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HARRY MORELL, M.D., C.M., *Chairman of Publication Committee*

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THE SASKATCHEWAN MEDICAL JOURNAL

VOL. 2 JANUARY, 1910 No. 1

Original Memoirs

*OBSTETRICS, GYNAECOLOGY AND ABDOMINAL SURGERY

By ADAM H. WRIGHT, B.A., M.D., M.R.C.S. Eng.
Professor of Obstetrics, University of Toronto

Obstetrics as a science and art has a fairly definite entity, and includes the management of pregnancy, labor, and the puerperal state. Gynæcology cannot be so easily defined because many gynæcologists practise also abdominal surgery. The tendency in certain quarters is to include abdominal and pelvic surgery under general surgery, and, it may be, that the pure gynæcologist will soon pass out of existence. In any case, however, those who pay special attention to midwifery and diseases of women will always take a deep interest in abdominal surgery which is accomplishing brilliant results.

The whole world is at present much interested in acute "septic peritonitis." Many of you will remember a paper on that subject by Dr. James F. W. Ross, two years ago, at Montreal; many of you will also remember another paper read by Dr. George Bingham, last year, at the meeting of the Saskatchewan Medical Association. Dr. Deaver, of Philadelphia, read a paper on the same subject at the last meeting of the Ontario Medical Association held in Toronto, June 7 of this

*Opening address at the Section in Obstetrics and Gynaecology delivered at the meeting of the Canadian Medical Association, Winnipeg, August 23rd, 1909.

year. The opinions expressed by Dr. Bingham and others who took part in the discussion will form the text for a few remarks in this paper. One of the interesting features was the marked differences in the opinions expressed. To speak briefly there were practically two groups. Those in one party recommended small incisions, no irrigation, free drainage, Fowler's position, no administration of opium. The others recommended large incisions, thorough irrigation, no drainage (complete closure), recumbent posture, deep narcotism.

Let us consider the matter from the standpoint of the obstetrician, the gynæcologist, and the general practitioner. Why are the differences in opinion so marked? Which set of men are right, and which are wrong? We have to say in this connection that many of the discussions on this and cognate subjects that have taken place in recent years have been neither temperate nor dignified; and the Toronto discussion was no better than the average in that regard.

One should suppose that the results obtained would aid us much in reaching a decision. Both parties, however, claim success, and report a large percentage of recoveries. Under such circumstances it would seem fair to conclude that both parties are right in part at least. If the exponents of the two widely different methods consulted and discussed matters in a friendly way, it seems probable that they might learn much from each other. It seems unfortunate that the champions on one side so frequently endeavor to prove that those on the other side are entirely wrong.

In commenting on the points raised and the opinions expressed I shall refer chiefly to irrigation, drainage, the position of the patient, and the administration of morphine. No special reference will be made to elimination, administration of hot salt solutions, silver solutions, calomel, strychnine, sera, etc., although they are of course very important.

Irrigation.—One can say, probably, without fear of contradiction, that irrigation has to some extent gone out of fashion. Many surgeons do not now wash out an empyema. Many gynæcologists do not now wash out a pelvic abscess. Where

there is free drainage in such cases irrigation is not required. From this point of view it seems fair to assume that, if we could have free drainage in cases of peritonitis, irrigation would not be required, and therefore should not be done. From another point of view, it seems at least equally fair to assume that drainage is not always required because a large proportion of patients recover after irrigation without drainage. Such being the case we surely must admit that thorough irrigation, as carried out by Ross and others, is beneficial in some cases at least. Would it not be better, then, to try to discover why and when it is beneficial instead of endeavoring to prove that it is always wrong?

A certain well-known surgeon of Toronto published a report of a case of general septic peritonitis, following perforation of the bowel in typhoid fever, in which the patient's life was saved by operation seven years ago. It seems somewhat remarkable that while in that case he "flushed out the peritoneal cavity with hot salt solution," with apparently good effect, he should now conclude that such irrigation is never justifiable.

It will, of course, be admitted that the layer of endothelial cells lining the peritonæum is very important as a defense against the entrance of septic organisms, and that injury or destruction of these cells is dangerous in a high degree. Do the men, who (quite correctly) attach so much importance to this fact, think a hot salt solution in itself will destroy, or even injure these cells? Sure it has been demonstrated that it will not.

It is presumed that irrigation is decidedly dangerous in certain cases of more or less circumscribed septic peritonitis because of the possibility or probability, of disseminating the poison. This is true especially in certain cases of appendicitis, a fact which even the most ardent irrigationists are rapidly learning.

Drainage.—The present methods or promoting free drainage from the peritoneal cavity are a wondrous improvement on those employed a few years ago. The evidence as to the remarkably goods results following these improved methods is so strong that

we can scarcely refuse to accept it. The good effects of the Fowler position in connection therewith are generally recognized. Large tubes are introduced into the lower part of the abdomen and drainage through these is assisted by the sitting position of the patient.

The methods employed are not yet perfect, however, and the results of drainage in some cases are sadly disappointing. Such being the case, is it not reasonable to suppose that irrigation before drainage might sometimes be beneficial? Take for instance perforation of the stomach or bowel, with sudden outpour of septic matter sometimes in large amounts. Let us ask those who favor drainage alone why they think that any attempt to wash out some of this deleterious matter is always harmful? The answer is that some surgeons in Toronto and other places, have got better results from drainage alone. Supposing that to be true, is it not well to consider it possible that careful irrigation before drainage may accomplish good in some cases. We need not now consider the objections raised to drainage in septic peritonitis because of discomforts to the patients, prolonged recovery, dangers from new wounds, etc., although we may acknowledge that such objections are legitimate.

The important of drainage has always been appreciated by the obstetrician. Drainage from the uterus after labor has always been more or less encouraged; but the advantages of the recumbent posture have been overestimated; and the drainage has often been faulty where free discharges from the uterus and vagina were urgently needed. For several years the tendency has been to lose our high respect for the flat on the back position, and give our patients greater freedom as to their movements in bed.

Fowler's Position.—The object of placing a patient suffering from septic peritonitis in the semi-sitting position is to cause the exudates to gravitate from the dangerous upper zone to the safer lower zone in the pelvic region. It is somewhat surprising to find a gynæcologist, who has had large experience in the treatment of pus collections in the pelvis, make the statement that all zones are equally bad. Surely it has been demonstrated

that a subphrenic abscess is ten times over more dangerous than a collection of pus in the lowest portion of the peritoneal cavity.

Let us consider the effects of drainage from the uterus in cases of puerperal saprophytic infection. Clinically we find a foul discharge from the uterus due to decomposition of dead tissues such as portions of placenta and membranes. For many years it has been deemed important to clear out the decomposing debris from the uterine cavity. In connection therewith curettement and irrigation have been more or less popular. Many now think that the dangers connection with these procedures are serious. As before mentioned we rely greatly on drainage. Many of us thought that we might use Fowler's position with much benefit. As a consequence our custom now is to place the patient in the sitting position when the discharges become offensive. Fortunately, if we can place the patient in the proper position, no complications such as occur in septic peritonitis will prevent drainage.

It unfortunately happens that Fowler's position is so uncomfortable as to become impossible for some patients. Without discussing the various modificatons of the position employed by Miss Lash in her Cottage Hospital, Toronto. The head of the bed is elevated fifteen to twenty inches. The patient is allowed to bear part of the weight of her body on the feet, which are implanted on a pillow or cushion resting on the foot of the bed. If the patient gets tired she is fastened to the headboard in the ordinary way; in some cases she is fastened to the headboard in such a way as to give partial support while she bears part of the weight of her body on her feet. It will be noticed that in these two modifications the patient is lying on her back instead of sitting or half sitting up, and, as a rule she is perfectly comfortable. In several cases of sapræmia occurring in Toronto, drainage by this position, and eliminative treatment by the administration of calomel and Epsom salts, without any intrauterine douching or scraping, have cured the patients.

The Administration of Morphine.—The history of this old drug is interesting. It has probably been blessed and cursed to a greater extent than any other drug in the pharmacopœia.

Smellie, in discussing shock occurring in certain obstetrical emergencies, including hæmorrhages during pregnancy, one hundred and fifty years ago, said: "Above all things opium must be administered to procure rest." Forty to fifty years ago Alonzo Clark and Fordyce Barker, of New York, two of the ablest and most conscientious clinicians that this continent has produced, treated and cured patients suffering from septic peritonitis by the administration of very large doses of opium or morphine. About twenty-two years ago Lawson Tait objected absolutely to the use of opium in large or small doses. The general adoption of his views, especially on this continent, was remarkable, and the ardor of some of his disciples was almost sublime. In the year 1890 a discussion took place in a medical society, comprised of specialists, in the United States, on the surgical conception of peritonitis. One of the debaters designated a man who administered opium as an opium idiot. Another referred to Dr. Clark's "opium habit," and the "follies and evils of his teaching," in a most contemptuous manner. Let us not imitate these methods of discussion in this association.

We are told that morphine masks symptoms, causes intestinal paresis, and limits leucocytosis. Such statements are worthy of careful consideration, but cannot be discussed in detail. Allow me, however, to make a few observations from the other side. Morphine by relieving pain in the early stages of peritonitis may throw the careless observer off his guard, but will not hide the symptoms from the careful clinician. However, it will answer our purpose at present to say: If you fear this "masking" wait until you have made your diagnosis before administering morphine. Morphine retards to some extent the action of the bowels; but many of us think that it does not cause paresis, or even constipation, which cannot be overcome by cathartics. Sepsis alone causes incurable paresis. Many of us do not think that morphine limits leucocytosis in septic conditions. In fact we think it often aids that process.

We all know that morphine is a dangerous medicine if not used with discretion. We are exceedingly loth to prescribe it

for headache, neuralgia, dysmenorrhœa, etc. We believe, however, that morphine is one of the best remedies for shock due to injury, and collapse due to hæmorrhage. The surgeon who are now substituting morphine for strychnine in the treatment of these conditions are probably right.

When administering morphine in various obstetrical and gynæcological emergencies we wish to stop pain. As to that I have frequently expressed the opinion during the last twenty years that it did not appear to me either scientific, practical, or humane, to withhold morphine from a woman suffering agony from intraabdominal inflammation, because it may "mask symptoms." But morphine accomplishes something far more important than the mere relief of suffering. It produces that condition of repose and quietude of the nervous and circulatory systems which we desire above all things when the machinery within the body is going all wrong. It quiets those nerve centres, which, like so many specks of dynamite, are causing a vicious circle of explosions within the body in cases of toxæmia and septic inflammation. To produce such effects, *i.e.*, to paralyze the superactive nerve centres that are doing the mischief, large doses are required. One eighth or one quarter of a grain of morphine, even when given hypodermically, will be quite useless for the condition referred to in this paper. In fact such doses sometimes do more harm than good.

Bingham told you at Regina that "if one were restricted to one single measure in the treatment of spreading spsis it would appear that rest would be the paramount remedy." Ross told you at Montreal that he obtains rest by the administration of opium. Let me quote from his paper: "In all cases of acute general septic peritonitis, after operation I use *opium in very large quantities until the respirations are reduced to about ten per minute.*" One important point here is that the majority of surgeons who object to opium never gave these large doses, never saw anybody else give them, and think the method so absurd as to be unworthy of investigation or consideration. I hope I may be pardoned for saying that such men are not qualified to discuss intelligently the "opium treatment."

Let us in conclusion reconsider some of the main points at issue, recapitulate to some extent, and choose the best from the good work done by men who differ materially in their opinions and methods.

Irrigation is useful in so far as it washes out cavities containing putrid or septic matter, but it causes more or less shock, especially in peritoneal and uterine cavities. Let us endeavor to ascertain when it is advisable, how it can be carried out most safely, and how its evil effects can be best counteracted.

Drainage is useful in its place. We all appreciate that fact. Let us still study the subject, and endeavor to learn the best methods of procedure. Would it not be better, however, to combine irrigation with drainage in cases of rupture of the stomach and bowel?

Fowler's position is satisfactory to most of those who have adopted it as a good method of promoting drainage; but we should employ means to make it effective, and, at the same time, make the patient comfortable.

If morphine is a good medicine for shock would it not be well, as a matter of routine to administer it after every irrigation of the uterine and peritoneal cavities, after every difficult labor, and after every difficult operation?

And now a few words of a personal nature. I thank the officers of the Association for the honor conferred on me through the invitation to deliver the address in this section. I have referred to points of great interest to both general practitioners and specialists. I have spoken about the opinions of some surgeons (not as a rule giving names) of my own city with a certain amount of frankness, because they are personal friends who are not likely to misunderstand me. I do not pretend to speak with authority. I am not a master among my fellows. I am a student only. My opinions on some points are not definite, while those on other points are quite decided. I am continuously looking for new light on all things, however, and I feel that my views of today may be changed tomorrow. I should like to see friendship and goodwill existing between the members of our profession. May we endeavor to sink self,

work together, and learn from each other. Let us be a united body, charitable, tolerant, and broad. If we act on these lines we should make our profession grand in the highest sense of the word, and we shall be doing our duty to our fellow creatures, and to our God.

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*THE EARLY DIAGONSIS OF TUBERCULAR JOINT DISEASE

(Clinical Lecture)

By CHARLES OGILVY, M.D.

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The early diagnosis of tubercular joint lesions is a most important subject. A tubercular lesion should be recognized early and treatment begun at once. The course of the disease is thus shortened and the extent of involvement lessened.

What are the clinical symptoms?

1. Pain.
2. Spasm of muscle.
3. Atrophy.
4. Deformity.
5. Swelling.
6. Heat, and
7. Limit of motion.

1. *Pain.*—Pain is a very mild symptom at first. If in the lower extremity, it is manifested by a slight limp, more marked after the joint has been used, and therefore worse at night than in the morning, very gradually increasing from day to day and week to week. It may not be seriously considered for upwards of two months. Medical aid is then sought, more on account of the persistence than for the acuteness of the pain.

2. *Spasm of Muscle.*—Spasm of muscle develops early and is readily ascertained by comparison with the opposite limb.

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3. *Atrophy.*—Atrophy develops early, within the first few weeks of infection, and is easily distinguished, the eye being a better guide than the tape. The muscles both above and below the joint are involved.

4. *Deformity.*—The usual deformity is that of flexion. In the hip it is generally flexion and adduction. In the incipient stages of the disease deformity may not be present. Flexion deformity is most frequently seen and is due to the limb being held in the position of greatest comfort; the limb is constantly held in this position of deformity. Overcoming this deformity suddenly by force causes excruciating pain. To correct this deformity gradual extension should be employed without sudden forcible reduction.

5. *Swelling.*—Swelling appears with the effusion.

6. *Heat.*—Heat, localized and well defined, is distinctly palpable in the more acute stages of the disease. It usually subsides and disappears after proper treatment is begun, so that during the greater part of the course of treatment there is no perceptible localized heat.

7. *Limit of Motion.*—The limit of motion is distinctly marked, and through this limited range of motion the joint cannot be moved without considerable resistance.

In addition to these sysptoms, night cries occur in about fifty per cent. of the cases. Night cries are caused by a sudden jarring of the joint, the muscles being taken off their guard during sleep.

When there is doubt in the mind of the practitioner as to whether or not he is dealing with a tubercular joint, in most cases he gives a negative diagnosis. The symptoms in the incipient stages of the diseases are mild, but distinctive in character. A tubercular family history is rather of statistical interest than of diagnostic importance. The fact that there is no tubercular family history should not dissuade one from making a definite diagnosis when the clinical symptoms are present. The history of trauma is also frequently negative, and therefore of relatively less importance, though the trauma may have been so slight as to have passed unnoticed.

The various tests by the aid of tuberculin, of which we have learned during the past few years, are of material assistance, but should not take precedence over the clinical symptoms. The X-ray has well proven its efficiency, though it also should be interpreted in the light of the clinical symptoms. When there is a definite osseous focus of disease, a skyogram will show its exact location and extent. There are cases with bone foci which give few, if any, symptoms until the process has extended to the joint cavity, so that when these symptoms first appear and an X-ray is then taken, we are surprised to find an extensive bone lesion. On the other hand, when the disease is primarily synovial an X-ray taken when the earliest symptoms develop shows absolutely nothing abnormal. Later, however, an indefinite haziness in the outline of the joint is seen, which is quite characteristic. These two forms of pathological processes should always be kept in mind when reading the X-ray, though the clinical picture is the same in both when the joint proper is involved. The pathological changes in the joint tissue are first the production of a serous or sero-fibrinous effusion. The synovial membrane becomes inflamed. In this serous effusion a slight amount of fibrin is precipitated. These masses of fibrin are deposited in layers on the cartilage and the synovial membrane and grow to a considerable thickness, the deeper layers of which begin to organize. We then see tubercles developing, which are quite distinct, both macroscopically and microscopically.

Let us now briefly consider these three cases, which will illustrate some of the points to which I have called your attention.

CASE 1. This little girl is nine years of age. She is one of a family of nine children. The mother is living. The father died of tuberculosis one year ago. She comes to us for the first time today with a very decided limp and complaining of pain. In passing let me call your attention to the two very distinctive forms of limps: the first that of pain, the second that of paralysis or deformity, but without pain. In the first are classed all inflammatory lesions with their various infections; in the

upon seeing a patient walk into our office, we can immediately latter are excluded all inflammations and all disease. Thus, form a very definite idea as to whether or not we are dealing with an inflammatory joint lesion. As this little girl walks before you there is no doubt in your mind that she is suffering severe pain; she constantly favors the left leg. On placing her upon the table for examination we note that the thigh has a flexion of 15° and an abduction of about 5°. Decided atrophy is apparent, not only in the left thigh, but also in the leg. Motion of the left hip is limited in all directions. When an effort is made to extend the thigh she cries with pain. No local heat is present, and apparently there is no swelling. The most marked symptoms present, then, are those of pain, spasm of muscle, atrophy and deformity. The left leg, measured from the anterior superior spine to the internal maleolus, is one-quarter of an inch shorter than the right.

We have as yet asked no questions but have simply made our examination. We now ask a question of the greatest import ance, and that is: How long has she been complaining of pain? remembering that she has come to us for the first time and has not, as I have learned, had any previous treatment. The reply to our question is that six months ago, three weeks after having fallen upon her left hip, she complained of a very indefinite feeling of discomfort rather than pain. Since this time she has been complaining of severer symptoms, until at the present time, as you see, there are symptoms of a decided joint lesion. These symptoms are typical of a tubercular joint process, with the exception of the abduction deformity, which is usually not present, but which, in this case, has taken the place of the abduction, which is generally seen. In regard to the question of the diagnosis of tubercular joint disease in children, one may state that when a chronic joint lesion has continued for upwards of two to three months or longer, the symptoms are gradually increasing in severity and are associated with a general debility, loss of appetite, restlessness at night, slight anemia and mild digestive disturbances, a tubercular joint disease, in all probability is present and this should very seriously be considered

and a definite diagnosis arrived at. Another chronic joint lesion in children, which, perhaps is most likely to be mistaken for tuberculosis, is syphilis, but in syphilis other stigmata of the disease are present, by which we readily can confirm the diagnosis.

CASE II. This boy is seven years of age. His mother tells us that two weeks ago he came from school complaining that his right hip had been injured while at play. You will notice as he walks that he has a slight, though decided limp, favoring the right leg. This is not very marked, but it is sufficiently developed to attract attention. As he lies on the table what are our observations? There is no flexion of the thigh; there is no adduction or abduction deformity; there is apparently not the slightest atrophy; there is no heat nor swelling. Our findings have thus far been negative. What then has caused the limp? On closer examination we find that there is considerable spasm of muscle about the joint, though the thigh can be moved in all directions with but little discomfort to the patient. He does complain of pain on forced abduction, and the abductors stand out distinctly in spasm when forced abduction is attempted.

We have, then, nothing but slight spasm of muscle about the joint, some pain on joint pressure, and a slight but decided limp, with a history of an injury two weeks previously. From these symptoms one should make a diagnosis of a simple traumatic joint inflammation, the symptoms of which should subside if the joint is somewhat immobilized and properly protected from further injury.*

To differentiate between a tubercular and a simple traumatic synovitis, all the symptoms should very carefully be considered. *In tubercular joints* the pain is greater and gradually grows more severe in character. The spasm of muscle is always present; deformity always occurs and frequently within the first few weeks of the disease, and atrophy very soon becomes manifest. *In simple synovitis* there is little or no pain, and that which is complained of is not very severe in character and does not progress in severity. There is little or no spasm about

the joint, motion being perfectly free in all directions, and there is no deformity except that of the swelling. Atrophy is usually present after the synovitis has continued for some time, but it, too, is very slight in degree. If the fluid contents is aspirated there will be seen in tubercular fluid a number of flocculi, and if the process has continued for some time the effusion will be quite turbid. On the other hand, synovial fluid from a simple synovitis is quite clear, slightly gluey, but not so thick in consistency as the fluid from a tubercular joint.

CASE III. This case presents a type or condition which is sometimes mistaken for tubercular joint infection. One can hardly understand why this should be the case, and yet it occurs so frequently that it may be of advantage briefly to consider the symptoms exemplified in this instance.

This little girl, five years of age, comes for the treatment of a lameness which you readily see is not accompanied by any pain. Her limp is that of paralysis. She drags her right leg after her with a marked eversion of the right foot. She places the weight of her body upon the right side with as little discomfort as she does on the left. There is not the same ability to use the right leg as the left; nevertheless, she does not complain of any feeling of discomfort while walking. When she is placed upon the table you will see that the right leg is rotated outwards and the right foot lies with its outer side flat upon the table. She flexes her thigh, bending the knee with a great deal of difficulty, not because of any spasm of muscle about the hip joint, but because of lack of power in the muscles which flex the thigh. The same is true of abduction and adduction of the thigh. Upon closer examination of the hip-joint we find that we can move the thigh in all directions and that rather than any stiffness about the joint there is a lack of tone in the muscles. We have, therefore, a limp, it is true, and atrophy, both of which are decidedly marked, but all symptoms of inflammation or disease are entirely absent. The paralysis developed suddenly after two days illness accompanied by extreme prostration and fever. The case is one of anterior poliomeyelitis.

Of other conditions than *syphilis, simple synovitis,* and *infantile paralysis,* which have briefly been considered, which might be confounded with the joint tuberculosis, we may mention:

1. *Rachitis.*
2. The acute arthritides of infancy (staphylococci).
3. *Scorbutus.*
4. Other infections such as:
   Diphtheria.
   Scarlet fever.
   Pneumonia.
   Gonorrhea.
5. Osteomyelitis.

The differential diagnosis between all the infections of an acute nature and tuberculosis is readily made when the rapidity with which the acute inflammations run their course, and the slow, incipient development of tubercular joint disease are considered.

Rachitis is diagnosticated by is various characteristic developments.

You will have noticed that the subject of rheumatism has not been touched upon. Unfortunately, the greater number of our tubercular joints are primarily diagnosticated as "Rheumatism." It would be infinitely better if such a diagnosis were never made. Acute articular rheumatism rarely, if ever, occurs before the third or fourth year, and in children the manifestations are those of anemia, cardiac involvement and tonsilitis, rather than joint involvements. Acute articular rheumatism runs a course of a few weeks, accompanied by these several manifestations, and does not pass on to so-called chronic rheumatism. Acute rheumatism is rarely seen in one joint only without subsequent involvement of others. With these facts in mind, one might truthfully say that the diagnosis of rheumatism should never be made in a child suffering from a chronic inflammatory lesion in one joint.

This brief outline of a very important subject, into which time will not permit us to enter into further detail, may suffice to enable us definitely to diagnosticate tubercular joint lesions, of which we meet so many in general practice.

LABORATORY METHODS FOR THE GENERAL PRACTITIONER

By a "F.R.M.S." (Lond.)

Within the past few years, along with the advances of all branches of medical science, clinical laboratory work has grown and developed wonderfully. In the various lines of laboratory manipulations including microscopy, hematology, medical chemistry and bacteriology, continued and faithful work has brought forth many improvements in tecnique and simplified application and with this, definite and accurate results.

Whether a man confines himself to special lines or is engaged in general practice a certain amount of laboratory work is essential for the diagnosis of many diseases.

Wyeth in his oration before the American Medical Association nearly ten years ago, uses this argument: "It is equally important that there be called into requisition the invaluable and which laboratory research alone can give in determining an accurate diagnosis." Again in summing up he says: "Chemical analysis of the normal and abnormal secretions and excretions of the body, clinical microscopy and bacteriology should form a part of the educational requirement of every surgeon. I do not insist that the busy practitioner should attempt to master all the intricate processes of the laboratory, for this is possible only to one who devotes years of patient labor in the fascinating department of science, but he should possess that practical knowledge of the chemistry of the body in health and disease, and of clinical microscopy and bacteriology which any diligent student under a competent teacher and in a properly equipped laboratory, should be able to acquire in a three months course of study."

Of course we must not rely entirely in making a diagnosis on the laboratory findings alone although many diseases and conditions may be differentiated solely by the pathologist, but clinical methods taken together with the physical signs lead us on the correct road to diagnosis.

There are numerous physicians enjoying large and lucrative practices who have not the time nor inclination to do work of this character but they should at least recognize the scientific aspect of this class or branch of medicine and avail themselves of the services of a laboratory, municipal or state, or relegate the work to an assistant and give their patients the benefit of this the youngest and most accurate branch of scientific medicine.

Those of us who do clinical work in the office must have at our command reagents, stains, apparatus, etc., always ready, and work must be completed quickly, and we must be sure of our results and opinions when given, as mistakes are ruinous. Examinations of smear specimens of T.B. should be prepared for the microscope in five minutes. The T.B. may be precipitated from urine by the centrifuge in a few minutes and tuberculosis of the bladder or kidney may be diagnosed, a condition heretofore not suspected in a given case.

Gonococcus may be seen within the cells in a microscopical field, this finding is absolute, proving the discharge is specific. These organisms, discovered by careful investigations, have proved to be the specific germ of this disease. In the preface of the second edition of "Laboratory Work in Bacteriology," Novy says, "A thorough course of laboratory instruction in bacteriology is absolutely essential to the proper education of the medical student of the present day. The practical knowledge thus acquired in the methods of handling bacteria, in the precautions necessary to the prevention of personal infection, and in the methods for the recognition and for the destruction of disease-producing organisms in fundamental and invaluable. Such information is directly useful as a means of diagnosis; it is necessary to the successful performance of antiseptic operations and is indispensable to the proper execution and under-

standing of the common hygienic measures for the prevention of communicable diseases."

At the solicitation of many of our subscribers, we have been asked to prepare for publication a series of articles on laboratory methods, the technique of which contemplate, in the main, those which do not involve the large expenditure for elaborate apparatus, nor the description of investigations which do not lead to direct and definite ends—eliminating as much as possible all complicated and research work—or in other words, to describe dependable end results, which may be done in a modestly equipped laboratory. The subjects to be touched upon are those which are met every day in a general practice.

These articles are prepared especially for those who have been away from the laboratories for some time, or have not had time nor opportunity to acquaint themselves with the modern methods known to the investigators in the laboratories, but, who nevertheless feel a want in this direction. Others are those, who living far from the railway and away from the mails require a simple examination, and if not able to make this themselves, have to wait days to hear the result of a laboratory finding, these may by a little preparation be independent of such delay.

The examinations which will be taken up will include the following: the sputum, demonstration of tubercle-bacillus, preparation of stains, etc.: diphtheria, Klebs-Lœffler bacillus; Widel test for typhoid; the Diazo-reaction, the proper performance of, and what chemicals to use; blood, the collection and examination of fresh and dried specimens; hæmoglobin estimate, counting of red and white cells; collections of histological and pathological specimens, hardening and imbedding and the cutting of sections for the microscope.

The first article will appear in the February issue.

THE SASKATCHEWAN MEDICAL JOURNAL

HARRY MORELL, M.D., C.M., *Chairman of Publication Committee*

All communications relating to this publication should be sent to the Saskatchewan Medical Journal, Regina, Saskatchewan, Canada. Box 1106.

Editorial Notes

Dominion Medical Council

The honour emenates from the Canadian West of taking the initiative towards Inter-Provincial Registration or Medical Reciprocity. We predicted that when once the Western Provinces made a move in this direction, beyond a doubt the Eastern Provinces would soon do so also; such has been the case.

The Banff meeting in September was attended by delegates from the four Western Provinces, certain resolutions were passed and if acted upon there will be a Federated Board composed of members representing each Province, requiring a common standard of preliminary education and professional qualifications. The examinations for license will be held by a Board appointed by each Provincial Council.

The action of the Banff meeting was taken cognizance of by the different Councils in Eastern Canada and in Montreal at the meeting of the Canadian Medical Association on November 16th under the Chairmanship of Dr. Roddick, the question of a Dominion Medical Council was favored, there were some objections to this until certain clauses and amendments in the present proposed Canada Medical Act were considered, however, it will be an easy matter to solve if the objectors are in earnest.

In the December number of the Dominion Medical Monthly we notice that "the announcement of the Ontario Medical Council proceedings, comes to hand some four months after the annual meeting in July, when the news it contains is rather a bit stale. We believe the members of the College of Physicians and Surgeons would appreciate reading the proceedings if they were got before them with greater despatch, say, in two weeks' time.

Ontario Medical Council Delinquent

To be of any particular value to the profession they require to be read when fresh; after four months' time has elapsed they are more profitable to the printers than to the profession."

The above prompts us to ask what has our own Council of Physicians and Surgeons done in the matter of bringing before those who are entitled to know, their proceedings, as required by The Medical Profession Act, Section 61, Chapter 28: "The registrar shall from time to time under the direction of the council cause to be printed and published a correct list of the names of the members of the college not under suspension which list shall show their names arranged alphabetically, their residences and their qualifications including medical titles and diplomas, and if such list is not published yearly the registrar shall issue yearly an addenda for the completion of such list to the date of the issue of such addenda," etc.

Saskatchewan Medical Council Also

All the information which has been given out are those meagre items which from time to time appear in the lay press. This is not good enough, the profession at large are entitled to know the proceedings of the various meetings which have been held since the formation of the Council, July, 1909.

Evidently Silence is Golden

We hear that the acting Registrar was voted an honorarium of somewhere in the neighbourhood of fifteen hundred dollars for work done at the first meeting of the Council. What was the character of this work? The Council has in its treasury from twenty to twenty-five thousand dollars. This is a large sum of money. What has been done with it? Who has it?

Has it been placed in trust funds drawing interest? All these questions are legitimate, and every member of the Medical profession in Saskatchewan is entitled to and ought to know.

A communication comes to us, but too late to be taken up in this issue, dealing with certain questions of interest, one which will appeal to those medical men who are in competition with certain Provincial Government Servants. The ordinary medical practitioner has enough troubles, and should not have to compete with men who are subsidized, if we may be permitted to use this word. This matter will be taken up in a later issue.

Competition

The Month

At the annual meeting of the board of governors of the City Hospital, Regina, held on January 14th, it was reported in the daily press, that during the discussion on expenditures, the one medical member was reported as having stated "that he took exception to such a large amount being spent in drugs and that he condemned the experimenting in the use of serum, which cost $3 a dose." It is known that this shot was directly aimed at one of the members of the hospital staff. Quick and immediate steps were taken by the Regina branch of the British Medical Association. At their meeting a resolution was drafted and sent to the board, in which they protested at such a statement being held, as it shows a disposition to interfere in a dictatorial way in methods of treatment, and that it was unwarranted.

At the next meeting of the governors, January 18th, the above resolution was read. The medical member took exception to the resolution, and said "that it was not an expression of the opinion of the medical profession in the city, and the Regina branch of the British Medical Association had gone out of existence over a year ago, when the Clinical Society was formed. Not only this, but the resolution was put through by three medical men only."

The medical men of the city of Regina at once showed what opinion they held on this question, when in response to a call every active medical man in the city with one exception (who was ill) passed the following:

"To the Board of Governors,

Regina General Hospital, Regina.

GENTLEMEN,—At a meeting of the medical men of Regina held in Room 3, Masonic Temple Building, on Saturday, Jan. 22nd, 1910, the following were present: Drs. J. M. Shaw, E. E. Meek, D. S. Johnston, W. A. [illegible]vie, J. C. Black, David Low, W. A. Thompson, F. J. Ellis, Harry Morell, H. M. Stephens,

W. R. Coles, O. E. Rothwell, J. F. Ball, J. A. Cullum, Jas. McLeod. The following was adopted:

Whereas certain reports of the meeting of the board of governors of the Regina General Hospital have appeared in the public press of Regina, it is resolved that in the opinion of this meeting the sentiments expressed by the members of the board at their meeting on Friday, January 14th, as reported in the daily press of Saturday, reflect unfavorably upon the character and reputation of the medical men of the city, and that the facts do not warrant such a statement.

We are further of the opinion that the paragraph referring to the use of drugs, especially that referring to the use of serum, shows a disposition to interfere in a dictatorial way with the methods of treatment which any practitioner on the staff may consider advisable for his patient.

It is contrary to precedent and intolerable interference with the rights of the practitioner and is resented as such.

The words "experimenting with serum" also would infer that therapeutical measures were being adopted by medical men without proper considerations of the welfare of the patient.

The report of the discussion with reference of a medical superintendent would also infer that there had been some neglect in the past.

We are of the opinion that these statements are unwarranted and without foundation in fact, and it is further resolved that the secretary be requested to forward a copy of this resolution to the board of governors, and respectfully request on our behalf, that the board of governors take proper steps to remedy this misrepresentation without delay; and it is further resolved that the secretary forward to the board a list of the medical men present at this meeting.

Yours respectfully,

(Signed) JAMES MCLEOD, M.D.

Regina, January 22nd, 1910. Secretary."

While on this question we want to point out one or two facts in this connection. The medical staff of the city hospital want representation on the board of governors. They hold that at this time they are unrepresented, as they are not in sympathy with the opinions, actions nor standards of the one medical member of the board of governors.

Allow us to suggest that instead of the present method of governing the hospital, a more reasonable one be substituted; for instance the board of governors should be composed of non-medical members but have some source to which they could go in questions of medical import. Why not have, say three or six medical men to act as an advisory board to the governors? These medical men could easily be selected from a list made up and furnished by one of the medical organizations in the city. Any questions or line of policy then framed up would be at least fair and unbiased.

News Items

A meeting of the Regina Branch of the British Medical Association, was held on Saturday, January 15th, at the office of Dr. McLeod. Papers were read by Dr. Black on "The Treatment of Typhoid and Dr. Cullum on Tetanus. The meeting was very interesting.

A new and thoroughly up-to-date Catholic hospital will be built in Prince Albert next spring, and already the plans and specifications have been drawn up and approved. The new hospital will have accommodation for 100 patients, and will be built at a cost of $100,000.

In Toronto recently Dr. Stephen B. Pollard, who was convicted of malpractice and sentenced to five years in the penitentiary, was found guilty of "infamous and disgraceful conduct in professional respects," at the session of the council of the College of Physicians and Surgeons and his name expunged from the roll.

Book Notices

We shall be glad to receive all publications which may be sent, and acknowledgement will be made under this heading. Reviews of those will appear, as far as possible which, in our judgment, will be interesting and as space permits.

A Handbook of Medical Diagnosis. For the use of practitioners and students. By *J. C. Wilson, A.M., M.D.*, Professor of the Practice of Medicine and Clinical Medicine in the Jefferson Medical College, etc., etc., Philadelphia. 408 text illustrations and 14 full page plates. Philadelphia, London and Montreal: J. B. Lippincott Company.

This is an absolutely new work and coming from the pen and experience of one of the best known clinicians in America, at once stamps it as authoratative. This work is not a compilation, but represents the result of many years of labor in this particular field. The treatment of the subject matter under four main headings has been adopted. (Medical Diagnosis in General; The Methods and their Immediate Results; Symptoms and Signs; The Clinical Applications.)

Practical rather than theoretical considerations have been held constantly in view alike in the treatment of the clinical and the laboratory subjects. To attain this end a degree of positiveness of assertion not warranted under other circumstances and the avoidance of the discussion of moot and unsettled questions have seemed proper.

To add to the list of works on diagnosis demands the justification of something different in method, new arrangement of detail, and the presentation of the whole subject in accordance with the requirements of contemporary medicine. In the present volume these demands are fulfilled. It is the outcome of many years devoted to work in the wards with the controlling side-lights upon bedside diagnosis afforded by the clinical laboratory, revelations at the hands of surgical colleagues in the operating theatre and confreres in pathology in the post-mortem

room, the frequent opportunity of seeing unusual and grave cases in consultation, and long experience as a teacher. The one important feature which appeals to the reviewer is originality.

The general make up of the work is the "Lippincott" standard. This means first class paper, binding and illustrations, in all a handsome book. We recommend this volume to the student of medical man who wants the latest information on the subject. MORELL.

CLINICAL DIAGNOSIS. By *Dr. Rudolph Von Jaksch,* professor of Special Pathology and Therapeutics, and Director of the Medical Clinic in the German University of Prague. Translated from the fifth German edition by Archibald E. Garrod, M.A., M.D., F.R.C.P., London. Octavo, 602 pages, 172 illustrations, mostly in colors; cloth, $7.50. Philadelphia, London and Montreal: J. B. Lippincott Company.

SYPHILIS. By *Sir Jonathan Hutchinson, F.R.S., LL.D., F.R.C.S.,* Consulting Surgeon to the London Hospital, etc., etc. New and enlarged edition; with twelve colored and twenty-four black and white plates; nearly 600 pages. Cassel and Company, Limited, London, New York, Melbourne and Toronto.

BULLETIN OF THE ONTARIO HOSPITALS FOR THE INSANE. No. 4, Vol. 2; 102 pages. Editors: *C. K. Clarke, M.D., LL.D.,* and *Ernest Jones, M.D., M.R.C.P.*

This publication, which is printed by order of the Ontario Legislature, is devoted to the interests of psychiatry in Ontario and should appeal to those who are interested in this fascinating branch of medicine.

We acknowledge with thanks the receipt of a very useful, artistic and patriotic calendar from the house of Messrs. Charles E. Frosst & Co., of Montreal.

The "SPECTRUM," January issue, published by Messrs. Sherwin-Williams Co., Cleveland, O. This is one of the most artistic little booklets ever brought out. Its main object is to educate those who are contemplating some decorative changes in their abodes.

THE TWENTY-FIFTH ANNUAL REPORT OF THE NEW YORK POST-GRADUATE HOSPITAL. Also the Twenty-Eighth Annual Announcement of the Medical School (University of New York) has been received.

This is the most popular post-graduate school with Canadians, and in glancing over the list of matriculates we find many well-known medical men from Canada in attendance.

Those contemplating work in this direction will do well to request information from the Secretary.

We wish to thank the Editor of the "Post Graduate" for the coertesy of allowing us to republish lectures and clinics which appear from time to time, in the above. Those who are acquainted with the New York Post Graduate Hospital will appreciate this arrangement, as these clinics are given by gentlemen who are authorities in the branch in which they teach. We are fortunate in obtaining this privilege, and those who read the articles in this number will have an opportunity of judging the class of matter reproduced.

We suppose that every active medical man in this province who has receved our Journal regularly will form some idea of the publication which we are trying to furnish them with. Up to this time the Journal has been sent gratis as the organ of the Saskatchewan Medical Association. As we now issue monthly, we hope that every man in the Canadian West will forward his subscription at once. Those who do not comply will be taken from our mailing list.

Personals

Mr. Frank H. Holgate, representing R. L. Gibson, of Toronto, was in Regina during the first week of December, and this office acknowledges an extremely pleasant visit. Mr. Holgate was for over twenty years with the old house of E. Hooper & Co., King St. W., Toronto and known as one of the most experienced and efficient pharmaceutical chemists in Canada. Travelling through Western Canada in the interest of R. L. Gibson, Toronto, who is Canadian representative of Duncan, Flockhart & Co., Edinburgh, Mr. Holgate meets on his trip many familiar faces.

Dr. E. E. Meek has been reappointed Health Officer of the city of Regina for the year 1910, at a salary of $500 per annum.

Under the provisions of the recently enacted Public Health Act, the Government have created a Bureau of Public Health, constituted as follows:

Commissioner of Public Health—Dr. M. M. Seymour, Regina.

Sanitary Engineer—T. Aird Murray, Toronto.

Council of Public Health—The Commissioner of Public Health; Wm. J. McKay, M.D., C.M., city health officer, Saskatoon; E. E. Meek, B.A., M.D., city health officer, Regina; A. R. Turnbull, city health officer, Moose Jaw; F. W. Whybra, V.S., Prince Albert.

Doctors McKay and Meek are appointed for three years, and Doctors Turnbull and Whybra for two years.

On January 3rd, Dr. Elliott, M.L.A., Wolseley, was called to Winnipeg on account of the death of his nephew, Harry Elliott.

Ex-Sergeant George Burrows, formerly of the local police force, Regina, has been appointed as the detective of the College of Physicians and Surgeons.

Messrs. Chandler and Fisher, Limited, of Winnipeg, have outgrown their present quarters and announce their removal to more commodious quarters in the Keewayden Block, Portage Avenue East. This being only a short distance from their old premises and with practically a stone's throw of the centre of Main and Portage.

Obituary

RICHARDSON—Dr. James H. Richardson, first graduate in medicine at the University of Toronto and Professor of anatomy there for half a century, died at his home in Toronto on Saturday night, January 15th. He was one of Toronto's grand old medical men. He was born in 1824 and leaves four sons, Rodger and Charles at Winnipeg, George, an engineer working on the G.T.P., and Dr. W. A., who has charge of the medical work on the same railway at the Yellow Head Pass. He also leaves three daughters, Mrs. Ross Sutherland and the widow of the late Dr. Sutherland, both of Winnipeg, and Mrs. W. A. Freeland of Toronto.

OGDEN—At Toronto, January 4th. Dr. Uzziel Ogden, aged 82, a victim of paralysis. Dr. Ogden started his medical career at Aylmer, 35 years ago. He was a lecturer of physiology at the Toronto University until four years ago and had lectured to medical students for fifty years.

WILSON—At Edmonton, Alta., January 15th. Dr. H. C. Wilson died at Edmonton on January 15th. The doctor was educated at Upper Canada College, and graduated in 1878 from the Ontario College of Pharmacy. He entered Trinity Medical College in 1882, shortly afterwards moved to Edmonton. The doctor's popularity was shown by his being elected for the old North-West Council in September, 1885, defeating Frank Oliver, the first time that honorable gentleman ever suffered defeat. Dr. Wilson remained a member until 1888, when he was again returned, and was elected the first speaker. In 1891 he was forced to retire on account of ill health.

Chemistry has suffered a severe loss in the death of Dr. Ludwig Mond, who died recently in London. Dr. Mond was the inventor of many commercial processes, among them that for the manufacture of soda and ammonium.

Dr. William Henry Dallinger, the well-known scientist, died on December 9th, 1909, in his sixty-seventh year. The Rev. W. H. Dallinger, a master in microscopical research, and author of many works of science, including the re-writing of Carpenter's "The Microscope and its Revelations. He was a member of many scientific bodies, and at one time a president of the Royal Microscopical Society.

Therapeutics.

Adrenalin in a New Package

In addition to the one ounce vials in which it has hitherto been supplied Adrenalin Chloride Solution is now being marketed in hermetically sealed glass containers of 1 cubic centimeter capacity. "Adrenalin Ampoule" is the name used to designate the new package, and the solution is of the strength of 1 to 10,00 (one part of Adrenalin Chloride to 10,000 parts physiologic salt solution). In their announcement of the Ampoule Parke, Davis & Co. have this to say:

"Adrenalin Chloride Solution has become a necessity in medical and surgical practice. The most powerful of astringents and hemostatics, it lends itself to many practical uses and at little disk of injury in reasonably careful hands. Since the time of its introduction it has been marketed in ounce vials, and of the strength of 1:1000. Experience has shown, however, that a weaker solution is much more frequently required than the "Full strength"; and while it is generally an easy matter to dilute with water or normal saline solution, in certain emergencies an already fully diluted preparation is to be preferred. While the danger of deterioration from occasionally opening a vial containing a solution of Adrenalin Solution is not great, still, in consideration of the fact that a dose is needed now and then for hypodematic injection, it is believed that the small hermetically sealed package will be welcomed because of its greater convenience and security."

As will be apparent from th eforegoing, the Adrenalin Ampoule is intended for hypodematic use. It should be of great value in such emergencies as shock, collapse, hemorrhage, asthma, etc., or where prompt heart-stimulation is desired.

The Modern Tendency is to taken nothing for granted.

Ask the critics of Tyree's Antiseptic Powder to furnish as good a proof of the merits of the imitations and substitutes they offer as this. The bacteriological and comparative tests made by me of Tyree's Antiseptic Powder, were made from a sealed package purchased in the open market, and were duplicated three times with

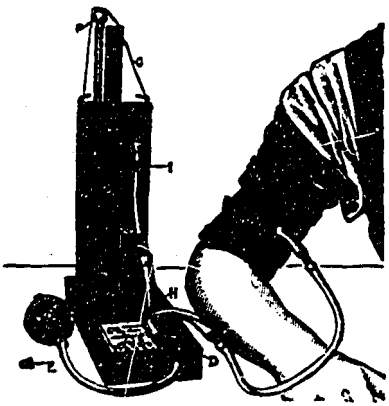
The results of these experiments show that the prominence given this compound is well founded, for the preparation responds to all the requirements of a first-class antiseptic and germicide, with practically no toxicity. This is certainly an advantage over hte standard antiseptics, such as mercuric bichloride, carbolic acid and formaldehyde.

W. M. GRAY, M. D.,
Pathologist Providence Hospital.
Microscopist Army Medical Museum.

Washington, D. C.,
Feb. 4, 1907.

Sphygmomanometers

In our last issue we gave a description of the Riva Kocci Sphygmomanometer as modified by Cook. We herewith describe two other models, the "Stein" and "Janeway" instruments.



The Janeway Improved Sphygmomanometer

This instrument employs the method of circular compression, introduced by Riva-Rocci and Hill, with the wide armlet, proved essential by v. Recklinghausen. The jointing of the manometer tube is copied from Cook, the use of an inflator from Erlanger. The apparatus is designed to embody in a portable clinical sphygmomanometer, which shall measure both *systolic* and *diastolic* pressures, every requirement for accuracy and substantiality.

This instrument is constructed to measure the pressure necessary to obliterate the pulsation of the radial artery in man.

Sphygmometer by John Bethune Stein, M.D.

It consists of a cylinder enclosing a spring:—at the lower end of the cylinder is a rod, by means of which pressure is exercised upon the nail of the finger which feels the pulse; at the upper end of the cylinder is a dial, the markings upon which are in centimeters and millimeters. The pressure exerted upon the spring by the rod below is indicated by the excursion of the hand on the dial and the pressure can be read in centimeters or millimeters of mercury.

We are indebted for the above descriptions to Chas. E. Dressor, New York City, who is the manufacturer.