonia and the pleurisy

are due to the same cause. In the case cited, as well as in another which I saw last spring, distinct pulsation occurred—they were, in fact, pulsating empyemata. Both were of the pneumonic form, and in both the fluid was found in greatest abundance in the upper part of the left chest.

These two forms of empyema will now be contrasted as to the character of the fluid. In the streptococcus variety the fluid may be slightly opaque, sero-purulent, or purulent. In large collections the upper portion may be serous, and the lower portion purulent.

In that due to the pneumococcus, the pus is uniformly thick, yellow, with a slightly greenish tinge, and is an excellent example of what the older writers called laudable pus. It does not readily separate into serum and pus. Its peculiar characteristics are great density, viscidity, and the greenish tinge.

In the streptococcus form, we have the ordinary signs and symptoms of sero-fibrinous pleurisy. The amount of effusion is usually large, and fills up the cavity, although it has occasionally been found localized. A striking peculiarity is the edema of its chest wall—a condition rarely found in the pneumonic form.

The evolution is slow. The virulence of the organism varies in different cases, depending largely upon individual peculiarities, and upon the disease to which the condition is often secondary. The duration is usually much longer than in the pneumonic form.

In the pneumococcus variety, the mode of onset is variable. In some cases, as in the one already given, there is a decided increase of the fever and dyspnea. It may, however, commence insidiously, so that a large quantity of fluid may be formed before it is discovered. Edema of the chest walls, which is so frequently found in the streptococcus form, is seldom seen in this variety. A striking peculiarity is the localization of the pus, often interlobar, often in the costo-diaphragmatic sinus, or in the upper part of the chest. The spontaneous evacuation of the pus through the bronchial tubes occurs very frequently in this form. It occurred in 20 per cent. of Gerhardt's cases. In the majority of such cases, there is no direct opening between the pus cavity and the bronchus, so that a pneumothorax is not produced. This form, then, may terminate in various ways:

(1) By absorption.

(2) Pus voided either through the bronchi, or through the walls of the chest.

(3) Pus may remain encysted.

The duration is not so great as that of the first variety, as the life of the pneumococcus is limited.

I should like here to make a few remarks upon the diagnosis of the

presence of pus in these cases of pneumonia—a diagnosis which is often a very difficult matter. Too much confidence ought not to be placed in the auscultatory signs. The signs to which the most importance is to be given are diminished or absent vocal fremitus, flatness on percussion, immobility, and the displacement of organs.

It must be remembered that we may have more or less vocal fremitus over purulent effusion, which may arise from the fact that the pus is localized, or that there are strong bands of adhesion between lung and chest wall. It is safe to say, however, that the vocal fremitus is diminished in almost every case.

Flatness on percussion may be obtained over splenization of the lung. A case of this kind occurred in the Toronto General Hospital a few months ago. A young man came in with all the symptoms and signs of pneumonia. Near the base of the left lung, at about the level with the seventh or eighth ribs, two or three inches from the spine, there existed flatness on percussion, diminished vocal fremitus, and very clear tubular breathing. Pectoriloquy could be distinctly heard over the same area. A cavity at first was thought of; but as there was no history of previous disease, we concluded that the case was either one of complete splenization of the lung, or that there was a collection of fluid existing between the lung and the chest wall. The former was evidently the correct conclusion, as the patient went through an ordinary attack of pneumonia, and all the signs, such as bronchophony, pectoriloquy, disappeared in a few days.

I would here remark that, according to my observations in left-sided pneumonic empyemata, the heart is not displaced so early as in ordinary left-sided pleurisy. This was especially noticed in the case the chart of which I have shown you. There was a considerable collection of fluid before much change in the situation of the apex beat was noticed. It is probable that this is due to the presence of a partly solidified lung on the diseased side, and on that account the heart is not so readily drawn over to the healthy side. This would appear to confirm the opinion of Dr. Douglas Powell as to the cause of cardiac displacement when fluid exists in the pleural cavity.

Now, I do not wish to say much as to the treatment, as that will be fully taken up by the surgeon.

On account of the greater amount of fluid which is usually present in the streptococcus form, the drainage must be thorough, and in the end an Estlander's operation may be required. In the pneumonic form, recovery will sometimes take place after aspiration, but it is best to drain such cases under almost any circumstances.

Now, as to the less common form of empyema, it will be noticed that the staphylococcus is found in but a small number of cases. It is sometimes secondary to osteomyelitis and pyemia, and is sometimes the result of the introduction of germs from without, either attached to a foreign body, or in a surgical operation carelessly performed. In twenty-five per cent. of the cases either the tubercular or putrid variety is present. In the tubercular form, the character of the fluid depends upon whether pyogenic germs are found in addition to the tubercular bacilli. The contents are serous, with masses of fibrin undergoing fatty degeneration, or they are purulent.

The putrid may occur as secondary to other forms—sometimes from the introduction of the germs of putrefaction from without, and sometimes occurs when no such avenue can be discovered.

I have thus briefly outlined the various forms of empyema as classified in this way. As stated at the commencement of this paper, this classification was largely based upon Dr. Netter's investigation of 109 cases. I am very much interested to know if these results will be confirmed by future investigation, and would ask the members of this society, when they are treating cases of empyema, to have the fluid which is first drawn off examined, so as to determine the particular micro-orgauism which may be present.

CLIMATES FAVORABLE FOR CONSUMPTIVES.*

By Dr. P. H. Bryce,
Secretary of the Provincial Board of Health, Toronto.

WHEN so much has been said and written on the subject of climate in its relations to the treatment of consumption, it seems very difficult to attempt to lay down, within the limits of a single paper, any details likely to be of practical value as a guide to the selection of a climate to which we may, from Canada, send any patients afflicted with the disease.

In order, however, that we may at all properly discuss climate in its relation to phthisis, it becomes necessary to enquire into the influences which seem to be beneficent or maleficent in their effects upon the respiratory tract, thereafter indicating such districts as may seem to have climates most favorable to the maintenance of a healthy condition of the air passages.

Writing at a time when a specific influenza is epidemic, there being in many households in Toronto a large percentage of their members ill with the disease, it seems most natural that we should enquire into some of the atmospheric conditions favoring the spread of this catarrhal fever. This enquiry seems proper, from the fact that most are probably agreed that it is upon the hyperemia and increased secretion of the respiratory mucous membrane that the inoculation of the body with the bacillus of tuberculosis through the air passages takes place. This is only saying what we recognize as true with regard to inoculation with the microbe of influenza, diphtheria, or scarlatina.

What, then, is this common atmospheric condition which, apart from dust or other particular irritating substance, induces this almost universal hyperemia at certain seasons, or, rather, under certain atmospheric conditions?

Primarily, it is, I believe, a damp atmosphere, under such conditions of temperature as to first chill the mucous surface by too rapid abstraction of its heat by conduction, and thereafter cause a venous stasis and hyperemia through the reflex influence of the vaso-motor system.

Various temporary or localized influences may increase this effect of damp, cold air, such as high winds out of doors and draughts indoors.

* Read before the Toronto Medical Society.

A second and, I believe, extremely potent cause in the production of this hyperemia in this cold northern climate is the undue abstraction of moisture from the respiratory tract, notably that of the throat and nose, by the excessive dryness of house-air in rooms heated with hot-air furnaces. The result is localized congestion of the mucous membrane, to which chilling by evaporation is added, along with local draughts owing to the air coming in at the registers not infrequently at a temperature of 120° or even 170° F. The dust which too often accompanies this hot air must be added as an additional influence.

On such irritable and congested mucous membrane we have the potent influence of the damp outdoor air; and to further illustrate the effect of an atmosphere rapidly changing in temperature, I have only to recall the readiness with which colds are caught on a summer evening after sundown by susceptible persons sitting on a balcony when the dew has begun to fall, through the rapid chilling and saturation of the atmosphere near the earth by the radiation of its heat. It is, further, hardly necessary to refer to the universal testimony that seashore and lakeshore localities in northern latitudes are places where catarrhs are most prevalent. That this condition seems to similarly tend to the prevalence of consumption, the statistics of the north Atlantic coast cities both of Canada and the United States as well as the lakeside cities, seem amply to prove.

RELATIVE PROPORTION OF DEATHS FROM PHTHISIS PER 1,000 OF POPULATION IN ONTARIO FOR 1890.

St. Catharines	2.7
Toronto	2.3
Ottawa	2.2
Kingston	2.1
Belleville	1.5
Hamilton	1.4
Woodstock	1.4
Berlin	1.3
London	1.2
St. Thomas	1.1
Brantford	1.0
Guelph	.7

DEATHS FROM PHTHISIS IN AMERICAN CITIES.

Chicago	1.6
Detroit	1.3
Rochester	1.7
Cleveland	1.5

Having outlined what seem to me the principal atmospheric influences inducing conditions favorable to inoculation with the bacillus tuberculosis, and premising that where the germs find their readiest victims their presence and multiplication have already or will take place to the greatest extent, it will now be proper for us to enquire concerning climates where conditions more or less opposite to these as regards atmospheric moisture prevail, as to whether they have been shown to be superior in their curative influence upon consumption, judged by the experience of invalids sent to them, and by the immunity from the disease of the resident population.

From what has been said it will be apparent that natural dryness of the atmosphere is, under ordinary conditions, the element which would seem to occupy the first position as regards a climate favorable to consumptives.

ATMOSPHERIC DRYNESS.

Stated in general terms, many have said that an atmosphere having from 70 to 75 per cent. of relative humidity or of saturation approaches most nearly an atmosphere normal for respiration. This is to say that it does not, by conduction, remove heat too rapidly from the mucous membrane; while, on the other hand, it does not, as an unduly dry air, remove heat too rapidly by evaporation. This statement, while generally correct, is only true within a moderate range of temperature.

Such a temperature is that which prevails during the bright sunshine in the early afternoon in climates at slight elevations above the sea level, as in our own climate. It is dependent upon several factors:

(*a*) A normally dry soil.

(*b*) A moderate temperature.

(*c*) No great rarefaction of the air by altitude.

With a soil naturally dry, evaporation does not, during sunshine, create saturation of the atmosphere, nor the chilling effects of a soil made cold by the abstraction of heat; while the expansion of the air by decrease of pressure, as in high altitudes, is not so great as to lessen notably the normal relative humidity.

This favorable condition is changed during the day by a moist air blowing from the sea or lake, with cloud formation by a wet soil, along with a cold wind springing up.

It is, therefore, apparent that sunshine prevents saturation, while high elevation, by rarefaction, tends to prevent the same. These varying conditions may be successively illustrated. For instance, the central plateau of Ontario, as around Mount Forest and Guelph, has notably less moisture and more sunshine than districts around our lake shores. It is inland fifty miles, with an elevation of 800 feet above Toronto. Again, Aiken, in South Carolina, some twenty miles from the Savannah River, though not

more than 600 feet above the sea, or about the level of Lake Erie, is situated on what are known as the "sand barrens," where it may rain two days, and by noon of the third the soil is practically dry. The climate is wholly different from that along the Savannah; for, while the southern gray moss (*Tillandsia*) grows freely at Augusta on the river, it has not been found, and will not grow, at Aiken.

Ascending again gradually from the level of Kansas City toward the foothills of the Rocky Mountains in Colorado, one finds a tract of reddish soil or disintegrated granite rock from the mountains forming great arid tracts, from 2,000 up to 4,000 feet of altitude, so dry as to show little sign of vegetation, except bunch grass, sage bush, and cactus. There, ordinarily, no dew falls, and only with the autumnal and spring rains does the air ever reach the point of saturation. In this there are two factors: first, the Rocky Mountains intercept the winds from the Pacific, precipitating their moisture on the western slopes; and, second, the altitude so increases the rarefaction of the atmosphere that the clear atmosphere allows the sun's rays to raise the soil to such a high temperature, often 150° F., that even the extremely rapid radiation at sundown does not reduce the temperature (though often a fall of 40 degrees) of the air at the dew point.

Conditions similar to this latter prevail on this continent, very generally, on the eastern slopes of the various ranges of the west, and to a less extent to the east of the Central Appalachian range in latitudes from Virginia southward.

From the further fact that the diluvial deposits of clay of the post-glacial period do not extend south much beyond the Ohio, we find that, except where alluvial deposits are found in the river valleys, the great portion of the soil is of a permeable arenaceous or sandy character, and that Tennessee, Virginia, and the Carolinas are characterized by immense areas of such soils, extending far up the mountains, which are clothed everywhere by one class of vegetation, viz., oak and pine.

The presence of these forests leads me to refer to the influence which forests exert on climate. From time immemorial, their protecting influence against winds has been taken advantage of; but they have another most important influence in preventing climatic extremes. They at once protect the earth from becoming excessively heated during the day through absorption of the sun's rays, while, on the other hand, they prevent rapid chilling by radiation after sunset, inasmuch as they have about them a more or less moist atmosphere, due to evaporation from the leaves, which atmosphere is kept warm through the heat given off from the constantly ascending currents of warm sap from the roots. The common fact is well known to every one that with the close, overshadowing boughs of pines and

firs, even in our own moist climate, dew does not form beneath them till toward early morning, and then but slightly. Where, therefore, such sandy soils exist with large forest areas of evergreens, we have warm currents constantly flowing over the surrounding districts, producing remarkably equable climates, not unduly dry, and remarkably free from the extremes which mark the bare slopes of many parts of both sides of the western ranges of mountains, and which I have found most markedly present in the high altitudes of the mesa or tableland of Central Mexico, from 4,000 to 7,000 feet above the sea. At the time of my visit to Mexico last year, there had been scarcely any rain for two years. Lofty ranges of mountains, from 10,000 to 14,000 feet above the sea, bound the tableland on either side. These have been almost denuded of the forest since the intrusion of the Spaniards. It is arid plain below, and a sky absolutely cloudless above. The sun in midwinter is hot at midday, shining through an atmosphere absolutely clear and diathermanous. So powerful, indeed, are the sun's rays that one feels hot on one side of the street, but passing to the other for shade he at once feels chilly, so great is the difference of temperature. This great change of temperature becomes general at sundown. So powerful is the chilling effect of the rapid radiation at sundown that the prudent go within doors for a couple of hours, or else, like the peons, draw their serapis or shawls more closely around them, carrying a portion with one hand over their mouths for protection—a practice so necessary that it is a habit they fall into even during the daytime. It is hardly necessary, then, for me to say that, along with dryness, I place equability as a most important factor in estimating the value of any climate.

EQUABILITY OF CLIMATE.

This quality I refer to rather in its diurnal than in its seasonal relations. It is, as we know, quite possible for the physical system to become, by degrees, habituated to the extremes between winter cold and summer heat, as seen in Canada ; but it requires much robustness of constitution to withstand the extremes which may take place within a few hours, or, as in these high altitudes, within an hour or two. And here I desire to point out a fallacy which too many, in praising the virtues of particular climates, are constantly resorting to. They take the daily or monthly means of temperature for a year, and then, if they find a high average, they speak of the moderate climate. As a matter of fact, such climates may be, as regards physical effects, extreme climates ; since it is the changes within a few hours, not days, which affect health.

To illustrate the latter, I may refer to my first experience in high altitudes. At Las Vegas, in Mexico, the Mexico and Santa Fé Railroad Company has established a modern, splendidly equipped, hotel, the

Montezuma, in a canon, where are the aquas callientes, or hot springs. Arrived at 9 a.m., the air on the piazza was cold and bracing. The next day a walk up the canon was hot overhead, but dry air prevented visible perspiration. Under the shadow of a projecting peak boys were skating on the dammed-up mountain stream, and yet native women went about the house, and in the sunshine, barefooted. At 5 p.m. in November the sun was disappearing behind the mountains; the cold air currents from the cooling mountain side made sitting on the piazza uncomfortably chilly, and I had to go within doors, and found sitting in front of a log-fire not uncomfortable.

It is quite apparent, therefore, that equability, with dryness, can only be attained either (*a*) at low altitudes; (*b*) at altitudes through the protecting influence of forests; or (*c*) protection by going indoors as the sun goes down.

In the preceding remarks reference has been made to dryness with elevation, and the conditions connected therewith. It may now be well to refer to the one feature of elevation which is so frequently referred to owing to its directly physiological effects. I mean

RAREFACTION OF THE AIR.

It is manifestly difficult to separate this from the other necessarily associated conditions as regards its beneficial effects. Although atmospheric dryness may be artificially produced, yet we know that no pneumatic chambers of such a size as to maintain a reduced pressure with the concomitants of space for exercise, sunlight, etc., are practicable; and I am inclined to think that rarefaction *per se* has not so positive a value as some physicians, writing on high altitudes, would lead us to expect. That altitude produces very definite changes in atmospheric pressure will at once be perceived when it is remembered that at 6,000 feet of elevation the weight of air, compared with that at sea level, is lessened by one-fifth, the barometer standing at twenty-four inches. The effect of this is readily perceived by any one ascending the foothills of the Rockies at the rate at which a railway train travels. Where the circulation is weak its effects are at times most marked, occasionally disastrous, producing, as Jaccound remarks, hemorrhage in those with affected lungs; while I am personally aware of an elderly gentleman who took so ill at the altitude of Mexico City that he was sent away the day after arrival, as fast as a train could carry him, to the lower levels.

Dr. Denison, of Denver, very properly remarks, however, that "there is an adaptability of these organs in perfect health which more than compensates for a rarefaction of one-fifth, so that only a pleasant exhilaration is felt even with moderate exercise." Observers generally seem agreed

that in cases where altitude is tolerated the system more or less gradually accommodates itself to the changed conditions. The most noticeable effects are (*a*) respiration increased in frequency; (*b*) increased in depth; (*c*) increased oxidation of tissues, and greater tissue change; (*d*) increased chest measurement and lung capacity. Remembering that the air inhaled in high altitudes is generally cool, and that it is raised in temperature in the respiratory tract, it is natural to conclude that there is internally a notable decrease of air pressure, and that increased circulation in the capillaries of the mucous tract is promoted. This, with the deepened respirations, serves to promote more rapid building up of new tissue in the walls of the disease alveoli, and to promote the absorption of the products of hypertrophic changes resulting from localized inflammatory products, whether fibrinous or catarrhal.

I believe these views to be precisely correct; but they readily suggest to us how careful the physician must be who would recommend his patients to high altitudes. Commonly, the physician has to deal, in a phthisical patient, with a system already anemic, and with the nervous organization in a peculiarly irritable condition. As a consequence, the heart's action is weak and irregular; the loss of flesh makes the system peculiarly susceptible to rapid changes of temperature, and thus he must ever keep before him the fear of softened and ulcerated tissues in the lungs becoming the occasion of hemorrhages. I, therefore, am strongly of the opinion that the sending to such altitudes any patients other than those in the early stages of the tuberculosis, marked especially by increased mucous secretion, with bacilli present, but without much pus, rapid pulse, with a slight elevation of temperature in the afternoon, and perhaps subnormal in the morning, with some loss of flesh and night sweats, perhaps should not be advised; but that, instead, the patient should be sent to dry climates of slight elevation—say, from fifteen hundred to two thousand feet—until, at any rate, degenerative changes in tissues have been checked, or greatly ameliorated, and then only by stages should the patient pass to high altitudes. On the other hand, where there is evidence of a disseminated tuberculosis, showing itself rather in the tubercular cachexia and a wasting due to a catarrhal condition of the stomach, with loss of appetite and malnutrition, it seems probable that a change to altitudes of four thousand to six thousand feet may supply such stimulating effects when the temperature is such as to make outdoor exercise daily possible as to be productive of the very best results.

This reference to outdoor exercise demands further remark. We have heard much, within several years past, of the value of rest in the treatment of phthisis. Of the importance of rest in cases of a peculiarly neurotic character, and especially in cases where degenerative changes, with a high

daily rise of temperature, are present, I think too much cannot be said; but, in the first, a warm and sedative climate, as in the pine woods of the south, seems specially indicated; and, in the latter, some similar climate, where the residence can practically become out of doors, or where the patient can be taken daily in a sedan chair into the fresh air and sunshine without any danger of chilling, would naturally be selected.

Having, then, summarized some of the chief characteristics of climate, and some of the varying physical conditions which demand our close attention, we have to ask ourselves, Where are some of the most convenient localities in which these climatic desiderata may be found?

Naturally, starting from the sea level, I place, first:

(A) SEDATIVE CLIMATES.

A sea-voyage from New York to the Bermudas or Nassau from October to May may properly be advised for any who are good sailors. Once in southern latitudes, the continuance of sea-voyages there is likely to prove most beneficial. There is, as we are aware, a very notable difference between the atmosphere on the open ocean and that along seashores in the south. On the sea the air is always in motion; it is wholly free from malarial and other soil impurities of seacoast resorts; while the daily range of temperature, owing to the specific heat of water being so much greater than that of the land, removes, in large degree, the danger of colds from rapidly-falling temperatures and chill night air.

(B) INLAND, WARM, AND DRY CLIMATES.

One only requires to take a winter voyage to Charleston or Savannah, and thence travel inland a hundred miles, in order to notice the marked difference between the climate of the coast and that at Aiken, South Carolina, for instance. This town is situated in what constitutes a very considerable tract of country clothed, more or less, with oak and pine, and is called the "sand barrens." I spent most of the months of January and February there several years ago, and can testify to its possessing the qualities of dryness and brightness, and, owing to its slight elevation of 600 feet, of mild, stimulating characteristics. While an occasional day may be chilly—too much so at times for a very delicate person—yet when I say that there was not a single day too cold for some visitors to stand and witness a polo match, you will know it was not very cold. Only two or three times did the ground stiffen with the night's frost. By going into the bridle-paths through the pines, one was able almost wholly to avoid the chilly wind. Thomasville, in Georgia, a hundred miles or so south, might, perhaps, prove rather more favorable for patients more sensitive to cold; but there, on the other hand, many days in winter become enervating through high temperature. It is not, I understand, wholly free from

malaria; but there are many tracts in the central high grounds of Florida, southwest from Jacksonville, wholly free from this reproach.

(C) DRY AND MODERATELY STIMULATING CLIMATES.

In many cases where decided progress of the disease has taken place, yet where considerable strength and ability to take active exercise exists —even though hemorrhage and ulcerative changes may have taken place —I am of the opinion that altitudes from 1,000 to 2,500 feet in southern climates, dry, and with abundant evergreen forest to prevent the chilling effects of high winds and of great diurnal variations, will be found not only the most readily reached from Toronto, but also the most satisfactory in their effects upon the patient. I have met in the south chronic consumptives in whom the ulcerative processes have become arrested, but leaving the constitution delicate, whose life gravitates from Aiken or Thomasville in winter to the Tennessee or Virginia mountains in summer. They can find temperatures, by varying the altitude, of whatever degree they may find most beneficial. Many others, again, find elevation such as that of Ashville or Hot Springs in Virginia most suitable throughout the winter. Taking the climate of these latter places as types of available resorts, we find them bright, owing to the height; drying, owing to height and soil; stimulating for the same reason, and yet with many localities so surrounded with mountain heights, clothed with pine forests, as to make them largely free from extreme changes, and so far south that out-of-door exercise on most days is quite possible and enjoyable. Both these places, and many similar places in the "Smoky Mountain" district, can be reached from Toronto, *via* Cincinnati, within forty hours by train.

(D) HIGHLY STIMULATING CLIMATES.

These are the so-called high altitude climates. I have already indicated the class of patients who, I believe, are most likely to be benefited at such altitudes. It does not follow that because many who go to Colorado, New Mexico, or Arizona do not have hemorrhage or syncope on arrival that therefore these climates are best suited to them. My belief is that, owing to the diurnal extremes of temperature, because of the great altitude, many systems have a draft made upon them which, while not necessarily preventing progress, prevents them from receiving benefits equal to those which, in climates of the second class, are more readily and naturally brought about. These heights, during the summer, may prove more generally available, but I confess to a very great fear for any, except those with incipient phthisis, of the effects of that variability of climate which Denison places amongst the excellencies of a Colorado climate.

(E) DRY CLIMATES OF LOW ALTITUDES.

It would be unpardonable in me to pass over the climates which multiplied pamphlets and guide-books speak about as earth's paradise, in the various valleys of Southern California. I have not had the good fortune to cross to the west of the Rockies; but a climate which can grow roses at Christmas, have strawberries in February, require a blanket on a summer night, and yet supply, within an hour's time, altitudes from 1,000 feet to wooded canons 4,000 feet above the sea, with a glacier in sight at 14,000 feet, does seem to possess many of the attributes making it "open sesame" to the Elysian fields.

All writers seem agreed that the San Gabriel valley, and other similar valleys in about the same latitude, of 35° N., running mostly northwesterly, and sheltered on the north by the foothills of the Coast range, and on the east by the Sierra Madres mountains, are the particular centres of this Edenic land. There seem only two particular blots on this paradisaical picture, the one being the fogs which occasionally arise owing to the moisture from the ocean meeting a cold mountain current, and the other being dust winds, which sometimes blow for several days together, and are irritating, hot, and very disagreeable. These arise from the fact that the whole plain country, where not irrigated, is almost devoid of vegetation, except sage bush and cactus; in fact, is a partial repetition of what may be seen on the foothills of eastern Colorado and New Mexico.

Further inland, however, are found wooded canons which, I can readily imagine, possess an almost ideally perfect climate, and are yearly becoming the homes of hundreds in search of health, and who are making a living there by ranching and fruit-growing.

This climate presents what have seemed to me the great desiderata, viz., dryness, equability, and warmth, without excessive heat. While having practically the same yearly mean as the far-famed resorts of the Riviera, *i.e.*, 60°F., there is a notable difference in that the average for January in San Diego, Santa Barbara, and Los Angeles is 53°F., and for August 68°F., while Mentone has 48°F. as the January mean, and 75°F. for August.

In concluding, I have but one other remark to make regarding the advice which we should give our patients in sending them away to health resorts; and this is: "To avoid, absolutely, residence in the larger towns and cities, and to obtain quarters, even if camping be necessary, in rural or suburban districts, wholly away from the air of towns." This should be urged for several reasons: first, the air of hotels and boarding houses, the resorts of consumptives, or indeed of any persons congregated together, is impure, and becomes daily more so; second, a morbid curiosity is soon aroused in other invalids, and the mind of the patient becomes introspective, dwelling upon the relative degrees of his own sickness and wellness as com-

pared with his neighbor; and, third, because life in rural parts, owing to the absence of society, of hotels, etc., forces the invalid out of doors, where he not only gets sunlight and exercise, but also develops an interest in things having a healthful influence from their diverting the attention from his own ailments.

As I believe that as it is comparatively seldom that any persons having tuberculosis at all developed can, at any rate for years, return with safety to our damp, raw, northern climates for permanent residence, I think that patients should be prepared for this, and should be advised that so soon as at all possible they should engage in some light out-of-door employment for the several objects of maintaining themselves, obtaining exercise and the fresh air necessary to promote nutrition, and last, and perhaps most important of all, of curing mental occupation, and an interest in the life about them, the only preventive against the ennui and nostalgia, the hardest of all symptoms to alleviate in our chronic invalids.

Selected Articles.

TWO GUY'S SURGEONS.

John Hilton and Edward Cock.

IT is too much the fashion among the younger generation of professional men to associate eminence in surgery with some new method of procedure or some brilliant achievement in the way of an operation never hitherto thought possible. It is not remembered that the day after to-morrow the method will be supplanted by another, and the operation will be discarded as useless or unjustifiable. In surgery, as in medicine, true greatness consists rather in the power of applying a wide and accurate knowledge to the elucidation of the numberless problems suggested by an extended clinical experience, in maintaining that balance of judgment which can withstand the temptations to adventurous brilliancy without becoming stagnated in the slough of servile adherence to tradition. The men who really leave their mark on surgery and truly advance it in the interests of mankind are not so much the laboratory investigators as the clinical observers—men who have the acumen to perceive, the industry to collect and record, the intellect to reason from and compare the ever-changing phases of disease as they modify and are modified by the ever-varying individuality of the patient. If we look back at the history of surgery, it will be found that the men who have left their mark are not the brilliant operators or learned investigators, but rather men who continually devoted great ability to the work of their profession, to the solution of the questions which daily presented themselves for interpretation. They were men who spared no pains in their work, who shirked no difficulties ; but they were men who ever placed the patient in the first place, and looked upon operative brilliance as the means to an end.

Looking at the matter in this light, it is with the very greatest pleasure that we find the last volume of the Guy's Hospital Reports opens with appreciative accounts of those two eminently practical and clinical surgeons, John Hilton and Edward Cock. Mr. Jacobson, from his associa-

tion with the later editions of Mr. Hilton's celebrated work on "Rest and Pain," as well as from his personal qualifications, is peculiarly well fitted for the task of delineating for us the portrait of the great Guy's surgeon. The task has been discharged in a most fascinating way, and one of the principal reasons which we had for referring to the matter here was to draw the attention of those who may not happen to be subscribers to the Guy's Hospital Reports to this most interesting and instructive biographical note. Hilton's character, method, and manners are faithfully depicted, and rich stores of anecdotes and recollections are gathered from all available sources. That wondrous association of "Anatomical John" with Joseph Towne, which resulted in those marvellous models of which Guy's is so justly proud, is vividly described. Hilton's method of applying his vast knowledge of anatomical detail to the interpretation of clinical symptoms is fully illustrated. Some of the stories relating to the earlier portion of Hilton's career and his relations with other members of the staff give a most instructive insight into the ways and manners of half a century ago. The relations of the surgeon to his dressers and students are the occasions for many amusing anecdotes which give us an insight into the reason why, in spite of manners which were brusque to the verge of brutality, and in spite of a sarcastic form of expressing his disapproval, which is always most galling to subordinates, he succeeded in inspiring a respect and reverence which have long survived his death. Guy's men should all read this biographical record of one of the greatest of the great men who adorned the Borough Hospital; all interested in the history or practice of our art should avail themselves of this opportunity of gaining an insight into the records of the past, and of perceiving that the true methods of the craft never become obsolete—that, like the "milk-white hind," they are immortal and unchanged.

Hardly less interesting is the paper which Mr. Lucas devotes to a sympathetic account of Edward Cock, who, though senior to Hilton in his appointment to the staff, was a more familiar figure to Guy's men of the present generation from the fact that up to near the time of his death, in 1892, he was a frequent visitor to the operating theatre of his old hospital. Even those who never exchanged a word with him seemed on terms of friendship with the genial old man, whose ready smile and well-known stammer were familiar to all. Around this appropriate personality there had sprung up a vast number of mythical anecdotes among the students, who were ever ready to relate some new specimen of "Teddy Cock's" humor. With that dexterous mastery of phrase which all old members of the Guy's Physical Society associate with their former secretary, Mr. Lucas touches upon this penalty which almost inevitably attaches to a certain kind of popularity.

But Mr. Lucas speaks with the authority of one who knows by experience the value of Mr. Cock's teaching when he deals with the practical questions raised in forming an estimate of that great surgeon's claims upon the gratitude of posterity. It will be evident that Mr. Cock belonged to a different type from Mr. Hilton. He did not, apparently, possess the same originality of mind, or the same power of generalization by induction, which were such striking features of the author of "Rest and Pain." He was rather a man of thoroughly sound common sense, capable of devoting his attention to the actual problem before him, and of carrying out the measures which his judgment and experience suggested with a bold and skilful hand. Mr. Lucas gives an excellent account of that procedure known to Guy's men as Cock's operation, and points out in a very lucid and able way the uses and limitations of that method. It is clear that any dispute as to priority or doubt as to the practical advantages of this operation arises altogether from a misconception as to the nature of its performance and its intention. In another paper in the same volume of the Reports, Mr. Golding-Bird gives an exhaustive account of his experiences in eighteen years in Urethral Surgery at Guy's Hospital. In this paper the value of Cock's operation in suitable cases is very clearly and forcibly exemplified. To those who want information on this subject, we can advise a perusal of Mr. Golding-Bird's paper, and Mr. Lucas' remarks; but to those who wish to be entertained by two interesting and amusing biographical sketches, we can safely recommend Mr. Jacobson's account of John Hilton and his colleague's biography of Edward Cock. There is one quotation from the latter paper which may amuse the students of Heredity: "Like his distinguished uncle, Cock died childless. So did Thomas Carlyle, and the brilliant Earl of Beaconsfield, whilst the sons of the latter's great rival appear to illustrate Mivart's law of the necessary retrocession to an ordinary type. I have often thought what a misfortune it is that genius cannot be grafted like tender fruit on the quince or paradise stock, or budded like the rose on the stem of the wild briar. Until some such method is discovered, the fool of the family will be always first in the field, digging at the roots of the tree of reproduction to ensure the continuance of his follies, whilst wisdom is turned aside, and knowledge is uprooted. Then genius, tender plant, exposed to wind and storm, shrivels and dies, leaving only the spirit of its past."—*The Medical Magazine.*

LETTER FROM MR. LAWSON TAIT.

WE reprint the following letter, written by Mr. Lawson Tait to the editor of the *Buffalo Medical and Surgical Journal*. The matters discussed therein are of considerable importance to the profession at large, and it allows Mr. Tait a means of putting his views correctly before us:

SIR,—In the number of your valuable *Journal* for the current month, I have just read an interesting paper by my friend and former pupil, Dr. F. Byron Robinson, which requires a little notice, for I think he is hardly fair to me, or to my brethren on this side of the Atlantic, when he says that few of us engaged in abdominal surgery give much attention to the kidneys in their work.

His paper has a most suggestive interrogatory title, "What Kills Patients after Laparotomy—Anesthetic, Nephritis, or Infection?" Dr. Robinson hardly answers his own question, nor does he make quite clear his intention in asking it; but it is sufficient for my present purpose that he does ask it, and that he does so without that full information which I thought he possessed after his long residence with me. I, therefore, desire to supplement some of his remarks.

I need not stop again to protest against the continued use of the word "laparotomy," which can be used properly for operations involving incisions made in the flank, and cannot be extended to anything like an ordinary ovariotomy, and I therefore pass at once to the question at issue, rejecting this objectionable phrase.

In order to place myself historically right, let me say that it is now about twelve years since I made the discovery that the anesthetic administration of ether in the human subject may—certainly does, in some instances—completely arrest the flow of urine during its administration. The discovery was made by accident in a case of great rarity, a uretero-uterine urinary fistula, where I failed time after time because I missed the fistula. This was due to the fact that I used ether, and therefore thought I had closed the aperture, when I had only temporarily arrested the flow of urine at the very time I most needed the guidance of its misdirected current. I then used chloroform, closed the fistula properly, and cured the patient.

In operating on several bladder cases immediately after this incident, I had opportunities of confirming the experience, and these facts set me thinking. At that time a great enthusiasm had set in for the use of ether, a prejudice had steadily grown against chloroform, and I had, unfortu-

nately, been carried away with the stream. But my new fact set me thinking, and my thoughts drove me into a careful research of a number of fatal cases of operation where no complications of the operation could account for the deaths, but where the fatal results were found to be due to pulmonary and renal lesions, some known to have been in existence before the operation, others not suspected or not possible as antecedents.

I appealed to my friend and colleague, Dr. Robert Saundby, now known as one of our greatest authorities on renal pathology, and then our acting pathologist, for assistance, and that was promptly and abundantly given. He had known for years that degenerative changes in the kidney were very commonly associated with all abdominal tumors. Dr. Saundby and I had discussed the fact often before 1878. I knew perfectly well that many operators refused to undertake cases where the coarse test of the presence of albumin in the urine seemed to indicate serious kidney disease. But I had steadily set my face against ever refusing to operate on any case whatever, and, therefore, disregarded this apparently ominous sign. The result was that I scored a great number of brilliant successes in cases refused by men then at the head of my department. But I met with equally disastrous failures in cases where I could not see that anything was wrong with the operation, and where Dr. Saundby, and, subsequently, Dr. Foxwell, steadily reported "kidney degeneration and pulmonary edema."

Then two cases occurred which put a great light on the whole thing, a light which ought to have been admitted before, and would have been recognized long before, but for that most unfortunate habit we adopt of moving restlessly about in streams of fashion, giving to no proceeding and to no plan a systematic and logical investigation. The cases were, briefly, these:

A young Irish girl came to me with an enormous ovarian tumor, which had been tapped over and over again, the radical cure having been refused to her by no less than five leading surgeons in Great Britain alone. Her legs were so enormously swollen that no kind of joint flexion was possible, and no vaginal examination could be made, on account of vulvar edema. She passed only about twenty ounces of urine in each twenty-four hours, and quite half of that was albumin. According to our notions at that time, nothing could be more unpromising, but I undertook the operation. On thinking over the special conditions of the case, I remembered Simpson's great belief in chloroform as a remedy for the extreme conditions associated with albuminuria, especially the eclampsia of the puerperal woman, and the convulsions of the post-scarlatinal nephritis. I determined to give this case chloroform, and she got well without an interruption, the albuminuria disappearing as rapidly as her

convalescence progressed. In three months she was a strong and perfectly healthy woman.

The other case was that of a strong young woman of thirty, with a rapidly-growing soft, edematous myoma. All her visceral functions were healthy, so far as could be determined, before the operation. I did hysterectomy, the patient being under the influence of ether. She passed very little, and highly albuminous, urine after the operation, and she never drew an easy breath after she came out of the anesthetic. Death occurred on the fourth day, and *post-mortem* examination showed that she died of acute pulmonary edema, that the kidneys were quite healthy, and that the ureters were quite uninjured, and far away as usual from the clamp wire. (I had feared they would not be found to be so.)

This was a lesson which could not be misunderstood, and I immediately published my experience, which received many important confirmations, to the effect that ether had secondary results of an extremely risky kind on the kidneys and on the lungs, but the utterance made but very little impression. My experiences were summarized and published, in 1884, in a paper entitled, "A Series of One Thousand Cases of Abdominal Sections," as follows, and I thought then, as I think now, that they were the most important sentences I have ever published in my life:

"The question of the best anesthetic for use in abdominal surgery is one to which, of course, I have given a very large amount of attention, and it is very singular that in the class of drugs, the action of which there can be the least doubt about, we are, as yet, certainly very unsettled in our views. Like all pupils of Simpson, I began my professional life with a most profound belief in the advantages of chloroform over all other anesthetics. I have never seen an accident from chloroform, but, partly by reason of the fear of inquests, and partly by the example and teaching of Dr. Keith, a belief grew in my mind that ether was preferable to chloroform, and, at first, I had the impression that the sickness after ether was less marked than after the use of its rivals. I was not, however, very long in discovering that ether has special risks for people with a tendency to bronchitis; and later on I discovered, and have already published the fact, that during the administration of ether the secretion of urine is completely arrested. It was subsequently very forcibly impressed on me that, for patients with damaged kidneys, ether is a dangerous anesthetic; and although I cannot say that I have seen any fatal results arising from this peculiarity of its action, I certainly have had abundant cause to fear it. My first alteration, therefore, in my views concerning ether was to limit its application to patients under forty, but even after this I found my confidence in its safety greatly diminished by the fatal occurrence of bronchitis in a case of hysterectomy in a woman aged thirty. In this case

the patient's breathing was embarrassed from the moment she recovered from the anesthetic, her urine was scanty, and became ultimately albuminous, and she died on the fourth day from suffocative catarrh, the *post mortem* showing that, so far as the operation was concerned, everything was perfectly satisfactory."

These utterances attracted very little attention, and my example was very little followed, if at all. The reasons were two: First, that crowds of experiments on animals had just been published, in which it was proved that, so far as animals were concerned, ether was a safe anesthetic, and chloroform was not. Even if this conclusion were correct, and for many reasons I doubted and still doubt it, I urged the plea that what was true about animals need not be, and was not, true about human beings, and that no animal was known which suffered from chronic renal degeneration or which died from acute pulmonary catarrh. Nobody would listen to me, and my arguments were put down as those of a crank who had strong views about experimenting on animals. My views on this subject were entirely misrepresented, as they have been again, and quite recently, by the editor of the *British Medical Journal*. I am content to leave the quasi-moral arguments alone, and I confine myself to my own department, that of surgery, and I said fourteen years ago what I say now, that, for surgical purposes, experiments on animals are wholly untrustworthy, and have been, in very many instances, grossly misleading. I have never said anything more, and no amount of bullying or ridicule will make me say anything less. So much for the first reason of the neglect with which my utterances on anesthetics were received. My only comfort is that, last year, I induced the Council of the British Medical Association to exclude from their officially-conducted research on anesthetics all experiments on animals.

The second reason was a stronger one. England is emphatically the land of coroner's inquests; and, considering also it is the land which has established the freest and yet most responsible system of jurisprudence the world has yet seen, its people stand an amount of nonsense from coroners and their juries which is most astonishing.

The thing which an English practitioner hates above everything is a coroner's inquest upon any incident in which the conduct of his own practice may be called in question. Coroners seem always fond of making public enquiry into cases of death under an anesthetic, as there seems to be ingrained in the public mind, from the ridiculous misrepresentations they see on the stage and read of in novels, that anesthetics may be used for purposes of rape and robbery. Every such death is, therefore, blazoned abroad until the use of chloroform has become a *bete noire* of surgical practice alike for practitioner and patients. Chloroform,

when it kills, which it does very rarely, kills on the instant, and, in England, there is an inquest. When ether kills, which it does far more frequently, it kills some days after its administration, and there is no inquest, not even an inquiry. In Scotland there are no coroners and no inquests, and, as it is universally known and believed there that chloroform is far safer and better than ether, the former is used and the latter is not.

To get over the difficulty, I began to use a mixture, and soon found that it was a great advance over either of the two anesthetics used separately. I vary the proportions according to age, increasing the proportion of chloroform from one-third to two-thirds rapidly after forty, and in case there is any suspicion of renal or pulmonary incompetency.

Twelve years' experience has driven entirely out of my practice all those disasters which ether brought into it. In a number of administrations, now amounting to a great many thousands, not a mistake has occurred, and alarms occur only where some new and inexperienced administrator will indulge in such fantastic tricks as pushing back the tongue by pressing up the jaw, or violating, in some other foolish way, the simple rules for administration laid down over forty years ago by Simpson, not one of whose methods has yet been surpassed.

I have also this advantage, that when compelled to operate with the assistance of some practitioner in the country, whose opportunities of administering anesthetics are few and far between, I hand him my anesthetic, with the usual remark that it is an ether mixture; he goes to his work with confidence devoid of fear. If I told him that it was chloroform, his hair would stand on end, he would think of nothing but an inquest all the time, and I should never have the patient properly under from beginning to end of the operation. In fact, I should have all the elements of danger, as Simpson lays them down, arrayed against me.

Further, in discussing details of an operation with women patients, half of them want to know if they must take chloroform, because they are sure their hearts won't stand it, and they have been told this, that, and the other. "Ether mixture, far better and safer than chloroform," settles the question, and calms their morbid imaginations.

Perhaps you will permit me, in another letter, to reply to the third part of Dr. Byron Robinson's question concerning infection. Meantime, accept my assurances of respect, and believe me, yours sincerely,

LAWSON TAIT.

The Crescent, Birmingham, Eng., Dec. 9th, 1893.

Clinical Notes.

SUPPURATING MYOMA OF THE UTERINE WALL FOLLOWED BY TWIN PREGNANCY.

By James F. W. Ross, M.D.,

Lecturer in Gynecology in the Woman's Medical College; Gynecologist to St. John's Hospital, Toronto General Hospital, and St. Michael's Hospital.

THE following notes are taken from my case book:

Mrs. J., æt. 28, kindly referred to me by Dr. Stevenson, of Trenton, admitted July 22nd, 1891. Nothing unusual about menstrual history; was married two years ago; had a child born in May, 1891, good delivery. Four years ago she had a sickness that was attended by much vomiting; had a good deal of pain in the region of the bladder and pain in passing water—only a few drops of water would pass at a time, and there was a frequent desire to micturate. On the 27th of May her child was born; four days after she noticed a pain in the right iliac region, that shot across the abdomen and across the back; the pain was severe. At first it was constant; it gradually became diminished; and now, July 22nd, only occurs for a few hours every day or night. Since her confinement she has noticed an enlargement on the right side, low down in the abdomen. After the confinement the lochial discharge lasted for six weeks.

Two weeks ago—that is, during the first week in July, and about five weeks after her confinement—a greenish-yellow, thick, foul-smelling discharge commenced to flow freely from the vagina. At present the discharge is thinner, not so offensive, and has every appearance of laudable pus. The discharge has gradually been increasing in quantity. Patient looks very ill; she lies on her left side, as it hurts her to turn on her back. There is pain on pressure over the abdomen, chiefly in the left iliac region; tympanites present; she has an aching pain in the right iliac region. Has been troubled with painful micturition for the last week or two. The urine is found normal.

On inspecting the genitals, I found a large abscess in the left labia majora, and a very offensive discharge of pus from the vagina; the parts were all reddened and inflamed as a consequence of the irritation of the

discharge of this pus. The os uteri was enlarged, and the cervical canal patulous. One finger was passed in, and a large fibroid, about the size of a child's head, was discovered pressing into the cavity of the uterus. The patient was placed under chloroform, and on exploring the interior of the uterus the fingers burst into a horrible sloughing mass, evidently a sloughing intramural fibroid. The cervix was still further dilated, and by means of gallstone forceps and fingers the tumor was scooped out until the surface towards the peritoneal cavity was as much diminished in thickness as was consistent with safety. The hemorrhage was free, but the uterine cavity, and the cavity of the tumor, were tamponed tightly with iodoform gauze tied into knots, together with vaginal packing, and a pad and bandage to compress the genitals.

The abscess in the left labia majora was freely incised, and a large quantity of pus evacuated. The uterine cavity was douched out twice daily for a few days, and the uterine cavity re-packed with iodoform gauze. The patient made an uninterrupted recovery. One would have thought that the uterus of such a case would be so much weakened by such a large growth in its wall that pregnancy would scarcely be carried through at any subsequent period with safety. The tumor had a very broad attachment, and was not one of those intra-uterine fibroids with a pedicle, but bulged out into the abdominal cavity, so that the junction of the uterine muscular tissue could be distinctly felt above and below it by a depression. The uterine wall was implicated from the fundus to the internal os.

The reason I relate the history of the case at this late date after her recovery is owing to the fact that I have just received a letter from her medical attendant, who states: "Mrs. J., the patient of mine on whom you operated, has since been safely delivered of a pair of twins. She made a good recovery, and is in good health."

CEPHALHEMATOMA.

By H. Morell, M.D., C.M.,
Stayton, Minn.

On May 14th last I was called to attend Mrs. L., a primipara. On examination, everything was quite normal, and labor was terminated in about three hours. While inspecting the child, which was of the female sex, I found a swelling on the right parietal eminence. I thought, in my hasty examination, that it was an ordinary caput succedaneum, and told the parents that it would disappear in a few days. I did not take any more notice of it until about two weeks after, when my attention was drawn to it by the child's mother, who was very much alarmed. On inspection, I found that the tumor, instead of diminishing, had increased in size, and was of a harder consistency than before. It did not pit on pressure like the ordinary tumor of the head, but it was a *distinctly fluctuating* swelling about the size of a small orange. At first sight it looked like a congenital prolapsus of the brain (hernia cerebri congenita); but, as it did not extend over a suture or fontanelle, nor bulge or become tense when the child cried, that idea was dispelled. There was now only one thing that it could be; that was a blood humor, or cephalhematoma. This occurs, at the most, twice in one thousand newborn children. Cephalhematoma is a painless, soft, elastic, *distinctly fluctuating* tumor upon the scalp, and is produced by an extravasation of blood between the pericranium and bone. Vogel says "that the extravasation most probably occurs during the delivery; for, as early as the first day of life, when the common caput succedaneum begins to disappear, a very distinct swelling is noticed, which remains from the fourth to the sixth day, at the longest, when the tumor, of the size of a ripe apple, is discovered upon one of the parietal bones. Usually, it is observed on the right side. It never extends over a suture."

Treatment. The tumor was left alone, with the exception of a little vaseline rubbed on once a day. In about four months it completely disappeared. During the whole period the child was in the best of health. Compression, puncturing, and incisions only cause danger, through irritation of the scalp and exposure to the air of bones denuded of periosteum.

Progress of Medicine.

MEDICINE

IN CHARGE OF

J. E. GRAHAM, M.D., M.R.C.P. Lond.,

Professor of Medicine and Clinical Medicine, University of Toronto; Physician to the Toronto General Hospital, and St. Michael's Hospital.

AND

W. P. CAVEN, M.B. Tor.,

Lecturer in Clinical Medicine in the University of Toronto; Physician to Home for Incurables.

Tuberculous Pleurisy.

The following is reprinted from the "Transactions of the Massachusetts Medical Society," being the Shattuck lecture for 1893 (Wm. Osler):

Of 101 cases of pleurisy examined *post mortem*, thirty-two were definitely tubercular, and thirteen existed in patients with tubercular lesions of the lungs without any definite proof of the tubercular character of the pleurisy. By far the commonest forms of pleurisy were sero-fibrinous or fibrinous exudation, secondary to acute disease of the lungs, or occurring at the termination of chronic affections of the heart, arteries, or kidneys. The author recognizes the following *clinical types:*

(1) *Acute tubercular pleurisy.* These are rarely fatal, a large majority completely recovering, a few becoming chronic, and a variable number developing tuberculosis of other organs later. These may be divided into three groups: (*a*) Acute tubercular pleurisy with subsequent chronic course may set in acutely without anything to suggest tuberculosis. After a series of tappings the patient may recover, with evidences of thickened pleura. Recurrence and ultimate infection of the lungs may occur. (*b*) Secondary and terminal acute tubercular pleurisy may occur in the course of pulmonary tuberculosis, or at the end of some chronic disease, *e.g.*, of the heart, arteries, or kidneys, or cirrhosis of the liver. In these latter there is generally found a tuberculous lesion of the apex or of the bronchial glands. (*c*) Acute tubercular suppurative pleurisy running a rapid course.

(2) *Subacute and chronic forms.* (*a*) With sero-fibrinous exudation.

This is by far the commonest, and may occur as a complication of well-marked tuberculosis elsewhere (*e.g.*, in lungs), or be the only obvious lesion; though, in the latter case, a tubercular focus generally exists in the lungs, bronchial glands, or peritoneum. This is a very important class of cases, as the onset is generally insidious, and the character of the disease often overlooked. A certain number ultimately die of pulmonary or general tuberculosis. (*b*) With purulent exudation. Generally subacute in onset and chronic in course. (*c*) Chronic adhesive tubercular pleurisy, with enormous thickening. It is generally preceded by tuberculosis of bronchial glands. The thickened layers may unite in their whole extent from a solid membrane with patches of softening, or a space may be left below filled with fluid. The process may extend into the lung.

(3) *General serous membrane tuberculosis.* A group of cases in which the serous membranes are affected, either simultaneously, or, more generally, one after the other, the pleuræ being usually secondary to the peritoneal affection. (*a*) Acute tuberculosis, with rapid evolution of disease in the pleuræ and peritoneum, generally consecutive to disease of the tubes in women, or of the bronchial or mesenteric glands. (*b*) More chronic. Exudation occurs into the pleuræ and peritoneum, with caseation, ulceration, and suppuration. (*c*) Still more chronic, with much fibrosis and little exudation. The course of these serous membrane tuberculoses is often very chronic, with periods of great improvement, and with little or no fever.

As regards the *treatment* of pleuritic effusion, the author believes in a dry diet combined with cathartics and diuretics. Aspiration he recommends at the tenth day, if the fluid still reaches the level of the fourth rib. Counter-irritation he strongly advocates. Pulmonary gymnastics, by means of Wolff's bottle, are useful when there is much thickening of the pleura.—*Medical Chronicle.*

Dilatation of the Colon in Young Children.

The author (Wm. Osler, *Archives of Pediatrics*, February, 1893) relates four cases in all, the two last being his own. The first, recorded by Formad, was twenty-three years of age, and gave a history of constipation and abdominal distension from infancy. At death the colon had a circumference varying in different places from fifteen to thirty inches, and its weight (with contents) was forty-seven pounds. In a case of Hughes,' æt. three years, with similar symptoms and death from enterocolitis, the colon held fourteen pints of water, and its muscular coat was enormously hypertrophied. Rectal enemata only aggravated the symptoms during life.

Case 1. Colored boy, æt. ten years. Swollen and painful abdomen

and troublesome constipation from infancy. Circumference above navel, 63 cm. Visible peristalsis; tympanites; no tumor to be felt; very emaciated. During residence in hospital he had alternating attacks of diarrhea and constipation, tympanites being very troublesome at the latter times, and relieved by irrigation with water by means of a rectal tube passed high up. Greatest abdominal circumference noted was 74 cm. Laparotomy was performed, and the colon found to be enormously dilated in its whole length, but especially in the sigmoid flexure (circumference 45 cm.), which was twisted on itself without causing any obstruction. An artificial anus was made at the most prominent point of the sigmoid flexure. As a result of the operation feces passed freely through the artificial anus, and tympanites no longer existed, and the patient gained flesh. Six months later (at the time of publishing the paper), the operator was considering the advisability of closing the artificial anus.

CASE 2. Child, æt. seven months, normal labor. From the outset no meconium was passed. On examination no obstruction was found, and tarry feces came away when a catheter was passed high up into the rectum. On admission, child well nourished, abdomen greatly distended, and mother says she has seen peristaltic movements. She injects daily a few ounces of water and then passes the catheter, when feces and gas escape, and the abdomen collapses in a remarkable manner. The treatment ordered was to pass the catheter several times daily, so as never to allow distension. Several months of this treatment, however, have caused no improvement.—*Medical Chronicle.*

A VARIETY OF NERVOUS HEMATEMESIS.

Josserand, in *Lyon Médical*, says it has long been known that cases are not rare where blood is apparently vomited without any other signs of stomach or lung disease being evident. As this is most frequent among young adult women with dysmenorrhea, it has been customary to class them as cases of vicarious menstruation. The author, however, has found this symptom in several cases where menstruation was quite normal, though various hysterical symptoms were present. He therefore made some observations on the characters and source of the blood in these cases. The fluid, he says, is less colored than pure blood, as seen when a drop is allowed to stain white linen, though it may seem dark, looked at *en masse*. It is more watery, is viscous and syrupy, and partly adheres to the bottom of the vessel containing it; is not frothy as in hemoptysis, and rarely coagulates. The vomiting is preceded by a feeling of stifling, or epigastric or retrosternal retraction; then the mouth fills rapidly with saliva, and suddenly the blood is expelled all at once, and the

patient feels greatly relieved. This often occurs daily for even several weeks. Careful analysis of the vomited blood shows that it contains one-fifth of the amount of hemoglobin contained in pure blood, while the red corpuscles only number one five-hundredth of those in normal blood. Placed in a test glass it settles into three layers, the lowest being gray-white, and consisting of pavement epithelial cells and cells like salivary corpuscles; the middle layer being thin and consisting of red blood corpuscles partly discolored, while the uppermost layer is deep, slightly pinkish, and, as shown by the spectroscope and other tests, consists of a solution of hemoglobin. The fluid possesses considerable diastatic power, and, on the whole, is a mixture of one part blood with ten or twelve parts saliva.

As to the source of the blood, he says that in some cases pharyngeal varices have been found. Sometimes the larynx is the source, though no lesion other than temporary congestion is present. In several of his own cases varices about the base of the tongue were present. Manon and others have noted the existence of cerebral lesions in some cases. The author thinks, however, that in most cases the blood comes either from the gastric mucosa or from varices at the lower part of the esophagus, and that true hematemesis occurs. The phenomena consist, then, first, of a nauseous ptyalism, then a small quantity of blood is poured out and vomited, and in its passage is mixed with the copious flow of saliva. He hence suggests the term "hysterical hemosialemesis."

The fluid is of remarkably constant composition, namely, one part blood with ten to twelve parts saliva, the latter having dissolved out the hemoglobin from most of the red corpuscles, so that though the hemoglobin is one-twelfth of that of pure blood, the red corpuscles are, to a large extent, destroyed, and those that remain are partly discolored. So characteristic is the fluid that he claims that a mere examination of it is enough to justify the diagnosis of hysteria even without seeing the patient. The exact etiology is still obscure, but the author has done good work in so carefully analyzing the cases he has dealt with.—*Manchester Chronicle.*

The Varieties of Pulmonary Tuberculosis.

Dr. Fowler (Fowler, J. K., in *The Practitioner*, October, 1893) uses the term "pulmonary tuberculosis" for all cases of phthisis pulmonalis of tuberculous nature, and suggests that for these cases the classic designation should be discarded. He classifies all cases of tuberculous diseases of the lungs under the four following varieties, viz.: (1) Chronic pulmonary tuberculosis; (2) miliary tuberculosis of the lungs; (3) caseous tuberculosis; (4) fibroid tuberculosis.

In an examination of one hundred and sixty-six consecutive cases of this disease, he found that one hundred and forty-nine cases were of the first variety, four cases were of the third variety, and thirteen cases of the fourth class. No case of the second variety presented itself.

Chronic pulmonary tuberculosis, then, is, in the author's view, a sufficiently definite designation for the great majority of cases of tuberculous disease of the lungs.

Miliary tuberculosis of the lungs may occur as part of a general tuberculosis; or it may follow the breaking down of an old encapsuled caseous mass in the lungs; or it may occasionally be a primary infection of the lungs through the medium of a softening caseous bronchial gland.

Caseous tuberculosis of the lungs is the term suggested to include acute phthisis, acute pneumonic phthisis, acute tuberculo-pneumonic phthisis, florid phthisis, galloping consumption, caseous, epithelial, or scrofulous pneumonia. It may be a lobar type, or a disseminated type. It may be primary, or may supervene upon the chronic form, or upon an arrested tuberculosis. The distinguishing pathological changes are the presence of areas of consolidation tending rapidly to caseation, followed quickly by softening and excavation.

Fibroid tuberculosis of the lungs. This class does not include cases of so-called "fibroid phthisis," even when tuberculous, these being referred to the class of chronic pulmonary tuberculosis. The most distinctive pathological feature of the class is the fibroid transformation of miliary tubercles. Pigmentation and fibrosis are characteristic of the lesions. Excavation is rare, and, if present, the cavities are usually small and thick-walled. There may be pleural adhesions, but the extreme thickening of the serous membrane, which is such a marked feature of "fibroid phthisis," is absent.—*Manchester Medical Chronicle.*

TABLE GIVING THE RELATIVE FREQUENCY OF THE CONDITIONS PRODUCING HEART HYPERTROPHY.

	Cases.	Per cent.
Arterio-sclerosis in	62	59
Nephritis	14	13.4
Valvular lesions	13	12.4
Adherent pericardium	8	7.6
Work	4	3.8
Tumors	2	1.9
Aneurism of heart wall	1	0.95
Hemic plethora	1	0.94

—Howard, in *Johns Hopkins Bulletin.*

THERAPEUTICS

IN CHARGE OF

GRAHAM CHAMBERS, B.A., M.B. Tor.,

Professor of Analytical Chemistry and Toxicology, Ontario College of Pharmacy; Lecturer in Organic Chemistry and Toxicology, Woman's Medical College;

AND

WILLIAM LEHMANN, M.B. Tor.,

Physician to the Home for Incurables and House of Providence.

A Precaution in the Use of Cocaine as an Anesthetic.

In a recent number of the *Centralblatt für Chirurgie* we find an abstract of an article by Dr. Gauthier, published in the *Gazette des Hôpitaux*, on a means of preventing the unfavorable after-effects of cocaine when it is used as a local anesthetic by injection. This consists in the addition of one drop of a one per cent. solution of nitro-glycerin to the injection. The author goes on to say that nitro-glycerin dilates the blood vessels of the brain in the same way that amyl nitrite does; in the course of a few minutes after the injection of two or three drops of a one per cent. alcoholic solution the skin of the face is seen to grow red and hot, the conjunctiva becomes injected, and the patient complains that his head feels as if it were going to burst. M. Gauthier has taken advantage of this action, antagonistic to that of cocaine, for the last two years.—*Medical Record.*

Chlorobrom in Sea Sickness.—Hutcheson (*The Lancet*, August 12, 1893) states that he used chlorobrom in all cases of seasickness to which he was called while ship's surgeon to the steamship "Rimutaka," during a voyage to and from New Zealand, and speaks of its action as follows: He always gave it in three drachm doses in the second stage of this distressing ailment, when retching, headache, depression, and sleeplessness were the prominent symptoms, the hour selected for administration being ten p.m., in order to secure a good night's rest. The results were very satisfactory. The chlorobrom was always retained, and was always followed by sleep (generally sound). The patients awoke much refreshed in the morning, with an appetite, and able (except on one occasion) to eat and retain something light.—*The Therapeutic Gazette.*

Clinical Experience with Senna Cathartic Acid.

Dr. Karl Dehio (*American Journal of the Medical Sciences*) notes that Cubly has isolated a substance from senna leaves which he believes to be the active principle, and to which he has given the name of cathartic acid. As this substance is irregular and unreliable in its action, it seems fair to conclude that it is not a chemically pure body. Gensz has also isolated an active principle of senna leaves, to which the same name has been given, although it is not identical with that mentioned above. The latter is a brownish-yellow powder, with difficulty soluble in cold, but readily in hot water, and of weakly acid reaction. Further investigation will determine if it be identical with the active principle of rhubarb and frangula. In dose of from one to three grains it produces, after five to seven hours, watery movements, sometimes accompanied by somewhat severe cutting abdominal pains, but usually it is of entirely painless action. The results of its use in twenty-one persons are recorded, generally in single dose and in the form of tablets. In general, in healthy persons, with frequent and copious evacuations, considerable pain was observed, while in cases of simple constipation it found favor because it did not cause any very severe pain. The slower its action the less pain resulted. As the remedy does not have an unpleasant taste, rubbed up with sugar it will be readily taken by children. The dosage can be made more accurately than with other senna preparations. The more obstinate the constipation, the milder appears to be the operation of this remedy, and in these cases this should be the cathartic to be chosen.—*St. Petersburger medicinische Wochenschrift.*

Injections of Iodoform in Goitre.

Kapper (*Gaz. des Hôp.*, September 2, 1893) uses a solution containing one part of iodoform and seven parts each of ether and olive oil, which is injected into the goitre after previous disinfection of the skin. The trocar of the syringe is disinfected, and is then plunged to the depth of two or three centimetres into the tumor, and the patient is told to swallow in order to ascertain whether the cannula takes part in the movements of deglutition, or whether it has not been inserted deep enough. Immediately the solution is injected the trocar is rapidly withdrawn, and the orifice of the puncture closed by means of a piece of diachylon plaster. When the goitre is very large, he injects as much as six grammes of the solution at one sitting, in four different parts. The injections were repeated at intervals of four to six days, sometimes on several consecutive days. Local reaction was always feeble. Eight men and six women have undergone the treatment. After ten injections in the course of two months the circumference of the neck was diminished by six centimetres at least, and after

another interval of two months there was a diminution of eight or ten centimetres. Besides this, the discomforts felt by the patients were sensibly attenuated. Six months after cessation of the treatment, the improvement was maintained.—*University Medical Magazine.*

Dangers of Subcutaneous Injections of Pilocarpin.

Rémy (*Rec. d'Ophtal.*, October, 1893) relates a case of white atrophy of the optic nerves in which pilocarpin had been ordered for subcutaneous injection. The effect of the injection was most alarming to the patient, but treatment was continued, and the number of injections were increased. Finally, shortly after one injection, the patient fell back dead. In another case pilocarpin was given subcutaneously to hasten recovery from a cerebral embolism; after its use the patient was seized with a series of epileptic attacks, which passed off when the drug was discontinued. The author relates other cases which have come to his knowledge of dangerous symptoms following subcutaneous use of pilocarpin.—*British Medical Journal.*

Atropine in Morphine Poisoning.

Cruse (*Archiv. für Kinderheilk.*, xvii., 1-2, 1893) describes the case of an infant a week old who was accidentally poisoned by a grain of morphine administered as a lotion. The comatose condition which resulted was left untreated at first, and then for several hours remained unaffected by various treatments. Eventually, the author administered atropine solution, giving one-quarter of a grain on two successive occasions at an interval of half an hour. Recovery immediately ensued, and was complete in thirty-six hours, other suitable treatment being also employed. The author calls attention to the relatively large doses which were administered without causing unpleasant symptoms.—*British Medical Journal.*

New Method of Treating Pulmonary Tuberculosis.

Dr. Carasso Giovanni Michele, director of the military hospital in Genoa, supported by the well-known bactericidal quality of ol. menth. pip., and the successful experiments of Leonard Braddon with this oil, has, since 1888, treated pulmonary tuberculosis by continuous inhalations of ol. menth. pip. He combines inhalations with internal administration of an alcoholic solution of creosote, glycerine, and chloroform, to which ol. menth. pip. 1-100 is added. The success has been brilliant. Thirty-nine cases are reported cured, and among them were cases in an advanced stage, with cavities, and large numbers of bacilli in sputum. These were all cases in which the disease was confined to the lungs.—*Centralblatt für Therapie.*

The Bactericidal Quality of Nasal Mucous. (Drs. Wurtz and Lermoyez.)

Nasal breathing is, in three respects, a protection against injury from the inhaled air: (1) By warming the air; (2) by increasing the moisture; (3) by the arrest of dust particles. The very interesting and instructive work by the above authors treats of the latter point. After a part of the dust has been arrested by the so-called vibrissæ at the entrance to the nose, the inhaled air must pass through the labyrinth-formed air passage of the nasal cavity, with its many inlets and irregularities, as through a filter, and arrives in the pharynx almost completely clean and free from injurious qualities. But if the labyrinth fails to perform its function, inflammations occur in the pharynx and larynx, such as ozena. The surface of the nasal mucous membrane is covered by a thin layer of mucus, whose function it is to protect the air passage mechanically against the invasion of microbes by the arrest of dust particles. But if this were the only function of the nasal mucus, the nasal cavity, on account of its favorable conditions for collection, and its warmth and moisture, would become a most favorable breeding-ground for microbes. The nasal mucus must, therefore, possess special sterilizing and bactericidal qualities. Wurtz and Lermoyez have made a series of simple and instructive experiments which prove that it does possess these qualities. And they reason by analogy that not only the nasal mucus, but also other secretions chemically and biologically similar, such as those of the trachea, bronchi, urethra, and cervix uteri, have the same qualities.—*Centralblatt für Therapie.*

Arsenic in Pulmonary Phthisis.

Dr. Karl Hochhalt holds that the most essential factor in the treatment of pulmonary phthisis is to control the fever. He condemns the administration of the modern antipyretics, because they lessen the energy of the heart, and influence the fever only symptomatically, and the fever returns to its previous height as soon as they are discontinued. In order to control the fever effectually and rationally, he recommends the frequently proposed, and again rejected, use of arsenic, and gives the result of experiments in fifty cases to show that the appetite improved, the body weight increased, and the hectic decidedly improved under its use. He does not think that it has any influence on the process itself in the lung, except in acute initial apex catarrh. He gives Fowler's solution, beginning with one or two drops daily, and increasing by one drop daily until five or six are reached, and then every second day, until he gets to ten drops. —*Centralblatt für Therapie.*

OBSTETRICS

IN CHARGE OF

ADAM H. WRIGHT, B.A., M.D. Tor.,

Professor of Obstetrics in the University of Toronto; Obstetrician to the Toronto General Hospital.

Puerperal Insanity a Toxemia.

Dr. Menzies, of the Rainhill Asylum at Liverpool (*American Journal of Insanity*), presents a very interesting study of a hundred and forty cases of puerperal insanity. Of these, thirty cases were insanity of pregnancy, sixty-four insanity of parturition, and forty-six insanity of lactation. The author rightly says that these various periods merge so imperceptibly into one another that any division must be, to a certain extent, arbitrary. He applies the term insanity of pregnancy to cases in which mental alienation was noted before the birth of the last child, and all that began two months after parturition he classifies as insanity of lactation.

While it is generally considered that puerperal insanity is apt to have a sudden onset, fifty-four per cent. of his cases presented prodromal symptoms. In all forms depression is the first manifestation, as a rule, in the form of sadness, distrust, apprehension, or religious awe. This period of depression may be of short duration, or persist for months. States of depression are found in fifty-three per cent. of all pregnancy cases, in thirty-four per cent. of parturitional cases, and in seventy-four per cent. of lactational cases.

Pregnancy types. In nearly half the cases the patient imagines she is going to be killed, or has committed the unpardonable sin, or else she combines the two ideas. In this type the delusion as to the disloyalty on the part of the husband exists in but a small percentage. There are no distinctive mental features in this form by which we may distinguish it from other cases of melancholia. A physical examination is necessary. *Mania* of pregnancy, however, has distinct peculiarities, but it is rare, and only eight of the author's cases presented this form. The chief diagnostic points of the insanity of pregnancy are: (1) Silent reserve and unsociability; (2) strongly marked delusions of identity; (3) religious or erotic impulse; (4) rational performance of routine duties if the patient is left to her own resources.

Symptoms rarely present themselves before the fourth month of pregnancy, and most commonly develop in the fourth or fifth month.

Puerperal and parturitional types. Delirious excitement is most usual, occurring in forty-six per cent. of the cases. Suicidal and homicidal tendencies are not uncommon. Among the delusions of puerperal delirium, the most frequent is that of fear of impending death; but false identity, religious ideas, and hallucinations of sight and hearing are common. Acute delirious mania was present in but two of the author's cases. The tendency to relapse after apparent improvement or convalescence is great, and relapse is often quite sudden. Eighteen per cent. of the cases developed in the first week after confinement, fifteen per cent. in the second week, forty per cent. in the first month, and fourteen per cent. in the second month.

Lactational types. The same symptoms occur here as in the other forms, but the order of frequency of the types is different. Thus twenty-four per cent. show melancholic delirium; fifty per cent. quiet, depressed states; twelve per cent. mania; and fourteen per cent. maniacal delirium.

Any given case of puerperal insanity, of whatever type, may pass through six stages: (1) Prodromal disturbance; (2) early delirium; (3) melancholia; (4) stupor; (5) mania; (6) dementia. Many patients pass through all the first five, and yet recover; but, generally speaking, the fewer the stages, the better the prognosis.

As regards the recovery rate, it is high in insanity of the puerperal period, as is generally conceded. Seventy-five per cent. of the author's patients whose cases were of the parturitional type recovered, but only 43.3 per cent. of the pregnancy type, and 56.5 per cent. of the lactational type. In the cases of recovery the duration of treatment until recovery was as follows: Eighteen recovered in two months, twenty-one in four months, sixteen in six months, seventeen in a year, and twelve in over a year.

Twenty-one patients died. Of these, ten had general paresis, five insanity of the parturitional type, and six insanity of the lactational type. Of the last eleven, six had phthisis, one general pyemia, one *Schluckungs-pneumonie*, one coma and convulsions, one exhaustion and diarrhea, and one acute delirious mania.

Some valuable facts are brought out by the author in regard to certain questions often referred to in connection with insanity connected with child-bearing.

Thus, in seventeen of the one hundred and forty cases the mother evinced a feeling of hostility to her child, but in only two was there an attempt to kill it; fourteen patients attempted suicide before their admission to the asylum, and thirty-one patients showed erotic tendencies.

Erotism plays an important part in the early puerperal period. It generally develops after confinement, but sometimes before it. Indecent overtures and attempts at exposure are made, and in the delirious conditions filthy jokes and grossly vulgar details of private life are given.

As to the influence of the unmarried state upon the production of puerperal insanity, only ten of his patients were single women, and, of these, seven had led dissolute lives previously. The author is opposed to the idea that the shame of exposure and the worry incident to illegitimate pregnancy are causes of puerperal insanity.

Ten cases in the series of a hundred and forty-were cases of general paresis, and the author is doubtful as to whether the connection between pregnancy and general paresis should be considered purely accidental.

Another interesting fact is the course of labor in insanity. It is generally precipitate. The rapidity of delivery is very remarkable.

Probably the most valuable part of this paper is the discussion of the pathology of puerperal mania. Dr. Menzies advocates the very sensible theory that the cause is self-intoxication. The maternal excretion is overtaxed by the considerable excretion of waste products from the fetus, accounting possibly for the toxemia in the insanity of pregnancy. Delivery leaves the lymphatics choked with albuminous fluids of low vitality, which, if not excreted quickly, may change and poison the blood, in this way giving rise to the insanity of parturition. The drain of albumin in lactation possibly alters the chemical composition of the blood, and may thus give rise to the lactational type of insanity. These blood poisons engender the psychic symptoms naturally by their effects upon the intellectual substrata. In puerperal insanity a temperature of 101° F. is not at all uncommon, even in the lactational form. Cessation of the lochia invariably aggravates the mental condition, and involution is always retarded. There are waxy pallor, sallow skin, quick production of anemia and wasting, and great destruction of hemoglobin, all pointing to a blood condition, and not to a cerebro-cortical disturbance. The universal benefit derived from a purge, the recognized objection to drugs like opium, which paralyzes osmosis, and the advantages of uterine douches, show that asylum physicians act up to the toxemic theory, whether they admit it or not.

As regards treatment, the author believes in hydrotherapy, purging, good feeding, stimulants, rarely a hypnotic (either chloral or paraldehyde), rest in bed, hot uterine douches, and stopping the secretion of milk, according to the case and its condition. Intestinal antiseptics he believes to be of little or no use.—*New York Medical Journal.*

Dangers to the infant from Forceps Delivery.

The modern obstetric forceps is an admirable instrument, but it is well to keep in view the important fact that its use brings certain dangers to both mother and child.

Dr. Swayne, of Bristol, published a short paper in the Bristol *Medico-Chirurgical Journal* on the subject of compression of the umbilical cord during forceps delivery. He considers that this is a somewhat frequent cause of death of the infant, although the majority of text-books say little or nothing about it.

He says the result of his own statistics is that, in a total of two hundred and twenty-four forceps cases, six infants have died from cord pressure; that is, one in 37½ cases. This is only one of the several dangers to which the infant is exposed through the use of the forceps. In consideration of these facts, and having also in view certain dangers to the mother, it might be pertinent to ask if forceps delivery is not becoming too frequent in the hands of some obstetricians.

Opinions, of course, differ, and we think that there are plenty of physicians who go to extremes in either one or the other direction. The writer has in his mind one physician, with an average country practice, who had only applied the forceps once in twenty years; and, at the same time, another able country physician, with a large practice, who said that he applied the forceps in something like two out of three cases.

Which of these two is likely to have had the larger fatal mortality as the result of his methods? Probably the former, but that is by no means certain. We think that, in this country, the tendency during recent years has been in the direction of a more frequent and early use of the forceps. Perhaps this is right, but it is well for all to learn the lesson which Dr. Swayne endeavors to teach: that is, that the frequent and early use of the midwifery forceps is associated with grave dangers both to mother and child.

Ergot and Quinine in Labor.

Cordes, in a memoir upon the use of quinine, gives the following conclusions:

(1) Ergot, an excellent remedy in arresting uterine and other hemorrhages, should be replaced by quinine when the uterus contains a solid body, without excluding other treatment.

(2) In tardy labor quinine is preferable to ergot, which may asphyxiate the child, either by the tetanic contractions which it causes, or its elective actions upon the cervix. In medicinal non-toxic doses, it need not be feared for pregnant women suffering from intermittent fever; but, on the contrary, is useful in such cases.—*Annual of the Universal Medical Sciences.*

Uncontrollable Vomiting in Pregnancy.

Blanc (*Archives de Tocologie et de Gynécologie*) refers to the unfortunate position in which the practitioner is placed when in charge of a patient with uncontrollable vomiting during pregnancy. If performed too early, induced labor involves the destruction of a fetus which might have lived. If too late, after great emaciation, syncope, and delirium have set in, the patient's death may be deferred for a very short time, or even hastened. The uterus cannot be made to contract in these advanced cases. Hence it must be emptied of its contents. Blanc attended a lady in her third pregnancy. The first had been normal, the second ended by spontaneous abortion at the fourth month, after uncontrollable vomiting. On this occasion the patient had reached the third month of pregnancy. The vomiting was very severe, there was fever, and the least movement produced faintness. Cerium, cocaine, ice, champagne, and chloroform-water had all proved of no service. A laminaria tent was introduced; it set up contractions which soon passed away. Next day another tent was passed into the uterus. A day later a long strip of iodoform gauze was passed into the uterine cavity. At the end of twenty-four hours no contractions had occurred, and the patient was delirious. She was placed under ether; then the uterine cavity was scraped thoroughly, and the fetus, placenta, and membranes removed by means of the curette. A plug of iodoform gauze was packed into the uterus after irrigation with bichloride of mercury solution. Subcutaneous injections of caffein and ether were then given. By the next morning the delirium had passed away, and the patient could take a few cups of cold milk and soup, and a little champagne. At the end of two weeks she was restored to health.—*Univ. Med. Mag.*

Lysol in Midwifery.

Lysol is highly recommended by certain Germans as an antiseptic in midwifery. It consists of a mixture (in about equal proportions) of creasol and soft soap, and is readily soluble in water at any temperature. On account of its safety and cheapness, it is especially suited for midwives and nurses. Peè recommends a 1 per cent. solution for disinfecting the hands, instruments, or the field of operation.—*The Year Book of Treatment, 1893.*

Second Ligature of Cord.

Trèpant (*Gaz. des Hôp. de Toulouse; Brit. Med. Jour.*) objects to ligature of the cord on the placental site. He believes that it favors retention of the placenta. In sixty-eight cases of double ligature he observed four retentions; in one hundred and forty-six where one ligature was applied, the cord being divided on the placental side, only two retentions followed.

SURGERY

IN CHARGE OF

L. M. SWEETNAM, M.D. Tor.,

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

AND

A. PRIMROSE, M.B., C.M. Edin.,

Associate Professor and Demonstrator of Anatomy, University of Toronto; Surgeon Outdoor Department, Toronto General Hospital; Surgeon, Victoria Hospital for Sick Children.

EMPYEMA.

I have already said that the ordinary signs of pleuritic effusion may fail sometimes, and this is perhaps more noticeable in young subjects than in those of adult age; but this feature, or rather absence of it, is common enough at all ages. . . . Experience teaches that the mere existence of one or two pints of fluid in the chest is of itself a fact of no great importance unless it be accompanied by definite symptoms of urgency. And the existence of fluid is often unaccompanied by any such symptoms; and when this is the case, it is very difficult to be certain of its presence.

Now, I do not say this to encourage carelessness, but because I want you to think the matter over physiologically, and because I believe we are in the habit of looking at the mechanism of respiration from a much too narrowly mechanical standpoint. How is it that fluid can be present in the chest, even in considerable quantity, and give, as I say it may do, very little evidence of its presence? We are in the habit of looking at the pleural sac within its costal walls too much as a barrel in which fluid, if present, sinks to the bottom. This is true within certain limits, but you must always remember that in the so-called barrel there is a boat, viz., the lung, that is capable of pumping up and down more or less, and in so doing is capable of exercising a good deal of displacement. Therefore the gravitation of the fluid depends upon other circumstances than the hydrostatic one of water finding its own level, and indeed it depends more upon the question, which has got the upper hand, the water or the respiratory vigor of the patient? If the latter be good and the lung tissue healthy, the displacement of the fluid will be the greater, and it will be driven into all sorts of corners and over the surface of the lung, and I am

sure that if you study the matter you will be astonished at the facilities there are in the chest for the stowage of fluid away out of our ken. One, two, three, four pints of fluid may be inside, and yet no symptoms to speak of. . . . What one does find is that the chest is distorted, and generally altered in shape. I do not deny the diminution in size in many cases, but it is inconspicuous in comparison with the notable alteration of *shape* to the naked eye. I take this to mean that where the chest has gone *in* at one part it has bulged out at another, and that the spine rotates a little, and the mediastinum yields, and by this general give and take the actual alteration at any one part is reduced to a minimum. And let me dwell upon this point a littte more with reference to the treatment of empyemata, because here, again, I think the simile of the barrel comes in to falsify our physiological deduction and to impede the treatment of these cases. It is said that the chest being a cavity with rigid walls, the opening into it, if we are to secure proper drainage, must be made low down. But the analogy is a false one. The chest walls are rigid to some extent, but it would be better to think that an empyema was only an abscess, and nothing more, than to hold too rigidly to the unyielding nature of its walls, and to be guided in one's means of dealing with it by the necessities that such an idea seems to enforce. Now, when you open an empyema, in the majority of cases you do not create a general pneumothorax. The chest wall is more or less paralyzed by the incision into the pleura; the parts fall in in all directions, not the wall only, but the mediastinum and the diaphragm, and as a consequence the pleural surfaces in great part cohere. Thus it may happen that the cavity may be at once completely obliterated, as I have seen happen before now.

And as a natural inference from this tendency, as in all abscesses, for the walls to fall in and to come into contact, it may be concluded, as is certainly the teaching of experience, that it matters very little where the opening is made; it may be located wherever pus seems to be in large quantity, or indeed for other reasons that may seem to be of convenience to the patient or the surgeon.

And this may lead me on to a point that concerns itself with the same questions: there is sometimes a good deal of fluid in the chest, and yet it cannot be removed by the aspirator; and with respect to empyemata we cannot always obtain this natural evacuation of the cavity; and when this is the case, you may generally infer that this falling in of the parts and obliteration of the cavity are hindered for some reason or other, and these are the cases where, if the pus be evacuated, there *is* more or less of a general pneumothorax, and these are the difficult and serious cases to deal with. To name only one or two of the conditions of the lung that are likely to lead to this, there are growths in the pleura in the case of simple

effusion, and chronic indurative conditions of the lung from any cause; chronic pleural thickenings binding the lung down for either serum or pus.

It is a good rule, which I never depart from, always to put in an exploring needle before operation; for although you may know that there is pus in the chest, it is a satisfaction to know that at the very spot where the surgeon is going to make his incision there is pus present at the time.

We seldom now waste time by aspirating as a preliminary measure which may cure without resort to severer measures. It *may* do so, but the success attending the attempt is so little that it is not worth while in the usual run of cases to resort to this proceeding. I occasionally aspirate as a temporary measure to gain time.

Of the general treatment of empyemata I must not say much, and yet there are one or two points upon which I should like to express an opinion, because I have had ample experience to warrant it. And in the first place, as regards excision of the rib, I hold now, as I did some years ago, that it is quite unnecessary for the majority of cases. It is very generally practised, and it adds little to the risk of the operation. But I take my stand upon this principle—that what is unnecessary is meddlesome, and meddlesomeness is bad. Surgery, in the height of its present power, can afford to allow that it occasionally gives way to an excess of zeal. Another thing seems to me to be overdone, and that is the use of drainage tubes. They seem to me to be getting bigger and bigger. I have seen of late the most astonishing things in size. And in the advantages that have accrued to the success of surgery from free drainage our sense of proportion in this direction seems to have suffered. I venture to think, if only from the point of view of the comfort of the patient, and this *is really* of *some* moment, that drainage tubes may be too big. And I further believe that any advance in the treatment of empyemata will come from simpler measures even than those now in vogue, and that by and by we shall see them dealt with as simple abscesses; that is to say, by simple incision, and perhaps coupled with an initial washing out of the pleural cavity. I believe I am right in saying that Dr. Bowditch has practised this plan extensively, and of late I am told that Sir Joseph Lister has even adopted the plan of opening the abscess in the pleura, has washed it out and closed it up again as he would do abscesses in some other regions; and I believe, from the observation of the various kinds of pus that are found in the pleura, that in some cases of acute disease this might be done with a fair hope of success, and so accelerate the patient's recovery by several weeks. There is no doubt that their recovery is retarded by keeping a drainage tube in too long.

Next, a word about washing out the pleura. In former years I have been strongly opposed to washing out the chest except under very special

circumstances, such as the obvious retention of septic material in the pleura. But of late I have come to think that an initial irrigation of the chest—that is, at the time of the operation—may be of advantage in assisting to clear away the corpuscular matters and the clots of lymph that are so frequently found. And indeed I would add that in the presence so often of these masses of lymph I do see a valid argument for the excision of a piece of rib, if it be found that the lymph is more readily got away by such means, as I must admit seems likely to be the case. But I object as strongly as I have ever done to the practice of irrigation *afterwards*, unless for special circumstances. . . . As I have already endeavored to impress upon you, the cavity of an empyema after it has been opened is as large or as small as you like to make it. Natural processes tend to contract it at once to the smallest possible dimensions. Irrigation tends to interfere with this process of shrinking; to disturb the natural cohesion that I have talked about, and so to retard recovery. There is, as you well know, some slight risk attaching to irrigation, but I say nothing about that, as it is at best but slight.

Fetidity of the contents of an empyema is a by no means uncommon symptom, and it used to raise in my mind a suspicion of some gangrenous patch in the lung or extension of disease from surrounding organs, particularly from the liver. But of late I have come to think that it cannot be by any means always so, for in my experience these cases generally do well. . . . The treatment of such cases is not different from that of simple empyema, save that the initial washing out is certainly advisable. But on this head I wish to say that in my experience the *natural history* of such cases is that the fetidity ceases after a few days, and that they are not therefore cases that require any great length of treatment of this kind.

Next, there comes a question about empyemata that open through the lung. What I have seen of later years leads me to believe that, on the whole, it is better in such cases to explore the pleura from the outside, and, if pus can be found, that the pleura should be opened as in a simple case. If the pus be allowed free drainage without tinkering, the sinus in the lung mostly readily heals, and the patient recovers well.

Double empyemata are occasionally met with, I think not so very uncommonly, if we are on the outlook for them. How should they be dealt with? In the few cases I have had my practice has been what seems to be the common-sense one—of opening that on the one side first, and then after a week or ten days—there is no hurry in these matters—dealing with the other. But I remember that one case has been recorded in which both pleuræ were opened at the same operation and the patient did perfectly well.—James F. Goodhart, in *International Clinics*.

Chloroform Narcosis.

Resuscitation in chloroform narcosis has been accomplished by a new method devised by Maas, one of Konig's assistants at Gottingen. In the first case, the ordinary means of resuscitation had been tried for an hour without effect; respiration and pulse had entirely ceased. Maas then made rapid rhythmical compressions, about one hundred and twenty per minute, of the cardiac region, whereupon the heart's action gradually increased and the patient recovered. A second severe case responded with the same result to treatment. Maas ascribes the effect of the cardiac compressions to the driving of the blood into the larger arteries.—*Nashville Journal of Medicine and Surgery.*

Vinegar as a Remedy Against Vomiting After Chloroform.

Immediately after having performed the operation and placed the patient in bed, he (Warholm, in *Satellite*) applies a handkerchief moistened with vinegar in front of the nose, letting it remain there until the patient returns to consciousness, or longer if it agrees well with him. Of thirty cases experimented upon by the author, the majority were benefited. In most of them the effect was absolute. In two cases the remedy did not succeed; one of these was an alcoholist. The patient should have a small phial, filled with vinegar, standing at his bedside, to smell as the demand arises. —*Southern Clinic.*

The Use of Hydrogen Peroxide in the Peritoneal Cavity.

Dr. F. H. Wiggins (New York), in a communication to the *Medical Record*, urges the free use of hydrogen peroxide for the purpose of disinfecting the abdominal cavity when it has been infected during an operation. He says:

"Recently I have had occasion in two cases to use it, and instead of a weak solution have used it of full medicinal strength.

"In the first case, September 6th, in the course of the removal of a purulent ovarian cyst, parts of the contents escaped into the general cavity. Half a pound of hydrogen dioxide of full medicinal strength was poured into the cavity, and the patient made a prompt and uneventful recovery.

"In the second case, September 13th, a boy of sixteen, resection of the small intestine (Maunsell's method), an escape of fecal matter into the peritoneal cavity was followed by the use of a liberal quantity of dioxide; and although general peritonitis and fibrinous exudation in the intestine was present at the time, the peritonitis subsided, the temperature never rose as high after the operation as previous to it, and the boy, up to d te, has made a good recovery."

GENITO-URINARY AND RECTAL SURGERY

IN CHARGE OF
EDMUND E. KING, M.D., Tor., L.R.C.P., Lond.,
Surgeon to St. Michael's Hospital, Physician to House of Providence and Home for Incurables; Assistant Pathologist, Toronto General Hospital.

TREATMENT OF ACUTE ORCHITIS BY CARBOLIC SPRAY.

(MM. Thiéry and Fosse, *Gazette des Hôpitaux.*) This is an extract from the *Gazette Médicale de Paris.* The patient is placed on the edge of the bed with his feet resting on two chairs; the hypogastrium and the upper part of the thighs are covered with mackintosh tissue, so as only to expose the scrotum. The scrotum may either be covered with a layer of gauze or left naked. The vaporizer is placed on a chair or table at a distance of 25 to 30 cm. from the patient, so that the steam is projected against the scrotum as hot as possible. Each sitting lasts from twenty to thirty minutes, and is renewed twice a day until the pain has disappeared. In the intervals the patient lies in bed with the scrotum raised on a hollowed board. A solution of 1 in 30 is used, and no other internal or external treatment is pursued.—*Quarterly Medical Journal.*

[We clip the above simply to show of how very little practical value many medical articles possess. We are told nothing of the advantages of the treatment; we do not know whether it cuts short the attack or causes the pain to subside more quickly than other treatment. It is simply a new application of a hot fomentation—which is fairly good treatment, although dry heat is much better.—E.E.K.]

SUPRAPUBIC CYSTOTOMY IN URINARY AFFECTIONS OF PROSTATIC ORIGIN.

M. A. Poncet (*Gazette des Hôpitaux*) describes this operation, which he proposed several years ago in certain prostatic patients, and says that to-day the indications seem to have multiplied, and to have become much clearer. He describes two cases. Suprapubic puncture of the bladder and methodic opening of the bladder are in some cases the only two resources, and the former ought to be regarded simply as a makeshift, and not to be repeated, because when the urine is foul and ammoniacal it may

lead, as in several instances within his own knowledge, to prevesical cellulitis. Suprapubic cystotomy, on the contrary, is an operation which is almost innocuous, since in nearly sixty cystotomies for prostatic trouble he has never observed the only two complications which can be imputed to it, viz., wound of the peritoneum at the time of the operation, and urinary infiltration. When death has occurred it could not be attributed to the operation, because he has constantly found pyelo-nephritis of shorter or longer standing. Cystotomy is indicated when catheterism is badly supported, when false passages exist, when the prostatic obstacle is difficult to overcome. In some cases after cystotomy, micturition by the urethra re-establishes itself completely, owing to repose of the bladder and prostate, the latter having undergone some degree of atrophy. In other cases this is not the case, and the patients have to wear some kind of apparatus, and the suprapubic sinus has to be kept open by repeated catheterism. The incision is made in the middle line, and the bladder is incised as close as possible to its neck; the vesical incision is then stitched to that in the abdominal wall by six metallic sutures, and the bladder is washed out with hot boracic acid water. He concludes by saying that the operation secures to those with enlarged prostate a calmness, a functional security, which they often have not known for a long time; it puts an end to painful phenomena; it causes all fear of retention to disappear; and, finally, it appears to him to be the only means in many cases of effectively struggling against urinary infection.—*Quarterly Medical Journal.*

URETERO-CYSTONEOSTOMY.

M. Bazy (*Gazette des Hôpitaux*) describes an operation for making the ureter open into the bladder in cases of uretero-vaginal fistula, with obliteration of the ureter. Uretero-vaginal fistula following nipping of the ureter and its obliteration have been treated so far by nephrectomy. M. Chaput has, however, succeeded in fixing the ureter into the colon. M. Bazy's patient was a woman on whom vaginal hysterectomy had been performed three months previously for fibroma; after the operation the urine passed *per vaginam*, owing to the presence of a uretero-vaginal fistula. As regards the details of the operation, he simply opened the abdomen, sought for the inferior extremity of the ureter, which he found distended and separated from the bladder by half to three-quarters of an inch of cicatricial tissue; he then punctured the ureter and resected it. He incised the bladder near to the end of the ureter, and united the lips of the ureteral incision to those of the bladder incision by silk sutures. He then sutured the peritoneum over it, and closed the abdomen, after having put in an aseptic gauze drain. From the time of the operation the

patient did not lose a drop of urine by the vagina. In both the ureter and bladder he placed a red rubber catheter *à demeure*, which was left in for five days. Cystoscopic examination a month later showed the ureteral orifice in the form of a slit directed obliquely from above downwards and outwards, a centimetre in length and spindle shaped, *i.e.*, more open in the centre. The kidney, which was previously enlarged, *i.e.*, hydronephrotic, had attained its normal size. The operation is suitable in those cases where neither the ureter, the pelvis, nor the kidneys are infected.—*Quarterly Medical Journal.*

On Absorption by the Urinary Tract.

If classic treatises on physiology be consulted, it will be found that they contend that the urinary bladder is lined by a mucous membrane that has no power of absorption.

It is classic to say that the healthy urinary bladder does not absorb, and experiments are cited in support of this contention; and, again, it is classic to say that only when the bladder epithelium is stripped off has the bladder any absorbing power.

Having observed certain clinical facts for a long time, I was led to the supposition that the bladder has absorptive power. Experiments conducted over several months have convinced me that the healthy bladder has the power of absorption.

An animal can as certainly be killed by injecting a poison into its healthy bladder as it could be by injecting the poison under its skin, or into its rectum.

The three principal reasons for this popular error are: (1) Imbibation has been confounded with absorption; (2) sufficiently active poisons have not been used, so that the results would be beyond dispute; (3) poisons that were not toxic to the animals experimented upon have been used.

In my experiments I used a No. 8 F. gum elastic catheter. I never distended the bladder, so as to avoid the intervention of pressure, also to avoid the provoking of a necessity to micturate, and thus cause the urine to pass into the urethra. I did not in any case ligate the urethra to prevent absorption by the urethral mucosa.

Chemical and microbian poisons were used. In the case of the latter, I sometimes injected the microbi-toxine pure; sometimes pure cultures of the microbes were used.

The chemical poisons, provided they were strong, always gave immediate results. In those cases where the effects were not immediate, the animal died, after a more or less protracted time, anyhow.

Cocaine, strychnine, hydrocyanic acid (medicinal), killed the animals

in a few minutes; cocaine applied to a large, denuded, cutaneous surface has no action; belladonna, curare, pilocarpine, produce their effects much more slowly, and seem to act by slowly producing minute nutritional cellular changes.

The absorption of chemical poisons by the bladder seems to throw a certain amount of light on urinary pathology, and gives an explanation for the great difference existing between the effects of vesical and renal retentions (these last do not affect the general state to such an extent), and, again, they allow of the very much longer survival of the patient.

The vesical injection of microbi-toxines produces effects no less striking. Taking a microbe, to the effects of which the rabbit is most susceptible, the pneumococcus, I was able to get five deaths out of six rabbits injected; these within the space of three to five days, with pleural and peritoneal exudations, without renal lesions—a most important fact for the history of urinary infections.

An emulsion of gangrenous muscle by the pus-microbe was injected on two different occasions into the bladder, after first filtering in Chamberland's filter, and killed the rabbits in twenty days.

Of the four rabbits injected with Chanin's pyrogenic substance, two died; one at the end of seven days, the other after fourteen days.

The consequence of these facts, as related to human pathology, are easily seen, and the light that they throw on the pathogenesis of urinary infection is apparent at sight.

He also studied absorption with reference to the ureter and urethra. Urethral absorption is very active, but ureteral much less so. When toxic substances reach the calices, he found that the effect was well-nigh instanteous with the solutions he used.—M. P. Bazy, in *Gazette des Hôpitaux.*

J.A.A.

PEDIATRICS AND ORTHOPEDICS

IN CHARGE OF

W. B. THISTLE, M.D., L.R.C.P. Lond.,

Assistant Demonstrator of Anatomy, University of Toronto; Physician to Victoria Hospital for Sick Children; Clinical Lecturer on Diseases of Children in the Woman's Medical College;

AND

B. E. McKENZIE, B.A., M.D.,

Lecturer on Orthopedics and on Surgical Anatomy in the Woman's Medical College, and Surgeon to the Victoria Hospital for Sick Children, Toronto.

MEMBRANOUS INFLAMMATION OF THE THROAT IN SCARLATINA.

In the report of the January meeting of the London Medical Society there appears an interesting report and discussion on this subject. Dr. J. W. Washbourn read for himself and Dr. E. W. Goodall a description of a fatal case of membranous inflammation of the throat accompanied by a rash. The diagnosis rested between (1) severe scarlatina anginosa with membrane; (2) diphtheria with rash; (3) co-existing scarlet fever and diphtheria. Subsequent desquamation and an absence of diphtheria bacilli on a careful bacteriological examination proved that the case was one of scarlet fever with membrane. The difficulty of diagnosis was due to the remarkable toughness and thickness of the membrane. Such a condition was uncommon, although it was well known that a membranous inflammation of the throat indistinguishable from diphtheria was quite common during the acute stage of scarlet fever. This condition had been found not to be true diphtheria by various bacteriological investigators. The authors examined four cases of this nature, and failed to find diphtheria bacilli. Clinically, too, it was not diphtheria, for out of 123 cases seen by the authors only 2 developed croup and 2 subsequent paralysis. On the other hand, a membranous inflammation of the throat occurring during convalescence from scarlet fever was generally true diphtheria. In 4 cases examined by the authors they readily found diphtheria bacilli by cultivations, and they had notes of 11 cases in which the membrane spread to the larynx, of 3 cases which were followed by paralysis, and of 1 case in which the vulva became affected with diphtheria inflammation. In 8 consecutive uncomplicated cases of diphtheria, the bacilli were readily demonstrated. The conclusions drawn were that a membranous inflammation of the throat occurring during the acute stage of scarlet fever was

generally not true diphtheria, but a similar condition occurring during convalescence was true diphtheria. These conclusions were in accord with the bacteriological examinations made by several investigators abroad, and by Klein in this country.

Dr. Sidney Martin said that he had cultivations from two non-diphtheritic membranous cases; one gave only a large diplococcus, and the case readily yielded to local treatment with nitrate of silver. He regarded diphtheria as an acute infective disease, cultivation from the membrane of which gave a bacillus producing a poison the inoculation of which in animals produced paralysis. In a second severer case, that of a girl, aged 15, who had a red throat, with fever and enlarged spleen, and who died, there were found *post mortem* two patches of membrane, one on the rim of the epiglottis and the other on one of the tonsils, whilst micrococci had spread through the tonsil and epiglottis, contrary to true diphtheria bacillus, which never spread below the surface. He thought the membranous throats of scarlet fever were caused by micrococci and other organisms not diphtheritic.

PYOKTANIN IN DIPHTHERIA.

C. Horing (*Memorabilien*, October 19th, 1893) refers to the treatment he adopted early last year in 27 cases of diphtheria, the results of which were published in the *Aerztl. Memorabilien*, vi. and ix., 1892. Since then Horing has continued to use pyoktanin, and claims excellent results. The practice was to apply a 3 per cent. solution two or three times daily to the pharynx and downwards to the epiglottis, the retention of the liquid in young children being secured by immediately placing their heads low, thus aiding the swallowing of the liquid. Otherwise the drug was not administered internally, nor was it directly introduced into the affected tonsil. Simultaneously, the patients are syringed with lime water, or are allowed to use it as a gargle or inhalation, while salicylate of soda is given internally. When the nose is affected, a tampon soaked with the solution is retained in the cavity, and in milder cases the application of pyoktanin to the pharynx, etc., is the only treatment followed. In support of his practice, Horing says he has found even a 1 in 1,000 solution to destroy the Klebs-Loeffler bacillus, as also the more active streptococcus, the latter in the course of half a minute. In practice, the local effects are antiseptic, healing, and destructive to the false membrane, the general results being diminution of pain and pyrexia, without the production of toxic symptoms. The present cases enumerated are 112, two of which succumbed for reasons explained; the remaining 110 cured cases included many serious cases which had been despaired of. The symptoms, spread of contagion,

and sequelæ, are quoted in support of the diagnosis. The author, in view of his experience, supported by that of others, regards pyoktanin as a specific against diphtheria.

Correction.

In the abstract from Prof. Hosley's lecture on the treatment of cerebral tumors, which appeared in the section on Pediatrics in the December number of The Practitioner, two misprints occur. The final clause in the quotation from Louis Starr, "the operation is not to be performed," should have read "the operation is not to be *postponed.*" Next line, "cure from mercurial treatment," should have been "cure from medicinal treatment."

Treatment of Gonorrheal Ophthalmia.

Burchardt (*Centralbl. f. Prakt. Augenheilk.*, November, 1893) describes the treatment he has found most successful in acute purulent ophthalmia of gonorrheal origin in children and adults. He formerly carried out the classical treatment of leeching, scarification of the conjunctiva, cauterization with nitrate of silver, and ice compresses. He has gradually omitted all these methods in consequence of some ill-effect they had, or because they appeared to him irrational, and he now confines himself to a very free irrigation of the conjunctival sac with a five per cent. solution of chlorine water, followed by a one-tenth per cent. solution of nitrate of silver. The head of the patient is thrown back so that he looks directly upwards; an assistant then allows the solutions to fall upon the inner canthus drop by drop, while the surgeon moves the lower lid up and down very freely with the thumbs, and the upper lid more slowly with one of the fingers. By this means he is able to clear the conjunctival sac very completely. The success of the treatment appears to lie in the very free movement imparted to the lids, whereby the fluids gain access to all the folds of the conjunctiva. Shreds or membranes are removed from the conjunctiva after everting the lids.

Treatment of Diseases of the Nose and Throat in Infants and Young Children.

In a paper on this subject Dr. Jennings, of Detroit, points out the great importance of local treatment to the throat in the inflammatory conditions occurring in connection with the acute diseases of children. Taking measles as a type of these diseases, there may be, as a secondary manifestation of the throat inflammation, suppurative disease of the middle ear, chronic nasal or pharyngeal catarrh, adenoid vegetations of the

vault of the pharynx, and chronically enlarged or tuberculous glands. These sequelæ can almost certainly be prevented by proper local treatment.

In diphtheria the specific bacillus is found on the surface, and the toxine is absorbed from the membrane. In addition pus cocci develop, and complicate the diphtheria with pus poisoning. During the course of scarlet fever throat inflammation, the streptococci and staphylococci of pus develop in great abundance, and are the cause of many of the most dangerous complications and sequelæ of the disease. The cervical adenitis and abscesses, the purulent oditis media, endocarditis, pleuritis, arthritis, and various other remote inflammations, are of the same nature. All these conditions are more or less preventable by local treatment of the throat and nose.

He advises the purification of the nose and pharynx by frequent use of antiseptic solutions by either the spray or douche.

The solution most frequently used is the antiseptic alkaline solution of Seiler :

Sodii Bicarb	℥i.
Sodii Bibor	℥i.
Sodii Benzoat	grs. iss.
Sodii Salicyl	grs. iiss.
Eucalyptol	grs. i¼.
Thymol	grs. i¼.
Menthol	gr. ¼.
Ol. Gaultheria	gr. ¾.
Glycerine	℥iss.
Alcohol	℥ ¼.

Aquam q.s. Oii.

Tablets after this formula are put up by the manufacturing chemists. Listerine, 1 to 15, is also an excellent solution. Peroxide of hydrogen alone, diluted to 1 to 10, or in combination with Seiler's solution, is recommended highly by the author.—*Archives of Pediatrics*, January, 1894.

HYGIENE AND PUBLIC HEALTH

IN CHARGE OF

WILLIAM OLDRIGHT, M.A., M.D. Tor.,

Professor of Hygiene in the University of Toronto; Surgeon to St. Michael's Hospital;

AND

E. HERBERT ADAMS, M.D., D.D.S.

Tuberculosis in Cattle.

Nineteen thousand one hundred and ninety-one cattle were examined by the State Board of Health of New York last year, and 613 were destroyed because they were found to be suffering from tuberculosis. In Ontario cases of tuberculosis in cattle have been found recently at Guelph, Toronto, Hamilton, Ottawa, and other places. In Quebec, at Montreal and elsewhere cases have been discovered. It is high time for the health departments of the Dominion and Provincial Governments to take active measures to prevent the further spread of this disease amongst our cattle.

Punishment for Sanitary Delinquency.

In France drastic measures are imposed on officials who are remiss in attending to their duties. The *Medical Week* of Sept. 29th reports that the mayor of a provincial town was recently suspended from his functions because no sanitary measures had been adopted at the outbreak of an epidemic to prevent the propagation of the disease, which was allowed to spread among the population for more than ten days before an attempt was made by the municipal authorities to comply with the advice of the medical man in charge, and with the instructions of the government, by taking the necessary steps to stay the epidemic's progress; also because of the delay in the adoption of the precautionary measures recommended by the physicians sent by the government.—*The Sanitarian.*

American Public Health Association.

At the annual meeting of the American Public Health Association, held at Chicago, October 9-14, 1893, the following resolution offered by Henry P. Walcott, of Massachusetts, was adopted:

Resolved, that the American Public Health Association again urge

upon Congress the necessity of the appointment of some officer with general sanitary authority in connection with the national government.

That the functions of such an authority are of sufficient importance to demand the exclusive attention of the best instructed sanitarian.

That such authority should be enabled, from time to time and under proper regulations, to secure the advice and co-operation of the state boards of health.

At the meeting of the International Congress of Public Health, held under the auspices of the American Public Health Association of the World's Congress Auxiliary of the World's Columbian Exposition, at Chicago, October 10-14, 1893, the following resolutions were adopted :

(Offered by Dr. J. E. Monjaràs, of Mexico.) Resolved, (1) That the educational authorities of the various nations represented here be requested to devote a longer time than they now do, in their curriculum, to the teaching of hygiene.

(2) That the governments of the countries represented at this congress be urged to appoint to sanitary positions and commissions only such persons as may have acquired a special education in sanitary studies.

(Offered by Dr. Benjamin Lee, of Pennsylvania.) Resolved, That the International Congress of Public Health affirms in the strongest possible manner its confidence in the value of vaccination as a preventive of small-pox.

(Offered by Mr. Henry Lomb, of Rochester, N.Y.) Resolved, (1) That this congress urge upon the people of the countries here represented the importance of completing our sanitary organization by forming voluntary Public Health Associations, to study for themselves the conditions of healthy living in the home and in the community, and to afford efficient and persistent support to the work of public health officials.

(2) That this congress respectfully ask state and local boards of health to assist in all proper ways the formation of such organizations.

Editorials.

THE COUNCIL AND ITS REAL ESTATE.

THE Defence Association has had a good deal to say about the so-called speculations of the council in real estate. During the earlier days of the war between the association and the council, many of the remarks on this subject were unpleasant, if not offensive, in character. We are glad to notice that recently the criticisms on this subject have been more moderate and reasonable in tone.

It is probably conceded by most physicians at the present time that some sort of a structure is required by the council, not only for its regular meetings, but also for examination purposes; but the leader of the Defence Association says that "an unpretentious structure" in "a less expensive locality" would be quite as suitable as the present building, and at the same time less expensive.

Before deciding on any radical change, the new council will do well to consider the matter in all its aspects. While the present building was being erected, we think that there is no doubt that the council was well officered. It will be remembered by those who took any interest in the matter at the time that Dr. Henry Wright, as chairman of the Building Committee, spent a large portion of his time in looking after details in all directions. He received at the same time material assistance from others who desired to get full value for the council's investment. We feel certain that never in the history of medicine in this country was more honest or faithful work done in the interest of the profession. The men who contemplate the erection of something *cheap* in some *cheap* locality had better mature their plans very thoroughly before they engage in any new building operations. The new building, like the old, would require a large examination hall, and it might be somewhat difficult to make it much more economical than that which is now owned by the council. However, when we get the plans of the proposed cheap building in the cheap locality, we shall be in a better position to discuss the matter intelligently.

INFANT MORTALITY IN ENGLISH MANUFACTURING TOWNS.

A PARLIAMENTARY committee of the British Medical Association has recently been investigating the subject of infant mortality in certain artisan towns where women are largely engaged in factory labor, and has sent a report on the subject to the Home Office. A great deal of information was received from a valuable report by Dr. Reed, the medical health officer for Staffordshire. In giving the average infant mortality for his county during a period of four years, from 1889 to 1892 inclusive, he says that deaths of children under the age of one year in groups of towns where many women are engaged in factory work were 196 per thousand registered births. In groups where fewer women were similarly engaged the deaths were 173 per thousand, and, practically, where no women were so engaged they were 160 per thousand. These rates correspond closely to those of the previous ten years, according to reports forwarded to the Home Office.

It will thus be seen that in certain manufacturing cities where women are largely employed in factories the mortality of infants is increased to the extent of something like 35 per thousand, in consequence of the fact that nursing mothers leave their children at home during the day while engaged at their routine factory work.

We have here a sad picture in many respects. The maternal instinct is the most noble and most steadfast characteristic of womanhood. Words cannot describe what many of these women suffer in leaving their little ones improperly cared for, while they go out to earn bread. When they return to their homes in the evenings they generally have their children to look after, and their housekeeping to attend to. In many cases they soon become broken down and die. Women who would otherwise have large and healthy families become helpless and chronic invalids, and help to fill the various poorhouses of the country. What the state loses by all this it would be hard to compute; and how it is going to provide a remedy only a very wise political economist can tell. Such sad facts show the terrible struggle for existence which is going on in Great Britain. Other countries are in no better condition. The world seems at present to contain too many people. Earthquakes or big wars may, in the near future, furnish drastic remedies. The outlook from any point of view is not particularly pleasant.

RAILWAY OR CORPORATION SURGEONS AND THEIR RELATIONS TO THE GENERAL PROFESSION.

THERE has been a good deal of discussion recently on the rights and duties of surgeons to large corporations, such as accident insurance companies, railways, etc., and their relation to the general profession. The Street Railway Company of Toronto have employed a surgeon to take charge of persons injured by their cars. It has been contended by some that the surgeon, in treating, or offering to treat, such patients, has, in some cases, interfered with rights of other practitioners.

We have received a communication on the subject from Dr. Spence, which, on account of its undue length, and the introduction of personal issues—which, in our opinion, can accomplish no good—we do not publish in full. We extract from it, however, the following resolution, passed by the council of the Toronto Medical Society, after a careful consideration of the question in connection with certain street railway accidents, and the treatment of the parties injured thereby:

"Resolved by this committee that, except in emergencies, it is unprofessional for any medical man to visit the patient of any other medical man without his knowledge and consent having been first obtained."

As we understand that the principle involved in this resolution has been accepted by all parties concerned in the investigation, we think that further discussion at the present time is needless.

Correspondence.

To the Editor of THE CANADIAN PRACTITIONER :

DEAR SIR,—You may be interested to know that I receive your journal regularly every month, even in this dark quarter of the earth. Accept my thanks for your kindness in sending it to me. Its familiar aspect, and the reading of articles from the pens of old friends, in a measure bridges over the great gulf in space that separates me from my old home and colleagues, and emphasizes the fact that distance alone cannot separate friends.

And now, as we have gotten fairly well settled in our new home, I thought you might be interested in knowing something of my doings, and of the kind of work into which I have dropped. Let me assure you that in leaving Toronto I did not leave behind me the need to work. Disease is world-wide. We arrived in Japan per "Empress of India," June 19th, 1893, having had a delightful voyage of rather more than thirteen days. I was pleased, on going aboard the ship, to find my old student friend, Dr. H. A. Bruce, occupying the position of ship's surgeon, he having succeeded another former Toronto graduate, Dr. Gordon. I am glad to say that he did not have much opportunity to give practical evidence of his professional skill during his first trip, but he won the esteem and respect of the passengers and crew; and I have no doubt that, when occasion requires, his natural ability and thorough medical and surgical training will show to advantage, and reflect credit upon his school.

We spent three pleasant weeks in Japan, remaining most of the time in Yokohama, but visiting the great city of Tokio and seeing its beautiful and strange sights. I visited some Japanese hospitals, and found them conducted according to foreign methods, but entirely attended by native physicians. The University of Tokio is a very large institution, supported by government, and giving instruction in all manner of subjects. It has a large and strong medical faculty, and has turned out many competent physicians and surgeons. I was sorry that at the time of my visit the summer vacation was on, so I was unable to gratify the curiosity I felt to see for myself its methods of working. It has been largely in the hands of

foreign professors, but these are being gradually replaced by its own graduates.

We thought at one time of remaining in Japan till September, but gave up the idea and took boat again for Korea. The voyage through the inland seas of Japan was truly delightful, the scenery being picturesque, and the stopping places sufficiently numerous to break up the monotony of constant sailing.

After leaving Japan, we crossed the narrow, but turbulent, Straits of Korea, and had abundant opportunity to test the respective merits of antipyrin and those other so-called remedies for seasickness, if we had been so minded; but experience is a good teacher, so we settled down on our backs and went to sleep, till the quieting down of our boat should inform us that we had crossed the straits and were again in smooth water.

I presume Dr. Caven could explain the reasons for the fact—which is, I suppose, pathological—that it is very easy to go to sleep when the boat is rocking, and there is a tendency to seasickness. Be it pathological or physiological, it is a blessed fact.

In due time we came in sight of Korea, and all thoughts of seasickness vanished as we beheld for the first time the bleak and rugged coast of the country which had for so many centuries been self-isolated from the rest of the world. Our boat appeared to be heading straight for the rocky shore, there being no appearance of either harbor or landing place; but soon we passed through a narrow opening, and there spread before us the large and excellent harbor of Fusan. Here we went ashore, and took our first glimpse of the people amongst whom we were to work. We did not expect to stay here, but it turned out that we remained for six weeks, being thus enabled to escape the dangers of acclimatization in the interior during the hot season. Here I had the opportunity to do some medical work, and gain an idea of the kind of patients I should have to deal with.

In the Toronto Hospital you see some bad cases, but it is reserved for a country like this to show what a combination of filth, vermin, and disease can do.

Syphilis is so common that whenever a patient with skin lesions appears the first thought is to look for evidences of that disease; then scrofula follows as a close second, while cases of necrosis and caries of bone come before you every day. Then the eye surgeon meets with a field of labor here of unexampled richness. Conjunctivitis, corneal ulcers, entropium, iritis, and cataracts flourish as on virgin soil. A very interesting class of cases came to us in Fusan very frequently, viz., lepers. I had not had the privilege of examining cases of this disease in Canada, so I should doubtless have been much puzzled by my first one if I had

not been warned of their frequency, and one or two pathognomonic signs described.

Attempts have been made here to treat these cases, but as yet with no success. In the district round Fusan, this disease is fairly common, but as yet I have only met with one case since I came to Seoul, and on enquiry I learned that this patient came from that part of Korea.

Having spent six pleasant weeks at Fusan, where I indulged in sea-bathing every day, we again took boat for Chemulpo, the seaport of Seoul, which is the capital of Korea, and our home. We were glad to meet on this boat with Dr. H. N. Allen, the first medical missionary to Korea, to whose skill in treating the king's nephew, in the year 1884, the opening of this country to missionary work is mainly due. He had been to the World's Fair as a representative of the Korean government, and was now returning as the official representative of the American government to Korea. We arrived in Chemulpo on August 28th, and next day reached Seoul. This is a city of some 350,000 inhabitants, about thirty miles from the seashore, situated in a saucer-like depression, with mountains on all sides, and surrounded by a stone wall and earthworks about thirty feet high. It is the capital of Korea, and the home of the king.

We soon settled down in a home of our own, and I at once entered upon the study of the language, which is said to be one of the most difficult in the world. In October our mission held its annual meeting, and I was appointed superintendent of the Royal Korean Hospital. This is a government institution, which the king established in 1884, in order to give Dr. Allen scope for the exercise of the skill which had so surprised them. For some years it was carried on vigorously, but of late it has gone backwards, until it scarcely deserves the name of a hospital. It is expected of me that I shall restore it to a position of usefulness. What the result will be only time can show.

It is fairly well equipped with surgical instruments, but there is no suitable operating room in which it would be safe to perform a major operation, and no room in which one would like to place a surgical case.

I have only attempted one major operation as yet, and it resulted badly, in that the patient died on the sixth day after it.

To give you an idea of the difficulties we have to contend against, I will just tell you how this patient was nursed. In the first place, I may say that the operation was for epithelioma of penis and scrotum, and it necessitated the amputation of the penis, the removal of a goodly portion of scrotum, both testicles, and the inguinal glands of both sides, so that there was great shock, and great care was needed in looking after the dressings. They, however, left him to himself for a time, and he pulled out the catheter and tore off all the dressings, so that when I got there next morning he

was lying with the entire wound exposed and saturated with urine. The wound gave good prospect of healing, but we failed entirely to control his method of urinating, so that he was constantly in pain and tore off his dressings, and finally pulled open the wound. It was very discouraging, and I told them I would not undertake any serious surgery again until the conditions were made more favorable.

It is the king's hospital, and I have succeeded in bringing the condition of it to his notice, and he is now considering a series of propositions which Dr. Allen and I have made with a view to its improvement, and I have hopes that it will yet become a hospital which I would not hesitate to have any of you drop in and see, though it will be quite unlike anything which you have ever seen in the western hemisphere, for, you know, everything is done by contraries in these oriental countries.

I am afraid I am spinning out my letter to too great a length, but I cannot refrain from reporting one case which came under my notice.

I was called one morning by one of our lady physicians to a house, and when I got there I found two lady doctors trying to deliver a woman of a child. They said they had been called in the morning, and on arrival found a baby two days old, and the mother again in labor. On examination, they found another child's head presenting in the vagina, but the woman labored in vain. They concluded that it was a two-horned uterus, and applied forceps to the head, but were unable to effect delivery, so sent for me. They had administered chloroform, and, as the forceps were on the head when I arrived, I hurriedly determined the kind of presentation, and then attempted to deliver. The forceps slipped off the head twice, and I then removed them, inserted my hand, turned the child, and delivered it feet first. Of course it was dead, and, as there had been no labor pains for a long time, I inserted my hand again and found that some placenta had been left in what had been supposed to be one horn of the uterus. I removed this, and then sought for the second placenta. This time my hand seemed to enter the uterus very easily indeed, and I grasped what felt like placenta and withdrew it. What was my surprise to find I had a piece of intestine in my hand instead of placenta, and then the whole case became clear. It was a case of twin conception, one fetus being intra-uterine, the other extra-uterine. The intra-uterine one was delivered normally in the absence of any physician, unless there may have been a native midwife. The extra-uterine fetus then presented at one side of the uterus, and either broke through the peritoneum by reason of its own pressure, or else was forced through by a midwife. Finding delivery impossible, they sent for a foreign doctor. We were unable to obtain the exact facts of the case. Of course the woman died in a very short time, it being impossible to do anything for her.

I have not read of just such a case, although such may have been recorded. If you think it worth while, you might place it on record for me. It may be that, in the opinion of those of wider experience than myself, it is not sufficiently uncommon to entitle it to be thus placed.

My double position as a medical missionary and an official of the government gives me a sphere of work somewhat different from that of my co-workers, and I have already attended professionally some of the relatives of the queen, and officials of high rank. I expect to have two foreign lady nurses at the hospital soon, and that will be a great help to me.

I expect also to open what may be the beginning of a medical school, as soon as I get the place in shape, and become able to speak the language with sufficient clearness to make myself understood.

I must now close. If you should like it, I shall be glad to report interesting cases occasionally. I hope to keep my eyes open to the scientific aspect of my cases, so that I may not get away behind you who live in more highly favored Canada.

There are twelve American and European physicians residing in Seoul at present, and we have formed the "Seoul Medical Association," which meets once a month for the discussion of medical topics and the presentation of cases. They have done me the honor of electing me as the first president. I think we must invite some of you to deliver an address here some time. It would only take from four to six weeks to come. I noticed that Dr. McDonagh visited Japan last summer. I extend a hearty invitation to any of you, if you should come as far as Japan, to come on to Seoul and see these strange people, who are as unlike Japanese or Chinese as we are. It is a pleasant trip from Japan, and would not add more than $100 to the cost of the jaunt.

Yours sincerely,

O. R. AVISON.

Seoul, Korea, January 6th, 1894.

[We are greatly delighted to receive this interesting letter from Dr. Avison, and pleased to know that he is so comfortably situated. We shall look forward to many interesting communications from his ready pen. We need clinical information from all sources, but it is doubly interesting when of rare and complicated diseases.—ED.]

Book Reviews.

The Chicago Clinical Review, a monthly journal, edited by George Henry Cleveland, M.D., has lately made a departure that should be of great value to members of the profession as a means of ready reference. *The Review*, with its characteristic business push, has added a review department, in which the leading clinical articles in current medical literature are referred to. The references are given in an alphabetically arranged list, with the name of the author and the journal and date from which it is taken. It is really a boon to those who write, and also to those who wish to keep up with the times, where a limited number of journals only can be subscribed for. By the aid of this department, one can know just what is being published, when, and where. It ought to increase their subscription list.

A SYLLABUS OF LECTURES ON THE PRACTICE OF SURGERY. Arranged in conformity with the American Text-Book of Surgery. By Nicholas Senn, M.A., Ph.D., LL.D., Chicago. D. B. Saunders, Philadelphia. Price $2.50.

Dr. Senn's well-known ability as a teacher readily fits him for the task he has undertaken. He has furnished what every teacher of surgery has undoubtedly felt the need of—some short guide to aid him in drafting his lectures to enable him to present the subject in hand as clearly and concisely as possible, and at the same time not to omit any point that would be of vital importance. The little book in hand—published by D. B. Saunders, Philadelphia—will meet this need undoubtedly.

ANTISEPTICS IN MIDWIFERY. By Robert Boxall, M.D., M.R.C.P., Assistant Obstetric Physician to and Lecturer on Practical Midwifery at the Middlesex Hospital; formerly Physician to the General Lying-in and Samaritan Free Hospital, London, Eng. H. K. Lewis.

We have here a couple of admirable lectures, delivered by Dr. Boxall in the Middlesex Hospital, on the important subject of the use of antiseptics in midwifery. He refers to the reports of the Registrar-General of Great Britain, and shows by them that the rate of mortality from puerperal septicemia is still very high in the United Kingdom, being over two per thousand deliveries. From his observation and records in hospital practice, he estimates that, for every death from puerperal fever, about thirty-two cases of illness, more or less serious, occur in addition. He shows that the use of antiseptics in recent years has greatly improved the condition of matters in maternity hospitals, while he

regrets that the Registrar's statistics show that, in general practice, the mortality rates are but little reduced, as a rule, and not at all in many districts.

He then describes, minutely, the technique of asepsis, or antisepsis, and the essential conditions to be fulfilled. In treating of the various antiseptic agents, he points out many of the chemical incompatibilities existing between them, and gives his opinion as to their comparative value. As we pointed out in our last issue, he places bichloride of mercury at the head of the list, but, at the same time, shows how it may be inert under certain conditions, and dangerous at other times. He shows conclusively that the use of antiseptic agents should be accompanied by a scientific knowledge of the subject, and the greatest possible care. This is a valuable little brochure, and should be read by all who practise the science and art of obstetrics.

THE CHRONIC DISORDERS OF THE DIGESTIVE TUBE. By W. W. Van Valzah, A.M., M.D., formerly Demonstrator of Clinical Medicine, Jefferson Medical College. 152 pages. Published by J. H. Vail & Co., New York.

This little book is a collection of the author's contributions on this subject in American journals during the past year, and deals with the subject in a thoroughly practical manner. It gives the general etiology and symptoms of the various disorders, but the principal part of the work is devoted to treatment, especially dietetic. It deprecates the habitual use of drugs in cases where no attempt, or very little, has been made to regulate the diet, but regards them rather in the light of accessories.

Under disorders of the stomach, the author limits the diet to lean meats, milk, and light broths, adding a little starchy food when the patient can bear it. To cleanse the stomach, he washes it out daily, and also gets the patient to take several glasses of hot water to aid this action. He believes we should try to regulate secretions by massage and electricity, rather than supplement them by giving drugs.

In intestinal troubles, the diet is still more limited. He advises the pulp of beef muscle in preference to a milk diet, as being more nutritious, bulk for bulk, and leaving no more unabsorbed element to pass down the intestine. Copious draughts of hot water are given to flush the alimentary tract thoroughly, and this should go on for several months. Frequent examination of the blood, urine, and feces should be made to ascertain whether the food is all digested or not. When the patient has decidedly improved, a fuller diet may be given, but only as long as he shows signs of improvement.

In chronic diarrhea and constipation, the author shows that they are brought on, in a great measure, by improper food, and that a restricted diet, supplemented later on, will go a long way towards a cure.

The binding and typography are first class.

SAJOUS' ANNUAL OF THE UNIVERSAL SCIENCES, 1893. The fourth volume contains extracts from the writings on diseases of the Skin, Eye, Ear, Nose, and Throat, Legal Medicine and Bacteriology. Each section has been carefully edited, there being much information for both specialists and general practitioners.

The chapter on Diseases of the Skin is edited by Dr. Arthur Van Harlington, of Philadelphia, and among his references is one by Maylard on the treat-

ment of burns. He believes in an antiseptic treatment from the first, and so washes the wound with a 1 in 2,000 solution of bichloride at once, covers it with some green protective soaked in the solution, and then puts on successively some borated lint, gutta percha tissue, and sublimated gamgee tissue. He leaves the dressings on for two or three days or more, until they become soiled with the discharges. He says this is a painless method of treatment. Besnier, in the treatment of eczema, says it is requisite to place the digestive organs in a healthy condition, and to regulate the diet to some degree. He recommends alkalies internally in the obese, congestive, uric acid and diabetic diathesis, sulphur in the young, ergotine in varicose eczema and congestive forms, and arsenic or arsenious acid in the chronic forms to modify the epithelial functions. Locally, inert powders, moist fomentations, and oily applications may be used.

Neisser has found tumenol very useful in ordinary ointments to relieve the pruritis of eczema or kindred diseases.

The section on Ophthalmology, edited by Dr. Charles A. Oliver, of Philadelphia, is very complete. The subject is reviewed in all its branches, there being many interesting cases, well illustrated by colored and other plates.

In diseases of the Vitreous, especially in connection with constitutional and specific maladies, Galezowski, of Paris, recommends the use of the ophthalmoscope to examine the ciliary circle, as he says it is invariably affected. He employs a weak convex lens joined to a very strong achromatic prism.

Gama Pinto, of Lisbon, and Risley and Gould, of Philadelphia, deprecate the routine practice of slitting up the canaliculus, and the use of large instruments for dilatation in affections of the lachrymal sac and nasal duct. Gould thinks the sac and duct might be emptied by pressure, and then a boric acid solution might be made to filter through if introduced in small quantities. In any case, only a small incision should be made when really required.

Barraza reports a case of restoration of the upper lid, when the skin and conjunctiva were the seat of a neoplasm (probably sarcoma), which required removal. The border of the lower lid was denuded, the two edges were sutured, and, after healing had taken place, they were divided and the skin and conjunctiva stitched together.

Hotz, of Chicago, recommends the use of Thirsch's (skin) grafts after the denuding operation for pterygium. He finds that the grafts readily adhere to the surface of the eyeball.

Pflüger, of Berne, uses trichloride of iodine, in strengths of 1 in 1000 to 4000, in cataract operations. He finds it antiseptic, non-irritant, and non-poisonous, and that it will not permanently affect the endothelium of the cornea, nor cause any opacities in it. For sub-conjunctival injections he uses 1 in 1000-1500, and in ulcus serpens 1 in 1000. The borders of the ulcer are then touched with a 1 in 10 solution.

Charles S. Turnbull, of Philadelphia, has edited the section on Diseases of the Ear, and among the cases noted is an account of excision of the stapes for non-suppurative inflammation of the middle ear by F. J. Jack, of Boston. He records sixteen cases, in all of which there was no inflammatory reaction, but a decided improvement in the hearing.

Garnault has found that the injection of five or six drops of a one per cent. solution of the double iodide of potassium and bismuth is very useful in cleansing the ear in otorrhea ; Janicke recommends the tetra-borate of sodium, either in solution or as a powder, and Delstancha finds that liquid vaseline, mixed with iodoform, relieves pain and serves to overcome any tendency to suppuration.

Politzer, of Vienna, states that treatment in cases of mastoiditis following influenza should be very prompt, as many cases end fatally. Paracentesis of the drumhead when an effusion appears, cold applications over the mastoid, and operative measures to remove the pus from the cells when manifested, should be undertaken as soon as possible.

Diseases of the Nose and Accessory Cavities is edited by Chas. E. Sajous, of Paris. He quotes Rixa, of New York, in which he extols terpin hydrate (turpentine acted on by alcohol and nitric acid) in hay fever. He gives fifteen grains (in five-grain capsules) during each of the three meals and at bedtime, giving another during the night, if the attack has occurred on a damp day. H. J. Loebinger, of New York, also recommends the drug for the asthmatic attacks, he giving fifteen-grain doses three times a day.

Bosworth, of New York, gives a record of eighty-eight cases of asthma in which the disease was cured or lessened in severity by active treatment of the existing abnormal conditions of the nose. These lesions were mostly nasal polypi, deflected septums, and hypertrophic rhinitis.

L. E. Blair, of Albany, also found some abnormalities of the nose in thirty-five cases of asthma, which, when treated, cured the asthma.

F. W. Draper, under Legal Medicine, reports a new method of resuscitation, by Laborde, of Paris, of those apparently drowned. The plan is to force open the mouth, catch hold of the tongue with the fingers, and, drawing it forward, impart to it about eighteen or twenty energetic and rhythmic backward and forward movements to the minute, thus stimulating the respiratory reflex. This may be done in conjunction with the ordinary methods, but Laborde believes it to be quite sufficient of itself.

Under the subject of the preparation of tissues for the microscope, A. G. Auld describes Fol's fluid for the rapid hardening of tissues. It contains : Saturated aqueous solution of picric acid, 10 parts ; one per cent. chromic acid, 25 parts ; water, 65 parts. The fresh tissue is cut into small pieces and placed in the fluid, and in from twelve to twenty-four hours it may be put in the freezing microtome and cut. In many cases no more staining is required, but alum-carmine or hematoxylin may be used. If left too long in the fluid, the tissues will become brittle.

The following pamphlets and books have been received :

THE CAUSE OF THE DISEASES OF WOMEN. By Chas. P. Noble, M.D. Reprinted from the *International Medical Magazine*, August, 1893.

PHYSICAL CULTURE. A Manual of Home Exercise. Price 10c. Published by A. G. Spalding & Bros., manufacturers, Chicago, Philadelphia, and New York.

REPORT OF THE KENSINGTON HOSPITAL FOR WOMEN, NON-SECTARIAN. From Oct. 10th, 1892, to Oct. 9th, 1893. No. 136 Diamond street, Philadelphia.

THE RELATIONS OF URINARY CONDITIONS TO GYNECOLOGICAL SURGERY. By Chas. P. Noble, M.D. Reprinted from *American Medico-Surgical Bulletin*, October, 1893.

REPORT OF TWO YEARS' WORK IN ABDOMINAL SURGERY AT THE KENSINGTON HOSPITAL FOR WOMEN, PHILADELPHIA. By Chas. P. Noble, M.D., Surgeon-in-Chief. Reprinted from the *International Medical Magazine* for December, 1893.

DENUDED CRANIUM. Its Treatment by Perforation of the External Table of the Skull and Thiersch Method of Skin Grafting, with report of case by Edmund M. Pont, M.D., Rutland, Vt. Reprinted from the *Medical Record*, Dec. 16th, 1893.

REPORT OF A YEAR'S WORK IN MINOR GYNECOLOGICAL SURGERY IN THE KENSINGTON HOSPITAL FOR WOMEN, PHILADELPHIA. By Chas. P. Noble, M.D., Surgeon-in-Chief. Reprinted from the Transactions of the Philadelphia County Medical Society.

ESTABLISHING A NEW METHOD OF ARTIFICIAL RESPIRATION IN ASPHYXIA NEONATORUM. By J. Harvey Dew, M.D., New York. With four illustrations. (Read before the New York Academy of Medicine, Feb. 2nd, 1893.) Reprinted from the *Medical Record* of March 11th, 1893.

HOW TO USE THE FORCEPS, with an introductory account of the female pelvis and the mechanism of delivery. By Henry G. Landis, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in Starling Medical College, Columbus, O. Revised and enlarged by Charles H. Bushong, M.D., Assistant Gynecologist and Pathologist to Demilt Dispensary, New York. Price $1.75. E. B. Treat, publisher, 5 Cooper Union, N.Y., 1894.

THE SURGERY OF THE URETERS. A Clinical, Literary, and Experimental Research. Read in the Section of Surgery and Anatomy at the forty-fourth annual meeting of the American Medical Association, June 8th, 1893. By Weller Van Hook, A.B., M.D., Professor of Surgical Pathology and Bacteriology, College of Physicians and Surgeons, Chicago; Professor of Surgery in the Chicago Post-Graduate Medical School.

Medical Items.

DR. SYLVESTER, of Galt, has removed to Toronto.

Dr. PAUL DIDAY, of Lyons, France, died January 8th, at the age of eighty-three.

DR. W. T. PARK, who was formerly practising in Listowel, has removed to Detroit.

IT is announced officially that a branch of the Pasteur Institute will be established at Algiers during this year.

COOMBE LYING-IN HOSPITAL, DUBLIN.—Dr. Frederick W. Kidd has been elected master of this hospital in place of Dr. Hoey.

DR. GEO. ACHESON has taken Dr. Sylvester's office in Galt, where he is well known through his residence there in boyhood.

DR. DANIEL MITCHELL, of Blenheim, has been appointed associate coroner for Kent county, in the place of Dr. George E. Richardson, removed from the county.

DR. A. H. FERGUSON, of Winnipeg, has been elected Professor of Surgery in the Chicago Post-Graduate College, and expects for the future to be a resident of Chicago.

DR. ONESIME LANGLOIS, of Windsor, died on February 2nd, after a short illness with typhoid fever, at the age of forty-five. He was educated at McGill, and graduated in 1875.

DR. E. H. WILSON, of Brooklyn, has been appointed director of the department of Bacteriology in the Hoagland Laboratory, Brooklyn, in the place of Dr. Sternberg, resigned.

DR. G. STERLING RYERSON, M.P.P., paid a brief visit to Southern Virginia, where he went to recuperate after a short illness. He returned, full of health and strength, in the latter part of January.

JOHNS HOPKINS UNIVERSITY.—In the new medical school connected with this university there are now seventeen students, while forty-six graduates in medicine are attending the post-graduate lectures.

DR. DUNCAN MCDONALD GORDON, of Lucknow, has been appointed associate coroner for the county of Bruce, and Dr. John Danby, of Richmond, has been appointed to a similar position in the county of Lanark.

DR. CHAS. O'REILLY, superintendent of the Toronto General Hospital, was seriously ill for six weeks with *la grippe*, complicated with broncho-pneumonia. He left Toronto, February 10th, for Hamilton. After a stay of three days there, he started for Philadelphia and Atlantic City.

DR. JAMES H. BURNS, of Toronto, is another of *la grippe's* victims. After a severe attack he was left very weak. He started for Atlantic City, February 13th, joining Dr. O'Reilly at Hamilton.

DR. GEO. WATSON, who practised in Toronto for a time, has been spending several months in New York, where he has been engaged in post-graduate work. He has lately returned to Canada and commenced practice in Listowel, having taken the office formerly occupied by Dr. Park.

WE are told by the *British Medical Journal* that a somewhat notorious quack of Dublin, named Farlow, but known as Dr. Franks, who was arrested a short time ago on a charge of endeavoring to procure a lady for immoral purposes, has been convicted and sentenced to twelve months' imprisonment.

WE spent two or three very pleasant hours lately in Montreal, guided by Dr. J. Chalmers Cameron through the many buildings that form McGill University. We saw everything that possibly could be seen in the time, and there can be no doubt but that, through the great generosity of open-hearted citizens, McGill University can well feel proud of its present position.

THE BATHURST AND RIDEAU MEDICAL ASSOCIATION.—The annual meeting of the Bathurst and Rideau Medical Association was opened in the City Hall, Ottawa. Dr. Rogers presided. Among those present were Sir James Grant, M.P., Sheriff Sweetland, Doctors Irwin, Horsey, Kidd, Grant, Playter, Dewar, Klock, Baptie, Small, Robinson, Rattray, and Shillington. Papers were read by Drs. Playter, J. A. Grant, C. P. Dewar, Klock, and A. J. Horsey. The annual dinner of the association was given in the Russell on the same evening.

A RICH GIFT TO A LIBRARY.—We learn from the Journal of the American Medical Association that Dr. Nicholas Senn, of Chicago, has given his collection of books to the Newbury Library, of Chicago. The actual cash value of this library is supposed to be more than $50,000. It contains especially a large number of works in surgery, including, as it does, the collection of Dr. William Baum, of the University of Gottingen. Dr. Senn bought the whole of this library when he lived in Milwaukee; it came to him packed in fifty-two cases, making an entire carload. It is stated that the presentation was made chiefly through the recommendation of Mrs. Senn, who, knowing the great worth of the collection, appreciated the great danger to which it was exposed from fire or other casualty while it was kept in a private residence.

HIGHER MEDICAL EDUCATION. — In pursuance of the policy recently announced in the resolution to be presented to the American Medical College Association, the trustees and faculty of Rush Medical College have decided to require four years' attendance at college from students who begin the study of medicine this year with a view to graduation in 1898; however, those who have already studied medicine one year or more with a preceptor, so that the

four years of study, already required, will be completed before July, 1897, may graduate after three courses of lectures as heretofore. To encourage proper preliminary study, graduates in arts and sciences from high-grade colleges, and graduates in pharmacy and dentistry from colleges requiring a proper amount of study and two full courses of lectures, will, until further notice, be allowed to graduate after an attendance on only three courses of lectures.

ONE of the most skilful dentists in New York gives these rules for the care of the teeth: Use a soft brush and water the temperature of the mouth. Brush the teeth up and down in the morning, before going to bed, and after eating, whether it is three or six times a day. Use a good tooth powder twice a week, not oftener, except in case of sickness, when the acids from a disordered stomach are apt to have an unwholesome effect upon the dentine. Avoid all tooth pastes and dentrifices that foam in the mouth; the lather is a sure sign of soap, and soap injures the gums, without in any way cleansing the teeth. The very best powder is of precipitated chalk; it is absolutely harmless, and will clean the enamel without affecting the gums. Orris root or a little wintergreen added gives a pleasant flavor, but in no way improves the chalk. At least a quart of tepid water should be used in rinsing the mouth. A teaspoonful of Listerine in half a glass of water used as a wash and gargle after meals is excellent; it is good for sore or loose gums; it sweetens the mouth, and is a valuable antiseptic, destroying promptly all odors emanating from diseased gums and teeth. Coarse, hard brushes and soapy dentrifices cause the gums to recede, leaving the dentine exposed. Use a quill pick, if necessary, after eating, but a piece of waxed foss is better. These rules are worth heeding.

ELEVENTH INTERNATIONAL MEDICAL CONGRESS.—A letter directed to the undersigned by the secretary-general of the Eleventh International Medical Congress, and dated December 19th, 1893, contains the following communications:

"American members will pay on the English, French, and Italian railways single fares for double journeys, and will obtain a reduction of twenty per cent. on fares for Italian round-trip tickets.

"The documents required for their identification will be sent to you in January, and Americans intending to visit the congress will have to apply to you for them.

"Full particulars concerning the journeys will accompany the documents."

From former communications the following are herewith quoted: The members' fee is five dollars; that of their wives or adult relations two dollars each. Checks or money orders may be sent to Prof. L. Pagliana, Rome, Italy. Credentials have been promised in the near future. When they arrive (none were received last year), they may be too late for many who have started or are about to start. The undersigned, who is not informed of the cause of delay, proposes to supply, in as official a form as he thinks he is justified in doing, credentials which are expected to be of some practical value. The North German Lloyd has promised to recognize them. It is suggested, besides, that a passport may increase the traveller's facilities.

Only the North German Lloyd (Bowling Green) and the Compagnie Générale Transatlantique (3 Bowling Green) have thought fit to grant any reductions to Congressists.

The reductions on Italian railways are available from March 1st to April 30th. A. Jacobi, M.D., 110 W. 34th Street, New York, January 11th, 1894.

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

MEDICAL COUNCIL DIVISIONS AND CANDIDATES.—In accordance with the provisions of the amendment to the Medical Act, there will be seventeen territorial representatives, instead of twelve, in the next council, the divisions being arranged as follows:

(1) Counties of Essex, Kent, and Lambton. The present representative is Dr. Bray, of Chatham, who is likely to be re-elected. We have not heard of an opponent.

(2) Counties of Elgin, Norfolk, and Oxford. Two members of the present council, Drs. Williams and Fulton, will be in this division.

(3) Middlesex. Dr. W. F. Roome, M.P., of London, will probably be elected for this division.

(4) Huron and Perth. It is generally understood that Dr. R. W. Bruce Smith will be the new member.

(5) Waterloo and Wellington.

(6) Bruce, Grey, and Dufferin. Dr. Henry, of Orangeville, is the present member, and will probably be a candidate.

(7) Wentworth, Halton, and Peel. Dr. Miller, of Hamilton, the present member, is not likely to be a candidate. Drs. Griffin and Shaw, of Hamilton, and Dr. Heggie, of Brampton, are mentioned as probable candidates.

(8) Lincoln, Welland, Haldimand, and Brant. There will be a hot contest here between Dr. Philip, of Brantford, the present member, and Dr. Armour (of "Defence" fame), St. Catharines.

(9) Simcoe, Muskoka, Parry Sound, Nipissing, and Algoma. Dr. Law, of Beeton, is mentioned as a probable candidate.

(10) Toronto, west of Yonge street. Dr. A. J. Johnston, the present member, will be a candidate. Opposition is promised.

(11) Toronto, east of Yonge street. Dr. E. J. Barrick will be a candidate. Opposition doubtful.

(12) Ontario, Victoria, and York, exclusive of Toronto. The candidates at present said to be in the field are Drs. Cotton, Lambton Mills; Burrows, Lindsay; and Sangster, Port Perry. This fact was unknown to us when THE PRACTITIONER of last month was issued.

(13) Northumberland, Peterborough, Durham, and Haliburton. Dr. McLaughlin, of Bowmanville, will probably be elected.

(14) Prince Edward, Hastings, and Lennox. Two of the present members, Drs. Day and Ruttan, will be in this division. Strong efforts are being made to induce Dr. Day to be a candidate for re-election.

(15) Frontenac, Addington, Renfrew, and Lanark. Dr. Spankie, of Kingston, will probably be a candidate.

(16) Leeds, Grenville, and Dundas.

(17) Carleton, Russell, Prescott, Glengarry, and Stormont. Two present members will be in this division—Drs. Bergin and Rogers.

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS.

The following is the preliminary programme of the Congress of American Physicians and Surgeons, which will be held in Washington, D.C., May 29th, 30th, 31st, and June 1st, 1894. President, Alfred L. Loomis, M.D., New York city; vice-presidents, *ex officio*, represent the different affiliated societies;

chairman of the Executive Committee, Landon Carter Gray, M.D., New York city; treasurer, John S. Billings, M.D., Washington, D.C.; secretary, William H. Carmalt, M.D., New Haven, Conn.

The meetings of the Congress will all be held in Metzerott's Music Hall, corner of Twelfth and F streets, N.W.

TUESDAY, May 29th. 3 p.m.—Congress opened by the chairman of the Executive Committee. From 3.30 to 5 p.m.—General session of the Congress under the direction of the Association of American Anatomists.

WEDNESDAY, May 30th. From 2 to 3.30 p.m.—General session of the Congress under the direction of the American Climatological Association. From 3.30 to 5 p.m.—General session of the Congress under the direction of the American Dermatological Association. 7 p.m.—Dinner to the guests of the Congress at the Arlington Hotel.

THURSDAY, May 31st. From 2 to 3.30 p.m.—General session of the Congress under the direction of the American Association of Genito-Urinary Surgeons. From 3.30 to 5 p.m.—General session of the Congress under the direction of the American Gynecological Society. 7.30 p.m.—Address by the president of the Congress, Dr. Alfred L. Loomis, Professor of Pathology and the Practice of Medicine in the University of the City of New York, on "The Influence of Animal Experimentation on Medical Science." To be followed by a reception.

FRIDAY, June 1st. 1.30 p.m.—Business meeting of the Congress. From 2 to 3.30 p.m.—General session of the Congress under the direction of the American Laryngological Association. From 3.30 to 5 p.m.—General session of the Congress under the direction of the American Neurological Association.

SUBJECTS FOR DISCUSSION.

By the Association of American Anatomists: "Morphology as a Factor in the Study of Disease"—Opened with a paper by Dr. Harrison Allen, Professor of Comparative Anatomy in the University of Pennsylvania, and discussed by Dr. Thomas Dwight, Professor of Anatomy in the Harvard Medical School; Dr. Frederic H. Gerrish, Professor of Anatomy in the Bowdoin College; Dr. Frank Baker, Professor of Anatomy in the University of Georgetown; and Dr. Burt C. Wilder, Professor of Physiology, Comparative Anatomy, and Zoology in Cornell University.

By the American Climatological Association: "Sewer Gas"—(1) "The Bacteriology," by Dr. Alexander C. Abbott, First Assistant in the Laboratory of Hygiene, University of Pennsylvania; (2) "As a Cause of Disease," by Dr. Abraham Jacobi, Professor of Diseases of Children in the College of Physicians aud Surgeons of New York city.

By the American Dermatological Association: "The Distribution and Control of Leprosy in the United States"—(1) "The Distribution." Opened with a paper by Dr. J. Nevins Hyde, Professor of Skin and Venereal Diseases in Rush Medical College, Chicago, and discussed by Dr. Wm. A. Hardaway, Professor of Skin Diseases in the Missouri Medical College, St. Louis, and Dr. James E. Graham, Professor of Medicine and Clenical Medicine in the University of Toronto. (2) "The Prophylaxis and Treatment," with a paper

by Dr. James C. White, Professor of Dermatology in Harvard Medical School, and discussed by Dr. George H. Fox, Professor on Diseases of the Skin in the College of Physicians and Surgeons of New York city; Surgeon-General W. C. Wyman, U.S.M.H. Service; and Dr. Joseph D. Bryant, Professor of Anatomy and Clinical Surgery, Bellevue Hospital Medical College, New York city.

By the American Association of Genito-Urinary Surgeons: "Nephritis in its Surgical Aspects"—Opened with a paper by Dr. Edward L. Keyes, of New York city; followed by a paper from Dr. George M. Sternberg, Surgeon-General, United States Army, on "The Bacteriology of Nephritis," and discussed by Dr. George Chismore, of San Francisco, Cal.; Dr. L. Bolton Bangs, Surgeon to St. Luke's Hospital, New York city; Dr. Francis S. Watson, Instructor in Genito-Urinary Diseases in Harvard Medical School, Boston, Mass.; and Dr. W. N. Wishard, of Indianapolis, Ind.

By the American Gynecological Society: "The Conservative Surgery of the Female Pelvic Organs"—Papers will be read by Dr. Wm. M. Polk, Professor of Obstetrics and the Diseases of Women and Children in the Unversity of the City of New York, and Dr. Wm. Goodell, Honorary Professor of Gynecology in the University of Pennsylvania.

By the American Laryngological Association: "The Surgery of the Accessory Sinuses of the Nose"—To be discussed by Dr. J. Solis-Cohen, Professor of Laryngology, Jefferson Medical College, Philadelphia; Dr. F. J. Knight, Professor of Laryngology in Harvard Medical School; Dr. George M. Lefferts, Professor of Laryngology and Diseases of the Throat in the College of Physicians and Surgeons of New York city; Dr. F. H. Bosworth, Professor of Diseases of the Throat in Bellevue Hospital Medical College; Dr. William C. Glasgow, of St. Louis, Mo.; and Dr. E. Fletcher Ingalls, of Chicago, Ill.

By the American Neurological Association: "The Influence of Infectious Processes on the Nervous System"—(1) "Pathology and Etiology," by Dr. James J. Putnam, Lecturer on Nervous Diseases in the Harvard Medical School; (2) "The Relation to General Nervous Diseases," by Dr. E. C. Seguin, of New York; (3) "The Relation to Mental Disease," by Dr. Charles K. Mills, Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania; and (4) "The Therapeutics," by Dr. F. X. Dercum, of Philadelphia.

OBITUARY.

THE LATE DR. WILLIAM F. HUTCHINSON.—At a meeting of the Executive Council of the American Electro-Therapeutic Association, the following resolutions on the death of Dr. William F. Hutchinson, of Providence, R.I., were unanimously adopted:

Whereas, it becomes our painful duty to announce the death of Dr. William F. Hutchinson, one of the Foundation Fellows of the American Electro-

Therapeutic Association, as well as the First Vice-President of the same ; and

Whereas, in his death we lose a warm and faithful friend, a valued associate, and an accomplished member of the profession ; therefore be it

Resolved : That this association desires to place on record its appreciation of his genial spirit, his active co-operation in the work of the association, and of his deep interest in the scientific questions relative to his chosen profession.

Resolved : That we express our sincere regret and heartfelt sorrow at his death.

Resolved : That we tender to his sorrowing family an expression of our profound sympathy in their great loss.