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Original Communications.

THE SOFT MYOMA.*

BY DR. A. W. JOHNSTON, DANVILLE, KY.

Knowing full well that your election for this post of honor is not so much due to my own merit, as to the fortunate association with my beloved master, Lawson Tait, also having heard of your deep interest, not only in the practical, but in the abstruse sides of our science, I have decided to bring you a part of the work in which he and I were interested, but which to many societies of general practitioners would prove an insufferable bore; so that if any of you become fatigued with these physiological studies of the uterus, he must lay their infliction at the door of madame rumor, and not charge them up to me, as a sample of deliberate pedantry.

The subject, of which I wish to give only the natural history, is that of the "Soft Myoma," but please remember that I exclude all forms of sarcoma and carcinoma, and speak only of the soft benign growth of the uterus. Those of you who have kept up with the history of this subject, know that until a few years ago this form of uterine tumor was thought to be merely one of the secondary changes of the hard myoma, and that it was believed to be due entirely to a degeneration of the newly-formed muscular fabric which composes the ordinary fibroid so familiar to us all. A few years ago, however, this began to be doubted by some authorities, and what I will now attempt, is to bring forward proof, that from its very inception, it is an entirely distinct tumor, springing from a very different source, having separate histological and clinical histories throughout its course and widely differing terminations. As has been proved, long ago, the hard myoma is an homologous tumor of the uterine wall; the soft myoma being considered a totally heterologous condition; but what I now expect to prove is, that it is not a foreign tissue to the uterine body, but merely an homologous growth of the uterine lining.

That you may understand more thoroughly what my idea of this uterine lining is, I must refer somewhat at length to some papers, all of which form links in a chain, of which this article is only a part.

In August, 1881, I published a paper in the New York *Archives of Medicine*, on the "Origin of the Blood Globules." It was the result of a series of studies of the spleen, the tonsil, thymus and lymphatic glands, as well as the other adenoid structures, which are located along the alimentary canal. In making these studies, I believe I was the first to use the high power immersion glass in studying a development, which I then, for the first time, found going on in the ultimate fibres which compose these tissues.

Throughout them all, I found a new method of cell production—that is, by a process of growth of the minute clots within the fibre. The forming corpuscle bulges out from the thread-like matrix, increases its bulk and richness of granulation, until it finally separates from the parent thread, a fully grown lymph corpuscle. Though I sought carefully for months at that time, and I can now say the same as to years, I have never seen a lymph corpuscle bifurcate, except in an inflamed organ. By this means I sought to establish the fact, that in the adenoid tissues with this special method of development, was stored up material, from which corpuscular supply was constantly replenished, and that on their exhaustion, as is found in extreme old age, depends the senile atrophies, and many of the other wasting conditions of the aged.

Two years and a half ago, while doing Mr. Tait's pathological work, I saw for the first time a healthy specimen of the corporeal endometrium. You can imagine my surprise when I found it to be very closely related to my old friends of the adenoid group. Studying it faithfully, I tried hard to reconcile its condition to the then recognised theories about menstruation. Like all the rest of the world, I had been carried away by the doctrines in regard to the variations in blood pressure,

*Read before the meeting of the Ontario Medical Association, Toronto, June, 1888.

and while I had had no reason for opposing the views of the leading histologists of the past decade, like Dr. John Williams, and all others who had worked in my line in physiology, I had put one of the effects for the cause, and accepted their dogma, that the blood vessel itself, instead of being merely the means by which nutrition is brought to a rapidly growing tissue, is in reality the *source* from which that tissue springs.

I was peculiarly fortunate in my material, for I was frequently able to freeze and cut a specimen that Mr. Tait had removed from a living subject, before there was any possible chance for post-mortem changes to take place. Among these specimens, I obtained several menstruating uteri, whose conditions I could in no way harmonize with the views of menstruation, as taught by Dr. John Williams. Not satisfied with these specimens which, as some might have said, had already had pathological changes; through the kindness of the staff of the General Hospital in Birmingham, I was given free access to the immense mass of material which its dead house afforded, and for several months spent my leisure time studying the life history of the human endometrium. From this work I was convinced, that not only was Dr. John Williams wrong in his idea of the shedding of the endometrium, but that the endometrium itself, like the lymphatic gland, is another mass of adenoid tissue, whose function is to form the placenta. Like some other organs in the body, the hair follicles and the like it lies dormant for the first few years of extra-uterine existence, and like the thymus gland, finishes its course long before the rest of the economy is exhausted.

By a strange coincidence, just about two years ago, when I gave the results of this work to the British Gynæcological Society (without either of us having the slightest idea of the contents of the other's paper), Mr. Bland Sutton read a paper on "Menstruation in Monkeys," which, so far as it went, fully confirmed every idea which I had advanced in regard to the errors of Dr. John Williams, and all those who claim that menstruation destroys instead of purifying the endometrium. Being satisfied from its integral elements that I had a permanent adenoid tissue to deal with, the question at once came up, Where is its emergent stream which washes away its ripened products common to all other adenoid structures? The answer came at once—It is the menstrual discharge, and it is the spleen, and not the axillary gland to which it is most closely allied. In the herbivora, however, whose comparative anatomy I at once began studying, I found not only the same adenoid tissue, but a lymphatic apparatus which was capable of disposing of any possible amount of corpuscular growth which the cotyledons, under any circumstances, could produce. Thus showing at once that it is the erect position which necessitates menstruation; for with loose lymphatic network, necessary to the passage of a lymph stream, the erect position of the uterus could not possibly be maintained. The lack of this lymph stream also shows the necessity for the maternal placenta, being passed *in-toto*, and not being left to be absorbed, as is the case with the diffuse and multiple, and some forms of the single placentæ.

After these studies of the herbivora, I went more deeply into the comparative histology of the endometrium, the results of which were given to the British Gynæcological Society last June. It would occupy too much of your time to follow out at length the reasonings in that paper, but those of you who wish to see it will find it in the November number for 1887, of that Society's journal. The deductions which I draw from it are that *all* endometria are adenoid, but as there are great variations in the different forms of the placenta of the lower animals, there necessarily must be great differences in the structures of the organs which make them, and, further, that the same endometrium, particularly of the dog, goes through very radical changes, during the cycle of the rut, and that the causes for the widely different descriptions with which the world has been presented by different observers, of the same endometrium, is due to their examining it in different stages of the cycle of the æstrus. But for our present purpose, the principal thing that is necessary to know is, that from the ultimate fibres of the endometrium, no matter to what animal it may belong, there is a greater or less cell development constantly going on.

Last September, before the American Gynæcological Society, I reported a paper, which shows what the arrested development of this organ may accomplish, and what I now wish to give to you, is the picture which its one development produces. The first idea I ever had of the real nature of the

soft myoma, I got from a specimen which I helped Mr. Tait remove. Its history was that of most other such growths. Mr. Tait had diagnosed the tumor as uterine, but had half-way suspected pregnancy on account of its extremely soft, semi-fluctuating condition. After watching it, though, until the term should have been fully passed, he decided it to be a myoma, which must be removed.

Although he had watched the case for more than a year, when we had gotten the abdomen open, and exposed the tumor to view, he whispered across the table to me, "I believe it is a pregnancy still." After careful examination, we found it to be a soft myoma, involving most of the body of the uterus. An amputation at the internal os, not only saved the patient's life, but gave me a beautiful specimen. It contained no cysts of any kind, but was composed of a loose mesh-work whose interstices were filled with a fluid lymph, and from whose ultimate fibres a rapid proliferation was going on, so much, so that had I not known exactly where it came from, I would have thought I was dealing with a lymphadenoma.

As you all know, soft myomas are extremely rare, the only other one in which I ever came in contact, I removed successfully, a few months since. Like the one with Mr. Tait—the diagnosis could not be made. An exploratory incision for the relief of either a small ovarian tumor, a soft myoma, or a malignant tumor was done, and the soft myoma revealed in the wound. So extremely deceptive was the sense of fluctuation it gave, that after its removal, one of my assistants, whom I know to be a well-trained surgeon, was willing to wager almost any amount that the tumor contained a cyst. On splitting open, however, we found the same loose mesh-work, embracing many lymphatic spaces, which reminded one very much of the physical condition of a sponge. After cutting and freezing, I found much the same state of affairs as that described in Mr. Tait's specimens, the principal difference being in the presence of a greater or less number of muscular fibres distributed throughout the tumor. Many places, however, showed nothing but the myxomatous tissue, other places showed the young muscle cells of Billroth. In other places, where we had a rapid cell development, which were evidently originated from the ultimate fibres, some corpuscles seemed to be separating from these fibres and floating away in the lymph. Others, again, seemed to be taking on a spindle shape, and going directly on to the development of new connective tissue cells, and, so far as one can tell, to the development of a young muscular fabric.*

Any one who is at all familiar with mucous tissues, can tell at a glance to what class they all belong, and I do not think it would take a great deal of microscopical training for one to catch the relationship between these tissues, and having established this, my object is almost accomplished. For it is the kinship of the parenchymæ of the endometrium and the soft myoma which adds a pathological proof of the adenoid theory of the normal endometrium. The sponge-like interstices give free room to the large amount of œdema which these tumors contain, and it is its presence that gives the deceptive sense of fluctuation which so frequently places the abdominal surgeon in uncomfortable situations. Where this œdema comes from, I think is perfectly plain.

We have known for a long time that the lymphatic apparatus of the human uterus is not very rich, and that it is the discharges through its cavity which fills the place of the large lymphatic trunks, found in the lower animals. When the endometrium begins to develop backwards into the muscular wall, as this tissue for its well being requires a greater amount of lymph than is necessary for the muscle itself, at once there begins a disproportion between the quantity of lymph contained in the uterus and its normal outlets. As the tumor grows, this inequality becomes greater and greater, the result soon being a damming back of lymph within the capsule of the rapidly growing tumor. One of the consequences of this is the formation of lymphatic retention cysts, and this, I believe, is a true history of most fibro-cystic tumors of the uterus. I have never had the opportunity of examining one of these tumors, and cannot say positively whether they embrace more than one condition or not, but am prepared to believe that they are produced by two distinct histological conditions, this being one of them, and the other I would look for in the abnormal or unusual development of some of the uterine follicles. As I have shown, the interstitial tissue of these tumors is exactly that of the endometrium, and why may it

* Here the Dr. showed a plate which, we regret, not to be able to produce.

not contain uterine follicles just as it does in its normal position? These follicles may be simply out-growths from the normal ones, dipping further back between the muscular bundles, just as the mucus tissue does. Or, I say it deliberately, they may spring directly from this mucous tissue itself. This, I know, to all of you sounds like rank heresy, and to some it may appear "The wild imaginations of a fevered brain," for Remak's law has been the statute by which the whole of a generation has been judged, dissensions from which have been visited with the most dire punishments.

Even as a student I was not satisfied with its dogmas, and for ten years most of my leisure time has been spent in the quiet investigation of its claims. Eight years ago, as my old sketch book shows, I had the proof of its fallacy, but then did not understand it well enough to know even what this proof meant. But, "Led on through ways we know not of, and by means we know not how," the discovery of the adenoid nature of the endometrium has helped me to understand those old drawings, and by some studies which are yet unpublished, I have proof positive, that as taught by the last generation, Remak's law, while it has great semblance of truth, still in its fundamental principles is entirely wrong.

I take this first opportunity since my perfect satisfaction of its errors, of putting myself on record as a rebel to the iron-clad system, which its dogmas have built up; but to go deeply into this subject would take entirely too much of your valuable time, and I must leave it with the statement that I hope soon to publish the whole in a separate paper. I think, however, I have satisfactorily shown that the soft myoma is much closer kin to the mucous polyp than to the tough fibroid of the uterine wall, and it seems to me, that in our management of them, we will have better success, if we act in accordance with these views; for I cannot believe, until I have seen better proof than has so far been advanced, that the electric current can have much effect in the absorption of these tumors, for as the lymph forms a very large proportion of their bulk, its removal by tapping, as recommended by Keith, will give considerable relief, and where the patient is near the menopause this is frequently all that is necessary to be done; but in the truly cystic uterus, we cannot hope to gain much if we do not extirpate the whole of the diseased tissue.

In closing, gentlemen, let me thank you, not only for the distinguished honor you have conferred on me, by asking me to be present at this meeting, but also the courtesy with which you have listened to my weak efforts to draw your attention to the tissues themselves, and for a short time to relieve your mind of the wearying search after that "Will-o'-the-wisp," the harmless germicide. All honor to the biologists who are working out and classifying the various orders of the lower grades of life, and deserving of our greatest praise, are those who are showing us the true causes of fermentations, suppurations, and the like death-dealing processes; but it does seem to me that we are not only in danger of going too far in their pursuit, but that we have almost lost sight of the vital force, and are coming to look on the human body very much as we do on the inanimate contents of a gelatin test-tube; so that if by these descriptions of the varying tissue changes I have recalled to your memory that, opposed to these little creatures, there is a force, which if properly taken care of, is capable of the most wonderful conservatism in life, and that it is our duty under all circumstances to most jealously guard it, I will feel that my efforts have not been in vain.

Once more, Mr. President and gentlemen, I thank you, and hope than as the years roll by, this our first introduction will ripen, not only into the respect which fellow workers hold for each other, but that it will cement the esteem which our sister countries and kindred nations now hold for each other.

TYPHOID FEVER.*

BY CHARLES SHEARD, M.D., M.R.C.S., ENG.,
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It is fair to assume when the President of this Association requested me to write a paper upon the "Ravages of Bacteria in Blood and Tissues," that he with characteristic liberality placed the whole field of medicine before me that I might select of what would, in my humble judgment, be most profitable for the Society's consideration. I hope none will be disappointed when they learn they are invited to a discussion upon so old a subject as Typhoid Fever. Neither is it intended to occupy your time in studying the character, habits and

*Read before the meeting of the Ontario Medical Association, June, 1888.

features of those minute organisms known to be materies morbi of this class of disease; but rather would I claim the liberty of dealing with some obscure features in the history of this disease, the study of which may be of service to us and especially in a clinical relation. I invite your attention to the subject of typhoid fever, confident that in it we have much to learn and much to unlearn. Let us stop to consider the conditions ordinarily implied in speaking of typhoid fever—these are, as I understand, them, (1.) Ulceration or inflammation of Peyer's patches and solitary glands. (2.) Inflammation of the *mesenteric glands*. (3.) Softening, and often pulpy degeneration of the spleen; and I state, that save in those cases where death occurs from the direct poisoning of the patient with the materies morbi of typhoid during the first ten days, without the conditions marked, the case is not typhoid, and *I would further state that such abdominal lesions cannot exist without abdominal symptoms.*

It is my belief that many cases of septicæmia of various degrees of severity, and from various causes are mistaken for typhoid, chiefly because we rely upon what is so unscientifically called the "typhoid state." I would briefly refer to a case which I had under my care in the Toronto General Hospital, and where I made such a mistake. The patient, Lelia Whimp, was under my care for the treatment of typhoid for seventeen days, during which she had marked typhoid symptoms, headache, furred and brown tongue, epistaxis, low delirium, and the condition ordinarily seen in typhoid. At the end of seventeen days her typhoid symptoms left her, and marked septicæmic manifestations replaced them, for a subsequent period of twenty-five days, when she died, and I made an autopsy of the case. Confident that I would find the characteristic typhoid lesions, and probably in them trace a cause for subsequent septic inoculations, I searched the abdomen carefully and was disappointed; no lesions existed, no evidences of a healing or healed ulcer were to be found; I searched the large bloodvessels and heart, for a cause of of the later septic manifestations; I searched the brain, hoping that some hidden cerebral abscess might explain away my puzzle, but all was in vain. I regarded the case with grave disappointment, and about to leave it, I caught sight of a slight fulness in the right ankle joint; on opening this I found it filled with the products of a pus-forming inflammation, and on pushing my examination to other joints, I found the right hip and the opposite knee filled with sero-purulent matter and the structures of the joint destroyed. I may say that during life there had been nothing complained of to call attention to the joints. I now present you the temperature chart, which I claim, during the first seventeen days of her illness, much like as one would expect it to be in a typhoid case; here was evidently a septicæmia mistaken for typhoid, by relying on the so-called typhoid state and the temperature chart.

To go back to my original statement, that after the first week abdominal lesions and abdominal symptoms must exist to prove typhoid. I know this will be opposed to the feelings of some, who recall cases of mild typhoid, without such, or any symptoms—the so-called typho-ambulans; but I believe such cases are mistaken diagnoses, and I would dispute the existence of such a thing as typho-ambulans. In support of this I will refer to one of several cases I have observed.

This is the case of Alice Wilson, admitted as typhoid into the Toronto General Hospital. She had no marked *abdominal symptoms*, but other indications of typhoid, brown and coated tongue, headache and epistaxis, lumbar-pain, diarrhœa, and the chart which I show you, and which you will see is from Feb. 3rd to March 3rd, is closely similar to a typhoid chart. Allow me, in criticising this chart, to state it is more like typhoid than usual, because, not only does it show evening rise and morning fall, but it shows a definite rise to a certain height, which was, for a certain time, maintained, followed by a gradual lowering to the normal and a fading away by lysis, as we know typhoid does. What I ask would be any one's diagnosis of such a case, limiting his observations to the first month. I feel it would be typhoid; but this patient, as you will see by her chart, again relapsed—many typhoids relapse—and suffered from recurring febrile attacks. She was allowed out of bed, and walked the ward suffering from March 3rd, with recurring attacks of typhoid, typho ambulatories. Early in April she developed marked symptoms of tubercular disease of both lungs, and physical signs, which revealed only too clearly the disease as pulmonary phthisis. In the middle of May last, one month after leaving the

hospital, I again examined her chest to find the presence of cavities distinctly indicated, and my patient soon to succumb to pulmonary disease. Here is a case where I have no doubt the onset of acute tuberculosis was mistaken for typhoid. I could invite your attention to other cases of tuberculosis where the tubercular disease has been attended by marked nervous symptoms, chronic meningitis with effusion, where the symptoms so closely resembled typhoid fever that it was impossible to distinguish the disease except by post-mortem examination.

I would lay stress upon the error made by so many in relying upon nocturnal exacerbation of temperature as an indication of typhoid. In talking over cases among ourselves, how we say, "I think the case is going to turn out typhoid, he had a rise of temperature last night, and his temperature is down this morning"; or, as a physician once said to me over a case where I held the diagnosis of typhoid in dispute, "Well, the temperature chart shows typhoid." Let me assert that no temperature chart *can* show typhoid. Look at the first twenty-one days of Alice Wilson. Look at Chart 3, which is that from a man who had acute pleuritis with effusion. Look at Chart 4, from a case of true typhoid, and forever disabuse your mind of the thought that there is any actual diagnosis value, so far as typhoid is concerned, in the temperature. Do not misunderstand me, gentlemen. I am not saying the clinical thermometer is useless in this disease. It can distinguish the difference between real and feigned disease; it can show you the degree of acuteness of your case; it can predict a hemorrhage as faithfully as the barometer can predict a storm, but it cannot write the diagnosis for you; it cannot supply brains.

I would say that sudden rises of temperature, followed by a sudden fall, would indicate in the system as it would out of the system, *rapid oxidation*. In the former case, the rapid oxidation of some morbid material which has entered the blood, or which has induced rapid oxidation of the normal elements of the blood and tissue, and I think this material will be found generally to be pus, or dead tissue element. What are the most reliable symptoms of typhoid fever? I assert, again, they are abdominal symptoms; they are tympanitis, pain in the right iliac fossa, gurgling diarrhœa, sometimes a rash; and, at the risk of appearing arbitrary, I will, with your permission, refer to some of these symptoms.

Tympanitis.—In this, I believe, we have the one symptom which is worthy the most special attention; it is not only of diagnostic value, but of the greatest value in prognosis. This tympanitis, in bad cases, comes on early in the attack, about the third or fourth day; the abdomen is then full, hard and tense, the recti muscles rigid, the percussion note drummy. Such cases run the worst course of any in typhoid; in these the prognosis is the gravest, and you can readily see the reason. I think you will admit that after you have passed the first ten days, the danger in typhoid is from one of three causes, viz., *hæmorrhage*, *perforation*, or *asthenia*. Now, if you have the bowel distended with gas, ad-maximum, you have clearly the most favorable condition possible for both hæmorrhage and perforation. The bowel can be paralyzed by distention, leaving its contents to irritate and aid the process of destructive inflammation. If the walls of the intestinal vessels have been weakened, they are more prone to rupture, because of the great distention of the bowel; and the ensuing hæmorrhage more severe from the same cause.

Regarding perforation, I believe the gas in the bowel is more often the cause than the process of ulceration. If you have seen many perforations from typhoid you will remember that most of them were perforations like pricks with a pin, or a trifle larger; the solitary gland had ulcerated away; the muscle had been irritated by the contents of the bowel remaining in a fermenting state in contact with it; the secretions had been suppressed, because of the same distention, and the point thinnest in the bowel gives way under the pressure. Now, is the gas always in the intestine? I think, in many cases, the peritoneal sac is enormously distended with gas. We see in cases of intestinal obstruction, enormous distention. In such cases we have no hæmorrhage, no perforation, and our patient dies, in their absence, presumably from distention. I am of the opinion that abdominal distention can cause death from mere pressure upon the sympathetic nervous system, reflexively slowing the heart's action.

Pain in the abdomen is pretty constant in typhoid, and its absence may be regarded as suspicious, the pain is often nearer the umbilicus than in

the right iliac fossa; but if we have much ulceration going on we can scarcely avoid having pain, especially if the ulcerative process reaches the serous coat of the bowel, which is here the sensitive membrane, the same as the pleura is the sensitive membrane of the lung, but I can readily believe that in some cases when the lesion is more of a general inflammation and superficial, more of an enteritis pain may be absent.

As to the rash of typhoid, it is an unreliable symptom. I have seen it so marked that it resembled rubeola, save in the crescentic outline of the groups, whilst on the other hand, careful watching failed to reveal a single spot, and in these cases where the rash is typical, the symptoms are generally so well marked, that one does not require the appearance of the eruption to confirm the diagnosis. I think it may be stated generally, that it is in the severer forms of typhoid, the rash is most typical, whilst in mild cases it is most frequently absent.

Another point worthy of attention, is whether or not the typhoid poison may not produce some other disease. In many cases where typhoid appears to be a particularly severe type, the manifestations in the nervous system are also very severe, and perhaps the only marked indications of the disease. If we take those cases, where after the first day or two of illness, coma vigil, or acute delirium marks its advancement, we will find there is little tendency to severe abdominal lesion or symptom; although the patient may linger on for weeks, early death is the rule in these cases. Again, everyone must have noticed the special liability to severe pneumonic complications, where the type of the disease is severe; and this pnumonia also appears early, frequently terminating the case before the abdominal disease has progressed very far. Those cases where pneumonia comes on late—as a pure sequela—are in my experience, rarely well marked cases of typhoid, and in many of them I think there is room for doubt as to the correctness of the diagnosis of typhoid. I remember a case of consolidation of one lung, coming on at the sixth week, during a typhoid and terminating the case, but on post-mortem examination the consolidation proved to be not pneumonic, as thought, but tubercular, and limited to one lung. I do not wish to state that pneumonia cannot be a sequela to typhoid, but that it is more frequently an early than a late complication. Again I believe it is quite possible to have a septicæmia arise from typhoid. I mean a septicæmia similar in character to that due to direct pus infection, and am of the opinion that many lingering relapses in typhoid are from this cause. We know it is by no means rare to find a suppurating mesenteric gland near to a typhoid ulcer in the bowel, and there can be no reason why pus there should not enter the circulatory system. Again, where ulcerative endocarditis follows upon the disease there is generally evidence of irritating or septic material having entered the blood vascular system.

As to the lesion of softening and pulpy degeneration of the spleen, this is found in many other diseases besides typhoid, and in the latter is often absent; softening of the spleen is the result of high temperature, and should the temperature be low throughout, little change in the spleen need be looked for; it is one of the earliest organs to undergo pyrexial softening, and I do not think it is more predisposed to such change in typhoid than in many other diseases characterized by continued elevation of temperature. It is claimed by some that such tissue change can be entirely prevented by the continued administration of antipyretics, but upon the subject of antipyretics light has yet to dawn; it is a simple matter to reduce the temperature in any disease, but quite another thing to know if such reduction is beneficial; those, who in the administration of antipyretics have in mind the lowering of the temperature *only when its continued elevation threatens the integrity of tissue*, have grasped the great therapeutic principle underlying their employment, and I would question the soundness of that principle, commonly practised, which interperets the elevation of temperature as fever and the lowering of temperature as its reduction. If diseases of the zymotic type are changes involving the oxidation of morbific matter, I cannot but think that the lowering of temperature may lead to the storing up of that material and in the end to a greater pyrexial increase.

Thus would I outline some of the difficulties which beset us in our studies of typhoid fever, confident that this disease so common in its occurrence, is less thoroughly understood than many other diseases of less frequency, and as Charcot devolved out of those cases commonly called ataxic

many other vastly different states of the nervous system, so, by careful study in the future, may this disease be resolved into more simple and primitive elements.

To sum up, gentlemen, what I wish to state is briefly this :

1. That save in those cases where death takes place from the action of the typhoid poison directly on the nervous system, there must be intestinal lesion to prove the existence of typhoid.

2. That with such intestinal lesion we will have distinct abdominal symptoms.

3. That acute tuberculosis and septicæmic states are often mistaken for ordinary typhoid.

4. That evening rise and morning fall of temperature, as a proof of the existence of typhoid, is deceiving.

In conclusion, let me express the hope that none will think too severely of me for not more closely following my instructions from the President of this Association to discuss "The Ravages of Bacteria in Blood and Tissues." We now trace almost every pyrexial state to its own peculiar germ, and I am convinced that a paper from me, dealing only with the habits, customs and reproductive methods of all of these various bacteria would, whilst, perhaps, interesting to a section of this meeting, not attain to any particular aim. On this account have I claimed the privilege of drawing your attention to a special disease which has been proved beyond question to be of bacterial origin, and if this short paper may evoke from those before me an expression of their various experiences in typhoid fever, I feel sure the time of this Association will have been well spent.

SAYRE'S "SHORT HIP SPLINT" AS AN EXTENSION APPARATUS IN FRACTURES OF THE HUMERUS.*

BY DR. C. M. SMITH, ORANGEVILLE, ONT.

Owing to the pressure of professional duties, I have been unable to prepare the paper which I proposed to present, and shall merely crave your indulgence for a few moments, while I explain the application of a well-known splint to another purpose than that for which it was originally intended by its inventor. The patient, one of several on whom I have applied a similar apparatus to the one shown, sustained a compound comminuted fracture, one and a-half inches above the condyle of the humerus, separating the capitellum from the trochlear surface and both apophyses from the shaft—the so-called T fracture. The accident happened on the 8th June, 1886, and was caused by the blow of a crank on its downward revolution, while the elbow rested in a bent position on a wooden framework projecting slightly over it at the same time.

This variety of fracture is one frequently followed by the "gun-stock" deformity, in which the external portion is tilted forward with its articulating surface directed forwards, and unites with the shaft and internal trochlear portion, in such a position as to cause anchylosis of the joint, with a marked prominence in the flexure and projection of the olecranon and insertion of the triceps backwards, so that the latter muscle describes a marked curve in its lower portion, with concavity posteriorly, while the joint remains fixed at an angle of about 140°. This occurs more frequently in youth, owing to the fact, that while ossification commences during the second year in the radial portion of the articulating surface, it does not appear in the ulnar portion until the age of twelve. Moreover, while the internal and external condyles ossify respectively at the ages of five and thirteen, the external condyle and articulating surface unite first, and it is not until the age of sixteen or seventeen is reached, that they unite with the shaft. The internal condyle does not unite with the shaft until the age of eighteen.

The wound in the soft parts was situated on the anterior aspect of the arm, about three inches above the joint, and admitted the index finger. The fragments were adjusted, an anterior and posterior concave, rectangular splint, made of tin, applied; a shoulder-cap, similar to the one now exhibited applied, with a perpendicular extension overlapping the upper arm of the elbow splint.

Extension was secured by attaching over all, along the outer aspect of the arm, the Sayre's splint, converting the perineal into an axillary pad and securing the swivel iliac counter-extension pad to the loop in the shoulder-cap. The strap was buckled with moderate firmness around the posterior aspect of the arm, above the elbow,

* Read at the meeting of the Ontario Medical Association, Toronto, June, 1888.

while the semi-circular steel band afforded the lower *point d'appui.*

Subsequently large portions of the elbow splints had to be removed at the edges and under the elbow, in order to allow irrigation and the application of iodoform dressings. Extensive sloughing over internal condyle and olecranon ensued, and the destruction of osseous and soft parts was so great, as to allow the carbolized solution free passage from the site of the original wound through the posterior and inferior openings.

I was ably seconded in the attendance and subsequent dressings of the limb by Dr. Carbert and his son, to whose faithful services the saving of the member was in a great measure owing. The patient was ill-nourished, of a scrofulous diathesis and situated in the midst of most unfavorable surroundings. Owing to these circumstances the prognosis was for a long period doubtful, and amputation was seriously discussed more than once. However, by strict attention to the sinuses and a proper course of constitutional treatment, the condition of the parts warranted the removal of the splints in five weeks from the date of injury. Passive motion was then attempted, but the patient, who had all along proved incorrigible, would not submit to the process.

While the difficulty of maintaining extension is considerable in all oblique fractures of the shaft of the humerus, it is still greater in compound fractures, especially those occurring near the articular extremities. In several of my early cases I adopted the plan recommended by my old friend and classmate, the Secretary of the Association, and placed the limb in a position of full extension. While this plan secured apposition of the fractured ends in cases of injury situate in the lower fourth of the bone, it necessitated *bisement forcé* subsequently, in order to secure a useful joint. I have no doubt my brother practitioners from the rural districts will uphold me in this statement, that such an operation will be persistently described as "breaking the bone over again," and does not tend to elevate the surgeon's reputation. Moreover, with the anchylosis in a position approximating a right angle, passive motion can be supplemented by active efforts of the patient, made in carrying weights, which may be gradually increased as time progresses.

I should have been pleased had it been possible, to present to your notice another case, where the patient was a farmer of advanced years, residing some distance from the town, and in whom the fracture occurred about the junction of the middle with the lower third of the humerus. The result which followed the means adopted and described in this article, exceeded my most sanguine expectations.

I had nearly forgotten an important precaution which must be observed, namely: in order to prevent angular deformity and risk of false joint, the forearm and lower fragment must be secured in a position as nearly as possible corresponding to a right angle; otherwise the extension applied would force the lower fragment backwards.

If I shall have succeeded in making any suggestion which may advance the cause of conservative surgery, I shall deem the object of this paper attained.

Correspondence.

OUR NEW YORK LETTER.

From our Own Correspondent

NEW YORK, July 23rd.

July and August are quiet months in medical circles in this city. The meetings of the various medical societies are discontinued, the Colleges are closed, and most of the leading medical men are off on their vacation. New York, being the medical centre of this continent, something relating to her medical societies, hospitals, etc., may be interesting to your readers. There are thirty-six societies devoted to medicine and its branches in the city. The largest and the one most representative of the whole profession is the Academy of Medicine, whose building is at 12 West 31st Street. The building is centrally located, large, and well adapted for its purpose. On the first floor are two large rooms in which the meetings of the different sections are held. On the floor above this is the library, an excellent one containing some 27,000 volumes, and which is rapidly increasing in size. On the third floor is the reading room, where are about 200 medical periodicals from all over the world. Both the library and reading-room are open to the public, as are also the meetings of the society. Owing to the fact that mostly all doctors in New

York are specialists, or devote themselves more or less to special branches, the Academy is split into ten sections, each section devoted to a specialty, and the members attaching themselves to the section they are most interested in. Dr. A. Jacobi is President of the Academy. Each section again has its own President, and corps of officers, and meets once a month. There are two general meetings a month. These meetings, together with those of some of the other societies, who meet here, make it so that there is a meeting almost every evening, and as the papers are always good and the debates interesting, the Academy is well attended.

There are in this city something like 113 Homes and Asylums for different classes of people,—homeless, orphans, insane, etc., and 49 Hospitals, and 26 Public Free Dispensaries. Lying to the East of the city and a part of the corporation, are a number of islands, splendidly adapted for the purpose they serve. North Brothers Island, to the North-east, affords a place of quarantine for small-pox and typhus. On Randall's Island are Idiot Asylums, and Orphan Homes. On Ward's Island are the City Insane Asylum with 1800 male inmates, The State Emigrant Hospital with 1000 beds, and the Homœopathic Hospital. Then on Blackwell's Island is the largest hospital of the city—Charity—with 1000 patients of all diseases. This hospital is best known for its venereal and skin diseases, of which there is a very large service. Among the hospitals in the city the largest is Bellevue, with 800 patients of all kind of diseases, excepting contagious; and although not so well equipped as some of the other hospitals, it has the most varied service, and affords clinical material for all three colleges. The New York Hospital is probably the finest, and is the most richly endowed hospital in the city. It has a good, large operating room, which is not the case with most of the hospitals, and a good surgical service, so that a good place to see operations is here. Roosevelt, opposite the College of Physicians and Surgeons is another of the wealthy and modern hospitals, has 170 beds and is built on the pavilion plan. Among the hospitals for special purposes, is the Woman's Hospital, 170 beds, magnificently equipped, and where gynæcological operations can be seen at almost every hour. Students and practitioners are admitted to the operations of these and of mostly all the other hospitals and dispensaries.

In New York there are over 2,000 physicians, besides a large number of Homœopaths and Eclectics, and it is not an uncommon thing to see the shingles of three and four doctors in one house. Incomes ranges from nothing to one hundred thousand dollars—a large number of the former, and one doctor, an eminent gynæcologist is said to receive the latter amount from his profession. A young doctor, commencing practice, pays for his office and bedroom, from $500 to $1200 a year rent, according to the locality of the neighborhood he lives in. Owing to the large number of dispensaries, and the rivalry between them to get large classes, the clinical material to be made use of is enormous. Nor are the patients who regularly attend dispensaries poor. Probably one half of them could and should pay for medical attendance, but because of the anxiety of attending physicians to build up large clinics, it is indeed rare that a patient is turned away because of the silk dress or seal skin coat she wears. This is all very well for the attending physician and students, but not so agreeable to the young doctor trying to pay a portion of his rent out of his income.

Among the better families, a trained nurse, in time of sickness, is just as indispensable as a doctor. Within the past few weeks, a training school for male nurses has, through the liberality of Mr. D. O. Mills, been opened in connection with Bellevue Hospital, and woman's particular field of labor is being invaded.

CANUCK.

MUTUAL DEFENCE FUND.

To the Editor of the CANADA LANCET.

SIR,—In a recent issue of your journal, I notice that several medical men throughout the Province had contributed to the "Leslie Fund," which is in itself very praiseworthy; but could not a fund be started for the defence of medical men who are unfortunate enough to be involved in such cases? I expected that the Medical Association, which recently met in Toronto, would have acted on the suggestions advanced a year ago by Dr. W. H. Henderson, of Kingston, the worthy President of the Association for '88, and organize a fund for mutual defence; but so far I have not seen that any steps were taken in that direction. In support of these suggestions, would it not be practicable for the College of Physicians and Surgeons, to

whose fund we equally contribute, to put a certain amount aside, as a sort of sinking fund, to be used in the defence of any of its members when cases of malpractice are brought against them?

The College is fast becoming a wealthy corporation, and in what better way could it show interest in its members than by devoting a certain amount for the above purpose? We would then feel individually, that in the Council we have a friend that is willing to stand by its members, for, as instanced by the case of Dr. Leslie, any one of us is liable to be made the defendant in a similar case, although all proper care and skill have been exercised.

There are, no doubt, cases of negligence and carelessness shown by some practitioners, who perhaps get but their just deserts by being involved in an action; but it is not for the defence of such that the fund would be used; let money be paid out of the fund only after a recommendation to that effect has been brought in by the committee appointed for the purpose of investigating the cause of action, whether the physician had taken all reasonable care and shown reasonable skill in handling the case.

By such action on the part of the Council, the cost would be shared equally by each member, and would amount to very little; if necessary, an addition to the annual fee could be levied.

Thanking you for the space in your valuable journal, I remain, yours,

ALEX. FORIN.

Collingwood, June 28th, '88.

Selected Articles.

REMARKS ON WHITEHEAD'S OPERATION FOR HÆMORRHOIDS.

BY ROBERT F. WEIR, M.D., NEW YORK.

Last year, in giving my experience of four months' operative work at the New York Hospital, I reported that after trying Mr. Whitehead's plan of operating for hæmorrhoids I had become dissatisfied with the procedure, and had abandoned it in favor of the older and more extensively tried ligation method of Allingham. I beg again to report that after having tried Whitehead's method according to his more recently elaborated plan, I now desire to reverse my judgment, and to speak in favorable terms of the operation.

Mr. Whitehead's first paper on "The Surgical Treatment of Hæmorrhoids" (published in the *British Medical Journal*, February 4, 1882), describes the operation, which he had then practised for nearly five years, somewhat as follows: After stretching thoroughly the sphincter, the hæmorrhoidal masses, involving the whole circumference of the lower bowel, were mapped out into four irregular and unequal lobes. These were divided into four segments by longitudinal sections in the axis of the bowel, and in the furrows marking the intervals between the several lobes. This was accomplished without the loss of any blood. Each portion was then grasped in succession by a ring-forceps and dissected with scissors, at first transversely from the anal margin, and then the dissection was continued upward in the cellular plane to the highest limits of the hæmorrhoidal growths, in some cases to a distance of an inch and a half. Each segment was thus converted into a quadrilateral, wedge-shaped mass, the base below consisting of the hæmorrhoid, and the apex above of the healthy mucous membrane of the bowel. The mucous membrane at the highest point was next transversely divided, leaving the hæmorrhoids simply attached by loose cellular tissue, and the vessels proceeding from above and supplying the mass below. The forceps containing the hæmorrhoids was then twisted until this connection was severed, and the hæmorrhoids then removed. The divided surface of mucous membrane was next drawn down and attached by several fine silk sutures to the skin border at the verge of the anus.

The other portions having been treated in the same manner, the operation was completed.

My first series of operations was undertaken after perusal of the above directions. I did not find that it was easy or at all satisfactory to attach the divided mucous membrane to the verge of the anus, and perhaps from my defective appreciation of this operation I do not fairly carry out its details into thorough effect. It was, therefore, not until Mr. Whitehead had published in the *British Medical Journal* of February 26, 1887, an article entitled "Three Hundred Consecutive Cases of Hæmorrhoids cured by Excision," that I learned better how to operate according to his method, which he then more completely detailed in the following words: "After the sphincters have been thoroughly paralyzed by digital stretching, by the use of the scissors and dissecting forceps the mucous membrane is divided a short distance from its junction to the skin, for it is very important," he says, "that no skin should be sacrificed, however redundant it may appear to be." In this second paper it will also be observed that the quadrilateral section of the hæmorrhoidal masses has been abandoned, and exsection of the lower portion of the rectum is accomplished *en masse*. The further steps of the operation are thus conducted:

The external, and commencement of the internal,

sphincters are, after the liberating cut about the anus, exposed by a rapid dissection, and the mucous membrane and attached hæmorrhoids, thus separated from the submucous bed upon which they rested, are pulled bodily down, and divided points of resistance being snipped across, until they are brought below the margin of the skin at the anus. The mucous membrane above the hæmorrhoids is now divided transversely in successive stages, and the free margin of the severed membrane above is attached, as soon as divided, to the free margin of the skin below by a suitable number of sutures. The complete ring of pile-bearing mucous membrane is thus removed in successive snips. The bleeding vessels throughout the operation are twisted when divided. The operation is done as is usual in the lithotomy position. Before the wound is closed iodoform is blown in between the raw surfaces. For the stitches carbolized silk is used. These are not taken out. They are allowed to come away of themselves without further interference. In the three hundred cases reported by Mr. Whitehead not a single death or instance of secondary hæmorrhage, or any complication, such as ulceration, abscess, stricture, or incontinence of fæces has occurred.

Since last October I have had occasion to resort to this operation in six severe cases of hæmorrhoids. The first occurred in a man, aged thirty-two, who had had hæmorrhage from the rectum, to a greater or less extent, for nearly ten years, with occasional intervals of freedom from the loss of blood. On October 28th, an operation according to Whitehead's method (see Figs. 1 and 2) was done, with the removal of nearly three-quarters of an inch of the entire circumference of the rectum, which con-tained throughout evidences of hæmorrhoidal changes, marked in four places by swellings, which, prior to the removal, were as large as a hickory-nut, and in other parts by numerous varicose veins of varying size. At first there was some difficulty in dissecting up the mucous membrane from the protruding pile, and, in fact, this cannot be done, as the hæmorrhoid involves the mucous and submucous tissues. It is necessary to go somewhat through the pile, looking out carefully for muscular tissue, and keeping to the inside of this until the mucous membrane, recognized by its lighter color, is reached above the pile region. After this latter membrane has been found its separation from the muscular tissues is very easy, only an occasional snip of the scissors being required to detach adhesions, muscular or otherwise. Much less pain was experienced after this operation than is often observed after the operation of ligating piles.

On the eighth day the line of suture was entirely healed. The stitches were not removed, but were allowed to come away of themselves. A week later he was discharged from the hospital perfectly well, with a clean and well-shaped anus, only one or two stitches being still found attached to the skin. These, however, were not troubling the patient. He was seen several months later, and the anus presented a perfectly satisfactory appearance.

The second case was met with in a man, aged, thirty, whose hæmorrhoidal protrusions occurred

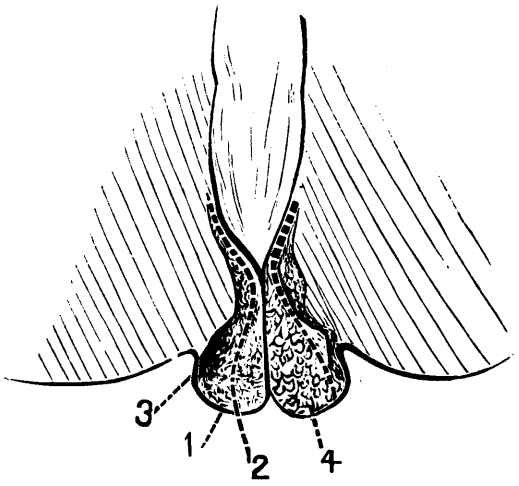

Fig. 1.—1, Muco-cutaneous junction, exaggerated; 2, line of incision, a short distance from muco-cutaneous junction; 3, external sphincter muscle; 4, protruding pile.

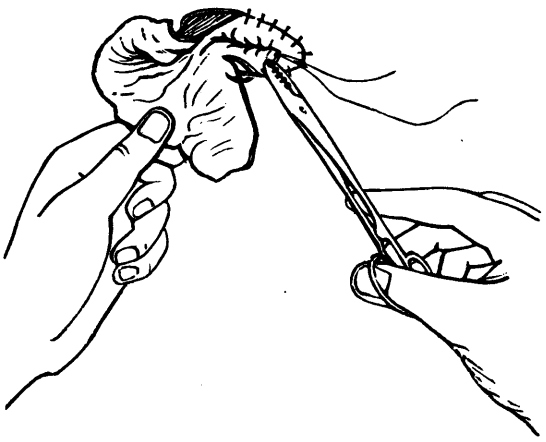

Fig. 2.—Mode of cutting off pile-bearing mucous membrane and stitching it in repeated sections.

one year ago after straining at stool. They have continued at times to bleed. Associated with these was a painful sensation in the rectum. By examination a circle of moderate-sized hæmorrhoids was seen extending all around the lower edge of the rectum, two of which were ulcerated.

On November 5th, Whitehead's operation was performed according to the manner above described. Nearly an inch of the rectal mucous membrane was removed. Bleeding vessels to the number of

two or three only required to be twisted. The mucous membrane was cut away half an inch at a time, and stretched to the skin by interrupted fine black silk sutures, and so on until the whole circumference of the bowel was removed. The patient progressed to recovery without any special pain or reaction; urinating voluntarily accomplished throughout. On the seventh day after the operation the bowels moved without pain, and on the twelfth he was out of bed and walking about. The stitches were removed as the wound was entirely healed, and he was discharged from the hospital on November 23rd.

The third case was a man, aged forty-eight, who in addition to his having hæmorrhoidal swelling of considerable size, just within the sphincter, which protruded and gave rise to frequent hæmorrhages, and to a certain amount of pain, had also sensations of uneasiness higher up towards the top of the pelvis, with discharges at stool of rather small tape-like fæces. He complained also of occasional attacks of constipation and colicky pains, with distention of the abdomen, which was relieved by medicine or by spontaneous diarrhœa. Being unable to satisfy myself by digital exploration whether or not a stricture of the rectum somewhat higher up existed, the patient was etherized, and nothing having been felt by palpation in the abdomen, a manual exploration of the rectum was made. By the gradual stretching of the sphincter and of the bowel the hand was introduced up to the knuckles, and slightly beyond them, though the thumb was not passed within the intestine. By this insertion the promontory of the sacrum was recognized, and with the other hand on the abdominal wall nothing was felt in this region. Believing, therefore, to have excluded the suspected stricture, the removal of the hæmorrhoids was undertaken after Whitehead's method. A certain amount of vertical laceration had occurred from the excessive distention of the anus, so that the operative procedure was conducted more after the original plan of Whitehead than after his later procedure. About one inch of the rectum was removed in this way. A longitudinal slit having run up beyond this point, it was sewn together by sutures. Only one suture was required to a bleeding vessel; the others, three in number, were secured by torsion. A plug of iodoform gauze was introduced into the rectum, and an antiseptic compress and bandage applied. The patient suffered a good deal of pain after the operation, and required once to have the urine drawn. The seventh day he had a movement of the bowels, with but little pain On the eighth day the wound was found to have united primarily, with the exception of an area of one-third of an inch in diameter, which had been caused by a stitch giving away. On the thirteenth day he was up and about. The sutures came away spontaneously.

Case IV.—A man, aged forty-five, had been troubled for several years with bleeding hæmorrhoids of large size When protruding they resembled, in size and appearance, a small tomato. The operation was done as in the previous case. Nearly an inch of the lower end of the rectum was removed. The line of junction was effected by more numerous sutures than had been used in the preceding cases. No reaction whatever followed. The patient urinated voluntarily, and no pain was felt. On the third day he was sitting up in bed, writing, and on the sixth day was about. The majority of the sutures were removed by me before the tenth day. Primary union took place, with a very well-shaped anus and smooth bowel beyond the point.

Case V.—A burly, strong man, with large hæmorrhoidal protrusions, bleeding freely, which had lasted for several years. In this instance a departure was made from the ordinary stage of the operation in this, that instead of cutting off the mucous membrane in small segments, and then suturing the same to the skin, the whole circumference of the detached rectum was removed and then the sutures applied. This necessitated the use of clamps to seize and draw down the otherwise retracting mucous membrane, and thereby giving rise by its pressure to a certain amount of damage to the mucous membrane. The procedure, however, rendered a trifle more rapid the operation, which in itself is somewhat a tedious one.

Case VI.—Was a man, aged forty-seven, who had been troubled by large piles coming down and being caught in the sphincter, thereby giving rise to a great deal of annoyance, though not complicated by much bleeding. It was supposed that Allingham's operation might have sufficed for this case. After stretching, however, the sphincter by gradual pressure in various directions, the hæmorrhoidal mass was seen, consisting of three very large piles, and one small one, and further, that the whole zone of the rectum was in a varicose condition. Whitehead's operation was thereupon resorted to, and was accomplished with a little more difficulty than usual, from the oozing of blood from the numerous divided veins. This patient was catheterized during the first twenty-four hours, though, I believe, with a little more effort, assisted by the kneeling posture, he could have emptied his bladder without this assistance. The subsequent progress was free from pain. The patient was able to sit up in bed squarely upon the affected part at the end of the third day. He was out of bed and dressed within a week from the operation. The stitches were not removed. They discharged themselves spontaneously.

While for the less severe cases of hæmorrhoids the operation of injection with carbolic acid (and preferably with the 1 to 20 solution) is to be first thought of, and while for the more decided form

of this disease Allingham's method yet stands unequalled, yet for the extensive conditions of hæmorrhoidal disease met with in the preceding cases, and which have been hitherto treated by tying off three, four, and sometimes more masses, I believe that greater efficacy and greater permanence of cure will be accomplished by the resort to Whitehead's method, and that less after-discomfort to the patient will be felt than by the well-known method of ligature as practised by Mr. Allingham. It is true, with this rather brief experience, the admission is to be made that the operation of Whitehead has taken me much longer time to accomplish than the older operation of tying and removing hæmorrhoids. Increased experience has, however, taught me that greater rapidity of execution can perhaps be accomplished by a manœuvre which doubtless Mr. Whitehead practises, as it is so self-evident, but which he does not mention. It is this: after separating the mucous membrane at the anus by scissors, all around, then at one limited place conduct the dissection deeper, and in an upward direction, until the normal mucous membrane of the bowel is reached. From that point, by means of the finger-nail, or by the end of a blunt-curved scissors, the mucous membrane can be stripped from the external tissues down close to the circumferential initial incision about the anus, when any intervening tissues can be cut through quickly with the scissors. In this way, proceeding right and left, the separation of the bowel in the last two instances has been brought about with decidedly increased rapidity and certainty.

I have been surprised to find how small, after dividing the mucous membrane, the arteries entering the piles become. Palpation of the same through the rectum, prior to their section, had led me to expect them to be of a decidedly increased volume; but with the open section they have not only shown themselves quite small, but they will often spontaneously cease to bleed. It is seldom that they require to be twisted or tied with catgut; certainly not more than one or two in the course of the operation, and these have, in one or two instances, been closed permanently by the pressure of a clamp for a few minutes.

After quite an extensive separation of the rectum, even to some distance above the line of section, it has been found unnecessary to introduce any drainage. In none of my cases have I dusted them with iodoform, as Mr. Whitehead has suggested, and when placed in position prompt union occurred, though the parts were bathed with the usual sublimate solutions—1 to 5,000. The tabs of skin that have been preserved for the final union of their edges to the mucous membrane often remain swollen for a week or ten days after the operation, and may excite some apprehension on the part of the surgeon for the patient that a mass of external reminiscences of the sufferer's past troubles might remain. In three cases where this condition has been watched they have in time disappeared.

As to the possibility of the formation of a stricture, especially where, as in one of my cases, a certain failure of primary union occurred in two spots in the circumference of the wound, I felt some apprehension; especially as this is a condition of affairs that I have encountered a number of times in patients who had been operated upon by surgeons of a past era, by the older method of ligation, so zealously carried out that no mucous membrane was left between the various hæmorrhoidal tied-off bunches. But Mr. Whitehead's positive statement must be kept in mind that this has not been observed in any of his large number of cases. He, however, lays stress upon the necessity of making the primary incision in the mucous membrane near to the skin of the anus, and not in the skin itself, since he believes, and I should think with justice, that undue contractions are more apt to take place when the annular cicatrix is formed at the expense of the integument.

A slight caution I may give, based upon an experience in rectal operations generally, that the bowels should not be moved by any purgative the day of the operation, as is commonly advised. This had better be done the day previously, if at all. Should this error have been brought about, as sometimes it has occurred to me, from a too zealous nurse, it is better to thrust a sponge some distance up the bowel at the beginning of the operation. This preserves the wound from infection, and the surgeon perhaps from profanity.—*The Medical Record.*

HEART TONICS.

BY J. C. MULHALL, M.D., KANSAS.

To present you with even an abstract of all that has been written within the last two years concerning the subject of my paper would impose on you a wearying and confusing detail. A number of entirely new drugs have been introduced, and the more intelligent use of several almost forgotten ones has been revived. Observers, the world over, having tested these various drugs, have rushed pell mell into print with their conclusions, and the proverbial disagreement of doctors has resulted. In the case of each drug, I have taken into consideration the conclusions of one or more admitted authorities, and have tested for myself such conclusions, only, however, at the bedside.

That there exists a necessity at times for a substitute for digitalis, equally powerful with that magnificent drug, will be readily admitted by every one who has been much concerned with the

treatment of heart disease. That many lives have been suddenly shortened through the cumulative action of digitalis cannot be denied. Who has not seen his anasarcous patient, with failing heart and sluggish kidneys, revive under the influence of digitalis, his pulse beat grow slower, stronger and more rhythmical, his urinary secretions augment, his dropsy decline, when all at once the happy friends are thrown into alarm at seeing the patient grow nauseated, vomit, and refuse longer to eat? What chance have the weary heart walls for the nutrition that is to give them more permanent strength than that afforded by a drug, when the alimentary canal refuses to obey its functions? We are compelled to withdraw digitalis and frequently to await the return of the stomach to its duties, before again venturing to administer the drug. The delay may be fatal. The heart may again rapidly fail to a greater degree than before, and be beyond the help of tonics. I have in my mind two individuals who having thus experienced nausea and vomiting, were never again able to take even a single dose of digitalis.

Again, with certain cases we are unable to get the happy effects which in the vast majority of cases we do get from digitalis. Physicians have with reason, therefore, sought to find a drug which, if not equally potent, was at least a powerful ally. This list experimented with includes convallaria majalis, adonis vernalis, the various salts of caffeine, sulphate of sparteine and strophanthus hispidus. Before the introduction of the last named drug I had frequently prescribed convallaria and adonis vernalis. I mention both in the same breath, for, as far as I could determine, the only clinical difference was that the diuretic effect of the adonis vernalis was far better marked than that of the convallaria. The first great objection was their abominable taste, and in the fewest cases I treated, the stomach very quickly exhibited repugnance to their continued administration. It goes without saying that like in pulmonary phthisis, so in the individual with ruptured compensation and failing heart muscle, the first great avenue of approach, the stomach, must be maintained in tolerant and vigorous condition. Both drugs certainly slowed and made more vigorous the heart's action, and are justly entitled to the name, cardiac tonics. Though they seemed to act more quickly than digitalis, their beneficial effect also seemed to cease at once with their use, thus differing in an important way from digitalis. Again, their tonic effect on heart and arteries was not nearly so well marked as that of digitalis, and they therefore never exhibited such prompt and magical relief to cardiac dyspnœa or dropsy as we often see from digitalis. I should say that at best they were poor allies to digitalis and very inefficient substitutes for strophanthus, caffeine, or sparteine.

I have used but one salt af caffeine, the citrate, in quantity not exceeding twenty-five grains, usually fifteen, in twenty-four hours, and have administered it in five cases, not a large number but sufficient to enable me to call it a valuable adjuvant in the treatment of heart disease. It acts much as digitalis does, being a heart regulator and diuretic, but again, though acting more promptly than digitalis, it did not seem to me to produce so slow, regular and powerful a pulse beat as the latter. It was in each instance well borne by the stomach. In one case, it seemed to be completely useless, and though in the same case, one of mitral regurgitation in a child, the substitution of digitalis was more efficient, compensation was never established and the patient died.

Five years ago a woman aged 31, and her brother aged 22, both the subjects of mitral stenosis came under my observation, and to the present date have remained my patients. Some months since I was called to see the woman who was in the seventh month of her third pregnancy, on account of alarming dyspnœa, and increasing œdema of the lower extremities. Judge my astonishment when I found the loud, harsh, jarring, presystolic murmur, which in this very patient I had often demonstrated to various students, to have completely disappeared. There existed, however, the constant signs of mitral stenosis, and furthermore that of a failing right ventricle, an occasional tricuspid regurgitant murmuring being audible. This patient took during the remaining two months of her pregnancy five grains citrate caffeine three times daily with the happiest effects upon her circulation. Her physician after her delivery, fearful that the caffeine might not prove powerful to carry her through the trying ordeal, with my consent substituted digitalis for a month succeeding. I may add that, having called on her six weeks after delivery, I found again the old familiar presystolic murmur. I decided on caffeine as her heart tonic, from the fact, that previously digitalis had on several occasions caused her nausea and loss of appetite. How much this heart tonic had to do with her full term and delivery I cannot say; but it seemed hardly possible to me that a woman with mitral stenosis, and a failing heart at the seventh month, could without some such assistance have happily completed gestation, and the citrate of caffeine seemed to meet the indications perfectly.

In combinations with squill and acetate of potash its diuretic effects were well marked.

Used alone, as compared with digitalis, I did not think its diuresis so well marked. In one case of combined aortic and mitral regurgitation, where there existed much precordial pain and distress, where relief to this latter symptom did not follow the administration of digitalis, the patient asserted that the substitution of caffeine was a most happy one, since his cardiac pain vanished on the third day of its administration.

With sulphate of sparteine I have had but one experience, not having been able to procure the drug, a fact I regret, since the reports of Prof. Germain Sée would lead us to believe that its tonic effect on the heart was remarkable. He announced firstly, that its reparative effect on the heart and pulse was more marked, prompt and lasting than digitalis or convallaria; secondly, that in the immediate regularization of the cardiac rhythm no remedy can be compared with it; and thirdly, that it was acceleratory to the heart beats.

My one experience was on a patient suffering aortic regurgitation and obstruction and also mitral regurgitation. The heart was enormously enlarged, and its tumultuous, irregular, intermittent action, 96 to the minute, most distressing to the patient. Anasarca was general, ascites to a moderate degree, and œdema at the base of both lungs. Here I thought was a heart whose rhythm needed control, and confident in the recommendation of Prof. Sée, I administered one-half grain of the sulphate of sparteine three times daily, and I must say with disappointment. The pulse remained intermittent, full at one beat, empty at another, and as before 96 to the minute. After three days trial I substituted digitalis and the bromides with good effect. But one may judge nothing from one case, and indeed this case may not have been an appropriate one for the remedy.

Immediately upon reading the paper of Professor Fraser, of Edinburgh, on the remarkable results achieved by him with strophanthus in the treatment of cardiac dropsies, Mr. J. M. Good, of St. Louis, procured from Lehn & Fink, of New York, a reliable tincture made by Merck, of Darmstadt, this being the preparation which I have used in twenty-one cases of various cardiac disturbances.

Professor Fraser's general conclusion was that whilst it was a true heart tonic, like digitalis, unlike the latter it did not increase arterial tension.

Dr. Leon Rosenbusch, in the *Berliner Klinische Wochenschrift*, Feb. 13, 1888, makes the following conclusions: 1. It has a marked action upon the heart, increasing the power of and lengthening the systole, increasing the arterial tension and slowing the heart's action. 2. It strengthens the heart muscles and regulates its work. 3. It acts as a diuretic in cardiac disease, but very feebly in kidney disease. 4. It does not disturb digestion as other heart poisons do, especially digitalis. 5. It may be given for weeks without giving rise to cumulative action. 6. It is best employed in the form of a pure tincture in doses of 10 to 20 drops three times daily. 7. It is less vigorous in its action than digitalis, and is therefore indicated especially in those cases in which digitalis has not yet been tested. 8. It maintains, especially in severe disturbances of compensation, the effect of digitalis which has previously been administered. 9. The alcoholic tincture should be employed. 10. In stenosis of the aortic valves its action is negative; as it lengthens still more the systole, it should not be employed in this disease.

With these conclusions, I may say that my own humble experience mostly coincides. I am not sure however that it increases arterial tension, for it is in a class of cases where arterial tension is a marked feature, namely, chronic diffuse nephritis with sequential heart disturbances that I have seen the most brilliant effects in slowing the heart's action. I refer particularly to one of the phases in Bright's disease with general arterial sclerosis and hypertrophied heart, wherein sudden attacks of painful palpitation with pulse extremely irregular and increased to from 120 to 160 beats per minute, possibly a uremic phase, lasting sometimes for days, nearly always occompanied with a nausea that rejects digitalis. In four such cases five drop doses of tincture strophanthus repeated every six hours, rapidly slowed the heart, produced a regular pulse, and increased the flow of urine. It might, therefore, seem that since it controlled these hypertrophied hearts, it had a marked influence on the cardiac ganglia. In a case of acute dilatation of the heart, the first attack occurring without discoverable cause at the menopause in a lady whom I have treated in three such attacks, the first two with digitalis and the last with strophanthus, the latter acted far more promptly and far more agreeably to the patient. It has advantages over all other cardiac tonics in its palatability, smallness of dose, and acceptance by the stomach. I have not seen the astonishing diuretic results reported by Prof. Fraser, where after one full dose, the secretion of urine continued to augment for several days. After all neither strophanthus nor other heart tonic can be compared in power to digitalis. They have certain advantages, they act more promptly, they are not cumulative, they are better borne, caffeine and striphanthus do not nauseate and do not require the careful supervision of the physician as does digitalis. Hence where a gentle cardiac tonic is to be exhibited for a long time, one other than digitalis would seem to be indicated. They are therefore very valuable allies. But when the heart is trembling on the verge of fatal asystole, when its quivering muscular fibres have almost given up the contest against the unyielding obstruction, no such powerful reinforcement has yet appeared on the field as digitalis.

When on the other hand it has lent its power to the heart, and its cumulative effect is dreaded, or the digestive tract is disturbed by its presence, the compensation that it has effected can then best be carried on, I think, by strophanthus.—*St. Louis Courier of Medicine.*

Opinions of the Authorities on the Application of PAPOID (Carrica Papaia) in Diphtheria and Dyspepsia.*

PROFESSOR L. FINKLER, of the University of Bonn Rhein, Germany, has made an exhaustive study of Papoid. We quote a few extracts from his published writings on the subject:

"PAPOID is a digestive ferment made from the tropical fruit 'Carrica Papaia.' When taken into the stomach has the following action:—

"It converts five times as much albumen into peptone, bulk for bulk, as the best pepsin."

"It increases the flow of gastric juice, by stimulating the peptic glands."

"It prevents the decomposition and fermentation of the contents of the stomach by its antiseptic action."

"The action commenced in the stomach is continued after the food has passed into the intestines, as it acts in the presence of an acid or an alkali, or when the reaction is alkaline."

"It is perfectly harmless."

"It dissolves any unhealthy mucus sheathing the walls of the stomach and intestines, and,"

"It relieves pain, either caused by the presence of irritating ingesta, or due to local neuralgia."

"It is thus evident that the drug will prove useful in all cases where there is either deficient secretion of the peptic ferments, abnormal fermentation, or a combination of both conditions."

"In practice excellent results have been obtained in the following conditions—

"Gastric or intestinal pain."

"Vomiting, persistent, especially the morning sickness of chronic alcoholism, and that incidental to pregnancy."

"Anorexia, simple loss of appetite without other symptoms."

"Acid dyspepsia."

Gastric Catarrh.

5 George Street, Hanover Square,
LONDON, Aug. 4, 1887.

DEAR DR. HERSCHELL,—
Thank you for sending Mr. Hughes to me with his little girl. I ordered the child your favorite Papoid which I have found of the very greatest value in cases of Gastric Catarrh. It is really a wonderful medicine.

Yours very truly, EUSTACE SMITH,
Physician to First Children's Hospital.

Its Advantages in Diphtheria.

Dr. A. JACOBI, New York, before the Medical Society of New York, Feb. 2nd, 1886: "Diphtheritic membranes are dissolved in a few hours—in a few cases after a day only. Temperatures of 104 and 105 degrees would sink to the normal standard after the removal of the membranes."

Prof. CRONER, (im Vereine fur innere Medicin in Berlin) reports successful treatment of a boy eight years old with Papoid. A five per cent. solution brushed upon the parts every hour caused the entire disappearance of the membranes in about seven hours and the reduction of the temperature to normal. Recovery was rapid.

FLATOW, at the same meeting, mentioned a similar case treated with equal results, using a five per cent. solution.

Drs. FRAENTZEL and LEYDEN, at the same meeting, related similar successful cases.

Prof. OERTEL, in Respiratory Therapeutics (Ziemssen Handbuch der Allgameinen Therapie, p. 1751)—"A large piece of diphtheritic membrane expectorated by a child suffering from diphtheria of the trachea was dissolved in a five per cent. solution of Papoid in one hour's time."

KOHTS and ASCHE, (Zeitschrift fur Klinische Medicin, Vp. 558), "Diphtheritic membrane in the throat and nose as far as they can be reached are completely dissolved by a five per cent. solution."

Dr. A. F. GREEN, Cleveland, Ohio: On the morning of Aug. 16th, I was called to treat Willie Taylor, son of W. D. Taylor, of the firm of Geo. Worthington & Co., who was suffering with malignant diphtheria. A large surface on the right side of his throat was covered with diphtheritic fungus. I applied Papoid to the child's throat every 40 minutes for 18 hours, when the membrane was entirely removed. Thinking then, from the favorable symptoms, that the disease was abating, I applied the remedy at intervals of about three hours. About 36 hours after the fungus on the right side had been dissolved, it appeared in large patches on the left. I again treated the throat at short intervals, and met with the same success as before mentioned. After the sixth day the child made rapid and unimpeded progress to recovery.

Yours, A. F. GREEN.

METHODS OF DISINFECTION RECOMMENDED BY THE MICHIGAN STATE BOARD OF HEALTH.

In diphtheria the discharges from the throat, nose, and mouth are extremely liable to communicate the disease, and should be received in vessels containing a strong solution of copperas (sulphate of iron), or on soft rags or pieces of cloth, which should immediately be burned.

In typhoid fever and other dangerous communicable diseases the discharges from the kidneys and bowels are dangerous, and should therefore in all cases be received upon papers or old cloths and promptly burned, or be received in vessels and thoroughly disinfected as follows: Disinfect each discharge from the bowels by thoroughly mixing with it at least one ounce of chlorinated lime in powder, or one quart of "Standard Solution No. 1,"* recommended by the American Public Health Association's committee. In country districts, villages, and small cities, where the privy is not far distant from a well, discharges should not be thrown into a privy-vault, but after being disinfected, they should be carried a greater distance from any source of drinking water and then covered with earth. Rags, closet-paper, or other similar material used about the patient, should be immediately burned. Privies, water-closets, cess-pools, gutters, drains, sewers, etc., should be frequently and liberally treated with copperas solution. Sulphate of iron (copperas) dissolved in water in the proportion of one and a half pounds of the sulphate to one gallon of water, is a good solution for chamber-vessels, water-closets, etc. When much is wanted it may be prepared by hanging a basket containing about sixty pounds of copperas in a barrel of water.

Nurses and attendants should be required to keep themselves and their patients as clean as possible; their own hands should frequently be washed and disinfected by chlorinated soda. Soiled clothing, towels, bed-linen, etc., on removal from the patient, should soon be placed in a pail or a tub of boiling-hot zinc solution, made in proportions as follows: Water, one gallon; sulphate of zinc, four ounces; common salt, two ounces. Soiled clothing should, in all cases be disinfected before sending away to a laundry, either by boiling for at least half an hour (it may well be boiled in a zinc solution), or by soaking in a strong solution of chlorinated soda.

Cotton, linen, flannels, blankets, etc., should be treated with the boiling-hot zinc solution, introducing them piece by piece, securing thorough wetting and boiling for at least half an hour. Heavy woolen clothing, silks, furs, stuffed bedcovers, beds, and other articles which cannot be treated with the zinc solution, should be hung in the room during fumigation, pockets being turned inside-out and the whole garment being thoroughly exposed. Afterward they should be hung in the open air, beaten and shaken. Carpets are best fumigated on the flour, but should afterward be removed to the open air and thoroughly beaten. Pillows, beds, stuffed mattresses, upholstered furniture, etc., after being disinfected on the outside, may be cut open and their contents again exposed to fumes of burning sulphur. In no case should the thorough disinfection of clothing, bedding, etc., be omitted. Infected clothing and bedding have been known to communicate diphtheria months after their infection. The body of a person who has died from scarlet fever, diphtheria, smallpox, or typhoid fever, should be wrapped in a cloth wet with a strong solution of chlorinated soda, or with "Standard Solution No. 1," or with zinc solution. The zinc solution should be made in proportions of one half pound of chloride of zinc to one gallon of water, or:—Water one gallon; sulphate of zinc, eight ounces; common salt, four ounces.

TEMPORARY SHELTER DURING DISINFECTION.

Disinfection of a room always necessitates vacating it, and sometimes makes it impossible to remain in adjoining rooms, therefore in some cases it seems essential to have hospital, tent, or other temporary shelter for the inmates of infected houses, where bathing, disinfection, and washing can be done while such houses are being disinfected and put in order. On this subject local boards of health should be consulted, and should be prepared to act.

DISINFECTION OF ROOMS.

After a death or recovery from a dangerous communicable disease the room in which there has been a case of such disease whether fatal or not, should, with all its contents, be thoroughly disinfected by strong fumes of burning sulphur. Rooms to be disinfected by sulphurous fumes must be vacated by persons, but the contents should all remain for disinfection. For a room ten feet square at least three pounds of sulphur should be used; for larger rooms proportionately increased quantities, at the rate of three pounds for each one thousand cubic feet of air-space. Hang up and spread out as much as possible all blankets and other articles to be disinfected; turn pockets in clothing inside out, and otherwise facilitate the access of the sulphurous fumes to all infected places. Close the room tight, place the sulphur in iron pots or pans which will not leak, supported on bricks over a sheet of zinc or in a tub containing water, so that in case melted sulphur should leak out of the pot the floor may not be be burned; set the sulphur on fire by hot coals or with aid of a spoonful of alcohol lighted by a match; be careful not to breathe the fumes of the burning sulphur, and

*Dissolve cloride of lime of the best quality in soft water in the proportion of four ounces to the gallon.

when certain the sulphur is burning well leave the room, close the door, and allow the room to be closed for twenty-four hours. The privy should be disinfected by fumes of burning sulphur. It is especially important that the *contents* of the privy be disinfected. For this purpose use four ounces of the best quality of "chloride of lime" to each gallon of material in the vault.

MEDICAL NOTES.

If patient can cross the legs there is *rotation in the hip joint* of the limb raised. (Allis.)

For *constipation of infants*, Prof. Parvin recommends, as a simple expedient, rubbing the abdomen with a little sweet oil.

Prof. Da Costa says the proper method of examining a patient for *dilatation of the stomach* is by percussion after he has drunk a large quantity of water.

Flapping of alæ of nose is indicative of *disorders of respiration* in infants, while pinched appearance of mouth is present in gastro-intestinal troubles. (Parvin.)

Professor Bartholow recently treated a case of *hæmaturia*, due to acute congestion of the kidneys, by giving 10 grains of quinine three times a day, which was followed by rapid recovery.

The best astringent for *chronic diarrhœa* of children is extract of hæmatoxylon. This remedy dyes the discharges and also discolors the napkins. Therefore, do not be scared. (Parvin.)

Frequently the direction of blood vessels will aid in distinguishing the bowel from the sac in *hernia*. The vessels of the bowel are arranged transversely, while in the sac they are more longitudinal. (Brinton.)

Dr. Rex states that he has had very gratifying results by treating *convulsions of children* in the following manner: Give the child a hot bath, or, if this be inconvenient, a hot mustard foot-bath may be substituted; then give 3 grains of sodium bromide every ten or fifteen minutes until the convulsions cease.

A case of *muscular rheumatism* presented to the clinic was treated by giving, internally, 20-grain doses of muriate of ammonium three times a day, and, externally, a liniment containing—

℞ Aquæ ammonii, . . . f ℥ j
Spirit. rosmarini, . . . f ℥ iij
Liniment. saponis, . . f ℥ ij. M.

One of the best methods of removing *foreign bodies* from the external auditory meatus, when the tympanic membrane is intact, is by injecting water in the ear; which, in most cases, will pass between the membrane and foreign body and force it out (Dr. Hearn.)

For a case of *enlarged spleen*, Prof. Da Costa ordered half-drachm doses of fluid extract of ergot, three times a day; 4 grains of quinine each morning, and over the abdomen—

℞ Iodinii, ... ℥ ss
Ung. belladonnæ,
Lanoline, . . āā . . ℥ ss. M.

For a case of *idiopathic epilepsy* in a boy aged eleven, Prof. Da Costa ordered a prescription:—

℞ Potassii bromidi, . . . gr. xx
Tinct. cannabis indicæ, . gtt. ij
Syrup., . . . q. s. ad., f ℥ ij. M.

SIG—Take three times a day.

Milk and vegetable diet. To prevent the paroxysm, inhale five minims of nitrite of amyl.

The best remedy for *tapeworm* is pomegranate, but must be given in the proper way. Clean out the canal thoroughly, and for this the soda salts are good, preferably the phosphate of sodium to dissolve the mucus in the canal, which must be given in the intervals of digestion, followed by a purgative; then give a strong decoction of pomegranate bark, four ounces of the fresh bark to one pint of water, and boiled down to eight ounces; follow this by a purge. (Bartholow.)

For *chronic eczema*, Prof. Holland recommends the following treatment: Soften crusts with oleaginous preparation or bread poultice, and remove them; then apply the following:—

℞ Liq. carb. deter., . . . f ℥ j
Aquæ rosæ, ... f ℥ viij.

The liquor carbonis detergens is made of coal tar, 4 parts; tinct. soap bark, 9 parts. Shake together and let stand for eight days; then strain, and it is ready to dilute for use.—*Coll. and Clin. Rec.*

CARBOLIC ACID IN THE TREATMENT OF ENTERIC FEVER.

The patient is of course confined to bed, in a well ventilated room if possible, and every effort is made to insure that no particle of solid food of any kind is administered by over anxious relatives. The diet is restricted to milk, toast-and-water, barley-water, and calf's foot jelly; new milk is always insisted upon as the main support, from a quart to three pints being giving to an adult in the twenty-four hours. The carbolic acid is ordered in a mixture, of which this is the prescription: Take of carbolic acid (Calvert's extra pure for internal administration), twelve minims; tincture of iodine (B. P.), sixteen minims; tincture of orange-peel, one drachm and a half; simple syrup, three drachms; water to eight ounces: the dose to

be an ounce every four hours for the first fortnight, or until the urgent symptoms yield, when the same dose is administered three times a day. The good effect is manifested almost immediately. In two days the pulse shows and gains in strength, the temperature falls, the tongue becomes moist, all diarrhœa cases, and the general condition of the patient is so much improved that, as a rule, in a week all anxiety is at an end, and the case progresses quietly towards recovery. It sometimes happens that a case is cut short by this treatment as suddenly as is a case of acute rheumatism by the exhibition of salicylate of soda; but more generally the fever runs its course of thirty days before all danger of relapse is past, and I have found it better to continue the medicine until the thermometer shows no rise of temperature for three or four clear days. If the pulse at any time rises above 120, the temperature 105°, or if sordes form on the lips or teeth, either champagne or brandy, and sometimes both, are given every two hours. This, however, is rarely necessary. Complete abstinence from any kind of solid food until all traces of fever have disappeared is insisted upon, and when the patient does return to his ordinary diet, the resumption of solids is a gradual progress from soup to boiled sole, chicken, mutton, and soft vegetables. Beef-tea is carefully avoided so long as the temperature is abnormal, as it so frequently gives rises to troublesome diarrhœa. The carbolic acid combination is usually taken without trouble or difficulty. A day or two after commencing with it patients always complain that every thing they take tastes of the medicine; this is unavoidable, and need give no anxiety, unless vomiting is excited, when it is a good plan to reduce the dose of carbolic acid and to add a small quantity of dilute nitro-hydrochloric acid. It is easy to detect the smell of carbolic acid in the breath and perspiration, but I have rarely noticed carboluria. It must also be noted that not only does diarrhœa cease, but the opposite condition —namely, obstinate constipation—is generally induced. Aperients are decidely to be avoided; if the bowels do not act for some days, I administer an enema of warm soap-and-water, or of a small quantity of castor oil emulsified in warm water with the yolk of an egg. If after convalescence there is trouble in getting a regular evacuation, I give daily small doses of belladonna and salad oil. I do not think the remedy owes its antipyretic action to a direct influence on the vascular activity through stimulation of the vagus or th cardiac gan-glia, but I lean to Dr. Rothe's alternative opinion that this undoubted action is the result of the causes being gradually overcome and removed. I cannot prove that the presence of carbolic acid in the system either arrests the production or destroys the already produced typhoid bacilli, but I firmly believe this to be the case. I also consider that the ulceration in the intestine is prevented, and ulcers already formed are induced to heal rapidly. No other remedies have in my experience proved reliable. I give stimulants without hesitation if necessary, and to assist recovery when a tonic is needed I prescribe bark and mineral acids.

In my note-book I have a rough analysis of one hundred and sixty cases. Seventeen were children, ten adolescents, and the remaining eighty-nine adult, the sexes of the total number being about equally divided. They belonged to all ranks of life, and the surroundings of some of the poorer cases were not conducive to cleanliness or the possibility of good sanitary arrangements. *The result in every case but one has been complete recovery*, and that one fatal case calls for the explanation that death did not take place until long after the fever was over, and from quite an accidental and adventitious cause. This case is as follows:

J. N——, aged twenty-eight, a badly-fed farm laborer, fell ill in September, 1882, and was carried safely through a smart attack of enteric fever by a strict adherence to the line of treatment indicated in this paper. Calling to see him one morning about four weeks from the commencement of his illness, the thermometer showed a temperature of 104°. This astonished me, as at my last visit a day or two previously it had fallen to the normal figure. On making examination I found under each arm a large axillary abscess. A few days afterwards I incised them both and they rapidly got well, though of course the patient was thrown back and weakened by this fresh drain on his vital resources. A fortnight after his recovery—that is, eight weeks from the typhoid invasion—his wife took the opportunity of a bright, breezy day at the end of October to scrub and clean the room they inhabited together. She conducted this operation with most praiseworthy assiduity, keeping both door and window wide open, her husband sitting on a chair in a direct line between them, surrounded by a sea of soapsuds. She did not neglect to scrub the floor under the bed, and seemed surprised at the reproof I administered when, on calling, I became an eye-witness to the above facts. Next day the poor fellow had a succession of rigors, and succumbed three days after to an attack of acute double pneumonia.—*Lancet*

THE TREATMENT OF ULCERS.—An article appeared in the London *Medical Record* for December 15, 1887, giving interesting details of the treatment of ulcers by phospohric acid, as shown by the experience of Dr. Grossich. By his method of treatment, he used a ten per cent. solution of pure phosphoric acid in distilled water. The ulcer is covered with a bit of lint dipped in this solution, and the dressing renewed three or four times a day. The patient for the first few minutes feels a slight burning sensation, but this soon passes, and with-

in twenty-four or thirty-six hours the ulcer cleans, and looks better. Inflammation or eczema of the surrounding parts disappear, and all pruritus ceases. The ulcer cicatrizes rapidly, and the cicatrix is firm and healthy. Kollischer treated tubercular affections of the joints with injections of the phosphate of lime, with great success. Dr. Grossich has also had good results with this treatment, and cites some very interesting cases The treatment by the solution of phosphoric acid was further employed in a case of tuberculous abscess of eight months' duration, and also a case of eczema marginatum which had lasted more than a year, and good results followed. The above suggests the superiority of Horsford's Acid Phosphate as a substitute for the phosphoric acid. The effective acidity of this preparation is about the same as the ten per cent. solution of phosphoric acid which is prescribed in the above treatment, and it may therefore be justifiably employed by the profession in the treatment of disorders of this character. It has the advantage of containing the phosphates in solution, notably the phosphate of lime. It follows, then, that all cases that require the phosphoric acid treatment can be more advantageously treated by Horsford's Acid Phosphate, and the suggestion is hereby commended to the profession.

TEACHING STUDENTS TO THINK.—It is often a subject of regret to teachers in our medical schools that the work of the first two years is so soon forgotten; a man who has passed his preliminary examinations frequently so far forgets his scientific subjects in six months as to be unable, when in the hospital wards, to give a description of the cerebral supply to parts of the body, the convolutions of the brain, and the cranial nerves, or the minute anatomy of the kidney and liver; still, such students may have dissected dilligently, attended lectures, and read at night, but they have not learned to think, or are not trained to think systematically and correctly. This defect is, we suspect, not entirely the fault of the students, but is also in part due to defects in teaching. When observing students under examination, both for university degrees and on the lower examinations, it has often been obvious that failure to pass the standard may depend upon inaccurate methods of thinking and speaking—or upon no previous thinking quite as much as from ignorance of the subject-matter. Observing the objects of study in the dissecting-room does not necessarily teach thinking; to observe is to receive impressions, thinking may or may not follow observing. We have no intention of suggesting formal teaching of the laws of thought in the form of logic, though this useful science used to be one of the extra subjects in the Arts examination of the Apothecaries Society. It does, however, seem needful to call attention to the importance of educating students to think as well as to observe facts; the scientific subjects and the teaching of medicine afford plenty of scope for both. The student is generally interested in the application of scientific knowledge to practice, and to show him such connections early in his career stimulates thinking. The constant application of anatomy, physiology, chemistry, comparative anatomy, and the principles and facts of vegetable biology, to what is seen in patients, produces an expansion of the subjects of thought, and engenders habits of correct thinking. To follow well-made analogies, and to answer questions which exercise the imagination in a scientific manner, as in describing the minute conditions of circulation and the cause of nerve currents in reflex actions, necessitates correct thinking. A student will often say that he hears a systolic mitral *bruit*, and is satisfied with his achievement, without understanding that the sound heard suggests an hypothesis which requires to be fully worked out before he can know the condition of the patient. A man well trained, not only in observation, but also in rapid and correct thinking, will get through much more good work in practice than one less thoughtful. Thought, preceding action, guides him rapidly to make the necessary observations in the case before him, till thinking becomes automatic, and his opinions are rapidly formed upon brief observations, and what is ill termed "clinical instinct." In making these remarks we by no means wish to depreciate the necessity of thorough and systematic examination of all the organs as a matter of primary necessity.—*Brit. Med. Jour.*

TOBACCO AMBLYOPIA.—(By A. R. Baker, M.D., Cleveland, Ohio: Abstract.) There is a diversity of opinions expressed, as well as a lack of uniformity of symptoms described as characteristic of this disease. Some eminent authorities assert that women never suffer from this form of toxic amblyopia, while a number of cases are reported as having occurred in England. Most observers believe that it results more frequently from smoking than chewing, but Dr. Ayres says the opposite is true. Calazowski says it is of frequent occurrence among persons working in tobacco manufacturing establishments. Dr. Ely, who spent much time in examining cigar-makers, says that it rarely if ever occurs among them. There is less diversity of opinion as to treatment, some claiming that it is absolutely necessary to stop the use of tobacco entirely, while others only limit the quantity used and advise a milder tobacco. Many emphasize the necessity of prescribing strychnia; others believe iodide of potash to be the *sine qua non*, and still others have found that their cases do equally well with no medication. Probably there is no one who has carefully examined the evidence adduced who doubts the existence of a toxic amblyo-

pia, characterized by a rapid failure of sight, a central scotoma for red and green, and no marked changes to be discovered with the ophthalmoscope. Dr. Powers has advised the inhalation of nitrate of amyl as of great temporary benefit. If there are no pathological changes in the retina, optic nerves, or cerebral centres, then the necessity for specific medication is uncalled for. I may thus summarize my conclusions on the subject:

1. There is a toxic amblyopia due to the excessive use of tobacco.

2. That the excessive use of alcohol, or other toxic agents, does not produce the same or a similar amblyotic condition, although by their depressing influence on the vital functions they may serve as predisposing causes.

3. Tobacco amblyopia does not usually lead to total blindness. The disease is essentially a functional one. Gross pathological changes have not been demonstrated either in the retina, optic nerve, or cerebral centers.

4. The course of the disease may result in a certain amount of failure of sight and then remain stationary, even though the tobacco habit be not entirely given up.

5. Stopping the use of tobacco will result in recovery of sight without the use of specific medication, although the use of strychnia and tonics, by increasing the general tone of the system, may hasten a cure. The moral effect of taking something to replace the loss of the tobacco is of great value.—*Am. Pract. & News.*

RECTAL FEEDING.—From a study on the subject of rectal alimentation, Dr Weaver (Transactions of the Luzerne County Medical Society) has formulated the following conclusions:

1. By the use of enemata life can be sustained indefinitely with little if any loss of weight to the body.

2. In a larger proportion of cases in which rectal aliment is used, true digestion, of albuminous, saccharine, and fatty food takes place by virtue of inhaustion, or a reversal of the normal peristalsis of the alimentary tract.

3. While this is the case, there are doubtless instances in which retrostalsis does not occur, and for that reason the food used should first be artificially digested before being injected into the rectum.

4. While milk, eggs, and brandy are the best aliment for rectal nutrition, no one article should be used for too long a time, but frequent changes should be made, observing the greatest care to prevent irritation of the rectum, or intolerance of that organ for the nutriment required.

5. The enemata should, if possible, be administered by the physician himself. Where difficulty in retaining the aliment is encountered, the colonic method is preferable, the food being propelled through a rectal bougie. The food should be of the temperature of the body.

6. The rectum having once become intolerant of the enemata, absolute rest must be given to that viscus for a few days, and reliance be placed on nutritious inunctions of the surface of the body.

7. For rectal alimentation there exists a wider range of usefulness than has heretofore been assigned to it. It is not only appropriate in the severer forms of chronic diseases of the stomach and œsophagus, but is indicated and should be utilized in the management of all acute diseases when, from any cause, the stomach becomes intractable and rebellious.

8. In diseases of the stomach, even where a portion of the food ingested is retained by that organ only to undergo fermentation, inducing thereby pain and distress, it is more logical to resort to rectal alimentation, not as an adjunct to, but a substitute for stomachal injection.

9. Certain organic lesions, as well as functional disturbances of the stomach, are curable by means of rest to that organ, and by no other means. In rectal alimentation we have a safe and sure means of nutrition, pending the necessary period of rest. —*Dietetic Gazette.*

BILLROTH ON MACKENZIE.—The *British Medical Journal* publishes the following translation of a letter addressed to the *Neue Freie Presse*, by Professor Billroth, dated March 27th:

"With reference to your request for my opinion on Mackenzie, I can only reply that I have always warned people against passing a judgment on a man who, as a physician, occupies so difficult a position. I have never doubted the correctness of the diagnosis of my Berlin colleagues, but I have also never been able to understand what political reasons had made it necessary to communicate this diagnosis to the whole world. It cannot be admitted that Mackenzie, with his vast experience, has ever doubted the correctness of this diagnosis. If he behaved in such a way as to imply that he had some doubt about the correctness of this diagnosis, this could only be owing to pressure from above, or from motives of humanity. I know such situations from my own experience. One is not inclined to disapprove the statements of one's *confrères*, but, at the same time, one is not inclined to tell the patient that his malady is incurable, for the known want of infallibility in medical diagnosis is almost the sole ray of hope to the unfortunate incurables. Falsehood, in such cases, becomes a moral act. The entire behaviour of Mackenzie must, no doubt, be judged from this point of view. He did as a man and a physician what was still possible to be done when the unfortunate word 'cancer' had already been pronounced.

"In much the same terms as these I have, on different occasions, expressed myself as to Mac-

kenzie's conduct. I ask you to consider this as a private communication, at least, until the sad catastrophe has occurred in Berlin."—*N. Y. Med. Rev.*

Scarlatina and Puerperal Septicæmia—I very much fear that the recent discussion on this subject may tend to diminish the wholesome dread of carrying scarlet fever to lying-in patients which has hitherto so powerfully influenced the conduct of obstetrical practitioners. That the infection of scarlatina is capable of producing a virulent form of septicæmia, generally unattended with local symptioms, I have not the smallest doubt. In April, 1863, I was called in to see a case of this kind occurring in a primipara. She was attacked about five days after delivery, and on the day following her husband was attacked with scarlet fever. He recovered very well, but she died after four days' illness. Her case was a typical one of what used to be called malignant puerperal fever. She had no rash of any kind, and no marked abdominal tenderness. We made a *post-mortem* examination, but found no uterine lesions and no sign of abdominal inflammation; but decomposition had set in most rapidly. In fact it was a case of blood-poisoning of the worst kind.

About fifteen years ago a medical practitioner (who has since left Bristol) called me in to a patient he had attended in her confinment for about four days previously, but who was attacked in a similar way to the case just mentioned, except that there was some abdominal tenderness. She died on the ninth day after delivery. About three days before she died her husband was attacked with scarlatina, but ultimately recovered. On making strict inquiry of the medical practitioner who attended her, he acknowledged that the time when the husband came to fetch him to his wife, his own children were lying ill of scarlatina.

There can be no doubt that in each case the husband and wife were infected from the same source—in the first instance, I believe, from a servant; and in the second from the medical attendant himself. I have seen many similar cases of these, but not of so well-marked a character. We know that people who have once had scarlatina are generally protected against a second attack, but yet that, if they are again exposed to infection, they may get troublesome sore throats in consequence. In the same way I believe that a puerperal woman who has had scarlatina before may get a sufficient amount of the poison to induce fatal septicæmia—unaccompanied, however, with the rash or other characteristic signs of scarlatina. The poison of scarlatina is of so subtle a character, and creeps in through so many channels, that ordinary antiseptic treatment is of little avail against it.—*Br. Med. Jour.*

Calomel in Phagedæna.—I had a case of phagedænic ulceration of the under surface of the glans penis under my charge last August, which defied the recognized treatments of this disease. I applied nitric acid in the most thorough manner on six different occasions during a period of eighteen days without success. I then applied pure carbolic acid, but the disease again returned. Constitutional treatment with opium was adopted throughout. For six days the patient sat in a hot-water hip-bath on an average about four hours daily, without any appreciable effect on the course of the disease. The condition of the penis on the twenty-first day was as follows:

A large ulcer existed, covering the entire under surface of the glans, moulding it like the mouth-piece of a flute, and extending to the reflected foreskin in the vicinity of the ulcer. A third of the glans had been destroyed. The surface of the ulcer was covered with a reddish-grey secretion, irregularly disposed, and pierced here and there by large red granulations. The edges were angry and undermined.

I applied calomel powder on the twenty-first day of the disease, spreading it thickly, and pressing it well into the interstices of the ulcer. The calomel acted like magic; the ulcer began to heal rapidly. Now and then a suspicious spot appeared, but it was at once dissipated by a thorough application of the calomel. The patient made an excellent recovery, and was very pleased at the result, for he believed he was going to lose the whole affair. I was tempted to use calomel, as I had found it very useful in all forms of syphilitic ulceration.—*Br. Med. Jour.*

Formula for Terpine.—At a meeting of the Therapeutical Society of Paris, M. Vigier recommended the following formula for terpine, which contains seven and a half grains to the teaspoonful: ℞. Honey, glycerine, of each 100 grs.; alcohol 95 per cent.; terpine of each 7½ grs.; M. Sig.—Teaspoonful, a dose.

The terpine remains dissolved if mixed in the strength of a teaspoonful to a glass of water. A smaller amount of water than this causes the terpine to precipitate.—*Progrès Médical.*

Dr. Sittler, of Bowmanstown, Pa., writes as follows:—I have used Tongaline extensively during an epidemic of Dengue or break-bone Fever, where I had an opportunity to test it very thoroughly, and I secured much more successful results from it than from the ordinary treatment, consisting of pot. iod. vini. colchici. acid salicyl. quin. sulph. etc. In every instance Tongaline fully sustained the high character with which it is presented to the profession, and only deserves to be well known in order to be thoroughly appreciated.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science Criticism and News.

☞ *Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address,* DR. J. L. DAVISON, 12 Charles St., Toronto.

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MEDICAL ASSOCIATIONS.

It may not be inopportune to remind our readers of the good work done in medical societies. Everyone is aware of the almost irresistible tendency to get into grooves, and, in daily practice to adopt too much routine. With many practitioners their treatment of to-day is precisely what it was ten or twenty years ago, their knowledge has concentrated itself into a few "practical details" whilst from a scientific standpoint they are wonderfully behind the times. This state of things may result from many conditions. The demands which press so constantly upon the medical practitioner generally, the ill luck which has given him a troublesome case just at the time he has arranged to attend the society's meeting, or the desire, which we believe prompts but the few, of being careful to "look after practice" which is attended by more successes in his neighbors abscence, are some of the predisposing causes. Although the results of the progress in medicine have not been all that carping critics demand of it, yet its yield has been well worth the time and labor spent in obtaining it, and no one with any claim to being well informed can do without adopting some of the more modern principles and suggestions; and the difficulty which every one experiences in determining what is reliable and what is useless will be materially lessened after the ventilation and discussion such subjects receive at an ordinary meeting of medical men. It is no excuse that because a previous meeting happened to be in a measure unprofitable, subsequent ones should not be attended. It is a duty which everyone owes to his profession and the public to attend and support such meetings and associations, since by them alone can medicine make great and useful advancement. By the united evidence there given, can those careful and constant workers in science receive that encouragement and acknowledgement which they deserve. And apart from the scientific and special uses of the medical associations in the daily practice of a physician, it is in, and by such associations, are cultivated and developed those nobler traits of character and that kindliness of heart with which the members of the medical profession are so replete. Often at such meetings have differences been removed and old friendships revived which form the pleasantest reminiscences of a whole life. It is but a poor man who can attend such gatherings and go away unprofited. If a meeting happens to be less instructive than one expected; if in results it did not suit you, carefully enquire the reason. Did *you* do the part specially allotted you. It is unfair to throw the whole brunt of the work upon two or three prominent officials. It is manifestly unfair to hold the president of an association accountable for the only partial success of such meeting, when members in committee have given but indifferent support and imagined their names appeared in such places merely out of compliment and attached no work or responsibility. Each has his duty to perform, if he cannot entertain by reading a paper, he can encourage by careful attention, assist by careful discussion, and thus add directly to the success of the meeting. The programme is generally arranged to allow ample time for pleasure as well as business, and should be carefully followed. If all the members were away sight-seeing and on pleasure excursions there could be nothing done.

We sincerely hope these few remarks will be remembered and be in time to benefit the meeting of the Canada Medical Association to be held in Ottawa on September 12th, 13th and 14th next, and that members of the profession will feel it their duty to attend. It is said the public do not sufficiently recognize the work done by the profession. The fault lies with ourselves. Our voice, when raised, is often enfeebled from lack of interest and enthusiasm, and our influence undervalued because it is not concentrated.

THE SOUP BATH.

The importance of tiding children over a considerable period of time, in certain chronic diseases of the bowels, is appreciated by every practitioner. When the bowels are in such a condition that even the blandest foods act as irritants, and the digestive processes are very imperfectly performed, nourishment cannot be administered in quantities at all commensurate with the wants of the system, and the child eventually sinks from pure inanition. If the stomach does not reject food, enough may be absorbed in that organ to keep nutrition fair, for some time; but, as is a common experience, the simplest alimentation is sometimes too much for the stomach, and other means have to be sought to keep up the patient's strength. Rectal feeding may be useful, but in the great majority of these cases, the lower bowel is in so irritable a condition as to be intolerant of even the most carefully prepared and administered nutrient enemata.

Inunction with some of the oils, preferably olive oil, will aid other measures, the abdomen being the region usually selected for the friction, which should be gentle and produced by the warmed hand of the nurse. A table-spoonful or two may be thus used two or three times a day. But in such cases, says Dr. Hopkins, in the *Medical Record*, "the soup bath becomes a boon beyond all price. It not only relieves the thirst (which may be accomplished also by prolonged immersion in tepid water) but imparts sufficient nourishment to tide the patient over the critical period. We have known a child's life most evidently saved by this simple means. Let some pieces of mutton or other meat, sufficient for making two or three gallons of good soup, be first simmered for an hour and then boiled sufficiently long to thoroughly soften and extract the juices. In skimming, do not take away all the fat. The latter may be skimmed off while cooling and kept warm for inunction later. Pour the soup, when ready, into the little bath-tub, and, when sufficiently cool, immerse the child in it for a period of twenty minutes. It should, of course, have sufficient depth to cover the entire body, the head being supported by the nurse's hand. This should be repeated twice daily, the bath being re-warmed for a second use, and a fresh soup made if possible, each day. Let the bath be followed by inunction of the entire body with the warm fat that was set aside. After two or three days, if the case improves, the stomach will begin to retain light nourishment."

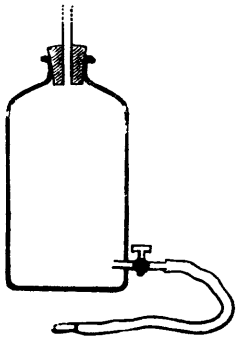
THE GERMAN SURGEONS' REPORT.

Now that the Emperor Frederick is dead, and the Empress has, by her accession, received the property which could not have come to her had he never ascended the throne, the German surgeons are showing up Mackenzie in a manner that will not be approved of by the profession, and which will have the effect of lowering the estimation of medical science and skill in the eyes of the whole world. It is easy to be wise after the event, and the reports submitted by Drs. Bergmann, Schroetter and Gerhardt show this wisdom in a large measure. They "knew all along" what was the trouble, and would make it appear that Mackenzie removed a healthy piece of larynx, which Virchow diagnosticated as *pachydermia laryngis*. This sounds rather absurd on the face of it. We shall, no doubt, be left in the dark as to the true inwardness of the case for some time to come, Dr. Mackenzie keeping very quiet, and only giving an outline of a more full and complete report to come. In this short report he says:

"In my opinion the disease from which the Emperor died was cancer. The morbid process probably commenced in the deepest tissues of the cartilaginous structures of the larynx, and they became affected at a very early date. A small growth, which was present when I first examined the late Emperor, was removed by me by several operations, and all the portions taken away were submitted to Professor Virchow. He was unable to detect in them any evidence of the existence of cancer. Examinations made at the beginning of March by Professor Waldeyer, however, led to the belief that cancer was then present. Whether the disease was originally cancerous, or assumed a malignant character some months after its first appearance, it is impossible to state. The fact that perichondritis and caries of the cartilages played an active and important part in the development of the disease, no doubt largely contributed to make it impossible to form a decided opinion as to its nature till quite a recent date."

THE STOMACH-PUMP SUPERSEDED.

Dr. D. Yellowlees writes as follows to the LANCET:—The recent correspondence as to the use of covered funnels in feeding by the stomach tube, leads me to give greater publicity to a far better contrivance, which I devised many years ago, and constantly use here. An ordinary twenty ounce bottle, perforated near the bottom by a small tap for the admission of air, and a long stomach tube bearing a cork which fits the mouth of the bottle, constitute the whole apparatus. The food being mixed in the bottle, the tube is introduced, the cork placed in the mouth of the bottle, the bottle inverted and raised, and the air-tap opened, when the food passes quickly into the stomach in a continuous stream. Great injecting force can be at once applied, if required, by *blowing* through the air-tap, to which a small rubber tube is attached for this purpose. For simplicity, cleanliness, efficiency, and perfect inspection, this plan leaves nothing to be desired, and solid nourishment can be thus given in many forms, as there is no tap to obstruct its passage, and as the food can be kept in agitation within the bottle during administration. No one who has used this contrivance will wish for any other. It is equally available for emptying the stomach, by lowering the bottle and establishing a syphon action by suction.



SULPHONAL.—It would appear that experience confirms the first statements regarding the therapeutical effects of this drug. Dr. Rosin, says the *Br. Med. Jour.*, concludes as follows:—"On the whole, sulphonal in doses of two grammes is as certain in its effects as morphine or chloral, and in cases of simple insomnia may be recommended in doses of double that strength, on account of its freedom from after-effects." The same authority says that Dr. Oestreicher, having observed the effects of sulphonal on fifty patients, some nervous and some phthisical, concludes—"that in moderate doses—that is, two grammes—this drug is a non-injurious hypnotic. Respiration, pulse, and kidney-secretion were unaffected; the effects of persistent use are, of course, unknown at present. It is best given in capsules or tabloids, from its insolubility in water. Oestreicher finds it without smell or taste; Rosin states that it has a slight bitter taste. Sleep sets in more slowly than after chloral or morphine in corresponding doses, but lasts longer."

ANOTHER DANGER FROM ETHERIZATION.—Dr. Hare, of the University of Pennsylvania, has drawn attention (*Therap. Gaz.*) to the fact that the temperature of patients subjected to tolerably prolonged etherization for operation varies as much as three degrees. This was not due, he believed, so much to the shock of the operation as to the anæsthetic. It is quite common to find it necessary to apply artificial aids to patients who have been removed from the operating table to restore heat to the chilled surface, especially when ether has been used. Experiments made on dogs shows that the rectal temperature may be reduced from 8° to 10° F. by giving five drachms of ether every five minutes for an hour. It is suggested that surgeons would do well to combat this action of ether by heat giving appliances while the patient is undergoing the operation.

A SANITARY Convention and meeting of the Executive Association of Health Officers, under the presidency of Dr. P. Palmer Burrows, will be held by invitation of the Mayor and Council of Lindsay, on Tuesday, Wednesday and Thursday, the 14th, 15th and 16th of August, 1888. As subjects of general interest to every city, town, village and hamlet will be discussed, and papers presented by eminent scientists, it is hoped that every place will be represented. Reduced fares have been arranged on Canada Pacific and Grand Trunk Roads (fare and a third). Those wishing a pleasant outing should visit Lindsay during the Convention.

ANTIPYRIN IN LABOR.—The effect of antipyrin enemata was found by Laget, (*Therap. Monat.*) to be the rendering of the contractions of the uterus in very severe labor, entirely painless. Steinthal succeeded by an enemata of two grammes in a cupful of water, in rendering painless the unbearable "pains" of a primipara who had been suffering twenty hours. The force of the uterine contractions seems to be in no degree lessened. Other observers have noted the same results.

Canadian Medical Association.—The following papers have already been promised for the Canadian Medical Association meeting, which will be held in Ottawa on the 12th, 13th and 14th of September: "Face Presentation," Dr. W. M. Mackay, Woodstock; "The Mortality of Pneumonia," Dr. Wm. Osler, Philadelphia; "The Duty of the Medical Profession under the Public Health Act of Ontario," Dr. Wm. Canniff, Toronto; "On Some Minute but Important Details in the Management of the Continuous Current in the Treatment of Fibroid and other Diseases of the Uterus," Dr. A. L. Smith, Montreal; "A Case of Resilient Stricture of the Urethra cured by Electricity," Dr. A. L. Smith, Montreal; "On the Treatment of Varicocele and Orchitis by the Electrical Current of Tension," Dr. A. L. Smith, Montreal. Papers have also been promised by Drs. Fenwick, Shepherd, Alloway, Blackader and Bell, of Montreal.

Cascara Sagrada in Rheumatism.—Dr. H. T. Goodwin says *(N. Y. Med. Jour.)* he has used cascara sagrada in about thirty cases of rheumatism with the most beneficial results, except in three or four where there was a syphilitic taint. If the bowels are acted upon too freely by it, the writer recommends the administration at the same time, of one of the preparations of iron. The explanation of its action is still to be sought, the writer gives his experience simply.

For Neuralgia.—Dr. Richardson recommends *(Asclepiad)* the following formula in neuralgia:—

℞.—Croton chloral . . . . . gr. ij.
Quinia . . . . . gr. ij.
Glycerin . . . . . q. s.
M. fl. pil.

One to be taken when the attack threatens, and to be repeated every two hours until relief is obtained.

As the world advances old landmarks and aphorisms give way. Thus, the ancient proverb has it, says the *Western Druggist*, "You cannot get more out of a bottle than you put in it." That's an error. Besides what he put in, he can get a headache, a sick stomach, and perhaps ten days in the lock-up.

The Council Examinations will be held in Toronto in September, commencing on the 18th.

Dr. Lawson Tait, has succeeded in curing six out of eight cases of acute suppurative peritonitis, of various origin, by laparotomy and drainage.

We are pleased to note that Dr. G. Sterling Ryerson has been presented at Court by Lord Wolseley. The Dr. was the sole American representative at the Donder's festival at Utrecht.

British Diploma.—Dr. Gilbert Gordon of Toronto, has lately taken the Diploma of L.R.C.P. & S. Edin. and L.S.P. & S. Glasgow.

Dr. John Milner Fothergill, M.D., Edinburgh, author of a number of medical works, died lately of diabetes, from which he has suffered for a number of years.

We regret that the name of Dr. Peters was by an inadvertence omitted from the list of those appointed to the extern department of the Toronto General Hospital, in our last issue.

We beg to direct attention to a new and elegant preparation of Effervescing Antipyrin, prepared by Lyman Bros. & Co., notice of which will be found in our advertising pages. The name of this firm is a sufficient guarantee of its being carefully prepared.

We are constantly in the receipt of letters testifying to the very excellent quality of Dr. Jerome Kidder's electric batteries. We have pleasure in specially recommending them, for we conscientiously believe them the best in the market. Although an American instrument, and hence requiring the payment of duty to bring them into Canada, yet practitioners will do well to communicate with the Kidder Electrical Company if in need of electrical apparatus.

We have received from the agents of Henri Nestle, Vevey, a photograph of a group of medals awarded to Nestle's Milk Food by thirty juries in all quarters of the globe. Accompanying the photograph is the brief but significant request that we note the unusual, and hitherto unattained, award of twelve diplomas of honor having been given Nestle's milk food. We have known of Nestle's Food for some years as being one of several infants' foods in the market, but we are free to confess we have not hitherto known that this food enjoyed such evident pre-eminence in European centres as the group of medals sent us would indicate. Any preparation that goes into competition before the juries of thirty World Expositions, and bears away eighteen gold medals, and in twelve instances the coveted diplomas of honor, must possess a very high order of merit.