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Original Communications.

A FEW NOTES ON CLINICS FOR DISEASES OF THE SKIN.

By DOUGLASS W. MONTGOMERY, M.D.

Professor of Diseases of the Skin, University of California.

The following cursory notes written for my own pleasure while on a short trip, have no pretension to being at all exhaustive. They may, however, interest my friends for a few minutes, and if so, they will serve their purpose.

Before boarding the steamer at New York to cross the Atlantic I called on Dr. J. A. Fordyce, who kindly invited me to see his service in the City Hospital. The City Hospital turned out to be what I knew twenty years ago as Charity Hospital, and it was explained to me that it hurt the patients' feelings to be treated in an institution called a "Charity Hospital," so the name was changed. How pleasant it is to feel that even such patients have some recollection of what self-respect is, and, as if in accentuation of this mental attitude, the first patient seen had pediculosis corporis. Lice had so long pastured on his body that indelible traces were left, as extensive areas of pigmentation. Throughout these areas there were many light-colored spots having superficially the appearance of scars. The pigmentation was particularly deep in the flexures. The interest of the case lay in a decided and recent loss of flesh, marked anæmia with eosinophilia, and some chloasma spots on the cheeks. The deep pigmentation alone has often led these cases to be mistaken for Addison's disease, and when one gets in addition, as in this case, rapid loss of flesh, anæmia and pigmentation of the cheeks, the chances for error become so imminent as to be interesting.

In this patient the rapid loss of flesh had produced a curious change in the skin of his abdomen, that was shrivelled and puckered up like an old empty leather bag, a fitting emblem of the man's diminished fortunes. It may be, however, that the creepy beasties this man had had in his clothes had really been a dispensation of Providence, acting in the way referred to by David Harum in speaking of fleas, namely, that a certain number of fleas is good for a dog, as they keep him from brooding and reflecting on the fact that he is a dog. In this view this was but another illustration of Emerson's doctrine of compensations.

The next patient Dr. Fordyce showed me was a young fellow afflicted with eczema scroti. The word "afflicted" is perfectly applicable in this disease, for the patient is scourged, whipped and stung by his malady. In addition to this exquisite torture the affection is apt to be obstinate, and under such circumstances relief may be awaited, though not patiently. In the instance under consideration there was a hard, thickened, scaly patch with much itching on the front of the bag. Considerable amelioration had been obtained by a course of lotions of resorcin gradually increasing in strength from ten to thirty per cent. till a decided inflammatory reaction was secured. Then the part was treated with calamine lotion till the inflammation subsided. It was a variety of the old principle of arousing enough inflammation to carry away with the accelerated and increased lymph stream the old inflammatory induration. The patient himself was so pleased with the result of the first course of treatment, that he wished immediately to enter upon another.

After leaving New York, and enjoying an uneventful voyage across the Atlantic, we landed at Bremen and went on to Hamburg. In Hamburg I had the pleasure of visiting the large venereal service in the General Hospital, the Hospital of St. George, with Dr. Arning. This institution is admirably outfitted. Of syphilis alone, about seven thousand cases are treated annually. Other than the venereal diseases, however, I saw only a few instances of psoriasis, one widespread lupus, and one pityriasis rosea. The service is what one might call monotonously depraved. Dr. Arning was employing a new treatment for chancroid. Everyone is aware how tantalizing the treatment of those ulcers is. They may be sluggish in healing, or new ulcers may break out; or even when healed it is not infrequent for the scar to break down, and the work has to be done over again. Dr. Arning finds that by treating the ulcer with a hot jet of permanganate of potash he gets a rapid solid healing without breaking down. This clinic should be an excellent one in

which to study syphilis. The material is abundant, Dr. Arning is energetic, and the pathological department is well outfitted.

It was while in Hamburg that an incident occurred that made me especially proud of San Francisco. I was telling an acquaintance of a mutual acquaintance in San Francisco, whose course in a certain transaction had not met with general approval. "Oh," he said, "he is just like all of you out there." For a few minutes I was rather taken aback by his naive impoliteness, but keeping my temper, I said, "You ought to have seen the way our local fire insurance companies met their obligations." I then told him that there were two local fire insurance companies in San Francisco, the stock of which was mostly owned within the city. The stockholders therefore lost, not alone through their fire insurance stock, but shared with others in the general calamity. I said that the California Fire Insurance Co. paid its obligations in full as soon as the losses could be determined. I also told him that the other company, The Fireman's Fund, lost more than ten millions of dollars; that its vaults did not hold, and that all their books were burnt, thereby destroying evidence of either debts or credits; that they, however, reincorporated, found what they owed and paid in cash, at first fifty per cent. of their losses, then six per cent. and gave stock for the rest, and that the stock to-day is excellent. I said further that those who had insured in The Fireman's Fund had already received about seventy-five per cent. of the face value of their policies, and that they would ultimately be paid in full. While I was speaking my acquaintance was looking into a microscope. As I proceeded with my recital I could see his eyebrows rise slightly, his eyes open a little and his lips part as indicating involuntary surprise, and he said in a low tone, "How did they do it? We couldn't." Until then I did not appreciate what a shot I had landed. I simply said, "You probably have no conception of the financial strength of that city, nor of the integrity of the better class of her merchants."

This resurgence of The Fireman's Fund is as gallant a piece of work as has ever been accomplished in commercial life.

From Hamburg we went to Copenhagen and there I met one of the most amiable characters it has been my good fortune to encounter, Professor Erick Pontoppiden. He has a large and interesting clinic for venereal diseases at the Vestre Hospital, where I spent a very enjoyable and instructive morning, heightened by the fact that the Doctor speaks English fluently, having lived a long time in the Danish West Indies, where practically nothing but English is spoken.

Dr. Pontoppiden told me that the compulsory examination of prostitutes, after being tried in Copenhagen for some time, had been abandoned. This step was partly owing to the efforts of people opposed to all such examinations, and partly to the fact that no examination, no matter how thorough, will enable a physician to give a certificate to a public woman that she is not liable to convey disease through sexual congress. In this clinic I saw an astonishing number of instances of the pigmentary syphilide in the usual situation, as a collar about the neck. In my own practice I see very little of this particular syphilide. This is undoubtedly due to the fact that I see very little of the early syphilis in females, of which the pigmentary syphilide is a symptom. Outside of prostitutes, most women who get syphilis acquire it from their husbands. As it is to the husband's interest to conceal the disease from his wife, it is either neglected or entirely overlooked in its early stages, and so it comes about that the specialist for diseases of the skin, in his private practice, sees most of the cases of syphilis in the female in the later stages of the disease, after the pigmentary syphilide has long since faded away.

Dr. Rasch, of Copenhagen, has an excellent service in the Commune Hospital, of both skin and venereal diseases. By far the most of the patients are venereal. The doctor told me that there is a law requiring all those having venereal diseases, applying for relief at the hospital, to be treated free of charge. This is a well meant effort to stamp out or control those plagues; but behold how it works: Because of this benevolent law sailors of all nations hasten to Copenhagen as being a good place to get free treatment. While in this city being cured it is not to be imagined that they are strictly continent, and no doubt many a case of infection is owing to them. This is one of the best instances I ever found of misplaced well-doing.

Dr. Rasch was treating psoriasis by painting the patches with pure coal tar. The tar should only be painted on, not rubbed in, as in the latter case it is apt to cause dermatitis. In other cases of psoriasis he was using chrysarobin locally, but in very weak dosage (1-1000).

While in Copenhagen Dr. Reyn kindly showed me the Finsen Institute for the treatment of lupus. With us in San Francisco lupus is a rare disease, as even in a large practice one may not meet with more than one or two cases a year. In the Finsen Institute, however, the patients are in crowds, with the disease showing itself in all sorts of forms, and on all parts of the

body. Light as developed by Finsen is the chief, though not by any means, the only agent employed. The treatment by light has many disadvantages. It is long-enduring, requiring from one and a half to two years for anything like an extensive case. It is tedious, for each sitting lasts an hour or more, and the sittings are frequent. It requires constant and accurate care on the part of the attendant, who has immediate charge of the patient, as the essential of the treatment is to keep the focus of light in the correct place, and also to keep the spot under treatment exsanguinated by pressure. This last is an important point, as otherwise the blood circulating in the tissues interferes with the action of the light. These two things, the accurate adjustment of the focus of light and the exsanguination of the tissues, mean that neither the attendant's attention nor her fingers may relax. Gentle reader, did you ever try to keep your attention on an uninteresting subject for an hour? or even on an interesting subject?

The treatment is not by any means always successful, and even when successful, there are frequent recurrences. With these drawbacks it is no wonder that the first enthusiasm aroused by the treatment has measurably subsided, and that some men whom I spoke to on the subject are decidedly opposed to the procedure.

The arguments in favor of the Finsen light treatment are : That it is frequently successful; that the scars following the light treatment are usually soft and inconspicuous; that the light treatment is often applicable when other treatments such as excision or cauterization are contraindicated or almost impossible, as around the eye.

The fact is that the light treatment is only a valuable addition to the treatment of lupus, and in the Finsen Institute itself they use many other forms of treatment, such as, the electrocautery, pyrogallie acid, and so forth.

A curious circumstance in regard to recurrences is that they often happen far removed from the original focus. This phenomenon would seem to be opposed to our usual conception of lupus being a strictly local disease.

I asked both Dr. Reyn and Dr. Francis if they found many cases where there was tuberculosis of other organs coexisting with lupus. They said they did not find many such, although they were convinced that tuberculosis was more frequent among lupus patients than among patients afflicted with other diseases. I also took occasion to ask both these men what they thought of the nature of lupus erythematosus. They both expressed them-

selves as not knowing what it was, but as believing that it has no affinity whatever with tuberculosis or lupus vulgaris. In the chronic form of lupus erythematosus they use the Finsen light with success in about fifty per cent. of the cases.

I was interested to learn that Dr. Reyn had worked out the opsonic index in one hundred cases of lupus vulgaris with absolute lack of success. He found that the variations of the index in patients suffering from lupus vulgaris did not differ in the least from those of the same number of normal individuals.

From Copenhagen we went down to Berlin where we saw a clinic of a very different nature from any hitherto encountered. In Professor Lesser's service in the Charité, Professor Hoffman has under his immediate charge quite a menagerie of monkeys, sheep, goats and rabbits that he has infected with syphilis. While standing in the pen watching Dr. Hoffman examining some infected monkeys I felt a slight tugging at my coat, and turned to find a syphilitic almond-eyed goat nibbling at the hem of my garment. After this, I confess to having had a very creepy feeling in Dr. Hoffman's barnyard. Dr. Hoffman told me he had carried the syphilitic virus through ten goats, without any apparent lessening of its virulence. The attendants handle these infected animals fearlessly, and with an air of security surprising to one aware of the virulent nature of the poison to which they are exposed. They said no accidental infection had as yet taken place. This statement is also surprising in view of the vast number of accidental (not venereal) infections that occur in ordinary life.

Incidentally it may be remarked that the phagedena of phagedenic chancere seems to be due to the spirocheta refringans.

The discovery of the spirocheta pallida has caused a fresh enthusiasm in the study of the origin of syphilis, and Professor Hoffman says the belief that this disease was brought to Europe by the crew of Columbus returning from America is again a favorite. If this is correct, Europe may thank America for four most interesting products, the potato, tobacco, quinine, and the spirocheta pallida.

From Berlin we went to Dresden, where I visited one of the most interesting of clinics, that of Dr. Werther. Dr. Werther has charge of the service for diseases of the skin and of the genito-urinary system in the General City Hospital. The hospital building itself is most interesting. It is the old palace of Count Markolini, and the door handles still bear the crown of the former noble occupant. Attached to the hospital there is a beautiful garden or park that is now enjoyed by the city's

charity patients. This Count Markolini was a wonderful fellow, and as Marshal of the Court of George the Just of Saxony, arranged everything in the royal household according to his own ideas. He was the first to introduce Chinese porcelain into Dresden and so to develop that industry, that has ever since thriven there. He even brought over some Chinese, to whom he assigned special apartments in the Royal Palace. It now comes about that in the rooms formerly occupied by this high and mighty personage Dr. Werther and Professor Schmorl are deeply interested in the study of *spirocheta pallida*. Professor Schmorl was the first one to demonstrate this micro-organism in the tissues by the Giemsa stain. Previous to that it could be objected that the micro-organism stained in smears by Giemsa, and that stained, for instance, by the silver method in the tissues were really two different organisms, taking stains differently.

Dr. Werther showed a particularly interesting case of syphilis in a little girl of two years of age. She had still the traces of a chancre on her lower lip and an eruption of secondary syphilis on her body. Spirocheta had been demonstrated in the chancre. She came of a family, all of whose members had syphilis. The mother, while pregnant with this child, had an inunction treatment under the direction of Dr. Werther for florid syphilis. According to our usual ideas, a child born under such circumstances should be immune from inoculation by syphilitic virus. This child, however, was not immune, and later on, as we have seen, she acquired syphilis by inoculation into the lower lip.

There was also in the hospital an elderly woman suffering from that very interesting affection, *mycosis fungoides*, who was doing badly under all forms of treatment, even under the X-ray. Usually the X-ray markedly controls this disease, and especially hinders the formation of the characteristic large tomato-like masses. It is true, that even in spite of the X-ray, the patients almost always die of the disease, but usually the amelioration and comfort from the X-ray and the retardation of the course of the disease are so notable that the introduction of this mode of treatment can be considered one of the great advances in therapeutics. To Dr. Werther's surprise a patient suffering from *mycosis fungoides*, that he treated with the X-ray a few years ago, recovered completely, and has ever since remained well. This, however, is an unexpectedly good result.

In showing a young fellow with a particularly well marked syphilitic eruption Dr. Werther remarked that he had been treated in a Nature Cure Institute. He said he got some of the

most neglected cases from such institutions where the patients were told that the eruption breaking out showed that the disease was coming to the surface. When their money was gone, however, they were given minute directions how to find the city hospital. The ways of the quack, resting as they do on the solid basis of human nature, are strikingly similar all the world over.

I doubt if irregular medicine is any less frequent in Germany than with us. For instance, while in Hamburg I entered a pharmacy where a man, who seemed to be the proprietor, was in earnest conversation with a customer. They were talking quite distinctly, and were so situated that I could not help hearing what they said. The customer was telling anxiously of his wife, who had a serious dysenteric attack. The druggist listened to him, and finally gave him a small bottle of medicine, directing precisely how it should be taken. For the medicine the charge was seventy-five pfennigs, about eighteen cents, and nothing was said about a fee for advice. This was cheaper than having one's hair cut. It may be that the husband had heard the French adage, "If you lose your wife and fifteen cents, it is a great pity for the fifteen cents."

From Dresden to Prague is but a short and pleasant journey, with an interesting city at the end as a reward for one's trouble.

Professor Kreibich has now the Clinic for Diseases of the Skin, formerly held by Professor Piek. The University Medical School is peculiar in that it is bilingual, there being a German and a Bohemian service. The hatred between the two races is so intense that they will not even be sick together.

Professor Kreibich showed me several cases, among them three patients suffering from dermatitis herpetiformis. Dermatitis herpetiformis is an affection in which American dermatologists take a special pride, because of the part played by Louis A. Dering, of Philadelphia, in elucidating it.

After leaving Prague we went by way of Nuremberg to Munich, where I did myself the pleasure of calling on Professor Posselt. Among his cases were two that were treated with the continuous water bath. One of these was afflicted with pemphigus. The other suffered from dermatitis exfoliativa that was said to have developed out of a forerunning psoriasis and seborrheic eczema. This man had dwelt in his tub for several years. Occasionally he would try the experiment of living in the open, but the itchiness, dryness and burning would soon become so intolerable as to drive him back into the water again.

In visiting the hospitals in Germany one is struck by the vast number of patients suffering from syphilis. Surely syphilis is

not so common with us as it is on the continent of Europe, although it must be rapidly increasing with us too. This is one of the most sinister prices we pay for increasing population and increasing commerce, increasing cost of living, and its attendant postponement of the age of marriage.

Another observable feature is the number of lupus patients, and the hopeless tone assumed when speaking of the treatment of this disease. When I would mention how few cases of lupus we have in California, "Remain happy in their absence," would be the invariable answer.

As regards the treatment of syphilis, mercury still holds the first place, and one could see by the blue marks on the patients' skin that in clinic after clinic the inunction method was the favorite. It was so much the favorite in fact that it was seldom mentioned, although many other ways of introducing mercury were adverted to. Good wine needs no bush, and mercurial rubbings speak for themselves. Some men were using intramuscular injections of salicylate of mercury, which undoubtedly are good, and some the bichloride of mercury, which is also excellent. One man apologized for not employing inunctions, saying that one of his assistants was desirous of trying a new preparation much advertised as an intramuscular injection, but which left a fine trail of the mercurial stomatitis behind it. One man was using the soziodolate of mercury.

During my journey I heard much of atoxyl as a remedy for syphilis, but saw very little of it used. One man said he used it if he found mercury to disagree. After using atoxyl for a time he would drop it and recur to the use of mercury, which he would not expect to agree. To get decided antisiphilitic effects from atoxyl, however, it has to be pushed to its physiologic limit, and there is danger that the patient may become temporarily blind. There is no occasion for insisting on the gravity of such a situation, as a perambulating case immediately becomes a hospital case. It is no wonder that many are entirely opposed to employing this drug against syphilis. Max Joseph, for instance, did not alone advise atoxyl as an antiluetic remedy, but warned his hearers most emphatically against its use.

THE HEART IN TYPHOID.

BY W. H. B. AIKINS, M.D., TORONTO.

In this disease, as in many other acute febrile infections, the brunt of the attack falls upon the heart-muscle. Little is known of the changes taking place in the earlier stages, because death is rare at this period, but the myocardium has often been described as friable and discolored. Later in the disease we find both parenchymatous and interstitial changes. The muscle fibres contain albuminoid granules, the nuclei become enlarged, elongated and surrounded by pigment. The interstitial change is shown in the round-celled infiltration between the larger muscle-bundles, with, perhaps, an obliterating endarteritis in the smaller arteries (Hayem). Both sides of the heart are involved in these pathological processes, the left usually the more. Clinically, the heart seems to recover completely, and fibroid changes after typhoid have rarely been demonstrated.

Endocarditis is more common than is usually supposed, but nevertheless, from a percentage standpoint, is a rare complication. The bacillus typhosus has been isolated from the vegetations, but probably the lesion was due to a secondary infection with pyogenic cocci. Pericarditis occurs only very exceptionally. The Johns Hopkins series¹ show 1,125 cases in which the heart sounds were clear throughout the disease. In 333 cases murmurs were heard at some time during the course of the illness, of which 16 were thought to be due to previous valvular trouble. Of 316 cases the murmur was systolic in 312, diastolic in one, diastolic and systolic in three. The murmurs were observed in 85 per cent. during the first three weeks. The murmurs persisted throughout the attack and were present at discharge in 31 out of 138 cases, in which the point was carefully noted. He states that the majority of the murmurs were due to the relative dilatation of the mitral orifice, although probably some were due to endocarditis. At autopsy, endocarditis was present in six of the series; of these the diagnosis was made in three clinically. The typhoid bacilli have been found in the vegetations, and endocarditis of the aortic valves has been produced experimentally by Lion² with intravenous injections of typhoid culture. In the 2,000 Munich cases that came to autopsy there were only 11 instances of endocarditis. They did not state whether or not typhoid bacilli were found alone or together with some pyogenic organism, but as a rule endocarditis as a complication of typhoid fever is usually due to secondary infection. Pro-

chaska⁴ has observed in mixed infections that ordinary pyogenic germs acquire an increased virulence under the influence of typhoid infection, but might not this be due simply to the asthenic condition of the patient and consequent low power of resistance ?

Isolated instances of endocarditis as a complication of typhoid fever are to be found in the literature, as the one to which we will again refer from the *Lyon Médicale*, March 18, 1905; but unfortunately the bacteriology was not worked out in this case. It was one in which vegetative endocarditis was found on the margin of the mitral valve, so they were unable to state either the presence or absence of Eberth's bacillus.

Pericarditis was present in three of the Johns Hopkins series, of which death followed in one, and in this case typhoid bacilli were found in pure culture. Of the 717 cases⁵ admitted to the Montreal General Hospital from January 1st, 1897 to December 3rd, 1902, there was but once case of pericarditis.

The onset of endocarditis is usually seen during the 3rd week accompanied by pain, fever and leucocytosis,⁶ the fever and leucocytosis often preceding the localising symptoms. The complication is usually ushered by chills, in more than one-quarter of the cases.

Frank Hinchley,⁷ St. Louis, relates a case of typhoid with relapse on the 24th day. On the 24th day of the relapse a synovitis of the knee was noticed. On the 29th day she complained of sharp pain in the cardiac region associated with restlessness and anxiety. The pulse rose from 92 to 108, to 130-150. The acute symptoms subsided in ten days, but the rapid heart's action persisted for five weeks. No blood examination was made.

In this connection Hewlett⁸ states that typhoid bacilli are not to be found in later weeks of typhoid fever, but reappear after the relapse.

Cole⁹ finds that 75 per cent. of the cases showed typhoid bacilli in the second week. The case before referred to from the *Lyon Médicale* was that of a patient 26 years of age, in the third week of the disease when she entered the Hospital; pulse 150, arrhythmia and tachycardia present. The patient came in on Nov. 10th, and died on Dec. 21st. During the course of the illness variable systolic murmurs were heard, but the heart was not enlarged.

The pulse of patients admitted to the Toronto General Hospital in my service with typhoid fever early in the attack usually showed dirotism, and the more severe the symptoms in the early stage of the disease the more marked was the dirotism. This

dicrotism became gradually less and less as the disease advanced, so that in the third week a pulse which during the first and part of the second week showed dicrotism has now lost its dicrotic character. The cases which showed most marked dicrotism all recovered, so that the prognosis seems to be good in these cases. On some days the dicrotism seems more marked than on other days.

Sudden death in typhoid fever occurs in about 2 per cent. of the fatal cases, and is the accident to be most feared in connection with the terminations of this disease. An accident of this description indicates the extreme caution which must be exercised during the convalescence of a typhoid fever patient, as the end may come suddenly, the consequence from movement or slight effort of the patient in bed. This ending may be preceded by symptoms of collapse, or death may be sudden without warning. This may occur in the 3rd or 4th week of typhoid fever, more frequently after the temperature has become normal or subnormal, and in the general weakened condition following the abatement of the fever, and sometimes the lessening of attention on the part of the physician and nurse and the withdrawal of stimulation. A French clinician, in analyzing 145 cases of sudden death from typhoid, noticed that it happened twice in the first week, 22 times in the course of the 2nd, 54 during the 3rd and 31 during the 5th week and the period of convalescence.

Sometimes sudden death is preceded by different symptoms, such as tachycardia or arrhythmia, but in some instances collapse occurs immediately. Sudden cyanosis and dyspnea with fatal collapse through paralysis of the heart, thrombosis of the pulmonary veins and œdema of the lungs may occur in convalescent patients who have left the bed too early. In other cases the patient becomes pale, but may have a few convulsive moments, utter a cry and become inanimated, and in these cases it is rare that he can be recalled to life with even the most energetic stimulation of caffeine, strychnin, digitalis, alcohol or hot applications over the heart.

This accident is very rare with children. In a series of over 350 cases analyzed it was not noticed once. Sudden death may occur as a result of hemorrhage, or pulmonary emboli or cardiac thrombosis, but during the wane and convalescence of typhoid fever sudden death is due to syncope, and in the matter of syncope it is risky to state the starting point of the reflex which acts upon the bulbar cardiac centres.

Treatment of the failing heart in typhoid fever requires almost constant watching and the closest attention to details to ward off

an impending end. Local revulsion seems to be useless, and plasters over the cardiac area are often dangerous. A means of revulsion which has apparently proved efficacious is the application of a bag filled with ice on the region of the heart. Where there is a typical myocarditis, a light flannel covering is first placed to avoid immediate contact and a bag filled with ice is permanently kept on the precordial region. This appears to have a quieting and strengthening action on the heart, and cardiac troubles are often seen to disappear.

Among the different medicines used in the failing heart of typhoid fever, mention must first be made of strychnin, digitalis, caffeine and ergot. Each of these therapeutic means has its indications, which necessarily vary according to the condition of the patient. Digitalis acts as a cardio-vascular stimulant, quickens cardiac contraction, and under its influence one can observe the heart beats grow stronger, and the pulse become freer and less rapid. Arterial tension is increased. The action of digitalis is not very rapid, and its elimination is slow, and on that account we have seen caffeine succeed better in cases of typhoid myocarditis.

Caffeine is an excellent remedy which has rendered me great service. It can be used by way of the mouth, but it is especially by subcutaneous injections that its effect is most manifest. These injections can be repeated in serious cases 3 to 4 times in 24 hours. Under the influence of this drug the heart seems to right itself quickly. At first the action is more rapid, then becomes slower and the beat becomes more energetic. The action is rather transitory, but when caffeine is given in combination with strychnin one often succeeds in sustaining the heart effectually. The action of alcohol in typhoid fever has been a subject of much discussion for many years indeed, but my experience leads me to give it in full doses, continuously watching the patient, and lessening or increasing the quantity of alcohol according to the varying conditions of the patient.

In some cases where the heart is failing as the result of the intensity of toxemia or of loss of blood from intestinal hemorrhage, I have had the most gratifying results with interstitial injections of the saline solution administered in the pectoral regions.

In one case which I had under my observation in the Toronto General Hospital there were in all 28 hemorrhages recorded. By the most energetic use of the saline solution the heart was given sufficient fluid on which to contract, and though the patient during a trying period of ten days was blanched and almost bloodless, recovery ensued.

When the heart appears to be rapidly failing with increased frequency of pulsation and lessened arterial tension, the application of heat or of the hot water bag over the heart, as observed by Schott, appears sometimes to restore the needed equilibrium.

Dr. Philip King Brown¹⁰ gives his valuable experience on the use of Nauheim baths for the failing heart in acute and infectious diseases, and came to the conclusion that the artificial Nauheim bath may be of service when associated with supportive measures, as the continued use of alcohol and the routine administration of hypodermic injections of digitalis and caffeine. If in pneumonic cases, why then, in administering the baths in typhoid cases, could not the artificial solutions of salt and chloride of calcium and the generation of carbonic acid gas be introduced? Unfortunately, the facilities for the carrying out of this method have not been at my disposal.

Sir Lauder Brunton¹¹ advocates the use of chloride of calcium in sudden heart failure administered in 5 to 10 gr. doses every 4 hours, simply dissolved in water. I have used calcium lactate in several cases of typhoid fever where the ventricular cell appeared to be losing power, and I think I may safely say that the result was so marked as to encourage me in the further use of a drug which deserves a wider trial.

50 College Street.

BIBLIOGRAPHY.

1. Thomas Macrae in *Modern Medicine*, 1907.
2. *Essai sur la nature des endocardites infectieuses*, Paris, 1890.
4. Feb. 28, 1907.
5. T. Macrae, *Transactions of Ass'n of Amer. Physicians*, 1903.
6. Thayer, *Johns Hopkins Bulletin*, Oct., 1904.
7. *St. Louis Medical Courier*, 1902.
8. *Medical Record*, Nov. 30th, 1901.
9. *Johns Hopkins Bulletin*, July, 1901.
10. *American Medicine*, Sept., 1906.
11. *British Medical Journal*, March 16, 1907.

SOME PHASES OF KATATONIA.*

BY JOHN GERALD FITZGERALD,

Clinical Director; Pathologist, Toronto Asylum; Demonstrator in Psychiatry,
University of Toronto.

It was in 1874 that Kahlbaum described a special form of mental disease whose characteristics were those now elaborated by Kraepelin under the head of the Katatonic form of Dementia Præcox. The original sketch still holds good in the main, Kahlbaum emphasizing those features which writers since his time have only been able to slightly modify—the symptom-complex—a progressive cycle showing first depression, then excitement and later stupor, with intellectual enfeeblement finally intervening; and these accompanied by motor disturbances characterized by spasticity make up the disease picture to which the author gave the name *Spannungs-Iressein*. It will, perhaps, be as well just here to very briefly make one or two statements in regard to the question as to whether the Katatonic syndrome is ever found in any other clinical condition than that which we designate Katatonic Dementia Præcox. I cannot do better than to quote Régis, a prominent psychiatrist of the French School, whose views are not entirely out of sympathy with those of Kraepelin. He says: "To-day there is a general tendency to admit that the Katatonia of Kahlbaum is of two varieties—that which appears as Dementia Præcox, when it constitutes one of the chief clinical forms; the Katatonic, the other variety, where it appears only as a Katatonic or cataleptoid symptom (the symptom of catalepsy of Brissaud), and may possibly be observed in a number of the neuroses or psychoses, particularly in hysteria, in depression, in paranoia, in the toxic psychoses and in various psycho-neuroses." His next statement does much to clarify his conception of the Katatonic form of Dementia Præcox. He continues: "The Katatonic form of Dementia Præcox, following the description of Kraepelin, is characterized by the particular states of stupor and excitement ending usually in dementia and accompanied by negativism, suggestibility and stereotypy;" to which I subscribe with the exception, that I cannot agree that all of these patients show stupor in the true sense. I will have occasion to speak further of this later on.

Now that we have a clear idea of the case which may be classed as Katatonic precocious dement, it is only fair to say that the term Dementia Præcox itself, and the term from which it

*Read as a part of the symposium on Dementia Præcox before the Toronto Academy of Medicine, January 14th, 1908.

was derived, Dementia Precoce (Morel being the first to use it in the early sixties), are both unfortunate, in that dementia in its strict, modern, psychiatric sense implies a condition from which recovery is impossible, whereas we know that Kraepelin holds that certain cases of Dementia Præcox do recover. Whether or not they show any psychic scar is probably an open question.

The Katatonic group is perhaps the most interesting of all the cases of mental disease developing in the adolescent and early adult periods, and many fascinating theories have been advanced to explain the origin of various symptoms that arise, but one may say without any fear of contradiction that the exact causes are not known. The etiologic factors that enter into the causation of so many other psychoses probably enter in here also. Defective heredity is quoted by Kraepelin as being present in a large number of cases, but it is idle to quote statistics as probably no two writers agree as to the exact percentage of cases in which the question of defective heredity enters in. Of other factors worthy of consideration Kraepelin lays particular stress on child-birth as being a very important etiologic factor in female Katatonics. Previous acute infective processes are said to be the starting point in some cases, and trauma occasionally may be a factor. After an analysis of a large number of cases I think we are bound to conclude that many individuals who develop Katatonia have always shown some peculiarity, but whether they would later develop a psychosis was purely problematical as other individuals of a somewhat similar makeup were more fortunate and never suffered from any form of mental alienation. Many of the cases show stigmata of degeneration and frequently give a history of gross sexual irregularities, and not uncommonly an undue susceptibility to the influence of alcohol. Since we are still unable to correlate, in every case or even in any case, given causes, certain clinical signs, and constant pathological alterations in the cortex cerebri, we are at liberty to speculate regarding etiologic factors, but such speculation is rarely of any value and is not sufficient to satisfy the critical sense of the trustworthy observer.

In regard to the pathological histology, Alzheimer and Dunton have described certain changes in the brain tissue of Katatonics, and I quote from Dunton's original article in the *American Journal of Insanity*—Vol. LIX. No. 3, 1903. He says in conclusion: "A summary of the microscopical findings of the brain is as follows: there is but a slight cell change and this is distributed over the whole brain, not being restricted to any one area. The greatest amount of cell change is found in the first frontal convolution. The cells show central chromolysis, an occasional

slight degree of pale yellow pigmentation, slight cell atrophy, dislocation and swelling of the nucleus, folding of the nuclear membrane, and an endonucleolus. As a rule the deeper layers are most affected. The motor cells show very slight changes similar to the above. There is a slight increase of neuroglia nuclei. Phagocytosis is well marked and there is a considerable cell disintegration. There is no change in the medullated fibres and no marked vascular changes."

These findings of Dunton are quite similar to those of Alzheimer and other workers, and while they are undoubtedly, as Dunton says, suggestive, he agrees with those who believe that no inferences are to be drawn from these findings, and it is therefore impossible at present to correlate given pathological changes in the nervous tissue with the known clinical manifestations. Just in this connection one might note that the opinion is gaining ground among workers in psychiatry, that neuropathology can go very little further *at the present time* in the elucidation of problems which only a short time ago it was believed could be solved only by the efforts of the neuropathologists. A friend of mine while in Heidelberg during the past summer called on Nissl, and was greatly surprised when this most eminent investigator in the realm of neuropathology told him that in his clinic the field of psycho-pathology was to be more thoroughly tilled in future, because he felt that the result of the work in histopathology was distinctly disappointing. Some other less illustrious persons who believe that changes in the morphology of the nerve cells will explain the parafunctioning of the mind would do well to remember this recent pronouncement of Nissl.

The onset in Katatonia may be abrupt or there may have been certain unusual features in the patient's conduct some time before the symptoms became so marked as to attract the notice of the friends. The age at which the condition most often develops occupies an intermediate position between the onset in early youth of the hebephrenic, and the comparatively late onset in many cases of the paranoid form. Perhaps from the ages of 19 to 24 is the time when the condition most frequently develops. It must be kept in mind, however, that in a goodly number of cases the Katatonic syndrome is engrafted on a defective basis, and the exact time at which the further pathologic manifestations make their appearance is not always easy to decide.

When the onset is abrupt, the following case is an example of the prodromal period: The patient, a young girl of twenty, came home from work one day, refused her dinner, although she usually ate a hearty meal at noon. She complained of strange

uncomfortable feelings in her head, was giddy at times, was afraid she was going to lose her mind (this is interesting, showing as it does, that the patient had a very good insight at this time). She cried and was vaguely suspicious, and appeared not to understand her own family relations; there were fallacious sense perceptions, no resistiveness, but mannerisms were noted, constipation was a marked feature. The condition gradually progressed and established itself in about four weeks, during which time the other symptoms observed were a degree of inertia, drowsiness, crying spells, diminished voluntary expression of ideas, vague, disconnected ideas of harm coming to her and mannerisms. The appetite improved somewhat. Many other prodromata have been observed, and those which have to do with the psycho-motor side are the most significant because they indicate that the condition developing is probably Katatonia. The condition on the psycho-motor side is not a hyper-functioning as in an oncoming attack of excitement, not a hypo condition as when we have to deal with a state of depression, but it is a true parafunctioning. Let me just for a moment illustrate this: the Katatonic need not execute in the course of twenty-four hours any more or any less movement, but he executes them in a clumsy, awkward, roundabout fashion. The easy grace which characterized the movements of the individual when well are replaced by the most bizarre motor activity in which an irrelevancy is plainly discernible. The outward expression seen in the movement is not in accord with the ideo-motor image. Next in importance to the psycho-motor phenomena are the disturbances in the emotional activity. As a rule we have at first a shallow, fleeting depression, which is followed by a condition of mild exhilaration with great motor restlessness. Then follows the stage of inactivity which at the present time, for the want of a better term, we speak of as stupor. Other early symptoms in either the period of excitement or depression, which are frequently present, are: various hallucinatory experiences, disordered nutrition evidenced by loss of weight, etc., and in females there is almost invariably some disturbance in the menstrual history, amenorrhoea frequently being complained of.

When the condition has progressed for some little time the characteristic symptoms make their appearance. One of the earliest and most characteristic is negativism. The exact nature of this symptom is a matter of dispute and is really at the present time only speculative because it is quite impossible yet to conceive of an explanation that is anything other than hypothetical. The theory of Pick of Prague is one that is believed by many,

and I give it simply as an illustration: this writer believes that the explanation of the negativistic phenomena is to be found in the absence of inhibition of the antagonistic mechanism, which, according to Sherrington, accompanies every tendency to movement.

Negativism may be well demonstrated by attempting to open the patient's eyes, when he at once wrinkles his eyebrows and tightly closes his eyes, or if he is requested to put out his tongue he closes his lips, and when these are parted his tongue is seen drawn well to the back of the mouth or to the side. It is most important that this symptom be not confused with the disturbance of volition, seen in cases of depression where there is a desire but an absolute inability on the part of the patient to comply with any request made.

The next symptom with which we have to deal is *suggestibility*. The patient is absolutely passive, shows no choice in the direction of mental activity, but shows a tendency to automatic imitation of everything seen and heard. When the patient repeats the words or phrases heard, it is spoken of as echolalia; when movements are imitated, the symptom is described as echopraxia. Bear in mind, however, that these are merely evidences of suggestibility, the second of the triad of symptoms in Katatonia. The third is *stereotypy*. McDonald gives the following concise conception of this symptom: "The lack of desire for the accomplishment of any particular object permits the energy to discharge along the paths of least resistance, which are, of course, the paths which impulses have most habitually travelled. The result is stereotypy." Stereotypies may be those of movements, of attitudes, of acts, of language and of writing. The stereotypies of the Katatonic are often most bizarre and persist without the least modification for years. Habitual grimaces may be included in this category, as may also tics, which are often present. Movements are unnatural and stilted as is the language; mirror-writing is infrequently observed.

In regard to the condition which is commonly spoken of as stupor, much misunderstanding has arisen and it would not benefit us greatly to go into all the phases of the question. That a great many Katatonics who are mute, inaccessible, resistive, negativistic, apathetic, indifferent and inattentive are commonly spoken of as being in a condition of stupor is true, but that there is actually clouding of consciousness is doubtful, because some time after the patient brightens up, he is able to give an intelligent account of practically everything that has transpired. Obviously this would be impossible had there been clouding of

consciousness of any depth. On the other hand there are cases that pass into a true stupor where there is deep clouding of consciousness and the same mutism and inaccessibility. This last stuporous state may occur as an episode in many psychoses and is spoken of as Katatonic stupor or Manic stupor, and is to be distinguished from the mental state described above, which I might speak of as pseudo-stupor, which is the third stage in the progress of a case of Katatonic Dementia Præcox.

In the psycho-analysis of the Katatonic the extremely marked emotional dulling, leading eventually to complete effect dementia, is conspicuous. The attention is usually weak and can seldom be directed. Memory often shows no gross impairment. Associative activity is, as far as we can learn, very slight, the ideas expressed are often fragmentary and irrelevant, and there is a very considerable lesion of volition. Fallacious sense perceptions are common, particularly the auditory variety. The delusional fabric if present at all is loose and disjointed, and makes no adequate impression in consciousness. The physical signs are variable, the tendon reflexes are often exaggerated, fine tremors are usually present; the pupils often widely dilated, at times irregular and unequal. One of the most striking features, however, are the disturbances in the circulatory system. The extremities are cold and blue, the circulation sluggish and the dermatographia often exaggerated. The gastro-intestinal disorders have already been noted. The temperature may be subnormal with slight rises to 99 degrees or 100 degrees F. (Lewis Bruce). I have been working on the blood in these cases and found an eosinophilia which at times is quite remarkable. The further details I hope to report at some future time.

This in brief is a review of the symptoms. The pathognomonic syndrome then is: a psychosis developing in a young individual showing first depression, then excitement with impulsive outbursts which are most striking, and finally a pseudo-stupor, in which negativism, suggestibility and stereotypy are present. This cannot be mistaken for any other condition. In many instances, of course, there are cases which are extremely difficult to differentiate for various reasons, and the exact condition is often a matter of doubt for several months. Of the prognosis, a word or two will suffice. Kraepelin says: "In twenty per cent. of the cases there are remissions simulating recovery. Almost certainly during these remissions certain characteristics of the disease remain behind which indicate that it has not gone on to complete recovery, unnatural behaviour, constrained manner or a strikingly unusual fashion in dress, unusual quiet or an incomplete in-

sight remaining." "In the remissions the patients may be very comfortable for from 5, 7 to 20 years and then an attack of excitement may recur. In the mildest form of Katatonic weak-mindedness under my observation I might record about thirteen per cent. of cases in which the symptoms so completely disappear that the healed ones fill their places in life quite as formerly. I must confess, however, that in some of the cases reckoned herein, light residuals of the disease passed through, such as twitchings in the face, quietness in behaviour, constrained or affected movements, also symptoms of catalepsy are present, indicating that probably the improved condition would only last for some years." Here, then, is the dictum of the man whose conception *Dementia Præcox* is. I can only add a note indicating certain features which would cause me to regard the outlook as favorable: (1) An abrupt onset. (2) Absence or great vagueness of the hallucinatory experiences. (3) No pupillary disturbances. (4) Very slight lesion in associative activity. (5) Good general physical condition. (6) Menstrual curve disturbed only during the actual period in which the Katatonic symptoms are most manifest. (7) Organic reflexes intact, and finally, preservation of the ethical sense practically intact. The question as to whether Katatonics ever recover or not must receive final consideration later on. What I have already said sums up our knowledge at the present time.

In the differential diagnosis the cases of stupor coming on during the course of an attack of the maniac-depressive psychosis are most difficult of diagnosis, although hysterical stupor is often extremely difficult to differentiate. If the triad of Negativism, Stereotypy and Suggestibility is present, the case can belong to only one group, and this is the Katatonic form of *Dementia Præcox*.

Treatment consists in hospital care, nourishing diet and strict attention to elimination, for the cases in the early stages, and re-education later on, the details of which I hope to record in another paper.

BIBLIOGRAPHY.

- Lewis Bruce—*Studies in Clinical Psychiatry*.
Dunton—*Journal of Insanity*, 1903.
Diefendorf—*Clinical Psychiatry*.
Farrar—*Clinical Demonstrations*.
Kraepelin—*Psychiatrie*, 7th Edition.
McDonald—*Transactions American Medico-Psychological Association*, 1906.
Paton—*Psychiatry*.
Régis—*Précis de Psychiatrie*, 1906.

ARTERIOSCLEROSIS.*

BY JOHN FERGUSON, M.A., M.D., Toronto.

MR. CHAIRMAN AND GENTLEMEN,

The subject upon which I wish to engage your attention for a few minutes is by no means a new one. The literature upon the subject of arteriosclerosis has become a very extensive one; and all I can hope to do on this occasion is to gather up the main features of what is known regarding the clinical and pathological state covered by the term, hoping that these remarks may lay the foundation for a fruitful discussion. Should such be the case, my object will have been attained. As tuberculosis claims many in the promise of youth, so high arterial tension has its victims among the best that are past midlife.

The term arteriosclerosis, introduced in 1834 by Lobstein, is vague, and other names have been suggested. Gull and Sutton called the condition arteriocapillary fibrosis, Virchow designated it endarteritis chronica deformans, Thoma speaks of it as angiosclerosis, Haller named it atheroma, and others have given it such names as sclerotic arteritis, chronic arteritis. In 1876 Friedlander called it endarteritis obliterans.

No one for a moment will doubt the importance of this morbid condition. Any disease which causes as many deaths in the prime of life as does arteriosclerosis may well claim a share of our thoughtful consideration. It is only by retaining a healthful condition of the arteries that we can hope to reach a green old age with the enjoyment of a fair share of mental and bodily vigor. Some may exclaim that old age is not desirable, and to such we would say you can attain your object by living a life of over-indulgences in foods and drinks, coupled with manifold cares and anxieties. But to those who take the more rational view of desiring length of days with wisdom and health, it can be safely proclaimed that arteriosclerosis is among the most preventable of the diseases to which the term preventive medicine is applicable. As Sir James Barr has well said, "if men were as anxious to live well as they are to live long, they would perhaps more frequently attain their end."

Did time permit, much might be said on the history of this subject. Among the earliest writers upon diseases of the arteries must be mentioned Lobstein, who used the term arteriosclerosis in 1834, followed by Haller, Scarpa, Bezot and Kreysig.

*Read at Academy of Medicine, Toronto.

These men advanced the inflammatory theory as the cause of the arterial changes which they observed.

About the year 1844, Rokitansky, the great Vienna pathologist, opposed this view, and held that the changes in the vessels were due to some material in the blood which became deposited in their walls and proved detrimental to them. This humeropathological theory of Rokitansky was supported by Donders and Jansen, but just as stoutly opposed by Engel and Neumann.

The microscope now became an instrument of precision, and by its aid many important observations were made. Resse, who gave much study to the histological changes, advanced the view that the degeneration in the vessels was caused by interrupted nutrition and new connective tissue formation.

Virchow threw all the weight of his great name and the conclusions gathered from his enormous data against the humeral theory of Rokitansky and many of his successors. The name which he gave the changes in the arteries, namely, *endarteritis chronica deformans*, clearly shows that he espoused the inflammatory theory of Lobstein and those who had written prior to the time of Rokitansky. Virchow claimed that two main changes occurred, namely, a simple degeneration, and an atheromatous degeneration. The first he regarded as a passive occurrence, while the second was an active formative process. The hyperplasia of the intima and the sclerosis of the vessels he taught to be the results of chronic inflammation.

Cohnheim and his school elaborated the inflammatory theory. They tried to show the part played in the process by the white blood corpuscles and the *vasa vasorum*. To Cohnheim much credit is due for his efforts to clear up the way by which the intima received its nutrition from the blood, and in what way its tissue could be penetrated by the leucocytes. But in what way perverted nutrition, or the invasion of the intima, led to atheroma, still remained unexplained. Cohnheim and Virchow held that the various morbid changes, however, were caused by errors in nutrition and the passage of white corpuscles from the *vasa vasorum*.

At this stage of the discussion Traube came on the scene with his mechanical theory that the cause of the arterial changes was high blood pressure. Rindfleisch and his school argued that the alterations found in the vessel walls were due to a slowing of the blood current. These pathologists, Rindfleisch, Strönganow, Keester and Talma, were unable to trace any connection between the vascular media and the non-vascular intima, and therefore, thought that the latter was seriously affected by a slow blood

stream. This led these men to advocate anew Resse's theory of interrupted nutrition.

Durante, Trompeter, and Krafft added to the discussion by showing that the media is always involved about the same time as the intima, and that the vasa vasorum are the real agents in maintaining the nutrition of the vessel walls. By the experiments made by Durante, it was shown that stoppage of the flow in the lumen of the vessel did not affect its nutrition; but that a similar condition in the vasa vasorum at once caused degeneration.

These various theories bring the subject to the position taken by Thoma. His theory has been well named the compensatory process. He divides arteriosclerosis into primary and secondary. In the primary there is a yielding of the vessel from loss of elasticity. The vessel is widened and the blood stream slowed. Connective tissue is formed in the deeper layers of the intima to restore the original relations. As age advances this thickening goes on regularly in keeping with the slowing of the blood current. In this way an adjustment is effected between the heart, the vessels and the blood. In the secondary form of arteriosclerosis the change has its origin around the vasa vasorum, or in the small arteries. These changes in the small vessels may be nodular and local, or diffuse. When the vessels yield at points they may bend at these points, and in this way the tortuosity noticed in arteriosclerosis is explained.

This very ingenious theory of Thoma, which rests upon an unproved hypothesis of slowed blood stream and a lost vessel elasticity, has been keenly contested by Beneke, Marchand, Fuchs, Huchard, Gibson, Councilman, and others. They think it is pushing the mechanical theory too far, and are strongly inclined to look for the causes among more general and constitutional states and tendencies. These later teachers cannot agree with Thoma that when the blood stream becomes slowed down either by dilatation of and lost elasticity in the vessels, or by resistance to the onward flow of the blood from any change in the tissues, there is established a compensatory endarteritis.

These brief remarks on the history of the subject brings us to what may be called the present and more rational view of the etiology of arteriosclerosis. And I think we may admit that the following are the factors that stand in the relationship of cause and effect :

1. Long and continued straining of the coats of the vessels affects nutrition and elasticity. The periods of rest are short-

ened and those of strain lengthened. The circulation in the vasa vasorum is interfered with and the process of inhibition of nutriment by the intima disturbed. At the same time there is hypertrophy of tissue in the media. The strain upon the tissues of the media affects the lumen of the vasa vasorum, and, therefore, the nutrition of the entire vessel. Barr has pointed out that when the arteries are under high tension the vasa vasorum are compressed and the flow of blood through them is impeded. The arterial walls tend to undergo degeneration for lack of proper nutrition. As a result of this malnutrition irritative processes ensue with the proliferation of cells in the intima. These cells undergo degeneration, giving rise to atheroma or atheromatous ulceration or calcification. There can be no doubt now but that this much of the mechanical theory is fully sustained.

2. Long-continued nervous strain, anxiety, and worry can raise the arterial tension, and, as a result, malnutrition, with all its evils, takes place in the walls of the vessels. The position is now too well established to require proof or to admit of contradiction. The tension need not be continuous. The intermittent form, as in strong emotion, may induce thickening in the vessel walls.

3. Excessive indulgence in food is a potent factor in the causation. The overworked vessels under high tension, and irritated by the products of a faulty metabolism, are placed in the conditions most prone to induce degenerative changes in their walls. Watch a man's habits of eating and you can pretty certainly forecast the future of his arteries. Over-indulgence in foods, especially meats, have caused more deaths prematurely than alcoholic beverages, and in saying this I am not advocating bibulous habits.

4. The influence of heredity must not be lost sight of. Arteriosclerosis has been noticed as a truly family disease. The teachings of Sir W. Gowers on abiotrophy apply here. There are certain parts of us that tend to decay and grow old too soon. Such is seen in many nervous diseases and I think the same thing applies to the vascular system. Early senility, myocardial disease, cerebral hæmorrhage, bear evidence of the fact that there is an inherent lack in the vitality of the arterial system, indeed in the whole vascular system. The noble tissue has not enough vital rubber.

5. It is now quite established that long-continued exposure to cold and damp will cause the disease. These act upon the skin so as to cause high tension, as evidenced by the increased urinary

flow. There is also the retention of poisons in the system which the skin should eliminate.

6. Much has been said upon the effect of viscosity of the blood since Clifford Allbutt introduced the term. No doubt the blood does vary in viscosity. The thin blood of the anemic and the thick blood of the plethoric persons are well known. The tarry blood of the cholera patient will not flow at all through the small vessels. It has been proven by cryoscopy that the freezing point of blood varies a good deal, owing to the varying quantities of solid constituents therein. The normal freezing point is -0.56 , and this is lowered in cases of arteriosclerosis, and has been found to run about -0.565 to -0.66 . If the blood is viscous the heart will have more to do and there will be potential high tension.

7. Sex plays an important part in the causation of arteriosclerosis, or rather in the form of it. Men suffer much more frequently than women. The mode of life, work, habits, etc., etc., of men tend to produce the general form of the disease, whereas the more emotional nature of women is prone to give rise to the abdominal form of the trouble. When the life of a woman approaches in form that usual to men, she is liable to the general form of the disease. The sudden changes of blood pressure in women due to emotion affects the aorta and the arteries in the splanchnic area rather than those of the periphery.

8. We are all familiar with the effects of age. Gradually as the years go by the arteries lose their elasticity, and as they do so the heart has added work thrown upon it. It has been well shown, however, that this latter phase is lessened materially by the tendency of the inelastic vessels to dilate. The ages at which sclerosis comes on vary very much. It has been observed in a pronounced form in youth, and scarcely detectable at 80, due no doubt to the facts that the machinery was not overloaded on the one hand, and that it was kept clean of refuse and waste on the other.

9. Race and country conditions bear a close relationship to the causation of the disease. The negroes are prone to atheroma and sclerosis of the arteries. It is very common among whites in the United States. On the other hand, it is very rare among Orientals. Races and countries who live mainly on vegetable foods suffer but little.

10. A very important group of causes is the toxic. Over this phase of the etiology of arteriosclerosis much has been said and written. Its importance cannot be overestimated. Unless the thickening of the arteries is wholly due to high tension the qual-

ity of blood must be reckoned with as it flows in the capillaries and bathes every tissue. For the sake of clearness in stating the case, the toxic agencies may be divided into the following groups:

(a) The various infectious diseases, as typhoid fever, syphilis, rheumatism, the colon bacillus, and others. It has now been well established that typhoid fever and syphilis stand in very close relationship to arteriosclerosis as cause and effect. Lately some excellent work has been done on the etiological relationship of the colon bacillus to the sclerosis; but more proof is yet required before an opinion can be pronounced. In some way these infections throw into the blood toxins, or derange the metabolism of the body so as to induce the various changes in vascular sclerosis. Syphilis, according to Bromwell and Diver, cause a general arteritis, including the vasa vasorum.

(b) Certain agents introduced into the system have been said to cause arterial sclerosis. Among these may be mentioned lead, caffeine, theobromine, purin bodies, theina, adrenalin, glycohemina, mercury, alcohol, digitalis, ergot, and especially nicotin. These may act in two ways: first as poisons and irritants they act on the vessels, inducing arteritis; and secondly, by causing and keeping up prolonged high tension, which is admittedly a cause of sclerosis. The part played by alcohol is in dispute, but I think the consensus of opinion is on the side of it being a cause, notwithstanding the work of Cabot. The faulty metabolism present in gout is undoubtedly a cause; but this again resolves itself to the causes of gout, which are pretty much the same as those causing arteriosclerosis.

(c) Lately, much attention has been paid to the influence of the various glands of the body, such as the suprarenals, the hypophysis cerebri, the thyroid and the kidneys. There is now no doubt that the thyroid gland principle reduces arterial tension, and that the active substances of the adrenals raise it. The adrenalin does more than raise the arterial tension, and, in this way, cause sclerosis of the arteries. In addition to this, by acting as a toxic agent on the arterial walls and setting up an arteritis, it causes degeneration and calcification. It has been shown that adrenalin acts on arteries with vasomotor nerves, but the recent experiments of Barr and Hunter also show that it acts directly on the muscle fibres of the vessels. It would, therefore, contract the cerebral, coronary, and pulmonary arteries where the nerve supply is either absent or very slightly in evidence.

The high tension in myxœdema is no doubt due to the lack of the active principle of the thyroid gland. High tension may result, therefore, from defect, as well as from an excess of glandular activity.

It has also been proven by Batty Shaw that when the kidneys are inflamed an extract is given off from them that enters the blood and causes high tension. Here we have an explanation for the high tension in nephritis, and the arterial changes that are so constant in chronic Bright's disease. We can all recall the stop-cock theory of Sir George Johnston, but it failed to carry conviction to the minds of many pathologists. If Batty Shaw and others are correct in the view that the diseased kidneys send into the blood a powerful pressor agent, we can at once understand why the arteries sclerose in chronic Bright's disease. We must wait a little yet, but I think this is the true explanation. What I say here applies to high tension and sclerosis following renal disease, and does not imply that there may not be a reverse process, with high tension and sclerosis, prior to the renal disease. Batty Shaw has obtained a renal extract which causes high tension when injected into the blood of an animal. Schaefer, Oliver, Shaw and Barr have shown that there is a powerful pressor agent in the posterior lobes of the pituitary body. Whether it plays any part in the etiology of arteriosclerosis or not is not yet settled.

As to the varieties of the disease, different writers have given us different classifications. John M. Cowan, of Glasgow, divides the condition into the focal or nodular and the diffuse. Clifford Allbutt speaks of the toxic, the hyperpyretic, and the involutionary. Alfred Stengel gives us the presenile, which he divides into the acute and the chronic forms, and the senile. Joseph McFarland treats of the condition under the terms acute and chronic. Osler contents himself with the simple division into the nodular, diffuse and senile, while Edwards makes two forms, the nodular and diffuse.

On the morbid anatomy I shall say but little. Of the focal form of the disease I would call your attention to two types. The first is that of endarteritis obliterans. This form affects the smaller arteries, and is very frequently of syphilitic origin. The nodulè may completely close the lumen of the vessel and in this way prove of extreme importance, shutting off the blood supply from the area of distribution. The keynote to the changes in this form is to be found in the words cell proliferation, with subsequent degeneration, though gross fatty and calcareous deposits of atheroma do not occur. Various infections, other than syphilis, as scarlatina, smallpox, enteric, etc., may cause this form, and it has been held that it may be caused by trauma. Thoma's theories suit this form only, if at all any form. The second type of the focal form is what is called atheroma, or

endarteritis nodosa or deformans. These atheromatous patches are usually present in the elderly, though their size and number vary very greatly. They vary from that of a pin's head to plaques as large as a quarter of a dollar. They are usually of a greyish or yellowish color, but if calcified are whitish. Sometimes they are soft or translucent, often opaque and firm. Ulceration is not uncommon, from which may arise thrombi. The aorta suffers most frequently from this form of the disease. The coronary, cerebral and peripheral arteries are affected oftener than those of the viscera, the pulmonary circulation being least liable. In advanced cases all the coats are involved. The intima is always thickened. In the early stage, spindle, stellate, and round cells are scattered between the laminae, while the lining endothelium remains intact. In the later stages, hyaline, fatty, granular, mucoid, or calcareous changes may be found. The elastic tissue shares in the hyperplasia and many fine fibrils can be seen. These in time undergo granular degeneration, and often break up into little masses. The media is thinned and the muscle fibres atrophied. The connective tissue is markedly increased, but the cellular elements are few. The vasa vasorum are frequently increased in size and numbers and may penetrate into the intima. In early cases the adventitia may be thickened and cellular, and in the advanced stage sclerosed with hyaline tissue and degenerate elastic fibres.

It cannot be held that these focal forms of atheroma are local forms of arteriosclerosis. The latter is associated with increased tension, while atheroma is commonly quite apart from this tension and cardiac hypertrophy. Infections can only be responsible for a small number of these cases, as no trace of infection may be discoverable in advanced examples of atheroma. The location of atheroma in the aorta, the coronaries, the vessels of the abdomen and the extremities goes far towards establishing the view that these focal forms are largely of traumatic origin. The many causes of high tension plus the systolic wave may produce damage to the vessel walls.

In the diffuse form all the arteries and capillaries, and, according to some, the veins, are involved. The vessels may be seen standing out, their lumen patent, and their walls distinctly and uniformly thickened. The larger vessels may appear whitish and translucent and their consistence firmer than usual, the aorta is thickened and may show many atheromatous patches. In the intima there is marked hypertrophy of the elastic fibrils, and there may be two or more continuous laminae evident. In cases of longer standing, when degenerative changes have oc-

curred, the elastic tissue becomes granular, the connective tissue hyaline and nucleated, but fatty and calcareous changes, so common in the patchy form, are rarely seen. In the media there are always changes. It may be simply thickened with an increase of its muscle, elastic, and connective tissues. Sometimes it is thinned with atrophy and fatty changes in the muscle fibres. In other instances the connective and elastic tissues are in excess, but the muscle fibres are degenerate and few. The connective tissue is usually hyaline or granular, and nucleated, and the overabundant connective tissue degenerate and granular. The adventitia in the early stage is thickly nucleated, while in older cases it is usually hyaline and sparsely nucleated. The elastic tissue is excessive.

The changes in the adventitia are usually constant. If the media is thickened and fibroid the intima may be little altered, whereas if the intima is atrophied the media is usually hypertrophied. Medial hypertrophy is usually present throughout the entire arterial system, with a tendency to fibroid changes.

In the capillaries certain changes are observed. Their walls on section present a double contour, they may be several times their normal thickness, and the lumen is somewhat narrowed.

The diffuse form of arteriosclerosis is frequently found in connection with renal disease, but may exist independently, the common feature of the condition being continued high tension, which Cowan thinks must be accepted as the immediate cause, though Professor Lindsay holds that a toxæmia is the more important factor. In other words, Cowan contends that the high tension, however caused, gives rise to the arterial changes, whereas Lindsay and others hold that the toxic agents in the blood cause much of the alterations from the normal by perverting the nutrition. This leads to hypertrophy of the media and adventitia, and to irritation and cellular proliferation in the media. These nutritional changes may be accelerated by the quality of the blood contained in the vessels and fed to them through their vasa vasorum. The diffuse forms of arteriosclerosis are manifestations of a general disease, and in this respect differ from the focal forms of atheroma.

My own opinion is that when degenerative changes commence in the arterial walls it is the elastic tissue which suffers first. The nutrition of this tissue is less stable than that of the muscular elements, and will be the first to give evidence of a departure from the normal. I am quite satisfied that this degenerative process may be caused by toxic agents in the blood affecting the vitality of the elastic tissue, or by hypertension,

either continuous or interrupted, interfering with its blood supply and proper periods of rest.

The clinical course of arteriosclerosis varies much. In some case it is fairly acute, while in others it is extremely slow in its advance. Not having too close regard for the senile type, we must be on the alert for vascular changes in those of mid-life, or the presenile form. It may show its worst effects in the aorta or coronary vessels. The terrible effects of disease of the coronary arteries on the myocardium are only too well known. Early in the case there is frequently a sense of oppression over the thorax and a feeling of dyspnoea, which later on may become typical angina.

The arteries of the brain and cord may undergo the main degeneration. During the progress of the vascular changes there may be transient monoplegias, extensive palsies, convulsive attacks, or generalized epileptiform seizures. There may be steady loss of memory and mental capacity. In the cord, attacks resembling myelitis may occur.

Many of the cases of chronic renal disease are arterial in origin. The disastrous effects of degeneration in the blood vessels on the digestive organs are now beginning to be fully appreciated, and should be sought out, and properly treated. Diabetes has been alleged to be due in some instances to sclerosis of the pancreatic arteries.

Arising from the diffuse form of arterio-capillary fibrosis, we have a variety of anæmia that has been styled pseudo-anæmia. There may be also a gradual loss of weight, and a tendency to digestive derangements. The nervous system does not escape. Attacks of pain, especially in the head, are not uncommon, and severe forms of neurasthenia are admittedly due to it.

As disease of the arteries kills a few in the early periods of life, many in mid-life, and most of us in advanced life, it behooves us to be on the lookout for its first manifestations.

The diagnosis is easy in the advanced cases, more difficult in the middle stage, and very difficult in the inception of the trouble. But if our treatment is to be of much avail, it is here that the diagnosis must be made.

There are four symptoms for which we must be on the watch. These are increased blood pressure, an increased heaviness and lengthening of the first heart sound, an accentuated second heart sound, and an increase in the tidal wave of sloping ascent and delayed decline. But we must remember that in tumor of the brain, in some diseases of the lungs, in overwork, in toxæmia, and in nervous strain there may be prolonged high tension with-

out sclerosis; and so we must be on our guard. But as high tension usually precedes the sclerosis, if we treat the tension we may never be called upon to treat the sclerosis. Add to these symptoms the gradual failure of vigor, the presence of pseudo-anæmia, the increased flow of urine of low specific gravity, and the presence of the well recognized etiological factors, and it will be within the range of possibility to make a working diagnosis of reasonable certainty.

If we have not been able to follow Thoma in all his views on the pathology and morbid anatomy of the changes in the arterial system in sclerosis, we can concur in the following statement: "By avoiding the causes of increasing blood pressure, by proper hygiene and regimen, serious and fatal vascular disease might be anticipated. If it became possible to recognize arteriosclerosis sufficiently early, it would be easy to limit the danger of rupture of blood vessels and aneurysmal formation."

From what has been said the treatment will be readily surmised. In the first place, reduce the strenuousness of life. Take off some of the load, and this applies to mind as well as body.

On the matter of diet much has been said, and yet it all comes down to this—moderation. Let milk and vegetables, as urged by H. Senator and Schroetter, constitute the basis of the dietary. I would urge the elimination of all alcoholics. Tea, coffee, and tobacco, if taken at all, should be taken in great moderation. The effect of a pipe in raising tension is unmistakable. Butcher meats and meat soups had better be left largely alone. All the proteids required can be obtained from the vegetable world.

Among the drugs, many have been vaunted. The chief of these are iodides, the citrates, the benzoates, the sulphates, sulphites, the nitrates and nitrites. There appears to be a widespread belief in the efficacy of the iodides, and, though some claim that they are of no value, I cannot concur in this opinion. Though it is not a drug, yet it may be mentioned here. It is held by high authority that chloride of sodium is a pressor agent and ought to be used with much care, and calcium chloride avoided. Of late Poehl's sal physiologicum, Truncceek's serum, antisclerosin, and arteriosclerosis tablets have been advocated. They all contain mainly sodium chloride, sodium sulphate, sodium phosphate, sodium carbonate, magnesium phosphate, and glycerophosphate of calcium. The nitrites and nitrates are helpful, and calomel in half-grain doses for a week and intermit, then giving it again, is a good remedy.

The proper regulation of exercise must not be omitted. An

indolent life is most injurious to these cases, and the proper taking of baths, especially warm to hot baths, is most useful. Early rising should be encouraged. Severe cases are greatly benefited by a period in bed.

Of one agent in the treatment of high tension I wish to say a word. Too little attention has been devoted to the use of the thyroid gland extract. Of all the means which we have at our command for the control of high arterial tension, I know of none equal to it.

Two classes require special mention, the obese and the diabetic. In the former, sugar, starch, and farinaceous food must be excluded and more proteids allowed. In the diabetics with sclerosis nitrogenous foods must be given more freely, while the carbohydrates must be carefully restricted. For these two classes milk, some lean meat, gluten bread and green vegetables must be the mainstay in diet. Some egg may also be permitted.

In the words of W. P. Heringham I conclude: "Meanwhile there is one lesson that middle age has always to learn, and that is that it must be moderate, and that moderation means for it something very different from the ordinary meals of healthy and active youth."

"Ill fares the land, to hastening ills a prey,
Where wealth accumulates and men decay."

Progress of Medical Science.

MEDICINE.

IN CHARGE OF W. H. B. AIKINS, F. A. CLARSON
AND BREFNEY O'REILLY.

Arterial Tension in Typhoid.

In the *British Medical Journal* of Oct. 19th, a review appears of an article by Huchard and Amblard, referring to the sudden rises in arterial tension noted by them in enteric fever, and its results. As a rule the pressure in typhoid is low; the sudden rises noted by them, accompanied by gallop rhythm, have preceded, in the cases observed, either hemorrhage or perforation; this rise is somewhat transient, a slowing of the pulse rate, a bruit following the first cardiac sound (the muscle stopping short in its contraction, not relaxing, seemingly taking breath, as it were, before completing the systole and accomplishing it by a double contraction; the authors do not believe this to be the reduplication of the second sound noticed by Hayem in typhoidal myocarditis) are the sounds present. Following the hemorrhage or perforation a subsequent fall of tension with small rapid pulse appeared.

The sudden rise may be reflex and due to irritation of the ulcerated intestine or to a sudden increase in the typhotoxine.

Chilblains.

Ritter directs attention to the use of Bier's method of artificial hyperemia for the relief of chilblains, and has obtained excellent results in over 150 cases. It was first brought to his notice during the treatment of a tuberculous arthritis in a patient suffering from chilblains. The latter completely recovered during the application of the constricting bandage; he subsequently used it in frost-bite with similar results. He points out that hyperemia of cold is not a stasis but a real congestion, or mild inflammatory reaction whose function is to aid in the repair of the tissue damaged by cold; if it is possible to increase the hyperemia, nature will be materially aided, and this is effected by the use of the artificial method of Bier. It is not always possible to produce a passive hyperemia in anemic persons, so that it

is found that Bier's bandage is most effectual in acute and chronic cases occurring in healthy individuals. In the long-standing lesions the use of hot air (by producing an artificial hyperemia) is the most successful; under either treatment pruritus is alleviated, the tissues become more pliable, the chances of gangrene are thereby lessened, and finally the disease is brought almost invariably under control.—*B. M. Journal.*

Rheumatoid Arthritis.

A very interesting article by Luff appears in the *British Medical Journal* of October 26th, 1907, on the above subject. He believes it to be a definite clinical entity and to be separated from several other infective joint lesions; to be due to microorganisms, probably gaining entrance to the blood from foci in the alimentary canal, and consequently it comes under the head of a general constitutional disease, the joint affection being merely one of the symptoms, and it is here that the nidus suitable for the propagation of the organisms is found. During the growth of the bacteria inflammatory changes occur in the joint tissues. Toxines are produced which probably are responsible for the nervous and vaso-motor disturbances (such as localized sweating and pigmentation) encountered. Further proofs of its infective character are the febrile excursions and the rise in the pulse rate.

In the early stages it very closely resembles subacute rheumatic fever, but is distinguished from it by not reacting to salicylates; it also usually commences in one joint, frequently in those of the fingers, thence becoming rapidly polyarticular. The apparent cases of monarticular rheumatoid arthritis Luff believes to be traumatic in origin, and to these cases suggests applying the term osteo-arthritis.

The acute and chronic forms differ merely according to the virulence of the infective agent. The former is most frequent during the earlier decades; the latter may follow an acute attack, or may be chronic from the commencement, and is prone to attack females near the climacteric. Either form may be precipitated by trauma. In the acute cases the synovial membrane is selected for the attack. If the disease persists the remaining joint structures become involved. Heberden's nodes represent the mildest form and are essentially chronic. The disease is usually a primary disease; rheumatism, influenza, gout, etc., may act as predisposing factors. As regards the treatment, a liberal diet is essential (thus diagnosis from gout is of the utmost importance). Wine or stout should be taken in moderation, and every effort

made to build up the constitution. As regards drugs, guaiacol is the one on which Luff pins his faith. Its effects are enhanced by the addition of potassium iodide to the prescription. It probably acts as an intestinal antiseptic and after absorption inhibits the action of the bacterial toxins. The iodide assists by promoting absorption of the hypertrophied joint tissues. Guaiacol carbonate is administered in increasing doses (in cachets) up to 20 grains three times daily and continued for at least 12 months. In addition, massage, tonics, superheated air, and electric light baths may be employed. A dry climate, as that of Egypt, will also greatly aid in the regimen.

Cranial Tumors.

Risier Russell's opening paper in the Medical section of the British Medical Association deals with the indications for operation in the above. He deplores the increasing tendency of the profession to believe that operation is useless, due partly to wrong diagnosis, ill selected cases, and reports which include in the mortality percentage cases operated on in which no tumor existed; one great reason that better results are not obtained is the fact that the diagnoses are made too late for operation to be of use.

Russell then discusses the differentiation of hysteria (with blindness, coma, convulsions or paralysis) from cerebral tumors, epilepsy, general paresis (especially with growth in the frontal lobes), disseminated sclerosis (here the resemblance to tumors of the cerebellum and mesencephalon may be marked) and cites several individual cases.

Operation may be considered, providing accurate localizing signs have been discovered, and the tumor be accessible to the surgeon; the probability of the form of tumor now receives attention, if encapsulated or otherwise; if non-malignant or liable to recurrence; if the tumor be metastatic, or finally if the growth be a result of syphilis. In the latter class we may find cases in which medical treatment has no effect, and here it is the surgeon's duty to interfere. Untoward results, as sepsis, shock, paralysis, and the advisability of performing the operation in one or two stages, must all receive attention. Operation may be justifiable merely to prolong life or to relieve distressing symptoms, as vomiting, paroxysmal headaches, etc.; and more important still is the relief of optic neuritis, given by trephining, when it is due to intracranial pressure. Lumbar puncture is a procedure to be employed only for diagnosis or the relief of urgent pressure symptoms.

Scarlatina and Duke's Disease.

Cotton's description of the above in the *Journal of the American Medical Association* is briefly as follows: In Duke's disease, the fourth of the exanthemata, the incubation period occupies from one to three weeks (prodromata frequently being absent), and the infection lasts from two to three weeks. It is apparently less contagious than measles, being on a par in this respect with scarlatina. The rash is usually the first manifestation. It almost always appears just on the face, spreads downwards, in a few hours covering the trunk and portions of extremities, avoiding the flexure and being more pronounced over areas liable to irritation or pressure; fine points may appear quickly merging into general hyperemia, rarely small normal patches of skin are defined. There is no oro-nasal pallor or pruritus, and the feeling of heat in the skin is absent; the color of the rash closely resembles scarlatina, fading rapidly in two or three days without staining. A fine branny desquamation usually takes place (contrast the flakes of scarlet fever). The throat is normal, except for slight hyperemia. Lymph nodes may show slight enlargement. The tongue is negative, and finally the febrile reaction, though marked, subsides with the rash. The course is mild and sequelæ are the exception.

In contrast to scarlet fever he notes (1) long period of invasion, (2) absence of emesis, (3) moderate fever of brief duration, (4) normal pulse and temperature ratio, (5) absence or fine character of desquamation, (6) negative tongue and fauces, (7) absence of leucocytosis and sequelæ.

Finally, when one or more apparent cases of scarlet fever occur in a family, who have already been sufferers of scarlet fever, Duke's disease may be suspected.

OBSTETRICS AND GYNECOLOGY.

IN CHARGE OF ADAM H. WRIGHT, K. C. M'ILWRAITH, FRED.
FENTON AND HELEN MACMURCHY.

The Early Diagnosis of Tubal Pregnancy.

In nearly every case of ectopic gestation a presumptive, if not a reasonably certain diagnosis, may be made before the onset of alarming symptoms. The condition may be divided into two stages—tragic and non-tragic.

The Non-tragic Stage.—The following conclusions are based mainly on a study of more than 130 patients operated on, and a few who died without operation, the diagnosis being confirmed by necropsy. More than 90 per cent. of the 130 patients consulted a physician for symptoms referable to the pelvis before the tragic stage was reached. A large proportion were told that ordinary abortion was threatened, was occurring, or had occurred. About 20 per cent. were curetted for the metrorrhagia, the cause not being suspected. Of the patients who consulted a physician, some were confined to the bed or couch for days or even weeks before tragic symptoms occurred. Except for brief intervals—an hour, or a few hours or so—in a large proportion of the cases the patients pursued their usual vocation during the non-tragic stage without material or prolonged interruptions. Only about 20 per cent. of the physicians consulted made a correct presumptive diagnosis.

It is easy to arrive at a presumptive diagnosis of ectopic gestation. When any female after puberty and before the menopause, who has menstruated regularly and painlessly, goes over the time at which menstruation is due, sees a discharge of blood differing in quality, color, quantity, or continuance from the usual flow, and has pains, generally severe in one side of the pelvis or the other or possibly in the hypogastric region, ectopic gestation may be presumed. The two points of greatest value in making a presumptive diagnosis are: (a) Atypical menstruation or metrorrhagia; (b) pains.

Menstruation.—The expression "atypical menstruation" although a misnomer, is useful. The flow may be continuous or interrupted. The amount of blood lost may be much greater or much less than that of the usual menstrual flow. It may be darker or may be lighter or more brownish than the usual menstrual blood. The metrorrhagic blood of ectopic gestation often has a sort of slippery character, which the writer is unable to describe but which is almost diagnostic.

A careful history is of great importance. None of the points in the following schedule should be omitted: 1. If the present or last menstruation was out of type, write the date of its beginning, its continuity, its interruptions; note the quality, the quantity, and the character of bleeding. 2. Note the date, duration, amount and character of the menstruation preceding the atypical menstruation. 3. Note the date, duration, amount and character of the second last menstruation preceding the atypical menstruation. 4. Note the date, duration, amount and character of the third last menstruation preceding the atypical menstruation. 5. Note the date of each attack of colic, or series of attacks, and the date or dates of any recurrences.

If the patient has been accustomed to painful menstruation, analyze the character of the dysmenorrhea and ask particularly if the pains which appeared in connection with the discharge this time were of the usual character. In tubal gestation, if the patient is intelligent, she will at once say that she never had pains like these. She will state wherein the pains and the flow differ from those of the previous and painful menstruations. If you are the second physician in the case, and the first one is reported to have said that the woman had a miscarriage and is still bleeding and has pains, be slow to accept such statement, unless a fetus has been seen. If it has been seen, obtain if possible a description of it.

Pain.—If the attacks of colic are very severe with steady pain between them, the abdominal walls may be rigid. The attacks in the beginning of tubal pregnancy are often mistaken for intestinal pains. They may not cause the patient to rest more than momentarily from her work. In other cases the pains are so severe that the doctor is sent for, whatever the time of day or night. Soreness of the abdomen may pass off in an hour or less after a severe attack, or be so prolonged as to prevent the patient from walking for a day or two or longer. Occasionally jars of the body in walking, or being much on the feet, cause so much pain that the patient remains in bed for a while. In such cases the attacks may return after shorter or longer intervals.

The pulse usually remains about normal.

The Tragic Stage.—There are severe attacks of colic, pallor, weak and rapid pulse, a fall of temperature one, two or three degrees below normal, rapid breathing, fainting, generally vomiting and restlessness, and sometimes a lethargic condition from which the patient may be aroused. The pulse may be anything from 120 to 180. It may not be possible to count it at the wrist, although its flickerings may be perceived until shortly before death.

Physical Signs.—No disease produces in the pelvis such a variety of signs. The uterus is always enlarged in a slight degree at least, but it seldom is much enlarged unless a considerable decidua is formed. The cervix generally is not altered but there are some exceptions. It is sometimes much softened. Unless hæmatocele has formed the mobility of the uterus may not be particularly affected. If the uterus is lifted on the examining finger pain is almost always produced on the side of the pregnant tube.

In the non-tragic stage the tube is usually sufficiently large to be palpated on bimanual palpation. The diagnosis may be made when the tube at its largest diameter does not exceed 1-2 in. The tube may enlarge to a size of 2 in. or more.

It is not likely that the simple growth of the foetus within the tube causes pain. Whenever pain is felt probably hæmorrhage has occurred within the tube. A pregnant tube is always tender when squeezed. The tube may be imbedded in blood clots, or so displaced or engulfed in hæmatocele, that its form and size are indistinguishable.

If a large hæmatocele has formed the uterus may be carried far upward and almost out of the pelvis. When thus lifted it is generally pushed to the opposite side. The uterus may be so far pushed up that the cervix will with difficulty be reached per vaginam. The corpus and fundus uteri resting on the outer and anterior surface of a large hæmatocele may be distinctly palpated through the abdominal wall.

Hæmatocele.—A hæmatocele is sometimes very hard, but it is soft and boggy generally. When hæmatocele forms and materially displaces the uterus, frequent, difficult, or painful micturition may occur. The formation of hæmatocele generally marks the presence of alarming symptoms and, consequently, the tragic stage.

The treatment is immediate operation, whatever the stage.—*Philander A. Harris, Abstract Jour. Amer. Med. Assoc.*

Treatment of Post-partum Hæmorrhage.

In cases of post-partum hæmorrhage due to atony of the uterus, Stowe has tried with great satisfaction a method of hæmostasis, which he has not seen mentioned in the literature. In several instances he has been able to arrest completely a profuse hæmorrhage. A sterile towel should be placed over the abdomen, or if this is not at hand, a laundered towel, soaked with a 1 to 1000 solution of corrosive sublimate, acts as a good substitute. Now the external hand grasps and firmly kneads the

fundus and presses it down into the inlet. The other hand, incased in a sterile glove, is passed into the vagina up to the cervix. The fingers then attempt to seize as much of the cervix and lower uterine segment as possible, and the hand is forced far into Bandl's ring until the fundus is reached. The internal hand remains outside the uterine cavity throughout the operation. If sufficient pressure be used the internal hand can be forced well into the fundus and past the contraction ring, pushing the cervix and lower uterine segment before it against the walls of the fundus. This obliterates the cavity of the uterus, and brings direct pressure and compression to bear against the sinuses and open vessels. The position of the internal hand or fist in the fundus, yet outside the uterus, has a marked effect in stimulating contraction, especially when aided by brisk massage.—*Surgery, Gynecology and Obstetrics.*

Management of the Puerperium.

At a meeting of the New York Obstetrical Society held November 12th, a very interesting discussion took place on the "Management of the Puerperium." From the report which appeared in the *American Journal of Obstetrics*, January, 1908, we extract the following:—

Lacerations of the Cervix.—The question of the immediate repair of lacerations of the cervix is still under discussion. It is argued that if the perineum should always be repaired, so should the cervix, and for the same reasons. I follow the teachings of the majority of obstetricians who repair the cervix only when lacerations are extensive enough to cause hemorrhage. A great majority of labor cases have lacerations of the cervix which are sometimes quite extensive and we know that most of these undergo a good deal of spontaneous repair. While the immediate operation is usually quite easy to perform, sometimes it is very difficult. The swelling and bruising of the cervical tissues immediately after labor make the prognosis uncertain. Sutures placed too close together and tied tightly may interfere with the lochial discharge and cause retention, with temperature and other constitutional symptoms. The difficulty of the technic and the liability of sepsis outweigh the advantages of immediate repair and make the routine performance of this operation inadvisable.

On the other hand, one or two plain catgut sutures placed high in the angle of a torn cervix, is the best means of arresting hemorrhage from this situation and is infinitely more satisfactory than packing, which is so often resorted to.

Tears in the anterior vaginal wall are most often due to projecting blades of forceps, and should always be immediately repaired.

Subinvolution and Displacements.—Perhaps the most important part of the management of the puerperium is the routine practice of making a careful physical examination at the end of the fourth and six week. If the uterus is found to be too large, this is the best time for treatment. The results of tampons of boro-glycerine or tannic acid and glycerine used from the fourth to the sixth week, are astonishing. The large flabby uterus is quickly reduced in size. At times the improvement can be noted from one application to another at intervals of only three days. It is rarely necessary to continue treatment for more than two or three weeks. I always use, in addition to the tampons, strychnine and ergotin internally, and hot douches.

Backward displacement of the uterus is very common after labor. It may be suspected in any case where there is a return of the lochia when the woman first begins to sit up, and is often a part of the subinvolution. The diagnosis is easily made by a bimanual examination. The causes are indefinite and its prevention very difficult. I have seen it in cases where the utmost care was taken in every detail. The influence of a tight binder I think has been much exaggerated. The most frequent cause, to my mind, is constipation and consequent straining at stool, to which all postpartum women are subject during the puerperium. The bowels should be carefully regulated by cathartics and if patients are obliged to strain, an enema should be given immediately. Nurses should be instructed in regard to the danger of allowing patients to strain and preparations made so that an enema can be given promptly. A patient should be instructed to lie flat on the abdomen for ten or fifteen minutes at a time at least twice during each twenty-four hours, during the latter part of the puerperium.

A short time ago, I examined a patient four weeks after a normal confinement and found everything in perfect condition. The next day she complained of pain in her back and I found the uterus over backwards and a history of an unusually constipated movement, which immediately preceded the pain.

The treatment, as a rule, is very satisfactory. Briefly outlined: If discovered at the fourth week, a simple replacement and treatment by glycerine tampons for about two weeks. If the displacement does not recur, this is all that is necessary, as with the involution of the uterus, the tendency to the displacement grows less and less. A few minutes in the knee-chest

position every day has seemed to me a wise additional precaution. In cases in which the displacement recurs, or in which it is first discovered six weeks postpartum, the treatment is replacement and a pessary. I now make it an arbitrary rule that a pessary is contraindicated before the sixth week, as interfering with normal involution and not to be compared in value with tampons. The best form of pessary is a simple ring which is easy to introduce and performs its work admirably. It should be worn about two months or a little longer, and then removed tentatively. In about 80 per cent. of my cases, the position of the uterus remained forward after the pessary was removed.

Three or four days after the removal of the pessary, an examination should be made, and again after an interval of a few weeks. If the uterus is found normal in position, the case may be discharged. If the displacement recurs, the use of the pessary must be persisted in for about six months.—AUSTIN FLINT, JR., M.D.

For many years it has been my custom to administer small doses of ergot throughout the ten days of the puerperium. I find that with such treatment involution is quicker, there is less lochia and from keeping the uterus well contracted there is less disposition to septic disturbance. Where there is a contraindication to its use, as shown by the occurrence of severe afterpains a short time after it is given, or where the stomach rebels, or where by its general effect on the vaso-motors it causes an artificial anemia as shown by dizziness, cold, clammy skin and weak pulse—here we use one or other of the alternates, strychnine or fair doses of quinine at regular intervals. After-pains are in a majority of cases to be considered as normal, especially when they occur in a multiparous woman, less often do they present themselves in the primipara. In most cases they can be readily controlled by keeping the uterus as empty as possible by a careful Crede performed every day, and by placing the patient in the semi-inclined position for purposes of drainage. Medically I find nothing better than the administration of 10 grains of chloral every hour until relief is afforded. Opium and its derivatives are of value but for many reasons are to be withheld. The most useful drug of this class is codeine in doses of from one to two grains by the mouth or the rectum. Gelsemium and bromides are of value where other measures fail. If a pathologic condition is at the bottom of the trouble, and especially if general disturbances arise, the case assumes another aspect and must be treated according to principles foreign to this paper.

With the giving of a free diet we find that the bowels usually move at the end of twenty-four hours without artificial means—but if this does not happen then the time-honored castor oil is given on the evening of the second day. Except with a complete laceration into the rectum this is our invariable rule. With extensive lesions of the perineum, we move the bowels on the morning of the fifth day, giving the evening before a retained enema of sterile olive oil.

We allow the parturient to assume any position that is the most comfortable for her, the presence of lacerations being no contraindication to such movements. We gradually allow her to assume the semi-inclined upright position, favoring this as early as the third day for purposes of drainage. Especially do we wish to avoid the enforced dorsal posture because of its deleterious effect on posterior displacements of the uterus. We are much more strict in allowing women out of bed and the rule is to keep them in bed until the lochia has become white. To get women up on the second to the fifth day is as senseless as dangerous. On two occasions I have seen women apparently normal suddenly die of a pulmonary embolus on the seventh day.—SIMON MARX, M.D.

Treatment of Cracked Nipples.

Roudaud (*Journal de medecine de Paris*, October 6, 1907) directs attention to the importance of treating the nipples during the last month of pregnancy. They should be washed daily with soap and water, and kept covered with a dry dressing. There is no need of other treatment. After delivery, special attention should be given to them. After and before each nursing, they should be carefully washed with a mild antiseptic solution (boric acid in water, or brandy and water). It is not advised to have a wet compress, for fear it might cause maceration of the epidermis. Between the nursings, a dressing made of three thicknesses of sterilized gauze is kept applied, over which a layer of absorbent cotton is laid, and a bandage pinned over to keep it in place. The mouth of the child should be washed out before nursing (with a tampon of cotton moistened with boric acid water). This is to prevent infection of the breast. In case of pain, the glycerite of starch may be applied to the nipple and covered with dry gauze. Before presenting the nipple to the infant, it should be carefully washed with boiled water, to which some hydrogen peroxide may be added (half and half). After nursing, the washing should be repeated, and the breast covered with cotton, and confined with a bandage. The rubber nipples,

on account of the difficulty in keeping them clean, should be avoided as much as possible.—*N. Y. Med. Jour.*

Diagnosis of Early Pregnancy.

I never examine a patient for pregnancy unless she is reasonably sure she is at least six weeks pregnant.

The first noticeable sign after the suppression of the menses (which is not a certainty) is the slight changes in the breasts. At six weeks the breasts in a first pregnancy are slightly fuller than normally, and there may be a little tenderness, usually a slight darkening. At eight weeks the ring about the nipples is wider and darker. This is not noticeable in multiparæ at so early a stage. At six weeks the uterus will be slightly lower than a normal nongravid uterus, the neck will be shorter and the fundus broader. During the first three months the uterus is abnormally low, producing the "flat belly" of pregnancy.

At eight weeks in a primipara this shortening of the neck and broadening of the fundus should be noticeable to the most casual examiner. In a woman who had had several children in rapid succession, I would want two weeks longer before being certain of my diagnosis.

At two months the color of the uterus has begun to show a difference, changing from the normal pink of a healthy uterus to a darker shade, gradually growing purplish as gestation proceeds. To the examining finger the uterus gives a different touch. The normal nongravid uterus gives to the touch a sensation like touching the end of the nose. The gravid uterus is softer, feeling more like the lips. When I find a soft uterus I never hesitate to say "you are pregnant." I know of nothing else that softens it.

Therefore I would call the early signs, darkening of the breasts; broad fundus, short neck, change of color in the uterus, and most certain of all change of touch. There is usually considerable discharge after the first month.—*Dr. H. Hooper, N. Y. Med. Jour.*

Pubiotomy.

Dr. Fry, of Boston, in an excellent paper on Pubiotomy (*Surgery, Gynecology and Obstetrics*), after describing the operation, concludes as follows:

Pubiotomy is a satisfactory operation, so far as the operation itself goes, for enlarging the pelvic girdle in moderate degrees of pelvic contraction. It is easy to perform and can be employed in simple flat pelvès with a conjugate vera of 7 to 7 1-2 cm. Separation

tion of the severed bone for 4 or 5 cm. is usually sufficient to enable easy extraction with forceps.

The principal objection to the operation is the difficulties encountered in the after-treatment. They are little, if any, less than those which brought symphysiotomy into disrepute. The pelvis must be immobilized and the patient kept in the dorsal position several weeks. Maternity institutions can overcome the objection to a large degree by the use of a special bed, as the hammock suspension bed described by Ayres. Williams used the Bradford frame after two of his operations. Jewett employed an ordinary hospital stretcher "the poles of which were lashed to the top rails of an iron bedstead. A trap-door was provided for the dejecta." Montgomery recommends a pelvic sling suspended from the ceiling and attached to a compound pulley. Ordinarily, after pubiotomy and symphysiotomy, the evacuations of the bladder and bowels are attended with discomfort, and it is a hard task for the nurse to keep the parts clean, which is the more important after secondary operations where the patient is already septic and the soft parts contused and lacerated.

In consequence, therefore, of the unsatisfactory convalescence after pubiotomy, the operation will obtain in this country a limited field of usefulness as an elective operation.

Placenta Praevia.

O. Burger and R. Graf state, that after a review of cases of placenta praevia treated at Schauta's clinic, they are inclined to oppose the use of Dührssen's vaginal Caesarian section as a method of treatment of these cases; first, because their material showed good results with other methods; and secondly, because of the hemorrhage which must necessarily accompany the vaginal section, and may be the cause of serious consequence in such exsanguinated patients. In addition to this, they oppose the operation because they believe that infection may easily take place from incisions made in such vascular tissues as the lower uterine segment. They grant that the prognosis for the child is better when the vaginal Caesarian section is carried out, but are not willing to give this too much importance because in these cases, so frequently, the child is moribund.

After careful comparison and study of their statistics, they conclude that it is safest to do the combined version, without completing the extraction, following a preliminary dilatation of the comparatively narrow birth-canal with the colpeurynter. The results they have obtained thus compare very favorably with other statistics, especially when the danger of hemorrhage and

infection in such cases is considered. The prognosis as to the children they hope will be improved, but do not believe that it will be by any radical operative procedure; and further, it should not be at the expense of the mother's life.—*Zur Statistik der placenta prævia. Monatschr. f. Geb. u. Gyn.*

PSYCHIATRY.

IN CHARGE OF DR. J. G. FITZGERALD,
Clinical Director and Pathologist, Toronto Asylum.

The Relation of Immigration to the Prevalence of Insanity.
By Thomas W. Salmon. *American Journal of Insanity*, July 1907, pages 53-71.

The features of psychiatric interest in the question of immigration are here dealt with, in an article which deals quite exhaustively with several phases of the problem. That a large number of insane and defective are bound to be included in the tide of immigration is but natural; that this question requires urgent attention on the part of those who have to do with the medical inspection of recently arrived future Canadians, has already been emphasized in a recent number of the Bulletin of the Toronto Hospital for the Insane.

The growth of immigration to United States has become so great that it is now the chief source of population, and owing to the changed sources of immigration a remarkable transformation in the composition of our foreign-born population is in progress. In New York State which receives more than one-third of the yearly quota of the "new immigration" the ratio of the insane to the total population has risen from one in 675 in 1875 to one in 294 in 1905. In 1906 46 per cent. of the whole number of patients admitted to New State Hospitals were of foreign birth, while the whole foreign population was but 26 per cent. of the whole population of the State.

These figures establish an obvious relation between the rising ratio of insane to population, and the increasing proportion of foreign-born patients in admissions; and therefore it is desirable to collect information regarding the insane immigrants arriving at the present time, and the most recent foreign-born admissions to public institutions. To do this two groups of 100 cases are taken—one group consisting of consecutive cases of insanity detected at Ellis Island by medical officers; the other group from

consecutive cases of insanity in aliens deported from public institutions. An examination of these cases shows that there is a higher proportion of women than men in the foreign-born insane; that there is a strikingly large proportion of young people among insane emigrants, the average age being 23.2 years, at which age the normal expectation of life is 38 years, and therefore these patients with incurable forms of mental disease are a source of great cost to the public.

A series of tables based on the nativity and race of these immigrants proves that the prevalence of insanity among the Irish in United States has no parallel in the world; that England too, has furnished a greater proportion of insane immigrants than it has of the total immigration, and that the practical cessation of German immigrants makes it certain that the future prevalence of insanity among the foreign-born will not be greatly influenced by immigration from that country.

Attention is called to the enormous increase of Hebrew immigration, amongst whom no matter in what part of the world they live, insanity is especially prevalent.

It is probable that in future medical officers will be stationed abroad, at the chief ports of departure, to examine intending immigrants and to intercept those suffering from mental disease.

A second series of tables deals with the type of mental disease found in these patients. Five per cent. of the cases in which the diagnosis was made and several cases not diagnosed were of the manic depressive type.

In 37 per cent. of the aliens deported from the institutions who were not insane at the time of their arrival, but who developed their psychosis from causes existing prior to their arrival, the etiological factor given was "constitutional inferiority," or "congenital defect;" even where this mental inferiority was apparent to the officers, under the present law these immigrants cannot be excluded, because they do not come under the legal definition of "insane."

The Cerebro-Spinal Fluid in Paresis, with a Special Reference to its Cytology. By William Burgess Cornell. *The American Journal of Insanity*, July, 1907.

In the mass of literature which has recently appeared on Lumbar Puncture, this article of Cornell's stands out as an excellent example of a piece of work that is highly valuable because of the information it conveys to the general practitioner.

The year 1901 marks the general use of Lumbar Puncture in neurology and psychiatry. Since then, from all sides a mass of

literature has accumulated, the size of which may be well estimated in Kaupe's catalogue review, in which he gives 487 references from the literature of 1904-5 on this alone.

The characteristics of the normal fluid are: It is clear and limpid, specific gravity 1007; total quantity, 60 to 80 c.c. It contains not more than 5 leucocytes to the mm.; is slightly alkaline in reaction, and it has 1 per cent. of solids. Globulin is present, but albumin does not normally occur.

The pressure of the fluid in normal individuals averages about 125 mm. of water in lateral decubitis, and 400 in the sitting posture.

A detailed description of the technique of obtaining the fluid is given. To count the cells Unna's polychrome methylene blue stain is used for differentiation. The undiluted stain is drawn to the 0.5 mark in the ordinary leucocyte pipette, which is then filled with the cerebro-spinal fluid.

After shaking, it is allowed to stand five or ten minutes, when the cells are well stained. The tubing is now carefully shaken again and after rejecting the first two drops, a third is placed on a special counting slide.

The method of counting is similar to that used in making an ordinary blood-count. The presence of serum-albumin is detected in the following manner: Equal parts of the fluid and a saturated solution of Ammonium sulphate are shaken together and the precipitate-globulin is filtered out. The clear fluid is then acidified with acetic acid and boiled. If the albumin is considerably increased a gross flocculent precipitate results. If only slightly increased a well marked turbidity is noted.

The writer draws the following conclusions from his series of cases:

1. Every case of paresis exhibits a spinal leucocytosis and increase of albumin.
2. This sign is also from point of view of its constancy, in all probability the earliest.
3. The diagnostic value of a negative puncture is often of greater value than a positive one.
4. The cell counting method with Fuchs and Rosenthal's slide is more accurate and rapid than the centrifuge technique, and has the great advantage in permitting comparative results.
5. The use of Unna's polychrome blue in the melangeur permits a simultaneous differential count.
6. A differential count is important in differentiating the parietic fluid from others, especially where the cytosis is due to small number of polynuclears.

7. The conditions under which syphilis produces a spinal leucocytosis demand further investigation, especially regarding the number and character of the cells. The increase of cells in the paretic fluid is apparently independent of any long antecedent syphilis.

8. There seems to be a correlation, both qualitative and quantitative, between the spinal and hæmic leucocytosis, which particularly refers to the mononuclears, but includes the polymorphonuclears, especially after convulsions.

To detect the mentally defective immigrants, a systematic plan of inspection has been devised. Qualified medical officers search for immigrants who seem atypical or who even remotely suggest mental disease. The immigration inspectors have been provided with memoranda as to the peculiarities which might suggest the existence of insanity, and are requested to report such to the medical officers. Occasionally, immigrants who have shown marked evidences of insanity during the voyage, are reported by the ship's surgeons. Doubtful cases are retained for further observation; certified cases are to be kept in a psychopathic pavilion under trained attendants until they can be returned to the land from which they came.

Editorials.

THE BEDSIDE MANNER.

It appears to be generally accepted as a truism in connection with the practice of medicine that the success of the physician or surgeon depends largely on his "bedside manner." History tells us much that is interesting, but perhaps not always instructive, as to the "manners" of very successful men in our profession. One of those most frequently mentioned is the great Abernethy, who was sometimes brusque, sometimes rude to his patients. The stories as to his "rudeness" were probably greatly exaggerated, since he had really a kindly heart, but had a tremendous hatred for chat and humbug. We may say to the young physician commencing practice, don't cultivate either abruptness or "rudeness," notwithstanding anything you may have heard about Abernethy.

The *British Medical Journal*, in a recent article, repeats an old story we have often heard. Sir Richard Quinn used to tell that when he was a young practitioner he was called in by an older physician to help in a case which caused anxiety. Before going in to see the patient he endeavored to assume a proper degree of solemnity, but while doing so his senior said, "For God's sake, man, try to look more cheerful, or they will take you for the undertaker." While the funereal manner is not advisable, the other extreme of forced joviality is still more objectionable. The patient is apt to consider his condition serious, and will strongly resent any joking at his expense. Apart from any such consideration the hysterical jokes of the surgeon or physician in serious cases are apt to be very dismal.

In the article referred to we are told that one of the essentials to a good bedside manner is cheeriness. The writer of this article well remembers a somewhat serious illness from typhoid fever in his boyhood days. He was attended by the late Dr. Dixie, of Springfield, a large man with a heart and soul as big as his body. His patient soon learned to love him. The doctor brought with him into the sick-room a cheery kindness which seemed to permeate the atmosphere, and remain a long time after

his departure. For more than forty years the patient has remembered those visits, and now they are as vivid in his mind as ever. Oh, for a manner like that! So he thinks now. But Dixie couldn't help it. He continuously carried within his person, a ton of human kindness of which a teaspoonful would fill the largest room.

Shortly after the writer commenced practice he received some sage advice as to his bedside manner, and reported the same to a senior physician. The latter spoke as follows: "Cut all that out. Be yourself, man; never mind any d——d mannerisms." Sir William Jenner used to express the opinion that if the doctor made the patient believe that he was thoroughly in earnest about his case it mattered little what his manner was.

While we fully appreciate the very great value of earnestness, cheeriness, and kindness, we consider it supremely important that the doctor should have a thorough knowledge of the diseases and serious emergencies which he is apt to meet, and a definite idea in his mind as to the proper treatment of the same. If he carefully and conscientiously studies each case coming under his observation, and if he cultivates a kindly tact in connection with his patients, he need worry but little about what is called "bedside manner."

ONTARIO MEDICAL ASSOCIATION.

The Vice-Presidents of the Ontario Medical Association with the Chairmen of the Committees on Papers and Business, and on Arrangements, Drs. R. R. Wallace and A. B. Osborne, met at the home of the President, Dr. Olmsted, in Hamilton, Dec. 15th last, to inaugurate the work for the year.

Dr. Olmsted reported a personal canvass of several portions of the Province to stimulate an interest in the coming meeting, which will be held in Hamilton, May 26th, 27th and 28th next.

The two local committees have already done much work making arrangements for the meeting. It is earnestly hoped that the members of the Association in all parts of the Province will support these committees very heartily.

The Committee on Papers are able to announce that Dr. Charles G. Stockton, of Buffalo, will deliver the address in Medicine, and Dr. Charles L. Scudder, of Boston, will deliver that in Surgery.

The Association desired at its last meeting to stimulate a wider interest among the practitioners of the Province in its work, and with this laudable object in view decided to have the meeting of 1908 outside of Toronto, where it has been held for so many years. Whether such decision was wise or otherwise brings up a question which has been much discussed in the past, and needs no special consideration now. The profession of Toronto almost unanimously approved of Hamilton as the place for the next meeting. Under such circumstances the physicians of the former city should give the coming meeting their most loyal support. We think we can promise that Toronto in proportion to its population will make the best showing as to numbers at the Hamilton meeting.

And now to the profession of Ontario outside Toronto, let us say that this is a sort of a challenge. To use a little of the rather expressive vernacular of the street, "it is up to you" to show that our prediction is incorrect.

MARRIAGES IN ONTARIO.

In the interesting Report upon Births, Marriages and Deaths for the year 1905, we find some interesting statistics and statements as to marriages in the Province of Ontario.

The marriage rate of 9.2 per thousand is 0.3 per thousand in excess of the previous year.

In considering the statistics in respect to marriages the continued increase in the returns from the County of Essex is deserving of more than mere passing attention.

As compared with the general returns from the province, it will be seen that of the total increase over the year 1904, six hundred and thirty-seven (637), nearly one-half, or 316 were registered in Essex alone, which is 93 in excess of the return for the County of York, which includes the City of Toronto, for the same period.

It will further be observed that while the provincial marriage rate per thousand of the population is 9.2, that for Essex County is 32.2. This large proportion is due to the fact that a large number of people from the United States (mostly divorced) come over to Sandwich and Windsor to be married.

In Sandwich, of 318 marriages, 297 were performed by the same clergyman, six others dividing up the remaining 21 marriages. Of the witnesses, in the case of the two hundred and ninety-seven marriages, three members of the clergyman's family witnessed as follows:—One 163 times, a second 111 times, and the third, 75.

In Windsor the division of labor was greater, some 29 clergymen registering the total number of 1,193 weddings performed during the year,—one clergyman marrying 365 couples, another 225, three others registering 174, 137 and 106 each, the next in order having officiated at only 54 weddings. In the instance of the 365, a family compact in respect to witnesses apparently existed, the six members appearing as witnesses on 197, 89, 50, 10, 3 and 2 occasions respectively.

The contrast offered by the County of Essex in respect to marriages when compared to the province is still further emphasized when it is seen, while the average rate for cities is 14.4, Windsor, which is the chief municipality in that county, shows a rate of no less than 91.5 per thousand.

Another practice which is becoming more common, and one to which issuers of marriage licenses should not lend themselves, is the providing of a room upon the premises of the issuer in which the marriage ceremony can be performed; and while there is no statutory provision prohibiting such an accommodation being made by the issuer, yet the very semblance of trafficking in what in this province is looked upon as both a civil and religious right should at all times be avoided.

The Registrar is of the opinion the law relating to the Solemnization of Marriage should be amended, requiring, in the case of both contracting parties being non-residents of the Province of Ontario, that one of the parties should have resided within the county for at least fifteen days, and this should be certified to by an affidavit from the householder in which said party was

so domiciled, and on no account should a license be issued without the production of such an affidavit, said affidavit being forwarded to the Registrar-General. And the performance of the marriage ceremony at the office of the issuer should be absolutely prohibited. In this manner the system of hasty marriages, to call it by a simple name, would be materially improved. Certainly at present it is a blot on the good name of the province and a stigma to those trafficking therein.

INFLUENZA IN 1908.

The type of influenza and grippe which has appeared during this season, though not so universally prevalent as on the first appearance of this serious and troublesome malady, is yet certainly serious and prevalent enough. The most striking feature of the prevailing type seems so far to be a marked tendency to affect the heart at an early stage of the attack. On the second or third day we have seen several patients recently, in whom the radial pulse was almost imperceptible and in whom the prostration was marked and seemed to take the form of cardiac weakness almost from the first. Two fatal cases have also been reported, both from cardiac failure. In neither of these cases were any heart depressants used to reduce the temperature or for any other purpose.

Again has the wisdom of at once placing the patient at rest in bed as the most important part of the treatment been amply justified.

TORONTO WATER.

Christmas comes but once a year, and but once a year will the dear public listen to anything about city affairs. That brief season begins about December 10th to 15th, and ends when Big Ben strikes twelve on New Year's morn. Sometimes it is omitted for a year or two, but not so in 1907. The dear public really did wake up and listen for once when Dr. Sheard said, "We are going to have this filtered water." Then most of the other

people who did not happen to be awake when their comrades heard Dr. Sheard, said: "What are these Doctors making such a fuss about the water now for—we have got the best water in the world?"

There are many good answers to the above intelligent question. One only will suffice—the record of the number of times Dr. Amyot found sewage—colon bacilli—in the city water in November and December, in 1904, 1905, 1906, 1907.

Here is the record:

1904—Nov.—No infection found.

Dec.—No infection found.

1905—Nov.—Infection found Nov. 1, 7, 17, 20.

Dec.—Infection found on Dec. 1, 2, 11, 18, 26, 30.

1906—Nov.—Infection found Nov. 16, 19, 27, 30.

Dec.—Infection found Dec. 6, 7, 8.

1907.—Nov.—Infection found Nov. 9, 15, 22, 23, 24, 27.

Dec.—Infection found Dec. 3, 16, 18, 28, 30.

That is what we doctors are making a fuss about. We don't like diluted sewage for drinking water. It is not good enough.

BRITISH MEDICAL ASSOCIATION.

The next annual meeting of the British Medical Association will be held (as previously announced) in Sheffield, July 28th to 31st, inclusive. Dr. Henry Davy, of Exeter, the President, will open the meeting, but Mr. Simeon Snell, the President-elect, of Sheffield, will conduct it.

It is expected that the address in Medicine will be delivered by Dr. Jas. Fowler, Middlesex Hospital, London; the address in Surgery, by Mr. Rutherford Pye-Smith, Sheffield; the Popular Lecture, by Mr. Edmund Owen, St. Mary's Hospital, London.

The Presidents of Sections will be: Anatomy, Dr. Christopher Addison, St. Bartholomew's Hospital, London; Pathology, Mr. Charles J. Martin, Lister Institute of Preventive Medicine, London; Physiology, Dr. E. H. Starling, London; Medicine, Dr. Wm. Dyson, Sheffield; Diseases of Children, Dr. C. H. Willey, Sheffield; Psychological Medicine, Dr. W. S. Kay, Sheffield; Indus-

trial Diseases, Dr. Thos. Oliver, Newcastle-on-Tyne; Electrical, Dr. E. Reginald Morton, London; Tropical Diseases, Colonel Sir R. Havelock; Surgery, Mr. Sinclair White, Sheffield; Ophthalmology, Sir Henry R. Swanzy, Dublin; Laryngology, Otolology and Rhinology, Mr. George Wilkinson, Sheffield.

GENERAL HOSPITAL STAFF.

The Board of Trustees of Toronto General Hospital have issued the final report of the Committee on Staff Reorganization. The committee recommended that in addition to the head of each department, there shall be a senior assistant, or assistants, and that the following gentlemen be appointed to the positions specified :

Surgery—Service in charge of Dr. George A. Bingham. Senior assistant, Dr. Charles Shuttleworth; clinical assistants, Drs. Wallace Scott and Arthur B. Wright. Service in charge of Dr. Alex. Primrose. Senior assistant, Dr. F. N. G. Starr; clinical assistants, Drs. Stanley Ryerson and Samuel Westman: It is recommended that Dr. Clarence L. Starr be given the standing of senior assistant and attached to Dr. Primrose's service for the purpose of being available as an assistant for Mr. I. H. Cameron, the senior professor in surgery in the University of Toronto. Service in charge of Dr. Herbert A. Bruce. Senior assistant, Dr. John Malloch; clinical assistants, Drs. Warner Jones, John McCollum and A. A. Beatty.

Medicine—Service in charge of Dr. Alex. McPhedran. Senior assistant, Dr. A. R. Gordon; clinical assistant, Dr. Wm. Goldie; in charge of tuberculosis clinic, under Dr. McPhedran's service, Dr. Harold C. Parsons. Service in charge of Dr. W. P. Caven. First senior assistant, Dr. John Fotheringham; second senior assistant, Dr. W. B. Thistle; clinical assistants, Drs. E. C. Burson and Joseph S. Graham. In charge of the department for the treatment of functional neuroses under Dr. Caven's service, Dr. D. Campbell Meyers. Service in charge of Dr. Graham Chambers. Senior assistant, Dr. R. D. Rudolf; clinical assistants, Drs. Goldwin Howland and Geo. W. Ross; clinical assistant in dermatology, Dr. D. King Smith.

Gynecology—Service in charge of Dr. James F. W. Ross. Senior assistant, Dr. Frederick Marlow; clinical assistants, Drs. W. B. Hendry, A. C. Hendrick, Ida E. Lynd and Helen MacMurchy.

Obstetrics—Service in charge of Dr. Kennedy McIlwraith. Senior assistant, Dr. Frederick Fenton; clinical assistant, Dr. J. A. Kinnear.

Eye department—Service in charge of Dr. A. R. Reeve. Senior assistants (of equal rank). Drs. Charles Trow, J. M. MacCallum and D. N. Maclellan; clinical assistants, Drs. Colin Campbell and W. H. Lowry.

Ear, Nose and Throat department—Service in charge of Dr. Geo. McDonagh. Senior assistants (of equal rank), Drs. D. Gibb Wishart, Geo. Boyd and Perry Goldsmith; clinical assistants, Drs. C. M. Stewart and Gilbert Royce.

Department of Anesthetics—Dr. Samuel Johnson in charge. Assistant, Dr. Duncan Anderson.

Electrical Department—Dr. Charles R. Dickson in charge. Assistant, Dr. George Balmer.

The committee recommended that all appointments lower than that of senior assistant should be probationary, and subject to special review before the annual appointments are made; also that in observance of the provisions of the Burnside Trust agreement, Drs. J. A. Temple and F. LeM. Grasett be appointed life members of the active staff without service.

The committee recommended that the following be added to the consulting staff:

Medicine—Drs. John L. Davison, T. F. McMahon, W. H. B. Aikins, Allen Baines and John Caven.

Surgery—Drs. Luke Teskey, R. B. Nevitt and N. A. Powell.

Obstetrics—Dr. Adam H. Wright.

Eye and Ear department—Drs. G. Sterling Ryerson and G. H. Burnham.

In presenting the final report, which was adopted, the committee recorded its appreciation of the excellent character of the service rendered by the staff, past and present, and expressed its grateful acknowledgment of the self-sacrificing efforts in the interests of the sick, and of medical education, on the part of members retiring, several of whom had been connected with the hospital for long periods, and had requested to be relieved from further duty. It was recommended that the committee be continued in existence for the purpose of assisting in bringing into effect the regulations adopted by the board in connection with the establishment of the new services.

NOTES.

The Academy of Medicine, Toronto.

At the inaugural meeting of the Academy of Medicine of Toronto, on December 3, oil portraits of R. A. Reeve, B.A., M.D., LL.D., Dean of the Faculty of Medicine, and of R. B. Nevitt, B.A., M.D., were presented, first to themselves, and then by them to the Academy. The portrait of Dr. Reeve was presented by Professor I. H. Cameron on behalf of the Executive of the local branch of the British Medical Association; and that of Dr. Nevitt by Dr. J. T. Duncan on behalf of the faculty and graduates of the Ontario Medical College for Women, of which Dr. Nevitt was Dean when it was in existence.

Training in Medical Organization.

The students of the University of Pennsylvania Medical School have formed an organization, the purpose of which is to acquaint the undergraduates with the workings of the American Medical Association, after which it is very closely modeled. The various student societies take the place of the State organizations and elect members to a House of Delegates, which transacts all the business of the association. An annual meeting is held, at which papers are read by chosen members, thus encouraging original research and a scientific spirit. The organization is named The Undergraduate Medical Association of the University of Pennsylvania, and already has over two hundred and fifty members.

Queen's New Medical Buildings.

The new medical laboratories building of Queen's College, Kingston, was formally opened January 14th. Among the visitors were Hon. Dr. Pyne and Dr. R. A. Reeve, of Toronto; Drs. Mills, McCallum and Adams of Montreal, and Dr. Lewellys F. Barker, of Johns Hopkins Hospital, Baltimore.

In the new building accommodation is provided for biology, physiology, histology, pathology, and bacteriology. There will also be room for public health work and dairy work. Very good work has been done in dairy bacteriology in the Queen's laboratories for something like 15 years. Pure cultures are now being supplied to all the chief factories throughout Eastern Ontario from these laboratories, and problems connected with this industry are constantly being studied.

Queen's University is a grand old institution. We rejoice greatly in her prosperity, and we congratulate the Medical Faculty on this important addition to her equipments. Dr. Pyne in his brief address said that he had never seen \$50,000 of Government money more economically expended. He also added that Queen's would continue to have the sympathetic support of the Government.

Personals.

Dr. N. J. Heatlie has removed to Pontypool.

Dr. W. H. Pepler visited Preston Springs last month.

Dr. R. D. Orok is doing post-graduate work in Edinburgh.

Dr. F. C. Trebileock is doing post-graduate work on the Continent.

Dr. G. H. Burnham, of Toronto, now has his office at 2 Bloor St. East.

Dr. N. J. Tait has removed from Ingersoll to 498 Spadina Avenue, Toronto.

Dr. E. R. Langrill, of 17 Spruce Street, Toronto, has removed to Virden, Man.

Dr. T. F. McMahon, of Toronto, paid a visit to The Welland, St. Catharines, last month.

Dr. McIntyre, of Winnipeg, on account of ill health has removed to Summerhill, B.C.

Dr. W. B. Hendry, of Toronto, has been elected President of the Canadian Football Union.

Drs. W. A. Young and J. H. Lowe left Toronto to visit the West India Islands, January 15th.

Dr. John Duncan has returned to Toronto after a year's post-graduate work in London and Dublin.

Dr. James McCullough, of Spadina Ave., Toronto, has returned from a visit to New York and Cuba.

Dr. Gibb has returned to Victoria, B.C., after a visit of six months to Great Britain and the Continent.

Dr. Jas. M. Forster has been transferred from the Mimico Asylum for Insane to the London Asylum.

Dr. C. H. Britton, of East York, quite recovered from an attack of pleuro-pneumonia early in January.

Dr. Williams, of Vernon, B.C., has gone to England, and expects later to visit Kimberley, South Africa.

Dr. L. F. Barker, after attending the Queen's function in Kingston, Jan. 4th, paid a short visit to Toronto.

Dr. W. C. Herriman has been transferred from the Rockwood Asylum, Kingston, to the Mimico Asylum, to succeed Dr. Forster.

Dr. Knight, who has been practising at Ninga, has bought Dr. McIntyre's practice, and removed to Winnipeg about the middle of December.

Dr. H. A. Abraham, who has been in charge of the Winnipeg River Hospital, in connection with transcontinental railway construction for the past 18 months, has returned to Toronto.

Dr. J. G. McKay, a graduate of McGill, who practised for a time at Revelstoke, B.C., has been appointed Assistant Superintendent of the New Westminster Asylum, in the place of Dr. Claire, resigned.

At the inaugural meeting of the Board of Education of Toronto, held January 9th, Dr. W. W. Ogden was elected Chairman of the Board, and Dr. John Hunter, Chairman of the Committee of the Whole.

We made a mistake in our last issue in announcing that Dr. A. Lindsay Webb had disposed of his practice in Wooler and had left the village. It appears that negotiations with such an end in view were carried on for a time, but fell through, and Dr. Webb will remain in Wooler.

In our last issue we stated that Dr. James Attridge, formerly of Highgate, Ont., and for several years a practitioner of Detroit, was fatally shot, Dec. 4th. We were wrong as to the fatality, as Dr. Attridge, although seriously injured by a "shot through the brain," made a fairly good recovery, and was able to leave the Harper Hospital of Detroit, Jan. 7th.

Dr. Angus McKay, of Ingersoll, who was nominated as Liberal candidate for the Ontario Legislature in South Oxford, has withdrawn for business reasons. It will be remembered that Dr. McKay was for many years one of the ablest men in the Ontario Legislature. He rendered signal service to the Ontario Medical Council on several critical occasions. His unexpected defeat at the last general elections meant a distinct loss to the medical profession of Ontario.

Marriages.

Dr. Albert Crux, of 103 Hazelton Ave., to Miss Laura A. Wraggle, B.A., Oct. 30th, 1907.

Dr. W. M. Meldrum, of New Durham, to Miss R. R. Maclean, Sept. 25th, 1907.

Dr. A. W. Hicks, of Halbrite, Sask., to Miss Eva Arnold, Oct. 3rd, 1907.

Dr. W. R. Ratcliffe, of St. Catharines, to Miss J. C. McCalla, Dec. 13th, 1907.

Mrs. Lesslie Sweetnam, of Toronto, was married to Dr. C. R. Stewart, of London, England, December 25th, 1907.

Obituary.

PHILIP J. N. STRATHY, M.D.

Dr. Philip Strathy, of 467 Spadina Avenue, Toronto, died suddenly at his home, January 2nd, 1908, aged 45. He received his medical education in Trinity Medical College, and after graduating in 1883 he went to Edinburgh and Vienna for post-graduate work. After his return he soon commenced practice in Toronto, and early became one of the best known physicians in this city.

NICHOLAS SENN, M.D.

Dr. Senn, of Chicago, was one of the world's greatest surgeons. The report of his death on the 2nd January came as a great surprise to his many friends. He was ill for some weeks from a cardiac affection, supposed to have been aggravated by his recent mountain experiences in South America. He was 63 years of age. He was born in Switzerland, but came to the United States when quite young. After graduating he practised for 20 years in Milwaukee and then removed to Chicago, where he became Professor of Surgery in Rush Medical College. His great work as a surgeon and as an author was very highly appreciated on both continents.

GEORGE FREDERICK SHRADY, M.D.

Dr. G. F. Shradý, of New York, died November 29th, 1907, aged 71. His death, after an illness of two weeks, was due to pyemia, resulting from cholelithiasis. He was appointed first editor of the *New York Medical Record* on its establishment in 1866, and continued its editor for 38 years.

Dr. J. A. Howitt, of Morristown, died Nov. 25th, 1907.

Dr. M. J. C. Naftel, of 961 Dundas Street, Toronto, formerly of Goderich, died Dec. 13th, 1907.

Mr. William H. S. Wood, senior member of the great firm of publishers which established the *New York Medical Record* in 1866, died December 11th, just twelve days after the death of Dr. Shradý.

We have to announce with deep regret that Mr. John Grafton Herald, a student in Medicine of Queen's University, Kingston, and a son of Professor Herald of the same University, died suddenly in Winnipeg, December 9th, 1907.

Edinburgh's two leading surgeons died on almost the same day. Professor Thomas Annandale, Regius Professor of Surgery in the University of Edinburgh, died suddenly of heart disease, December 20th, aged 70. He operated in the Royal Infirmary on the afternoon of the day of his death. Sir Patrick Heroã Watson died December 21st, also from heart disease, aged 75.

Correspondence.

THE HOSPITALS.

To the Editor of THE CANADIAN PRACTITIONER AND REVIEW.

Dear Sir:—The City Hospitals have issued their fiat that from and after the 1st January the rate to patients sent in by the City shall be seventy cents a day, or \$4.90 per week. From this the deduction may, we think, properly be drawn that henceforth these institutions are to be operated largely, if not solely, from a pecuniary standpoint, and not as should be the case from the standpoint of the greatest amount of good to the greatest possible number and at the lowest possible cost. Perhaps this is the more palpable in the case of the General Hospital for the reason that it comes more prominently under the searchlight. It has comparatively recently reorganized its ward arrangements, and wards which were public have been created semi-public where an advance can be levied. A large percentage of the public ward patients must now be content with the attic or garret, which has been assigned for their occupaney. The attic of the main building has now more than 60 beds. It was originally fitted up for infectious cases before the establishment of the Isolation Hospital, and was never intended for City Order patients.

The Government Inspector has condemned the garret wards, and it is difficult to understand why the Medical Health Officer, in view of this condemnation, should continue to allow City Order patients to be sent to quarters so unsuitable. Why does not he insist upon the semi-public and semi-private wards being allotted to City Order patients, in order that they may have proper accommodation during illness?

Evidently the precepts taught by the Good Samaritan are no longer to be considered or practised here. The whole thing has a distinctly business flavor as if its moving spirits were familiar with 100 per cent. dividends, and natural inclinations were actuated by monetary considerations.

Under the Charity Aid Act the Hospital receives from the Provincial Government a specific sum for each patient admitted, which in the aggregate amounted to nearly \$13,000 last year, and this assistance is of course given with a view to lightening the burden of those whose ailments may cause them to seek the relief which such an institution is supposed to supply and afford, and to facilitate the work which it was primarily established to

perform, but it is not for the purpose of enabling the hospital authorities to fill its coffers or to put on unnecessary side.

Though the institution has a very capable man as its Superintendent, he is merely its nominal head, and would appear to have little or no voice in its administrative policy. May I not, therefore, ask the question, Whither are we drifting? We read the hand-writing on the wall, and it is perfectly clear that if the present sordid policy is continued, the rationality of the argument of many thoughtful citizens, that the time has come for the erection of a large civic or municipal hospital to be conducted on broad and philanthropic lines, is beyond question.

Yours truly,

Toronto, January 13th, 1908.

“PRACTITIONER.”

RECURRING CARCINOMA.

To the Editor of THE CANADIAN PRACTITIONER AND REVIEW:

Will you kindly insert the following in your journal, giving it as prominent a place as possible:

The writer desires information regarding any alleged recoveries or cures of inoperable or recurrent carcinoma of the mammary gland.

If any case or cases are known to anyone who reads this circular and can be authenticated by facts as to the history and condition prior to recovery and the length of time which has elapsed since recovery, such information will be much appreciated and duly acknowledged.

Any well-authenticated reports of recoveries from carcinoma, located in other parts than the mammary gland, will be welcomed.

Cancer paste cures, X-ray cures, radium cures, or cures as result of surgical operation are not wanted.

Hearsay cases are not wanted, unless accompanied by name and address of the person who can give knowledge first-hand.

Address, HORACE PACKARD,

470 Commonwealth Ave.,

Boston, Mass.

January 10th, 1908.

Book Reviews.

CLINICAL TREATISES ON THE SYMPTOMATOLOGY AND DIAGNOSIS OF DISORDERS OF RESPIRATION AND CIRCULATION. By Prof. Edmund Von Neusser, M.D., Professor of the Second Medical Clinic, Vienna. Authorized English Translation. By Andrew MacFarlane, M.D., Professor of Medical Jurisprudence and Physical Diagnosis, Albany Medical College. Part I., Dyspnea and Cyanosis. New York: E. B. Treat & Company. 1907.

The development of bacteriology since Koch's discovery of the tubercle bacillus in 1881, and the application of solid culture media for the differential growth of the bacteria have tended in the last two decades to lead the physician to rely for his diagnosis upon laboratory aids and less upon clinical observation. In order to be thoroughly understood and rationally treated, disease must be studied primarily in its entirety as a pathological process.

The all-absorbing search for the specific cause of a disease, although most valuable when indicated, has too often pushed into the background the manifest clinical evidences of the disease, and the physician has regarded them of subordinate value and apparently even of negligible worth.

The diagnosis of disease must, in the great majority of patients, be determined at the bedside and not in the laboratory. Laboratory findings are most valuable aids to diagnosis, but are not, except in a few instances, diagnoses themselves and never substitutes for clinical bedside work.

This present series of monographs accentuates the value of the study of symptoms as observed at the bedside of the patient, and reproduces the marvellous clinical pictures of Trousseau, Niemeyer, Sydenham, Flint and others, illuminated by present-day knowledge of pathology and clinical methods.

Professor Edmund Neusser, with his rare diagnostic instinct and his almost uncanny memory of clinical facts and their correlation to pathological findings, typifies in the strict sense the modern master clinician.

These lectures are the resultant of almost limitless clinical material and of a scientific acumen which does not overlook any fact no matter how seemingly trivial and unimportant.

Those who have had the opportunity of visiting Professor Neusser's clinic and of listening to his erudite exposition of diseases and have observed his methods in diagnosing cases before a largely attended class will read this work with an absorbing interest.

Dr. MacFarlane is to be congratulated upon the excellent translation of this, the first of a series of monographs on Respiration and Circulation. The others will shortly appear, one on Tachycardia and Bradycardia and another on Angina Pectoris.

PARAFFIN IN SURGERY. A critical and clinical study. By Wm. H. Luckett, M.D. Attending Surgeon, Harlem Hospital, Surgeon to the Mt. Sinai Hospital Dispensary of New York; and Frank I. Horne, M.D., formerly Assistant Surgeon, Mt. Sinai Hospital Dispensary. 12mo; 38 illustrations; 118 pages. Surgery Publishing Co., 92 William Street, New York City. Cloth, \$2.00.

The authors have, in the above, undertaken to collate and analyze the literature relating to the subject of Paraffin injections, and to present the results of their personal observations.

The volume is small in size, printed on excellent paper and illustrated profusely, showing clinical results, and micro-photographs of tissues after injection.

The various chapters deserving special notice are those relating to the disposition of Paraffin in the tissues, its chemistry and accidents likely to be encountered.

In the second part is contained an analysis of sixty-four cases. Such various conditions as the treatment of herniæ, incontinence of urine and the operation in cases of saddle-nose having been treated, the volume will prove of the utmost use to any surgeon who undertakes the use of Paraffin.

MODERN METHODS OF DIAGNOSIS IN URINARY SURGERY. By Edward Deanesly, M.D., B.Sc. (Lond.), F.R.C.S., House Surgeon Wolverhampton and Staffordshire General Hospital. London, W. C. : H. K. Lewis, 136 Gower Street. 1907.

The above is a small volume of about 100 pages, written by a general surgeon, describing the more recent methods used in the localisation and diagnosis of urinary diseases. In the earlier chapters are discussed the interpretation of symptoms and abnormal condition of the urine.

The physical examination of patient and urinary organs next receives attention. Radiography, the cystoscope and its application are then fully dealt with, and finally the differential collection of specimens of urine by means of separators, etc., is taken up. The book is intended to be of aid to the general practitioner for reference in cases of difficult diagnosis, when the older methods prove insufficient.

THE DEVELOPMENT OF THE HUMAN BODY. A manual of Human Embryology. By J. Playfair McMurrich, A.M., Ph.D., Professor of Anatomy in the University of Toronto; formerly Professor of Anatomy in the University of Michigan. Third edition, revised and enlarged. With two hundred and seventy-seven illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1907.

It is with great pleasure that we received the above publication for review, coming as it does from the pen of one whose personality and work is well known in our medical circles. The general arrangement adhered to has been to divide the work into two parts, the first covering the ground of general development, and the second that of the special system and organs. In the earlier chapters we find full and comprehensive descriptions of spermatogenesis, the ovum and its maturation, formation of the germ layers, development of external forms of the embryo, and finally the medullary groove, somites, membranes and their formation are discussed.

The reading matter has been most fully illustrated with original drawings, plates, micro-photographs and diagrams which prove of the greatest value to the reader. Some of the colored plates are particularly clear and convincing. Passing to the second part, that embracing the subject of organogeny, we find the author has taken the various systems, such as the muscular, circulatory, respiratory, etc., and dealt with each in a separate chapter. That on the nervous system especially attracted our attention. The volume is concluded with a reference to post-natal development, which contains much valuable information.

We cannot praise the work too highly. Its use is apparent, not only to the embryologist, but to the careful student of anatomy, and we beg to offer to Professor McMurrich our heartiest congratulations on the excellence of his production.

DISEASES OF THE NERVOUS SYSTEM. Edited by Archibald Church, M.D., Professor of Nervous and Mental Diseases and Medical Jurisprudence, Northwestern University Medical Department, Chicago, Ill. An authorized translation from "Die Deutsche Klinik," under the general editorial supervision of Julius L. Salinger, M.D. With 195 illustrations in the text, and five colored plates. Pages 1160. Cloth. Price \$7.50. London and New York: D. Appleton & Co.

In this excellent volume Dr. Church presents to the profession one of the most valuable works on Diseases of the Nervous Sys-

tem ever published. The list of contributors is composed of some 21 of the most prominent neurologists in Germany and Vienna. The translators of this volume have conferred a favor upon the English-reading members of the profession by their excellent rendering of the text. The first two sections on the Macroscopic Anatomy and the Normal and Pathological Histology of the Central Nervous System form an excellent introduction to the work, and are especially valuable for clear, accurate and well ordered description. The section on General Neurological Diagnosis is most instructive, and is of special value to the student. Quinches' method of Lumbar Puncture is a very important and practical contribution; also the sections on Myelitis and Tabes Dorsalis are especially exhaustive and helpful. Contrary to what we would expect from a work by German authors, the therapeutic side of the subject has been taken up in a most practical manner. The typography and plates of this work are all that can be desired, and are of great value to the reader. The book will prove of great service to the physician and student, and to the specialist in this branch of disease it is invaluable.

MODERN MEDICINE: Its theory and practice in original contributions by American and Foreign authors, edited by Wm. Osler, M.D., assisted by Thos. McCrae, M.D. Vol. III. Infectious diseases (cont'd)—diseases of the respiratory tract. Illustrated. Philadelphia and New York: Lea Brothers & Co. 1907.

The favorable impression we formed of the first two volumes is increased by the third. Of the articles requiring special mention, those on Malta fever, by Col. Bruce; on tuberculosis, by W. G. MacCallum and L. Brown; on syphilis, by Wm. Osler and Churchman, and on hay fever, by Dunbar, will rank as classics, not only for the great mass of information they contain, but for the clearness and fluency of the style,—a very great consideration to the reader. This difference in readability is what characterizes a book written originally in English, as compared with one translated from a foreign language. Canada is again ably represented by Prof. A. McPhedran in a comprehensive article on diseases of the bronchi.

Selections.

The Application of Pure Ichthyol in Gonorrhœic Epididymitis.

For the last two years Cæsar W. Philip, of Hamburg, has had good results with the following method in treating gonorrhœic epididymitis:

During the acute stage the patient is kept in bed, the scrotum is raised, and cold applications are applied. In very mild cases, where the patient cannot stop working, a Langlebert suspensory with Priessnitz application are ordered from the very onset.

After four to seven days the acute symptoms, fever, swelling, and tenderness, abate. The gonorrhœic inflammation rarely has a tendency to suppuration, but soon passes to the subacute and chronic stage. The chronic inflammation is characterized by the presence of much connective tissue. Clinically, there are frequent recurrences and often neuralgic pains. At rest, there may be no pain, but if the patient is up and about for a protracted period there may be another acute attack after weeks or months, so that the patient may be unable to work for a long time. The infiltration is often not completely absorbed, so that a circumscribed, dense nodule will remain in the epididymis.

Since this process closely resembles other chronic inflammations, particularly synovitis crepitans, pure ichthyol was tried in a large number of cases. The method of application was as follows: The diseased half of the scrotum, including the skin over the cord up to and beyond the inguinal ring, are painted liberally with pure ichthyol and then covered with a moderately thick, folded piece of cotton. The usual snugly fitting suspensory is then applied. Since the skin over the cord and that of the scrotum form a firm sheath, a dragging of the testicle with the diseased epididymis is impossible. It is sufficient to cut short the hairs over the scrotum; shaving is not necessary.

After four to five days the bandage is dissolved off with warm water and a new one applied.

In this affection ichthyol again demonstrated its properties as an antiphlogistic and absorbing agent to a marked degree. The infiltration disappears rapidly and the patients no longer complain of pain, even though they follow their vocation. The final result is very favorable. The infiltration remaining in the epididymis was very slight and sometimes absent altogether. The neuralgic pains in the testicle and epididymis disappear very promptly. The results were especially brilliant in the case of a patient who had three recurrences until ichthyol was used.

In conclusion it may be mentioned that only the ichthyol-ammonium of Cordes, Hermann & Co. was employed. The