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## TREATMENT OF ACUTE IDIOPATHIC PERITONITIS.

BY JAMES NEWELL, M.D., L.R.C.P. AND S., DETROIT,  
MICH. \*

I venture to make the assertion that no member of this Association will deny that acute Idiopathic peritonitis is a disease of very grave significance, and that the physician (whose lot is may be) who is called upon to combat the malady, not only often meets a foeman worthy of his steel, but an enemy whose overthrow calls out every resource of his art, and all the available means which he can command. Therefore, unless he has both a proper and distinct conception of the leading principles which are to govern him in his conflict with so dangerous and relentless an enemy, the result may frequently be both unpleasant to the physician and disastrous to his patient. As it is a disease in which I have taken a great interest for a number of years, during the most active period of my professional life, and in which I have (not without being probably thought egotistical) had unusual opportunities of observation and acquaintance, I shall endeavour (though feebly and imperfectly it be) to pourtray what I conceive to be the proper and essential treatment of the disease. As to the frequency with which acute idiopathic peritonitis occurs, I must say that my experience is not in accord with the standard authors; for they state it is a disease rarely, if ever, encountered. However, I venture the opinion that certain portions or districts of country may and do exert a modifying influence on the prevalence of the disease, and in consequence in some localities it will be much more frequently met with than in others.

\* Read before the Detroit Medical and Library Association, Nov., 1889.

As examples—during the years intervening between 1871 and '78 I practised my profession in the County of Elgin, Ontario, and during these seven years saw but one or two cases of acute idiopathic peritonitis. I had during this time and since made frequent and numerous enquiries of physicians practising in other parts of that Province and been informed that they seldom if ever met the disease. In the year 1878 I removed to Wyoming, in the County of Lambton, Ontario, and followed my profession there until I came to Detroit about a year ago. Now, whether it was owing to some peculiarity in the constitution of the people, paludal or miasmatic causes, or to the geographical position of the county (being bounded on the north by Lake Huron, and on the west by the River St. Clair, and exposed to sudden cold moist winds), I am unable to say; but acute idiopathic peritonitis was a disease quite frequently met with, both in its mildest and severest forms. For some time after my arrival in that district I was very much inclined to doubt the accuracy of my diagnostic powers and those of my professional confreres, until the frequency with which the disease occurred forced me to the conclusion that it was acute idiopathic peritonitis, and that our diagnoses were correct. I am in a position therefore to assume that this is a disease with which I have had considerable familiarity and experience, and that the conclusions at which I have arrived regarding the principles of its successful treatment are based more upon experience rather than upon theories or ideas obtained from a reading of the standard books and treatises. The successful treatment of acute idiopathic peritonitis resolves itself, in my mind, into two leading principles or indications, and which are to be kept constantly before the mental eye:—*Rest, and comparative freedom from pain.* By rest I mean absolute quiet of body. That I may the better impress this cardinal fact upon the minds of my hearers, I cannot forbear introducing the following extract from John Hilton's treatise on "Rest and Pain," as it is so appropriate to the subject. I ask the indulgence and forbearance of those members of the society who are familiar with the work and the lesson it so admirably teaches; but lest there be any in this audience who may not have fully grasped and comprehended the beneficial significance of rest in restoring the lost integrity of

inflamed tissue is my excuse for the digression :—

“I would ask you to suppose a serous membrane inflamed—what happens when this takes place? When it is not traumatic, but dependent upon some internal cause (quite irrespective of any direct local lesion), almost immediately a considerable quantity of lymph is effused, and this after a time coagulates spontaneously upon the free surface of the serous membrane, and thus at once prevents the ill effects of further friction. If inflamed serous membranes are allowed constantly and freely to rub upon each other it is impossible but that the irritation must be considerably increased, but by the coagulation of the lymph upon the free surfaces, they are protected against direct friction. Such is the case in the opposed surfaces of the abdominal viscera and their parieties, or in the heart and the opposed surfaces of the pericardium. As soon as the lymph is poured out, the serous membrane, as far as it can be, is put in a state of rest or freedom from friction. When the original disturbing cause has become exhausted or removed, then I apprehend that in consequence of the rest which the serous membrane has experienced through the effused lymph, it is able to recover or resume its normal function of rapid absorption. Thus we see the effusion apparently performing two purposes—preventing the friction between two inflamed surfaces, and that being accomplished, giving nature a fair chance of removing the original disturbing cause. Here the rest has so far contributed to the restored integrity of the serous membrane, that it has enabled it to recover its natural function—that of rapid absorption, and the first act its of renewed health and vigor is to absorb that effusion, which was the primary result, whatever the disturbing cause might have been. Thus, then, the lymph prevents friction and aids absorption. In this way I apprehend, nature does her best to repair injuries, whether they be the result simply of accident or other excitant of the inflammatory condition.”

As these are the words of a man of great learning and sound professional skill, they are worthy of deepest consideration and attention, serving as a guide or finger-board to show us the way to a safe termination of acute inflammatory diseases. To resume: On the onset or beginning of the disease the sufferer should be undressed and put into a comfortable bed, and absolute rest of body

enjoined. Great relief is often experienced from the application of heat to the abdomen; quite frequently more relief is obtained by moist than dry heat, and for which purpose a flannel or piece of spongiopiline wrung out of very hot water should be applied to the belly. When hot water is not obtainable and the onset of the disease is sudden and abrupt (almost explosive, as it were), as it very frequently is, a plate heated in the oven, or a hot stove lid wrapped in a piece of wetted flannel can be used until better and more effective means can be obtained. Care should be taken not to burn or scald the abdomen, as I have witnessed on several occasions, as it is wonderful the degree of heat which the sufferer is able to bear in the explosive form of onset or attack. In robust and healthy young subjects the abstraction of 12 to 16 oz. of blood from the arm by venesection has in my hands sometimes nipped the disease in the bud, and, as it were, extinguished the conflagration. I would only advise venesection when the attack is very acute; in robust young males, and not later than twelve hours after the advent of the disease. The opening in the vein should be large, the abstraction of the blood rapid, so that a sudden impression be made on the system. The effect produced, not the quantity of blood lost, is the proper guide. If the pulse is rapid and hard I give one drop of fluid extract of aconite root every fifteen minutes, until the pulse becomes softer and the skin moist. However, great care and caution are required to not continue the aconite too long, for sudden depression and adynamic symptoms may suddenly and unexpectedly supervene in this disease. I now come to speak of what I conceive to be the true and essential treatment of acute idiopathic peritonitis, as I consider the foregoing but auxiliary and subsidiary thereto—I mean *full and repeated doses of opium*. When called to a case, if the pain is severe, and there is great uneasiness, as shown by the patient frequently changing his attitude and making outcry, or there is a condition of shock, sometimes as severe as after a grave injury, and very much more alarming both to physician and friends, it has been my rule to administer hypodermatically from one-fourth to a half grain of sulphate of morphia, and to repeat in half an hour until the pain is subdued and the patient is easy. Of course in such a case I would not think of

giving aconite. If the case is not so urgent I am in the habit of dissolving one grain of sulphate of morphia in eight teaspoonfuls of water and giving a teaspoonful every 10, 15 or 20 minutes until relief is obtained. However, I am of the opinion that the hypodermatic method is the better one, except in children. When the acuteness and poignancy of the pain have been obtunded (for there is no disease in which the pain is more agonizing), I put the patient on full doses of pulverized opium, say two grains every two hours, and keep him narcotized, not, however, that he cannot be aroused, for I consider that dangerous; but, so he lies dozing and free from pain. The sooner this condition be brought on the better, and if two grains of opium every two hours will not have the desired effect (sleep, and freedom from pain), I increase the dose to three or four grains every two hours, or until the necessary effect is produced. I continue the opium in diminished or increased doses, as the exigency of the case may demand, until the pain and soreness of the abdomen have almost entirely vanished. When, in the course of the disease, symptoms of adynamia occur, as shown by subsultus tendinum, mild delirium, etc., I combine pulverized camphor, 2 to 5 grains, with each dose of the opium, and have had excellent results from its use. When the tongue is covered with a coat of a yellowish color, I have found a few small doses of calomel or grey powder have a good effect, but that mercury has any modifying effect on the serous inflammation has not been my experience. When there is impending or actual cardiac failure, as shown by the pulse, and diminished first sound of the heart, the quantity of opium must be lessened, and belladonna combined with the camphor. I have not found alcoholic stimulants so effective in this condition as have others. When there is failure of the respiratory centre, as shown by the slowness and shallowness of the respiratory effort, and which may be owing to the heroic doses of opium or the poison generated by the inflammation, it is imperative to diminish the quantity of opium, and give strychnia or nux vomica, with a strong infusion of coffee or tea. My experience is that opium is not nearly so paralyzing to the respiratory and circulatory centres as morphia, and, consequently, for years I have not given the latter except at the onset of the disease, when I wished to get a sudden and

rapid effect. When convalescence has set in, I think one or two grains of quinine 3 times a day is beneficial. As to the bowels, *I let them alone*, and if there is not an evacuation at the end of 10 or 12 days, providing the peritoneal inflammation has pretty well subsided, I administer an injection of warm water, and sometimes add to it four ounces of sweet oil. I have had much better results with letting the bowels alone and giving them rest than have those who have given laxatives, cathartics, or enemas, producing a passage every day or two. I have in some cases had to regret having opened the bowels *too soon*, but never for having waited until the acuteness of the attack was over and the inflammation had pretty well subsided. In reference to local medicated applications to the abdomen, the tincture of opium has given excellent results, and if there is much tympanites combining it with spirits of turpentine. Puncturing the inflated intestine with a hypodermic needle in this condition has not in my hands proved the success that might have been anticipated. Sometimes I have applied the blue ointment, but the oleate of mercury makes a much nicer and cleaner application. In case of lingering patches of inflammation, where it has been parietal, the application of cantharidal collodion has hastened resolution. Special attention must be given to the condition of the bladder, for there may be retention of urine, and which is frequently produced by the opium or the inflammation. In such cases the catheter must be used every 8 hours. For nourishment I confine the patient to a milk diet, and give it raw, boiled, or peptonized, as may best agree; sometimes diluting with lime water or chilling with ice is useful, if there is vomiting. If there are symptoms of sinking and prostration, to the milk I add cream, eggs, and whiskey. Beef tea or its essence I *taboo*, as it is apt to produce tympanites, and contains but a very small amount of nourishment.

As a general remark, I wish to put the fact on record, that acute ideopathic peritonitis is not a disease which always runs a typical course, as we might have been led to believe from its description in some of the books. Sometimes the pulse will be found slow, even below the normal, and not much changed in character, and the temperature normal, and in a few cases subnormal. Such patients are suspicious, require to be closely

watched, and the strength carefully husbanded. At the risk of incurring repetition and prolixity, I recapitulate the essentials of treatment: Physical rest of body, thereby preventing friction and injury of the inflamed and exquisitely tender surfaces. Quiet and rest of peristaltic action of the bowels, which can only be brought about and induced by opium or its derivatives. Some one has well named opium the "splint of the bowels," and such beneficent action is, I apprehend, the chief indication it fulfils when given in sufficient doses in peritonitis—suberving the same purpose as a splint applied to a fractured bone.

In addition, by allaying the general irritability of the system and easing the suffering (for intense pain is a terrible depressant and sometimes kills), the patient is put in the best possible condition to allow nature to remove the results of the inflammation and to promote recovery. "Repair is but the repetition of growth. The same elements, the same kindred conditions, are necessary to the same results. Rest is the necessary antecedent to the healthy accomplishment of both repair and growth. This surely is the natural suggestion of a means towards an end which should never be lost sight of by the physician and surgeon."\*

By following the line of treatment laid down, I have had good results in treating acute idiopathic peritonitis, and it has not been nearly so fatal as is generally the case when treated by other methods, but it is a *sine qua non* that the opium be pushed with an heroic hand that almost partakes of fearlessness, until a state of narcotism is produced that keeps the patient dozing and free from suffering. This is the critical point at which, in my experience, some physicians falter and fail, their prudence being more conspicuous than their courage. What is wanted is happy combination of both qualities, which will measure it not by the quantity given, but the effect produced, remembering that hesitation may mean death to the sufferer, and that "obstinacy in a bad cause is but constancy in a good one." †

In cases of *bronchitis in children*, tending to spread downward and become capillary, Prof. Da Costa recommends the administration of iodide of potassium.

\* Hilton, "Rest and Pain." † Religio Medici.

## THE ABORTIVE FORMS OF TYPHOID FEVER.\*

BY A. M'PHEDRAN, M.D.,

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To some it may seem superfluous to occupy the time of the Association with the discussion of a subject such as this, on which their opinions are quite decided; yet with many there is grave doubt that typhoid fever does abort, and not a few who are of sanguine disposition not only wrongly believe that typhoid often runs an abortive course, but that they can, with proper medication, abort cases that would, if left to themselves, run an ordinary course. Such being the diversity of opinion in the profession, it scarcely needs an apology for introducing the discussion of this phase of a disease with which we are all so familiar, and which annually destroys so many valuable lives.

Cases of slight feverishness, with headache, malaise, and anorexia, lasting a few days, but without distinctive symptoms, the *febricula* of some authors, are met with in all seasons and in all conditions of life. They have no constant cause or pathology, but are as various as the febrile diseases to which we are subject. Some are due to non-specific, others to specific causes. Of the non-specific causes are such simple catarrh of pharynx, bronchi, stomach, intestines, etc.; while of the specific are the numerous cases of febricula we meet with during the prevalence of the essential fevers, and are doubtless abortive cases of these fevers. We often meet with cases of whooping cough, for example, which are so mild that we would have no suspicion of their specific character but for their occurrence in association with well-developed cases of that disease. Similarly, in diphtheria, some cases are passed unnoticed, while others are detected only by their association with typical cases, or by the unfortunate circumstances of their proving the source of infection to others in whom the disease may prove of the most virulent character. No one hesitates to attribute the feverishness and sore throat of those nursing cases of scarlet fever to the poison of that disease; they are simply abortive attacks of scarlet fever. Similarly, in regard to all the

\*Read before the Ontario Medical Association, June, '89.

the other eranthemata. All admit that many abortive cases occur. We might go farther and say that there are few, if any diseases, which, in some individuals do not run an abortive course. If this is true, why should typhoid fever be an exception, and never run an abortive course? To deny that it never aborts would be unreasonable in theory, and is equally so in practice. It is only in the more recent works in medicine that we meet with any recognition of the abortive form of typhoid; in former editions of Flint, Bristowe, Reynold's System, etc., no reference is made to it.

It is the fashion, widely among the public, and but little less so in the profession, to look upon all cases of feverishness with malaise and headache, occurring apart from colds, etc., as due to malaria, and this, too, in districts in which malarial fevers are all but unknown. In this city, where cases of ague other than those imported are now seldom met with, we often hear malaria assigned as the cause of such indispositions. Many of these are doubtless abortive attacks of typhoid fever. The following cases, which are fairly illustrative ones, occurred in my service at the Toronto General Hospital last year. They all suffered from headache, *malaise*, stupor and prostration in greater or less degree:

CASE 1.—Agnes B., æt. 12, took ill on August 28th, 1888, with headache and vomiting. Had some diarrhœa a day or two afterwards. She was admitted to the Hospital Sept. 4th, with a temp. of 104°. Had slight diarrhœa next day. Spleen perceptibly enlarged. Temp. fell rapidly, and was normal on 8th. No rash, tympanites or iliac tenderness. Duration, 10 days at most.

CASE 2.—John M., æt. 18. Admitted Sept. 25th. Had been ill one week; had some diarrhœa before admission, and cough. His brother had typhoid fever for six weeks. Unsanitary premises. Temp. on admission, 102½°. Normal on 28th. Duration, 7 to 10 days.

CASE 3.—Alice A., æt. 17. Took sick on Sept. 23rd with headache, while out walking. Vomited on returning home. A laxative was given and diarrhœa followed for 2 or 3 days. Admitted Sept. 27th. Bowels loose after admission. No rash. General appearance typical of typhoid fever. Temp. normal on Oct. 3rd. Duration, 10 or 11 days.

CASE 4.—T. A. æt. 17. Admitted Sept. 29th.

Temp. 102½°. Ill about one week; bowels constipated. Temp. normal Oct. 4th. Duration, 10 to 12 days.

In two of these cases the duration of the fever was probably not more than 7 to 10 days; in the other two it was within 12 days. In all the onset was definite; the temperature rapidly attained its maximum, and its subsidence was rapid, occupying 2 to 4 days. These are the characters of abortive typhoid, of which these cases are typical examples.

In the next three cases, while the duration is short, all within seventeen days—yet some may object to them being called abortive. It would at least be admitted that they occupy a position midway between the ordinary and abortive forms.

CASE 5.—S. Smith æt. 23. Lived on unsanitary premises; typhoid in the neighborhood. Sick one week when admitted 25th September, with temp. 102.5°, its maximum. Had some diarrhœa for 3 days. Temp. normal on Oct. 3rd. Duration 14 to 16 days.

CASE 6.—Wm. D., October 28. A commercial traveller. Took sick Oct. 3rd, chilliness, headache, etc. Consulted physician Oct. 5th, when he was told he had a fever. Admitted Oct. 8th. Temp. 100¼°; next day reached its maximum 103°. Bowels constipated throughout. A slight rash; other symptoms typical. Temp. normal Oct. 8th. Duration about 14 days.

CASE 7.—Miss B. A nurse in the hospital. This case having been under observation from the commencement of the disease, the record is complete. The fever began on Oct. 28th, the temp. rising in the typical typhoid manner reaching its maximum in 4 days, 103°, fell to normal again on Nov. 14th. Duration really only 16 days. There was no rash, and the bowels were constipated throughout, the general condition that of typhoid fever.

It occurs to all practitioners to meet many cases such as these, mild cases bearing a general typhoid appearance, occurring under conditions that give rise to that fever in others, yet without many of its more typical phenomena. In private practice these cases are seen too infrequently to furnish data sufficient for a positive opinion. According to almost all writers the temp. quickly attains its maximum which is usually not more than 103°, but may be 106° even; this after a few days sub-

sides, in two or three days to the normal, the whole duration being from 7th to 12th or 14th day. Griesnger reports a case whose duration was only five days. And Liebermaster says that cases occur without pyrexia, there being only a slight non-febrile catarrh of the intestinal tract. There is no tympanites or abdominal tenderness. Constipation is the rule. The spleen will usually be found somewhat enlarged. The rash is often absent, when present it usually appears early, even by the 2nd day.

There is nothing in the beginning to distinguish these cases from the ordinary, except it be that often they begin with some chilliness and it may be with sweating. The diagnosis will often have to be made from the circumstances under which the cases occur, just as we diagnose abortive cases of the other essential fevers.

The bowel changes in these cases may, in the mildest, be confined to a slight catarrh of the lower part of the ilium, as pointed out by Liebermaster, with probably slight swelling of the Peyers patches and solitary glands. In cases with pyrexia for 8 to 12 days there is probably considerable infiltration of the glands, but without ulceration resulting, resolution taking place by absorption of the effused material. In the more protracted ones there may be slight ulceration of the surfaces of the glands, such as is met with high up in the illium in ordinary cases, but no sloughing.

Cases of abortive typhoid are to be carefully distinguished from those mild cases known as "walking" or "ambulatory" typhoid in which, though the symptoms are mild, they are protracted to the usual duration of the disease and in which the ulceration in the intestines may be both deep and extensive. The symptoms are not due to the intestinal lesions and therefore there is no definite relationship between them—in the severest cases the lesions may be only moderate, while it is not unusual for cases of "walking typhoid," to be suddenly stricken down by perforation. It is of importance to diagnose abortive cases of typhoid fever chiefly because they may become the sources of infection for susceptible persons unless the discharges are disinfected or destroyed.

Admitting that typhoid fever does abort in many who contract it, this very practical question presents itself for solution, viz.: Are we able by early and prompt means to cause the abortion of

cases that would otherwise run an ordinary? I know some would answer this in the affirmative, and many remedies have from time to time been recommended for the purpose. I feel convinced that such opinions are due to the fact that the natural history of the disease is overlooked, and the natural short course of the disease in many cases attributed to the remedies used. In our eager search after specifics for diseases of all kinds we are too prone to forget, when we have had a more than usually successful result in a series of cases, that diseases have a natural history which is subject to great variations under varying circumstances. We congratulate ourselves that the favorable turn in events is wholly due to our management, and that nature counts for nothing. The sooner we thoroughly awaken to the fact that our materia medica contains no specifics for constitutional diseases the sooner will our therapeutics be freed from empiricism and become rational.

All the remedies to which abortive powers have been attributed, may be divided into two classes, viz., the disinfectant and the purgative. Of the disinfectant class a combination of carbolic acid and iodine may be selected as the representative; it has been most widely commended. Some years ago I had, what appeared to be, the most gratifying experience with this combination. Later experience showed equally favorable results with other remedies, or even with placebos. Any lingering confidence I had in the efficacy of carbolic acid and iodine was rudely destroyed by my hospital experience last year, in which case after case did badly on them, as they doubtless would on any medicine that could have been prescribed. The largest quantity of the mixture that can be given is too small to have any appreciable effect in disinfecting the intestinal tract, and a positive objection to its use exists in the fact that it not infrequently disturbs the stomach and causes vomiting.

Of the purgation class, calomel has been most widely used. Wenderlich claims for it the power to abort the disease, but the evidence against such a claim is overwhelming, as it is also against corrosive sublimate. Given in the first days of the illness calomel is, however a valuable and efficient purgative, mild in its action, and possessing considerable antiseptic properties. Its action on the bowels is followed by more or less fall of tempera-

ture, which may be permanent. This result, when not occurring spontaneously, as it does frequently, no doubt, is due merely to its purgative action, as equally good results may be obtained by the administration of castor oil. The purging removes from the intestinal canal, the decomposing faecal matter, together with the poisonous alkaloids produced by the disease germs, but the calomel can have no power either to inhibit or destroy the micro-organisms themselves.

Then, while neither these nor any other remedies yet discovered, have the least power in aborting typhoid fever, and the present status of therapeutics and pathology offer us little, if any hope of our ever attaining such a consummation, yet our efforts in this direction have not been all a failure. That much has been done to mitigate the disease and reduce the mortality, we have but to consider present results of treatment with those of a decade or two ago. Prevention is, however, the only course that promotes complete satisfaction.

### Correspondence.

#### MEDICAL EDUCATION.

To the Editor of the CANADA LANCET.

SIR,—From what I have been able to learn as to the views of the medical men in this division, in regard to Medical Education, I believe it safe to say, that a considerable majority of them regard, as I do, with anxiety if not alarm, the movement which has made the old Toronto School of Medicine, practically a Government Medical School by making it the Medical Department of the Provincial University, thereby excluding the possibility of other Medical Colleges deriving any benefit from any of those advantages which have been and are now being secured to the Provincial University at the expense of the Province, and which prior to the creation of University Medical Faculty were equally open to all students of Medicine who chose to avail themselves of them, as they should be in a university truly Provincial in its character.

It is difficult to see any good reason why the Government should enter the field of Medical Education and use the resources of the Province in an effort to build up one Medical College, in no respect superior to others, and to "down" the

other chartered Medical Colleges as far as may be in their power to do so. These colleges will come out all right for the sympathy of the Profession and of the public is fully with them.

The public have not asked for this action on the part of the Government and on a popular vote, not two per cent. of the people would vote for it, because they don't want a monopoly or any thing which looks like an attempt to create one, in Medical Education.

The Medical Profession have not asked for it, and on a vote, a large majority would certainly be opposed to it. The minority would consist chiefly of the immediate friends of the one Medical School referred to.

The interests of Medical Education do not call for it. The present position of Ontario in regard to medical matters is extremely good, and the graduates of all her schools take prominent positions in whatever parts of the world they are found. This has arisen in part from the stringent provisions of the "Ontario Medical Act," and in part from the wholesome competition and generous rivalry of its Medical Colleges.

I submit that it is not in the interest of Medical Education that this wholesome competition should be replaced by a would-be monopoly—that our active, energetic Medical Colleges should be injured in any degree by a State-subsidized Institution.

No educated man in, or out of, the profession will question the advisability of affording opportunities for the highest possible education in all the various subjects closely related to medicine; but if the resources of the Province are either directly or indirectly made available for this object, they ought to be so applied that the benefits may be freely and equally available to every student of every medical college in the Province.

The scheme of Medical Education which the Government is apparently trying to carry out is not only grossly unfair to the other Medical Colleges, but is opposed to the wishes of the public at large; is not desired by the medical profession, and is altogether likely ultimately, as a similar policy did long ago, to result in serious injury to the cause of Medical Education in this Province.

Yours, etc.,

WILLIAM T. HARRIS.

Jan. 24th, 1890.

## OUR PHILADELPHIA LETTER.

(From Our Own Correspondent.)

## THE USE OF PHOTOGRAPHY FOR RECOGNIZING AND COMPARING TYPES OF INSANITY.

Since the introduction of simple forms of photography, renewed efforts have been made by physicians and other scientific workers to adapt this art to practical use in medicine. The introduction of composite photography was an advance in proving the manner in which certain marked characteristics grow in different types of individuals. Instantaneous plates, cleverly arranged, have been made to show the curious gaits of different forms of nervous ailments. But photography as a whole, has been a rather disappointing agent in medicine; it has done but little of what is expected of it, and in many cases and attempts it has proved a misleading guide. At Norristown, in the State Hospital for the Insane, photography has been used to catch the lineaments of the various types of insanity; the method in which the work is done may be of interest to the readers of the LANCET.

A gallery convenient to the wards was fitted up and typical patients were selected from among the eight hundred insane men collected in the institution. The patients were brought to the gallery with as little previous knowledge of what was going to happen as possible; this was done to avoid exciting them or giving them time to "fix up," every thing being wanted as near the reality as possible. They were given a chair and were allowed to assume their own positions; no instructions whatever as to position or posing, being given. Wherever the patient noticed this lack of instruction he attributed it to the amateurishness of his photographers. In this way many interesting characteristics were brought out; the moods in which they happened to be were expressed; the expression of the face was given; the general physique and costume of each class could be studied. All this went to make up the *tout ensemble* which gave to each patient an indescribable finish, different and yet adhering to a certain type. This effect was facilitated by the rapidity with which the pictures were taken. The camera was already focussed; the light arranged; no head-rest was adjusted, for the exposure was short; care being taken only that

the chair in which the patient sat should not be moved.

By using the same chair always in the same position, with the same light and the camera invariably the same distance from the sitter, this could be done; it also served to show the comparative height and breadth of each patient in this way, the space between the top of the sitter's head and the upper edge of the photograph represents the varying heights and the amount of background revealed on each side shows the comparative breadths. In this way two hundred and fifty interesting photographs were obtained in a short time.

The method has been still further broadened by Dr. Chase, chief resident male physician, so that now all new patients are photographed on admission and the faces of all the older patients are gradually being added to the collection, so that the whole eight hundred are now included. This album serves a number of purposes; it shows the condition of the patient at a certain period; it serves as a reminder in recalling the cases of dead or discharged inmates, and in cases of escape it affords a very efficient means of identification. When Dr. Chase completes this work, it will throw light on a very interesting and important point; that is, to what degree the faces of the insane express their malady; whether it would be possible to diagnose or classify them by such means. Moreover it will add another interesting advance in medicine and photography to the annals which yearly fill our journals.

J. HOWE ADAMS, M.D.

TREATMENT OF VENEREAL WARTS.—P.S. (*Br. Med. Jour.*) writes: "Licentiate" will find the following powder, used twice daily and left on the wart, remove the growth in a few days; I have often used it; R Pulv. sabinæ recent., cupri subacet., āā ʒj, M.ft. pulv. It is an old remedy, but very effectual. Salicylic acid also rapidly removes them when applied in powder.

ARSENICAL PASTE FOR WARTS.—It is said that ung. hyd. nit., containing from five to ten per cent. of arsenic, spread on linen and applied over the wart will cause softening and gradual disappearance of the growth without pain.

## Selected Articles.

### ON THE PATHOLOGY OF RENAL DROPSY.

BY A. G. AULD, M.D.

The pathology of dropsy, and of renal dropsy in particular, has excited considerable interest and discussion since the experimental inquiry which is chiefly associated with the name of Cohnheim.

With respect to the œdema of hydræmia, Cohnheim, and with him Lichtheim, found in their experiments that a simple hydræmia or even hydræmic plethora was insufficient for its production. It was necessary that a change in the capillary wall of a paralytic nature be superadded, tending in all probability to cause a loosening of the attachments of the endothelial cells of which it is composed. In one experiment, Cohnheim and Lichtheim ligatured the iliac vein of a dog, yet this was not followed by œdema of the corresponding limb. Ranvier repeated the experiment, and in addition divided portions of the sciatic nerve. It was found that while section of the motor fibres of the nerve gave negative results, section of the vaso-motor fibres was followed by œdema of the limb. Salvioli obtained similar effects in dogs rendered artificially hydræmic. With respect also to the lymphatics, it is found that their complete occlusion is, at least for a time, unattended by œdema of the pertaining parts. In another experiment Cohnheim depleted a dog, and injected salt solution till hydræmic plethora ensued. The result was a great increase of the natural secretions—e.g., saliva, bile, urine, and intestinal fluid; but not until the hydræmic plethora was of the most extreme kind was any dropsy manifested, and then in the form of ascites only. Not only so, but Fleischer, after tying the ureters and adding urea to the injected liquid, failed to obtain anasarca, nor was the blood pressure permanently raised.

On the strength of these and such like experiments Cohnheim came to the conclusion that dropsy occurring in the human subject was caused, not so much by a hydræmia or hydræmic plethora, as by a morbid alteration in the walls of the capillaries favorable to an increased transudation of their fluid contents. This alteration he considered to be due to the direct action of a particular poison existing in the blood, the nature of which is problematical, but defined by some in the case of renal dropsy as the same specific agent which effects the kidney. It is, however, suggested by Brunton that it may be sarco-lactic acid, which, in conditions of imperfect oxygenation, may be formed instead of carbonic acid, he and Cash have discovered that the addition of dilute acids to the blood not only causes increased permeability of the vessels, as observed by Gaskell, but also

œdema of the surrounding tissues. In reference to this question, it may be said that, apart from inflammatory conditions, there is but scant evidence to maintain the proposition that the existence, and even the prolonged existence, of a poison in the blood has any direct influence in the production of dropsy. Were it so, this symptom would be much more frequent, and at the same time much less significant, than it really is. Quite an exceptional instance, however, is found in the case of arsenic, which causes an œdema of obscure origin said by Feitelber to be the outcome of defective oxygenation. It could hardly be justifiable to adduce the malignant œdema of Koch in this connection, which is due to the action of a bacillus, though Bienstock, indeed, states that a somewhat similar organism can be cultivated from the fæces of man. On the other hand, there can be no doubt whatever that there are poisonous substances which by reason of their deleterious action on the blood act as remote causes in the production of dropsy. This is well illustrated in the case of the œdema of chlorosis, there being every reason to believe that this cachexia is intimately related to the absorption of ptomaines and leucomaines from the stomach and intestinal tract, as declared both on pathological and clinical grounds by Bouchard, Duclos, Sir Andrew Clark, and others.

Again, with respect to the locality of the œdema it is found in disease, and especially in renal disease, that hydræmic plethora is chiefly associated with symptoms the very reverse of those occurring in Cohnheim's experiment—with œdema, namely, of the skin and superficial tissues of the body, and with a diminution of the natural secretions and excretions. Pathologists have been much troubled over this very decided though instructive contrast, for the explanation of which various opinions have been advanced. Cohnheim himself supposed the skin in renal disease to be in a morbid state, its vessels debilitated, and more susceptible to the action of the poisonous agent which he believed to exist—a condition which, indeed, demonstrably obtains in the case of scarlatinal dropsy. Coats, commenting on this, imagines that a special vulnerability of the skin, is, from its pathological relationship, to be apprehended in kidney disease, and he further considers it probable that it is injured by the same irritant which attacks the kidney. Hamilton, in his search for an explanation, goes almost the length of contradicting himself. He believes the œdema to be induced by a long-continued stretching of the skin, for the production of which there was not sufficient time in the experiments on dogs, and yet elsewhere he states truly that the superficial œdema commences where the tissues are very lax. The most striking negation of the theory that the œdema of the skin is owing to a special

participation of this texture in the disease is that afforded by the similarly distributed œdema which results from retention of urine, independently of any renal disease. This curious phenomenon has been particularly investigated and described by Trousseau. Its symptoms consist in an enormous distension of the bladder, with frequent or continuous dribbling of healthy urine and anasarca. Trousseau imagines that a flow of urine may take place backwards through the ureters into the kidneys distending these organs and impeding their functions. It has suggested itself to me that part of the urine may be absorbed by the distended bladder; but, anyhow, the fact remains that the anasarca is unattended by any disease of the kidney.

The very fact that the results of experiment on healthy animals bring into such bold relief the results of disease in the human subject suggests the greatest caution in dealing with them as standards of reference in pathological questions. Such ingenious theories as those referred to, which have been constructed to reconcile the dissimilar phenomena, are thus *a fortiori* liable to be impeached as tending only to obscure the light which these experiments convey. And such truly I believe to be in great measure the case. When critically examined, the chief value of these experiments seems to consist in their leading to the reflection that disease does not shoot out its phenomena in an hour or two, but that it works long and often silently, is recondite in its nature, complex in its affinities, and usually fertile in its resources; that is to say, they indicate that in the elucidation of the phenomena it is necessary to look deeper and more antecedent. And with respect to renal dropsy, I think there can be little doubt that its chief vital predisponent is that condition of the blood to which the term "anæmia" is conveniently applied. Clinical experience confirms this. "How is it," says Sutton, "that œdema is so prevalent in some cases and not in others? Frequently the renal symptoms—albuminuria, hæmaturia, giddiness and shortness of breath—have come on, but with no appreciable dropsy. The dropsy is augmented with the increasing loss of red corpuscles, the colored respiratory organs; and it may be plausibly suggested that to the anæmia of Bright's disease as to chlorosis certain retained products of the organism, or their costic derivatives, stand in a casual relationship. But, however originated, one of the most palpable facts in connexion with anæmia is failure of the blood adequately to carry on the circulation. Then, when to anæmia an hydræmic plethora is added, the conditions for the production of renal dropsy are fulfilled, whilst its distribution is regulated by physical laws. Consider the condition of matters. The blood, as already stated, is suffering intrinsically in progressive deterioration of its vital energy, particu-

larly from progressive diminution of its corpuscles, which, by their mutual actions of the normal state, is, moreover, as Hamilton very appropriately insists on, signally impeded in its functions by alterations of its specific gravity. The plasma has become specifically lighter than the red corpuscles, which consequently cease to float with ease in the centre of the stream. Hereby the corpuscles, instead of assisting, only serve to retard the blood current, leading to increase of tension and the pressing out of a greater quantity of fluid than usual. But, further than this, the specific gravity of the blood as a whole, from the advancing attenuation of its proteid constituents, is altered relatively to that of the plasma in the surrounding lymph-canalicular system, which will constitute another condition favourable to the transudation of the fluid within the blood vessels, and such transudation will be rendered still greater by the loss of tonicity which the vessel wall shares in common with the rest of the tissues in this cachexia.

Now, in this hydræmic plethora, with its attendant difficulties of circulation, it is in accordance with dynamical principles that in those parts most remote from the heart—in the periphery of the body, namely—will the impediment be greatest; and, in accordance with the laws of gravitation, the most dependent and the most lax of these parts will be specially involved. There the *vis a front* is greatest and the circulation is slowest; the venules become over-distended, and are unable to absorb and transmit the lymph which pours forth excessively from the capillaries. Should this state of matters continue, the circulation will fail nearer to the heart, until the fluid accumulates internally, in the serous cavities, lungs, and other organs, when death is imminent.

On the other hand, with regard to the phenomena which appeared in the subject of Cohnheim's experiment, their explanation may not be so far to seek when it is considered that the blood and internal organs were vigorous and healthy to begin with. A continuous effort would naturally be made by the healthy organism to rid itself of the superabundant fluid by means of the natural channels. This would lead to venous engorgement in and around those organs whose functions were exalted. Such would notably take place in the abdomen where excretion has its seat, and hence the resultant ascites. But in disease these conditions are reversed, and the organism perforce seeks relief through other channels, for the excretory organs are appealed to in vain towards the riddance of a foreign element whose invasion they have been powerless to resist, and under whose yoke they are paralysed.—*Lancet*.

## THE PRESENCE OF SUGAR IN THE URINE.

A few years ago I published in the *St. Thomas's Hospital Reports*, vol. xii., some notes on glycosuria, chiefly as observed in persons who had passed the middle age of life. The observations then recorded have been followed up and added to, and I now venture to set before you some statements and remarks in the way of supplement and illustration. These statements and remarks must not be taken to represent final decision in any one direction. They are, on the contrary, presented as matters to be thought about, matters which, being amplified by further note and thought, may help us to understand more of what indications in the way of diagnosis and treatment may be drawn from the occurrence, in one case or another, of glycosuria.

I trust that I shall not weary you if I review, in the outset, the conditions which may, so far as our knowledge goes, determine the presence of sugar in the urine in pathological quantity. Summarised as briefly as possible the conditions are: 1, excessive afflux of arterial blood to the liver, and probably to other glycogenic organs; 2, defective assimilation of glucose; 3, defective formation of glycogen; 4, instability of glucose; 3, defective formation of glycogen which is too easily transformed; 5, excessive ingestion of glucose or glucose-yielding substances.

Under the first head may be gathered several kinds of cause; for example, 1, vasomotor paralysis, determined by disease or injury of the medullary centre or of the nerves connecting the centre with the arteries of the liver; 2, dilatation of the hepatic artery, not determined by disease of nerve centre or nerves, but by irritation in the liver, or by reflex action at the instigation of other organs, such as the stomach, or by general disorder of the circulation, functional, a result of nerve strain or excitement, functional and probably also dyscrasic, as in gout; 3, possibly also compensatory hyperæmia, balancing obstruction of the arterial circulation in other parts and systems of the body. So far as I know, this possibility has not been hitherto discussed. But the converse of it appears to be pretty clearly established by actual experiment. Dr. Lauder Brunton, in the *Handbook for the Physiological Laboratory*, gives an admirable summary of the various ways in which nerve sections and nerve irritations may produce glycosuria. After showing that division of the fibres passing from the vasomotor centre in the medulla oblongata down the cervical part of the spinal cord, and thence along the vertebral arteries to the last cervical ganglion is followed by diabetes, he states that it is of great importance to notice that section of the sympathetic cord or splanchnic nerves does not produce diabetes, although the

vasomotor nerves of the liver are thus divided. To quote Dr. Brunton textually: "The reason of this probably is that the vasomotor nerves of the intestine being divided at the same time, so much blood goes to the intestinal vessels that the circulation in the liver is not increased."

If this plausible explanation be admitted, it seems to me reasonable to argue that an undue contraction of arteries in other parts of the body than the liver may determine an excessive blood-pressure in the arteries of that organ, and to set up glycosuria, the liver itself not being necessarily at fault. There is one form of glycosuria to which I shall presently draw your attention as being possibly explained by such conditions.

The first practical point to which I should like to draw your attention is the influence of heredity in bringing about glycosuria. Of this my notes afford several instances. In one case both parents have passed sugar in the urine for many years; the father dying at the age of 75, the mother being still alive at an age over 80. Here the eldest son, a remarkably powerfully-built man of 55, has glycosuria. In another case the eldest daughter of a gentleman, who died also at the age of 75, after passing sugar for many years, has glycosuria to an amount justifying the application of the term diabetes. She is a tall, very stout lady, enjoying apparently very good health, but she passes daily from 100 to 150 ounces of urine loaded with sugar. Again, a gentleman of extremely nervous temperament comes with intermittent glycosuria. His nervousness goes often so far as to annul self-control, so that he dare not travel about the streets of London without a companion; and his glycosuria appears mainly to coincide, in its development, with his perturbations. He states that his mother has diabetes, and is under restraint on account of mental aberration. My notes also give me two other cases of inheritance of a similar kind. They further present more than one case in which brothers, or brothers and sisters, of one family, have had glycosuria. In one of these it is probable that one of the parents had been a subject of the malady. It is of course evident that the existence of glycosuria in minor degrees will have been often overlooked in the past, and that a better estimation of the transmission of the tendency will, in the future, be more possible under the steady maintenance of careful examination of the urine. I think it is certain that in many cases the disease is transmitted from parent to child; and it is worth our while to consider in what way the transmission may be ordered.

In the first case to which I have drawn attention there was a transmission from the father's side of gout as well as of glycosuria. Glycosuria is well recognized as a not infrequent symptom of gout; and here it is to my mind very probable

that the gouty diathesis determined in each case the occurrence of the glycosuria.

Glycosuria, again, is certainly often observed in people subjected to great nervous strain, and in victims of excessive nervous irritability. Here, again, the possibility of a double transmission must be before us. But, when we come to consider cases in which these conditions are absent, a different view is presented.

Gout and nervous disorder being absent, both in parent and child, it is reasonable to suggest that tissue imperfection is to be invoked. In the second case which I have quoted, the lady who presents a sharp glycosuria is also abnormally stout. Her father, it may be noted, had at one period of his life been of very full habit.

The conjunction suggests that her tissues are, in more than one way, abnormal tissues; that, correlated with the excess of fat, there may be an imperfect constitution of glycogen, rendering it unstable and prone to change. In considering heredity observed in diabetes, we surely have not only to recognize the handing down of morbid processes, but also handing down of various constitutions and modes of behaviour of the several tissues.

The occurrence of glycosuria in very stout people is certainly a noteworthy fact. I have seen it in people stout by inheritance and without other sign of disease; in people stout by reason of unwise habits of life, sometimes in the way of want of exercise, notably in the way of alcoholic indulgence; and I am inclined to regard both the accumulation of fat and the occurrence of glycosuria as marks of imperfect forms of nutrition. In addition to these causes, we cannot overlook the influence of persistent alcoholic excitement of the liver in many cases included in the group just referred to. I find in my notes records of many cases in which, together with obesity, there were marked indications of affection of the liver. In most cases the liver was enlarged and tender; in a much smaller number, reduced. In most, with the alteration in the size of the liver, there coincided such symptoms as occasional jaundice, morning sickness, and great impairment of appetite. It is fair to suppose that in such cases the irritation of the liver by alcohol produced a reflex active hyperæmia, and consequently glycosuria, so that the relation of corpulence to glycosuria is decidedly complex. It is necessary, however, to remember that not a few of the victims of alcoholism come to us emaciated and still present glycosuria. I am much interested in finding that, in a very considerable proportion of cases of this class, valvular disease of the heart is detected, in addition to the affection of the liver. At first sight this, by causing backward pressure into the liver, would appear to oppose the introduction into that organ of an excessive amount of

arterial blood. I am not prepared at the present moment to explain the part taken, if any, by the valvular disease in the favoring of glycosuria. But the concurrence comes out strongly in my records, and must demand further attention. I think it probable that irregularities of arterial tension will here have to be considered.

There is another group of cases which I think must be placed in close approximation with the foregoing. We not infrequently find that people presenting in a typical form the symptoms of contracting granular kidney have also glycosuria. Within the last few weeks I have seen a farmer, aged 60, who presented all the symptoms of contracting granular kidney of about a year's duration. He had no valvular disease; had a considerable enlargement of the liver, and, it is to be noted, much anasarca. His urine was of specific gravity 1022, contained a good deal of albumen, and gave a very definite sugar reaction. He had been a stout man, but was now much wasted, and had not been guilty of alcoholic excesses. He had no definite sign of gout. Now, whether in this case the glycosuria was due to a general defect of assimilative or constructive process, or related with a very definite arterial tension, is not easily to be decided. I put it forward as one of the many problems awaiting solution in the study of glycosuria. To these I will at the moment add another. I have observed the occurrence of glycosuria in two cases of Raynaud's disease, and with these I may couple the notes of a case which I had the opportunity of watching for several years. The patient was a gentleman of the age, when I first saw him, of 64. He was rather stout, had albuminuria and casts in the urine, and was passing a good deal of sugar without polyuria.

When I found these conditions I put him upon a careful diet, which, I am bound to say, he entirely disregarded. Shortly afterwards circular sloughs of very slight depth made their appearance on his legs, about equally on both. Their form made me suspect the influence of syphilis, but upon this point he was not communicative. The history of his children makes it pretty certain, however, that he had had syphilis severely. I treated him with iodide of potassium and kept him at rest for many weeks, with the result that the sloughs separated and the wounds healed. He now remained fairly well, though with diminished faculties, for six years, and then again consulted me for the reappearance of sloughs, now mainly confined to his left leg, in which I found, in addition to extensive sloughs still of a superficial character, a complete obstruction of the femoral artery, which certainly had not existed before. Placed in bed and carefully nursed, while the administration of iodide of potassium was steadily maintained, he survived for more than six months.

Renal disease, glycosuria, and syphilis seemed all to have played their part in the fatal termination, and to the end there was no such general sloughing as one would have expected to result, in such a damaged constitution, from the blocking of the femoral artery. Here is another illustration of the complexity of the symptoms which are found in many cases of glycosuria, or I may perhaps say of the complexity of the causes which may determine the occurrence of glycosuria.

I am here reminded of a case which I recorded many years ago, looking at it from a different standpoint from the present. A young man of 25, who had contracted syphilis, consulted me on account of mischief in the mastoid process. The mischief turned out to be of a very serious character. On examination of his urine I found that it contained both albumen and sugar in considerable quantities. The albumen was pretty clearly referred to contracting granular kidney, but the sugar was not so easily disposed of. The first idea in any way of explanation was that irritation had spread from the mastoid process, inward to the medulla, and had affected the glycosuric centre therein. The next idea was that the liver might be involved in the meshes of syphilis, and be consequently disordered in its glycogenic function.

I must confess that the case at the time engaged my attention chiefly in respect to the remarkable form of uric acid observed in the urine, which indeed led me to undertake a prolonged observation on the influence of the constituents of urine normal and abnormal upon the form of uric acid as observed under the microscope. Whatever may have been the cause of the glycosuria in the case to which I refer, it is evident from cases which I have since seen that glycosuria is often present in cases of tertiary syphilis, and under conditions not involving irritation of the medulla.

My notes supply me with several instances of the association of glycosuria with tertiary syphilis without the least suggestion of implication of the medulla. The well known incidence upon the liver of the effects of tertiary syphilis leads me to presume that hepatic irritation is mainly chargeable with the production of the symptom of glycosuria; and on review of my subsequent cases I find that signs of hepatic disorder were always present. But I dare not speak in any tone of decision upon this point, being confronted by the profound alterations in general nutrition brought about by syphilis, and by the recognition of the possibility that, independent of hepatic irritation, faulty tissue-building may have to be considered; and such defect of anabolism may not concern the liver only. We know that there are other organs in which glycogen is formed and stored, notably the muscles. And as I review glycosuria as it has

presented itself to me, I experience much doubt as to whether I have not been keeping the liver too pre-eminently in my mind. The comparatively small amount of sugar found in the urine of many persons fairly advanced in life may possibly be inadequate to the majesty of that great organ. I know of no methods of analysis which may enable us to distinguish a glycosuria of hepatic origin from one of muscular origin. I can see no reason which should prevent a glycosuria from being the result of perturbations in the several glycogen-forming structures respectively; that is to say, it seems to me quite possible that a disturbance of nutrition in muscles, in spinal cord, and in liver might exist independently in each and give rise to glycosuria, while, on the other hand, a deep dystrophy might affect all at once. You will see that the consideration is rather wide, and I think that it offers a problem worthy of careful analysis.—Wm. M. Ord, M.D., F.R.C.P., in *Brit. Med. Journal*.

(To be continued.)

#### DILATATION OF THE STOMACH.

Dilatation of the stomach is a pathological condition generally, if not probably always, accompanied by subacidity, and in a large number of cases with anacidity.

Only a minority of cases of this kind are primary dilatation—i.e., that do not depend upon some other morbid affection of the stomach; the majority are secondary, in so far that they are consequent upon stenosis of the pylorus, which in turn may be either benign or malignant—the former arising from cicatricial contraction after ulcer, the latter due to the presence of carcinoma in that region. There may be also stenosis from mechanical pressure of near-lying tumors (floating kidney, Bartels), which, in turn, like all obstructions in that locality, occasion dilatation of the stomach.

Gastric dilatation without pyloric obstruction is sometimes noted in, and consequent upon, chronic catarrh of the stomach, but never occurs then in that degree as in the variety resulting from the former cause. It depends upon paresis of the muscular coat resulting from general debility or overdistention by ingested matter, and is frequently noted in those who indulge to excess in the pleasures of the table and the cup. I have had occasion to observe it more in connection with the chronic gastric catarrh of beer-drinkers than of any other class of patients, and it is also claimed to be frequently found among diabetics.

The *pathology* of gastric dilatation is to be considered as similar to that of cardiac dilatation in aortic obstruction. The muscular fibres of the

stomach, to overcome the pyloric constriction, first become hypertrophied; the accumulation of food soon produces paresis of the muscular coat and dilatation results, which increases in the same measure as the chemical peptic act is diminished, and the fermentative changes of the food-bolus produce irritation and inflammation of the mucosa. The latter, under such conditions, fails to secrete a sufficient amount of hydrochloric acid, which is the excitant to gastric peristalsis. As a consequence of overdistention, the mucous coat suffers anatomical changes, the ostia of the peptic glands—which at first appear almost hypertrophied and extend beyond the surface of the mucosa—soon atrophy, and with it the secreting power of the gland becomes less and less.

It was thought at one time that anacidity was pathognomonic of gastric carcinoma, but that has been certainly disproven, and it can only be possible when pyloric cancer, and consequent obstruction, produces dilatation of the stomach. Any considerable dilatation must necessarily result in subacidity, and if existing for some time and in increasing ratio, or from complete pyloric stenosis, it must result in anacidity. This has been disputed and HCl has been claimed as being present in not merely distended stomachs, but also in the overdistention or complete dilatation from pyloric obstruction, but it seems unlikely, and when we consider the diagnostic difficulties for defining distention, or even sometimes complete dilatation, the error may be readily looked for rather in the diagnosis than in the pathological condition. We may justly assume that anacidity is not a symptom accompanying any special gastric disease, but in all probability always results from complete dilatation from whatever cause this may happen. While in the functional anacidity from gastric catarrh, etc., this may exist for the time being and is, no doubt, also the result of dilatation, it being a paresis of the muscular coat rather than a paralysis of the fibre as in complete dilatation, the chemical character of the gastric secretion can be restored by a removal of the vicious element.

The *symptoms* of gastric ectasis are those of anorexia generally, anorexia, gastric pressure, eructations, pyrosis and vomiting. The latter is somewhat characteristic, as it takes place at longer intervals only, when the ectasis has assumed great proportions and fermentative changes exert their irritation upon the mucous membrane. According to the amount and quality of food taken, it may happen only once in twenty-four hours, or in three to four days, and even longer periods. My friend, Dr. J. M. Barton, ingeniously ascertains the number of meals comprised in the emetic act under such conditions, by giving a number of raisins with each meal and counting their number when rejected from the stomach. To arrive at

the degree of stenosis he gives both raisins and a few currants. If the latter are not ejected in the vomit he concludes very justly that the pylorus is partly pervious and deduces the amount of constriction from the size of the currants. The ejected matter is usually copious, is readily vomited without much nausea or straining, and patients feel a great sense of relief after it.

The *diagnosis* is not always as readily arrived at as might be judged from the number of mechanical means for this purpose. The objective examination by palpation and percussion leads in well-marked cases at times easily to a satisfactory conclusion, especially if the stomach is filled by fluids or gases. To that end it is often of great service to give in different potions about thirty grains of sodium bi-carbonate and tartaric acid, when, as a rule, the inflated stomach may be palpated with facility. If, in addition to this, a quantity of water, about eight to twelve ounces, is swallowed and the line of dulness by percussion is located below the umbilicus, the diagnosis is pretty certain. Adhesions from perforating ulcer or carcinoma may, however, embarrass the result under such circumstances. Perhaps the most satisfactory method for obtaining the capacity of the dilated stomach in complete pyloric stenosis is to fill the stomach with water through the tube and to measure the fluid as siphoned out therefrom. In atonic dilatation or with perforating ulcer or carcinoma this, also, is valueless. The examination of the stomach for dilatation by means of sound does not possess the value claimed for it, as displacement of the viscera may simulate the pathological condition in question.

The general condition of the patient suffering from gastric ectasis is always more or less impaired; emaciation rapidly takes place; the bowels are obstinately constipated and will not be open for days and weeks; the urine is generally small in quantity and of neutral or alkaline reaction. The total absence of hydrochloric acid from the stomach in connection with the other symptoms above enumerated would certainly point very strongly toward an existing dilatation as probably arising from pyloric obstruction. Functional dilatation may be accompanied by subacidity, and in these cases the existence of dilatation together with the degree of ectasis can be arrived at satisfactorily only in a minority of the cases.

The *prognosis* of atonic or functional dilatation of the stomach may be viewed as favorable—i. e., readily yielding to proper therapy. Gastric ectasis from cicatricial pyloric stenosis is more serious, but with proper management much can be done toward keeping up nutrition and preserving life. The recent operative treatment in this condition, as practised by Loreta in Italy, and Bull and Barton in this country, has been so success-

ful that a great future may be promised for it. The prognosis of dilatation from carcinomatous stenosis of the pylorus is most unfavorable, though pylorotomy has produced some favorable results.

The *treatment* for atonic gastric ectasis is one that depends largely on a proper diet. Albuminous substances, such as eggs, broths, or scraped meat, should be freely exhibited, followed by a dilute hydrochloric acid with strychnine or nuxvomica. Carbohydrates should be prohibited, nor should milk or other beverages be taken in quantities; saline laxatives are best indicated to keep the bowels solvent; the faradic current applied to the epigastrium will prove of vast value; the catarrhal condition should receive attention as pointed out under that head.

In the graver or secondary dilatation the treatment must depend upon the removal of the accumulated food by means of the stomach tube and the daily repeated lavage. While the pyloric stenosis is not directly benefited by this, the hyperæmia and œdema accompanying it can be much relieved by this treatment. In a case now under my care in the German Hospital, complete stenosis no doubt existed; no alvine dejecta had passed for about two months, all of the food taken was vomited at intervals of from one to two days; the patient's weight from 156 pounds sank to 89 pounds, and corresponding debility was manifest. By frequent lavage and the administration of albuminoid food with HCl, and nutritive enemata of carbohydrates (glucose), the patient gained in strength and weight. At one time during the treatment he washed out through the tube an apple-seed, though he had not eaten apples for two months past. Alvine discharges soon became regular, and are now formed, while the patient's weight to-day is 129 pounds.

Though I do not regard the stenosis in this case as cured, the obstruction arising from congestion or œdema must have been certainly relieved to admit of good gastric digestion and the dilatation has undoubtedly been improved, as the gastric secretion is beginning to show traces of HCl, and the patient has appetite and digests food without medicinal aid.

That all of these cases should ultimately be treated in a surgical way, I fully believe, and when I consider the good result achieved by Dr. Barton in his recent case, patients should be encouraged to that end. Much, however, can be done medically to relieve the patient, and this should be exhausted or done preparatory to operative interference. It has been my habit in such cases to wash out the stomach daily with three to four pints of a dilute solution of borax, to give broths with eggs and scraped meat as nourishment, followed by HCl with nuxvomica; and to administer enemata of from four to six ounces of glucose

thinned with a little warm water and admixed with a-half to one ounce of beef peptones.

In the dilatation depending upon carcinomatous stricture of the pylorus, little is to be hoped from treatment of any kind other than intended to palliate the pain and relieve the most urgent symptoms.—*L. Wolff, M.D., in Medical News.*

## ANATOMY AND EXAMINATIONS THEREIN.

The disposition recently shown by the Council the Royal College of Surgeons to accede to the proposal of the General Medical Council to increase the curriculum to five years is an event of importance. The time at present required is about four years, so that it will be necessary to determine how the additional year shall be utilized; it will be debated whether the whole should be given to medicine and surgery, or a part to the preliminary subjects. Whatever may be the solution of this question, there are certain directions in which the present scope and mode of conducting examinations in anatomy require to be modified.

We may, in the first place, recall one or two elementary truths which have a bearing upon the subject. We may assume that the object of this part of a student's curriculum is not to make an anatomist, but to afford a certain kind of training, and to teach a sufficiency for the practice of medicine and surgery. That which is taught and learnt is, we regret to say, determined, not by the teacher or student, but by the examiner and by the style of the examination. With regard to the first of these propositions, it may be further remarked that examiners who are specialists in a certain branch of knowledge are very prone to examine as if the student ought to know the whole of their particular speciality. Moreover, they seem to forget that different kinds of knowledge are of very different value. This is so much the case with anatomy that, whilst it would be exceedingly hard to tell of what value some facts could be to anyone but a specialist, it is very easy indeed to say that others are absolutely essential. We have before us a great many examination papers from a number of sources, and we find questions asked upon the metacarpal bones, the minute anatomy of the cerebellum, the relation of muscle; the fibula, the particular ribs, and the like. Questions upon topographical anatomy are almost entirely absent.

Now whilst admitting that in learning all the grooves and excrescences upon a rib the faculties receive a training, we maintain that such things as the topography of the heart, liver, spleen, kidneys, brain and great organs generally, are infinitely more important. The last branch of knowledge is the working capital of a lifetime; the former the adornment for an examination, put off

hastily as soon as the ordeal is passed. As for the training which accrues from the study of minute anatomy, it can be obtained just as well in other directions. It is notorious that after the usual anatomical examinations have been passed, the topography of the body has still to be learnt, and learnt at a time when attention has to be given to other equally important subjects. The text books which are used in preparing for the various examinations are a commentary upon their nature. Some of them contain no allusion whatever to the topography of the structures of which they treat, and others merely mention it in a casual and unimpressive way. It will be said that in acquiring a knowledge of the sort of anatomy required by the present examinations manipulative dexterity is acquired. Without doubt it is; but would not the investigation of the muscles, vessels and nerves be sufficient for this without invoking the minute anatomy of the carpal bones? Next, whilst fully allowing the great importance of the acquisition of manipulative dexterity, we ask what steps are taken to ascertain that it has ever been acquired? At some of the university examinations the candidate is called upon to show his skill in dissection, but this trial is the exception rather than the rule.

So far we have been speaking of the ordinary qualifying examinations, but if we turn to the higher examinations we find the same state of things. It is the custom to speak of these as honours examinations, and therefore conclude that their style and scope are less open to criticism. But it is not to be forgotten that many of them are made a *sine quâ non* for appointments, and are therefore far from being purely honours examinations. However this may be, it seems strange that those who present themselves for the first examination for the Fellowship of the Royal College of Surgeons, and who it is assumed will ultimately be called upon to display considerable manipulative training, do not have their possession of such dexterity tested. In other respects these examinations seem admirably calculated to discover the candidate's knowledge of what is usually called "pure human anatomy." It is also the custom to introduce into some of these examinations questions bearing upon morphology and embryology. Anything which makes anatomy more scientific is to be applauded. But we note that those subjects are asked in rather an arbitrary way. At one time a question on the morphology of the ligaments of the spine is asked, or a question in embryology, and at another both those subjects are passed over in silence. This is obviously likely to lead to disappointments, and is a fault which could easily be remedied. Further, morphology and embryology make rapid advances, and knowledge seems often to be required which cannot be obtained from ordinary sources. It

would be hard to say how far students should be sent to special monographs and papers, and perhaps it would be fairer if these particular branches of anatomy were scheduled. We cannot help thinking that the absence of this has something to do with the recent extraordinary number of rejections at the first fellowship examination of the Royal College of Surgeons. However, in this instance other factors are involved, and we have many complaints of the length of the papers, the shortness of the time given to them, and the extreme mental fatigue caused by having to write both papers on the same day, with only a short interval.

For the reason already given it is not enough to say that this is an honours examination, and may be taken or left; men who wish for the higher surgical appointments are compelled to present themselves for it, and would do so with greater confidence if it were improved in the direction which we have indicated. But it is with the pass examinations that we are mainly concerned, and here we think that a great deal more of topographical anatomy might well be introduced. This might be done, not by giving additional time, but by curtailing minutiae which, to say the least, are of doubtful utility.—*Br. Med. Jour.*

#### MEDICAL NOTES.

Prof. Bartholow recommends for *habitual constipation* a few minims of wine of tobacco, taken at bedtime. It acts by increasing the secretion and causing peristaltic action.

If *stricture of the vagina* be discovered in a pregnant woman, let it alone, as the head of the child is the best dilator. Should it prove an obstruction, and not give way in labor, it can then be nicked.—Prof. Parvin.

Prof. Parvin thinks a solution of creoline for *washing out the bladder* should not be stronger than one-half of one per cent.; that is, half a teaspoonful of creoline to a pint of water. He prefers this strength for *vaginal injections* also.

For a man fifty-six years of age, Prof. DaCosta prescribed the following for *aortic stenosis* and *fatty degeneration of the heart*—

R—Barrii chlorid., . . . . . gr. ʒi.  
 Aquæ destillat., . . . . . f ʒj.—M.  
 Sig.—Ter die. Milk diet.

For a case of *subacute rheumatic fever*, Prof. DaCosta prescribed one ounce of potass. acetate in the first twenty-four hours, half-ounce the following twenty-four hours, and two drachms a day to be continued. Also ten drops of tincture of digitalis three times a day.

For *painful affections of large subcutaneous nerves*—

R—Potassii cyanidi, . . . . . ℥ j.  
 Aquæ, . . . . . f ʒ j.—M.

Applied along course of nerve upon absorbent cotton. The skin must not be broken, or toxic symptoms will develop.—Prof. Bartholow.

For a case of *paralysis agitans* due to lead, the metal being found in the urine, Prof. DaCosta directed ʒ ʒ gr. hyoscyamine ter die, and—

R—Kali iodidi, . . . . . ℥ j.  
 Aquæ fontanæ,  
 Syrup zingiberis, . . . . . āā f ʒ ss.—M.

Sig.—Take t. d.

For a man suffering with *gastric ulcer*, brought before the clinic by Prof. DaCosta, the following was directed to be rigidly carried out: Absolute rest on the back in bed, milk diet, in which a small quantity of carbonate of soda is put, to render it alkaline; should this not sufficiently nourish him, then combine with the milk diet nutrient enema. For the anæmia accompanying the disease—

R—Ferri et potassii tartrat., . . . . . ʒ ij.  
 Glycerini, . . . . . ʒ j.  
 Aquæ, . . . . . q. s. ad. f ʒ iij.—M.

Sig.—Teaspoonful three times a day.

For a boy eighteen years old, having about ten *epileptic convulsions* a week, caused from a lesion in the cortical portion of the brain, Prof. DaCosta prescribed—

R—Potassii iodidi,  
 Potassii bromidi,  
 Ammonii bromidi, . . . . . āā gr. x.  
 Tinct. belladonnæ, . . . . . gtt. ij.  
 Syrup. zingiberis, . . . . . f ʒ j.  
 Aquæ, . . . . . f ʒ j.—M.

Sig.—Three times a day.

R—Pearls of amyl nitrite to avert the convulsion, as he can tell for a short time before an attack comes on.

—*Coll. and Clin. Rec.*

USES OF BORACIC ACID.

Dr. Lebovitz, in the *Wiener Med. Presse*, narrates the following uses to which he has put boracic acid:—

I. Boracic acid acts antiseptically. Every soldier should carry one ounce of it in his overcoat pocket, and a handkerchief cut in two triangles for necessary bandages. Simply sprinkling a wound with finely powdered boracic acid suffices to insure rapid healing. This remedy being odorless, and itself absorbing all odors, the author has

used it advantageously in abscesses, ulcers of the feet, caries and necrosis of the bones, and in complicated fractures.

II. In anthrax and after the incision of furuncles it acts well when applied directly to the parts. Forming furuncles should be painted several times daily with the following—

R—Boracic acid, } . . . . . āā equal parts.  
 Water, }

III. In burns, when the flesh is exposed, it is necessary to be careful with poisonous antiseptics. Boracic acid possesses the advantage of being non-poisonous. He covers the burnt surfaces with a boracic vaseline ointment in the proportion of one to five—

R—Boracic acid (finely powd.), 20 parts.  
 Glycerine, . . . . . 15 "  
 Mix, and add, vaseline, . . . . . 85 " —M.

Sig.—Apply twice daily.

In severe burns, with fever, the author combated the fever by the internal administration of the following—

R—Boracic acid, . . . . . 4 parts.  
 Glycerine, . . . . . 10 "  
 Water, . . . . . 100 "  
 Syrup of poppies, . . . . . 25 " —M.

Sig.—A teaspoonful every two hours.

IV. In skin diseases, such as pemphigus, eczema, rhagades, rupia, and scabies, the results obtained with boracic acid have been most favorable. The formula used was—

R—Boracic acid (finely powd.), . . . . . 10 parts.  
 Glycerine, . . . . . 20 "  
 Lanoline, . . . . . 30 "

The treatment of scabies consists in first taking a warm bath and then rubbing the affected parts with boracic-vaseline salve (first one to two; later equal parts). The duration of this treatment averaged six days. In a case of granular conjunctivitis a cure was effected within forty-five days; a like result was obtained in some cases of pannus. Chronic scrofulous otitis is improved by lukewarm injections of concentrated boracic acid solutions; the application of boracic acid glycerine (one to ten) to stomatitis, aphthæ, or tonsillitis is followed by a curative effect.

V. For coryza—

R—Boracic acid (finely powd.), } equal pts.—M.  
 Powdered coffee, }

Sig.—Use as a snuff.

*Hospital Gazette.*

It is stated (*Maryland Med. Jour.*) that the first medical degree ever given to an American woman was given forty years ago. To-day there are 2,600 women in this country having diplomas from either American or foreign schools.

## THE TREATMENT OF IDIOPATHIC CROUP WITH TURPENTINE.

CASE I is that of a child, two years of age, in whom the diphtheritic process had extended into the trachea. So critical was her condition that the parents had reluctantly consented to tracheotomy being performed. Before having recourse to this last resort he determined to try Dr. Demelow's suggestion, and he gave the child a teaspoonful of rectified essence of turpentine. In about a quarter of an hour the stertorous respiration became quieter and calmer, and the little patient passed a quiet night, the aphonic cough having quite disappeared. The following day the child was practically convalescent.

CASE II was also that of a little girl, two and one-half years of age, who, when first seen was almost unable to breathe, all the extraordinary muscles of respiration being called into play. Tracheotomy was not practicable, and he therefore gave the same dose of essence of turpentine. The condition of the patient soon became relatively calm, although twenty minutes before the air only passed the larynx with the greatest difficulty. The cough which had been aphonic, became barking. The same evening, although the danger of asphyxia had disappeared, the symptoms of croup were present in all severity, but the parents refused to allow tracheotomy to be performed. Another dose of turpentine was therefore given, and on the following day the more urgent symptoms had disappeared, and all danger seemed to be passed. In two days the patient was quite well. In both these cases a cutaneous eruption followed the administration of the turpentine, but no trace of renal irritation could be perceived.

CASE III. On the seventh day of his illness, this patient, a boy, two years of age, was pale, livid, pulseless, and almost asphyxiated. Stenosis of the larynx was well marked. A dose of turpentine relieved the more pressing symptoms, and on following up the treatment the child gradually recovered, though noisy inspiration persisted for some time afterwards, attributed by the author to a thickening of the laryngeal tissues.

CASE IV. A boy, four years of age, suffering from diphtheria since eight days. This was one case of several, for there was an epidemic of croup at the time, six of which proved fatal. He found the same condition of quasi-asphyxia, with an aphonic cough and cyanosis. A spray of turpentine, eucalyptus, and carbolic acid in alcohol was ordered, and a teaspoonful of the essence given internally. The dose was immediately followed by a violent spasmodic attack of coughing, during which an abundance of false membranes and mucopurulent expectoration was got rid of. The shreds of membrane varied in length from one to three

and one-half inches. The next day two other teaspoonfuls of the essence were given, one in the morning and one at night. Thereupon the child began to breathe more freely, took some nourishment and slept all night, except when awakened by the cough. On the second day one more dose was given without any apparent inconvenience. In four days the cure was complete.—*London Med. Rec.*

NERVE EXHAUSTION AND OPIUM.—The revelations following the death of Mr. Wilkie Collins may perhaps tend to increase the pernicious opium habit among those who are, or who believe themselves to be in need of some extra comfort or support. The accounts given by Mr. Edmund Yates, and by Mr. Hall Caine, differ in some respects, although they agree as to the relatively large amount of laudanum habitually taken by the deceased litterateur. The former speaks of Collins as a martyr to nerves and gout, and seems to infer that the drug was resorted to for the relief of pain. The latter, in an elaborate report of the conversation held early in 1888, professes to give the novelist's apologetic explanation for his practice. He took laudanum "to stimulate the brain and steady the nerves," and he had been in the habit of taking a wineglassful of laudanum many times a day for fully twenty years. Few things are more lamentable than the obvious cost at which much literary work has been accomplished. De Quincey, Coleridge, Bulwer Lytton and Wilkie Collins stand out as warnings against the folly of over-taxation of mental powers, and as examples of the habitual indulgence in opium. Rosetti, with chloral hydrate, and more recently the actor Damala, with morphine and cocaine, show the same form of weakness in resorting to other remedial (!) measures. It would be invidious to attempt to enumerate well-known names in literary and artistic circles of men whose work has been carried on beyond reasonable limits under the influence of alcohol. The lesson to be learnt is that brain power has its limitation as much as muscular power. Overwork produces exhaustion in both cases. Physiological laws cannot be set at defiance. So far as opium is concerned, it undoubtedly diminishes the susceptibility to external stimuli, and hence may enable a man whose attention is diverted by pain, to obtain relief, and perhaps to concentrate his thoughts more fully upon some particular point; but, as a mental "stimulant," its employment is to be deprecated as unsound and dangerous. The constant need engendered by its use does not strengthen the position of a "stimulant," so often erroneously claimed for this drug.—*Lancet.*

FORCIBLE FLEXION IN LOCOMOTOR ATAXY.—Dr. P. Bonuzzi has recently suggested forcible flexion

of the spine as a substitute for suspension in locomotor ataxy. From experiments made on the dead body he concludes that in suspension the relations of the spinal cord to the vertebral column are somewhat altered, the former being displaced upwards to the extent of from three to four millimetres, while the vertebral column is lengthened to the extent of from  $1\frac{1}{2}$  to three centimetres. This elongation however is more apparent than real, consisting as it does more in the separation of the spinous processes than of the bodies of the vertebræ. The roots of the nerve, though displaced to a certain extent, do not seem to be appreciably stretched, with the exception of the cauda equina, but there is an increase in the tension of the cerebro-spinal fluid. The body as a whole is lengthened during suspension to the extent of from two to three centimetres. Dr. Bonuzzi thinks the good effect of suspension depends on the traction which is thereby applied to the cauda equina, and through it to the whole spinal cord. He maintains that the same effects are produced in a more marked degree by forcible forward flexion of the body with the knees pressed up on the abdomen. By experiments on the dead body Dr. Bonuzzi claims to have proved that in this way a needle run into the spinal cord (the vertebral canal having first been laid open) was drawn downwards from a distance or from eight to twelve millimetres, the cord being at the same time made thinner and more resistant, and the cauda equina very tense. The apparent lengthening of the vertebral column was from six to fourteen centimetres. When the body was forcibly bent forward there was a large out-flow of venous blood from the opening in the vertebral canal, showing, according to Dr. Bonuzzi, that there was great pressure on the venous plexuses of the cord.

The method has as yet been tried only once on the living subject. The patient was a woman who had suffered from ataxy for nine years, all the characteristic features of the disease being strongly marked. Flexion was kept up at first for half a minute, the length of time being gradually increased to three minutes. The sittings took place on alternate days, and the manœuvre was carried out two or three times on each occasion. After three sittings there was marked improvement, and after eight the symptoms almost entirely disappeared. The woman could walk about and attend to her household duties; she was able to carry a pail of water from room to room, a thing she had not been able to do for three years, and she could stand with her eyes shut for half a minute without falling. Knee-jerk did not return but otherwise the improvement was progressive and permanent. The method has, at any rate, the method of simplicity, as no apparatus is required beyond a towel loosely twisted round the ankles, by which the lower extremities are pulled up while the patient is lying on his back.—*British Med. Jour.*

THE CURABILITY AND TREATMENT OF CIRRHOSIS OF THE LIVER.—Huchard (*Rev. Gén. de Clin. et de Thér.*) says that the belief is now general in the curability of many cases of hepatic cirrhosis under the employment of the iodides and a milk diet, but that there is a difference of opinion as to what forms of cirrhosis are curable. Marini has recently maintained that the classic cirrhosis of Laennec, the small, hard, and contracted liver, is not curable, and that only the hypertrophic form is amenable to treatment, and this only when treatment is commenced early. On the other hand, Lanceaux affirms that the ordinary alcoholic cirrhosis, the atrophic form, is almost always improved, if not cured, by the iodides and a milk diet; while the form attended by enlargement of the liver yields less easily to treatment, and that accompanied by icterus is still more obstinate.

The experience of Huchard is that atrophic cirrhosis is curable, especially in the early hypertrophic stage, while the form which is primarily and constantly hypertrophic, whether with or without icterus, is less easily influenced.

The treatment is complicated and ought to be carried out with precision. In the first place, iodide of potash or of soda, in doses of 8 to 15 or 30 grains daily, should be given from the beginning. In cases which extend over a long time, it is better to use the soda salt, as being more assimilable and less dangerous. Calomel may be given in conjunction with the iodides. It is best prescribed about every fifteen days, four powders, each of 3 grains. In this way the calomel acts not only as an alterative, but as a diuretic; and it is very important in this disease that diuretics be given. When thus administered the dangers of stomatitis are not so great.

As regards aspiration of the fluid in the abdomen, the author insists that most physicians do this too late, and that to remove a large quantity is actually to produce a serous hæmorrhage, by which the patient may be greatly, or even dangerously enfeebled. Every case of ascites should be aspirated early, and if the effusion be large, not all the fluid should be removed at one time. After the aspiration a purgative should be given and the employment of diuretics insisted on, since they act much more effectively after the ascites has been removed.

To influence the hepatic lesion revulsives are to be employed in the region of the liver—such as cupping, blisters, cauterization, etc. Hydrotherapy in the form of the Scotch douche in the hepatic region can also be used.

Of all treatment the milk diet is the most important. Two and a half or three quarts of unboiled or slightly warmed milk should be taken during the day in divided doses about two hours apart. Fifteen or twenty minutes should be occupied in swallowing in small mouthfuls a cup of

milk, in order to prevent the formation of a large curd in the stomach. If it produces constipation small doses of rhubarb, magnesia, or sulphur may be given. If, on the other hand, it causes diarrhoea, or is not well borne by the stomach, one-half tablespoonful of hot water may be added, or one-half tablespoonful of Vichy from one of the cold springs. If this does not correct the difficulty, powders of 3 grains each of pepsin, pancreatin, and bicarbonate of soda may be taken at times after a glass of milk. To make the milk acceptable to the patient in cases where there is a dislike to it, it may be flavored in various ways. Under the influence of this combined treatment improvement will, in favorable cases, begin to show itself within twenty or thirty days.—*Am. Jour. Med. Sci.*

**DIGESTIBILITY OF BOILED MILK.**—It is now very generally recognized, both by medical men and by the more highly educated section of the community, that it is a wise precaution to boil both water and milk before using them as beverages, and the practice is becoming very common. The growth of pathogenic organisms in these fluids, especially in milk, is often very rapid, and thus disease may be transmitted from one place to another. The temperature of boiling water puts an end to the life of the microbes, and also to the danger of infection. Another reason why boiled milk is so much used, especially in infant feeding, is that it is supposed to be more easily digestible than fresh milk. If, however, we can draw correct deductions from dogs to babies, it would now appear that this belief in the superior digestibility of boiled milk is founded on error. Dr. Randnitz, of Prague, has recently published, in Hoppe-Seyler's *Zeitschrift für Physiologische Chemie*, certain very striking experiments on this subject. He admits what anyone may confirm for himself, that milk that has been boiled does not, on cooling and the subsequent addition of rennet, form a large coherent clot as does fresh milk; but a flocculent precipitate of casein is produced instead. He shows, however, by analysis of the milk itself, and of the urine and faeces, that much less nitrogenous material is absorbed from milk that has been boiled than from the same milk when fresh. The digestibility of fat is apparently unaltered by boiling. The following figures, however, illustrate the fact just alluded to as to the difference of digestibility of the proteid materials: In three days, 15.6 grammes of nitrogen were given in the form of fresh milk; of this quantity, 13.3 per cent. was found in the faeces; the nitrogen of the urine accounted for 77.3 per cent., so that 9.4 per cent. was retained in store by the growing animal. The animal was next fed on boiled milk; and 10.4 grammes of nitrogen was given in that form in two days; 18.6 per cent. of this was found in the faeces, 75.7 in the urine; so that only 5.7 per cent.

was assimilated. The belief in the superior digestibility of boiled milk is, however, so widespread, that we should like to hear of the confirmation of the above remarkable results before we recommend mothers to leave off what is, from other points of view, the very praiseworthy custom of boiling the milk they give to their children.—*Brit. Med. Jour.*

#### PULSATILLA IN DYSMENORRHOEA AND OVARALGIA.

—Dr. Charles Bovet states, in *Les nouveaux Remèdes*, November 9, 1889, that he has successfully employed anemone pulsatilla in diseases of the uterus. He differs from other authors who ascribe the greatest activity to the tincture prepared from the dried plant, and states that he has found the latter preparation by no means as active as the alcoholic extract, made from plants gathered fresh in June, and composed of equal parts by weight of the plant and of 90 per cent. alcohol. The glucoside obtained from the plant, and called anemonin, is less active than the extract. As regards the method of using the remedy: If the case is one of dysmenorrhœa, Bovet gives the patient, four days before the beginning of the expected period, four tablespoonfuls of a wine which contains about ten drops of the alcoholic extract of pulsatilla to the tablespoonful. As soon as menstruation begins the use of the drug is discontinued for three or four days and then resumed for three or four days in the dose employed at the beginning. Recovery from dysmenorrhœa is frequently observed after following this practice for two months. If chlorosis exists along with dysmenorrhœa, Bovet gives chloride of manganese also, in doses of five-sixths of a grain to the tablespoonful of the wine of pulsatilla. In cases of ovaralgia, as the result of chronic infarct of the uterus or inflammation of the neighboring structures, the pulsatilla wine is given continuously, in moderate doses, until the pain completely disappears. Bovet states that complications are never observed in the course of treatment.

As to the dose of anemonin; It was given in doses of from five-sixths of a grain to one and one-half grains a day, and never in a larger dose than three grains. It is decidedly more uncertain in its action than the alcoholic extract, probably because changes in its constitution take place when it is kept a long time.—*Med. and Surgical Reporter.*

**A NEW ADVANCE IN THE TREATMENT OF UNUNITED FRACTURE.**—Every surgeon knows how difficult it is in certain cases to get a broken bone to heal by bony union. The ends may be pegged and hammered and sutured indefinitely without success. In the case of fracture of the radius there are often times special difficulties, since resection—the last resource of the surgeon—leaves a gap between the ends of the radius, which is

now shorter than the ulna beside it, and so it is almost impossible to bring the bared ends of the fractured parts into apposition and to keep them there. Even if a piece be cut out of the unfractured ulna, so that the inequality in the length of the two bones is removed, a satisfactory result cannot always be obtained. In the *Lancet*, October 26, 1889, Professor McGill, after commenting upon the above facts and relating his failure with the last-mentioned procedure, explains a new method which he applied successfully in one case, taking the hint from a suggestion made by Dr. MacEwen, who proposed, in case of destruction of the shaft of the humerus by acute necrosis, that a new shaft should be secured by transplantation of bits of new bone.

In Professor McGill's case a man, twenty years of age, had fractured both bones so that the ends of the radius protruded through the wound on the radial side of the forearm. The ulna healed quickly and well, but the radius remained ununited, although the ends had been refreshed and wired three months after the accident. Some eight months afterward he came to the hospital. He had a scar over the wound, and the ends of the radius were quite movable, the usefulness of the forearm and hand being much impaired. An Esmarch's bandage was applied and an incision was made in the line of the old scar. The ends of the bone showed no signs of union, but were rounded and covered by a thick membrane-like periosteum. When this had been filed away, an interval of three-quarters of an inch was left between the fragments. This interval was filled with thirteen pieces of bone, each about one sixth of an inch in length, chiselled from the femur of a freshly killed rabbit. The bones were not wired. The skin-wound was tightly stitched, without drainage, with catgut. Firm pressure was applied by means of salicylated wool and bandages, and the forearm was placed on an anterior splint. There was no suppuration and very little discharge. The patient left the hospital in six weeks, with the bone firmly united. Three months later the injured arm was as useful as the other. Is it not possible that this method used by Professor McGill may be of service in the treatment of old ununited fractures in other parts? It is possible that a more vigorous action might be set up, by presence of the implanted healthy bone, than would naturally occur in the fragments of a fractured long-bone in a person of feeble constitution.

**THERMO PALPATION.**—It has been known for some time that there is a difference in the surface temperature of the body corresponding to the organs underneath—that is to say, the temperature is higher over the lungs than over the liver or the heart. From a communication published in the *Orvosi Hetilap*, one of the chief medical journals

in Hungary, by Herr Jonas and Dr. Benczur, it appears that this fact is available as a basis for a novel method of physical examination which may be styled "thermo-palpation." These observers say that it does not require any peculiar sensitiveness of touch or any special education to appreciate the difference of temperature on passing the fingers over the surface of the body from the situation of the lungs to that of the liver, and that patients themselves, and students who had not yet learned percussion, were quite able accurately to detect the height of a pleuritic effusion by the difference of temperature. Diseased and healthy organs can be mapped out in this way by going over the surface, first, say, downward and then upward, when the line of demarcation will be distinctly felt. The general principle appears to be that organs containing air, such as the lungs and intestines, permit of greater surface warmth over them than more solid organs, such as the heart, liver, spleen, etc. Of course, instead of using the fingers, a differential thermometer may be employed, and much slighter differences may be recognized than is possible by the touch alone.—*The Lancet*.

**LOCAL TREATMENT OF CHRONIC ENDOMETRITIS.**—M. Pollailon has just laid before the Académie de Médecine a suggestion as to treatment of chronic endometritis by chloride of zinc pencils. A cardinal point, the learned member contends, is the finding the proper dimensions to give to the substance, not so much as regards its length as its thickness, which should not exceed a quarter of an inch in any case. The action of the chloride of zinc is rapid, and from the fourth to the twelfth day the eschar comes away, and the *suites* of the operation are always very favorable. The pain is slight, and no febrile reaction is observed. To avoid any complication, the patients are ordered to keep to their bed three days, and lie on the sofa five or six days, or until the slough becomes detached. At the end of three weeks, a complete cure is generally obtained. Out of 40 cases, those treated by M. Pollailon, 38 were cured. The menses are not interfered with by the caustic. As to the indications and counter-indications, all chronic endometritis, with purulent secretions, all infectious or hæmorrhagic endometritis, and even all uterine hæmorrhages, except those provoked by confinements or large tumors, are benefited by this treatment. However, in the case of young women, this cauterization should be used with care. It was said that it caused sterility, but every woman affected with chronic endometritis is sterile, and remains so unless treated. Acute metritis and ovaritis would be counter-indications to the employment of chloride of zinc.—*Med. Press and Circular*.

**ANTIPYRIN HABIT.**—To the already long list of

drugs, the use of which, under proper restrictions, is both beneficial and proper in combating the various ills to which flesh is heir, but whose abuse becomes a curse to humanity, another has recently been added. Scarcely have we learned to properly use antipyrin than the tocsin of alarm must be sounded against its abuse. The recent discovery of its value as a nerve-tonic places it on the list with morphine, chloral, cocaine, etc., so seductive is its gentle, soothing influence upon the overstrained nerves. Its victims are already found, especially among society women, whose nerves, strung up to a high pitch by the overwhelming demands of a winter season of gayety, seize eagerly upon anything that will afford relief from the headaches and other disorders arising from prolonged fatigue and over-tired nerves. So pleasing is the effect that it is soon used for every trifling ill feeling, until the patient finds herself unable to live without it, and the fascinating "antipyrin-habit" is formed. Properly used as a nerve-tonic its effects are admirable, but *abused*, the victim becomes even more hopelessly entangled than the morphine or cocaine victim. The effects vary with the dose. In large doses it produces complete relaxation with loss of reflex action. In moderate doses, continued, it induces convulsions. As a stimulant its effect is much like that of quinine.—*International Dental Journal*.

THE PUPIL AS A GUIDE IN THE ADMINISTRATION OF CHLOROFORM.—As a result of experiments upon animals and of observations made upon man, Dr. H. I. Neilson formulates the following conclusions: 1. The first effect of chloroform narcosis on the pupils consists in a dilatation which varies in intensity and duration in different individuals. As the anæsthesia becomes more profound the pupils then begin to contract, and finally become very small and immovable. If now the chloroform is pushed still further, a sudden dilatation occurs, which is the result of asphyxia, from which the patient seldom recovers; 2. As long as the pupil is observed to dilate in response to sensory stimuli, such as pinching the skin, the anæsthesia is not yet sufficient to allow the commencement of the operation; 3. As soon as the pupil becomes strongly contracted and immovable the administration of the anæsthetic must be suspended until a commencing dilatation is observed, and the patient must be held at just this point as long as the operation continues; 4. Vomiting causes a dilatation similar to that occurring as the patient emerges from the narcotic condition, but it is usually more sudden in the former case. In experiments upon dogs it was found that the contraction of the pupils did not begin until the blood-pressure was somewhat reduced, and that the dilatation proceeded *pari passu* with the increase in the blood-pressure. The author regards the appearance of the pupil as a very reliable guide

for the administration of chloroform, as by it he is enabled to judge accurately concerning the condition of the patient.—*La Riforma Medica*.—*Brooklyn Med. Jour.*

WASHING OUT THE BLADDER WITHOUT A CATHETER IN CASES OF PAINFUL CYSTS BY MEANS OF SIMPLE ATMOSPHERIC PRESSURE.—M. Lauvaux, *London Med. Rec.* A reservoir containing the fluid is placed three or four feet above the recumbent patient; a rubber tube with a perforated nozzle syphons the liquid into the orifice of the urethra. The liquid fills the urethra and then passes easily into the bladder. As soon as there is a desire to micturate the nozzle is withdrawn, and the stream passes out naturally. The injection is repeated as may be judged necessary—usually four or five times. Solutions of cocaine and boric acid are chiefly used. "For washing out the urethra an elastic catheter, with the ends bulbous and the openings allowing of a reversed current, was used, so as to obtain a constant irrigation by antiseptic solutions several times in the day." A number of cases of painful cystitis are detailed, and the conclusions are that the method has many advantages, and that the anæsthetic action of cocaine is a great assistance toward cure. Where there is much loss of substance in the urethra, difficulties arise, but the method of injection helps to discover and locate fistulæ.

Anæsthesia of the mucous membrane of the bladder can be produced in a few minutes with the cocaine solution, and then the use of aseptic injections will cure cases of cystitis rapidly.—*Annals of Surgery*.

IRRIGATION OF THE PUERPERAL UTERUS.—Discussing in the *American Journal of Obstetrics* the question of irrigation of the uterus, Dr. Haynes lays down the following rules:—1. Where intra-uterine irrigation is used in the absence of sepsis, use no sublimate, but plain hot water, or salt and water. 2. If the urine is albuminous and scanty, use no mercury. 3. If the urine is slightly albuminous and copious, or if the patient is profoundly anæmic, do not use more than a pint of a solution of 1:8,000. 4. Always use tartaric acid and sublimate tablets or powders; dissolve thoroughly in a small quantity of water and mix carefully with a definite quantity of hot water in a pitcher, from which pour into the irrigator. 5. Always use fountain syringe, and for the uterus a double tube, so as to insure the return of the solution. If for any reason the fluid fails to run out as fast as it flows in (if not through the reflex tube, by way of its channels at its sides), shut off the flow. The irrigator should not be raised more than three feet. 6. Precede by copious irrigation with hot water to wash out blood, etc., which may form with sublimate adhesive albuminous compounds,

which may in time be absorbed. Follow by a quart or two of hot water to insure the evacuation of all the sublimate solution. 7. For the uterus use a solution not stronger than 1 : 8,000, and not more than a quart daily. 8. For the vagina use a solution not stronger than 1 : 4,000, and not more than a quart twice daily. Irrigation used in the above way is, he believes, a practice almost devoid of danger, but it is always a procedure requiring great care and judgment, and some skill.

**IODOFORM GAUZE IN POST-PARTUM HÆMORRHAGE.**—Dr. O. Piering, assistant in Prof. Schauta's obstetric clinic in Prague, has published his experience in the employment of Dührssen's plan of plugging the uterus with iodoform gauze for post-partum hæmorrhage due to an atonic condition of the organ. Dührssen recommends that, when post-partum hæmorrhage comes on, the bladder should be emptied, and forcible friction and intra-uterine irrigation of hot or cold water, along with ergotin hypodermic injections employed; that if the hæmorrhage still continues, the cavity of the uterus should be filled with iodoform gauze, the irritation produced by this setting up active and permanent contraction. The method has, according to Dührssen, the advantages of great certainty, complete harmlessness, and facility in its performance. Olshausen, Veit, and Tehling, however, say that the contraction set up is not always permanent, and that the method is not so free from danger as Dührssen believes. In consequence of these conflicting views, Dr. Piering resolved to give the method a trial, and he details several cases in which he employed it with complete success. In no case was any harm done by it. He advises that resort to the plug should not be too long delayed, and he prophesies an important future for the plug of iodoform gauze in post-partum hæmorrhage.—*Lancet.*

**ACETATE OF LEAD IN PNEUMONIA.**—Prof. Crocq, of Brussels, has found that a remedy which was formerly a good deal employed in pneumonia, but which has long fallen into complete disuse—viz., acetate of lead—is in many cases of great value. This remedy was prescribed, combined with opium, by Ritscher, and afterwards by Strecht, Leudet and others. Nothnagel and Rossbach mention it in their handbook, but consider that it is useless in ordinary cases, though they recommend it where there is œdema of the lung, and in the hæmorrhagic form of the disease. Prof. Crocq, having prescribed the lead salt in a large number of cases, is convinced that it frequently reduces the heart beats as much as ten or fifteen per minute in a single day, and that exerts an equally marked effect upon the temperature, the sputum, too, becoming less in quantity, and less deeply tinged. Instead

of producing constipation, it is far more likely to open the bowels; but notwithstanding this action there is no objection to prescribing it with a little opium in cases where diarrhœa is present, or, if preferred, trisnitrate of bismuth may be added instead of opium. Small doses are of very little use, the minimum quantity that should be ordered for an adult per diem being six grains, and this may sometimes be increased with advantage to as much as fifteen grains. This treatment may be continued for a fortnight without any symptoms of lead poisoning presenting themselves. Prof. Crocq remarks that it may be given at all stages of the disease, but at the beginning in strong subjects, and when the pain is severe, its action is but slight, and so antimonials are to be preferred at that time. Where, however, resolution is delayed, where there is but little fever, where the patient is very weak, where there is enteritis or diarrhœa, and especially where the digestive organs will not tolerate antimony, acetate of lead is very valuable. Again, when the pneumonia is secondary to some other serious disease, and when the heart is acting insufficiently so that the pulmonary circulation is interfered with as in Bright's disease, in organic affections of the heart, in drunkards and in old people acetate of lead will sometimes work wonders; indeed, he considers that it is most valuable in serious cases. Of course, it must sometimes be combined with alcohol.—*Lancet.*

**TREATMENT OF GASTRIC ULCER.**—In a recent clinical lecture on gastric ulcer, Dr. Byrom Bramwell, in speaking of the treatment of gastric ulcer, insisted upon the importance of giving the patient as much food as is necessary for the purpose of nutrition, and the avoidance of all foods which irritate the inflamed and ulcerated stomach, and which produce pain or vomiting. Liquid food, and especially milk, fill these requirements, though the latter is sometimes not well borne, unless boiled or partially predigested with pancreatin. Half a teaspoonful, or a teaspoonful, of the liquor pepticus given immediately after a meal, is often useful in those cases in which it is not considered necessary to peptonize the food before introducing it into the stomach. In the severe cases in which peptonized foods disagree, the stomach should, for a time, be placed at absolute rest, and the patient fed *per rectum*. It is now well-known that it is possible to support patients for long periods of time by means of nutrient enamata (milk beef-tea, defibrinized ox blood) and nutrient suppositories. Nutrient enamata should be given in small quantities at a time, to ensure their retention, and when the rectum become irritable, a few drops of laudanum should be added to every third or fourth enema. Potatoes, raw apples, meat and pastry are especially injurious. Tea is also bad.

The second indication is to administer remedies which will promote the healing of the ulcer. In ulcer of the stomach, as in every other disease, one of the great principles which should regulate our treatment is to remove the cause of the condition. Ulceration of the stomach is very frequently seen in chlorosis, and in such cases he has found arsenic in the form of Fowler's solution, with a teaspoonful of liquor pepticus (Benger's), a most valuable remedy. Bismuth and nitrate of silver are also very useful in treatment of many cases of ulcer of the stomach. In others, where the pain after taking food is very severe, a small dose of opium or morphia, given in the form of a pill, is of advantage. In cases where there is distinct tenderness on pressure, the application of a blister is often beneficial.

In treating ulcer of the stomach, it is necessary to attend to the condition of the bowels. Cascara, or castor oil, may be given when medicine is required; strong purgatives should be avoided.—*Studies in Clinical Medicine.*

ICHTHYOSIS IN AN INFANT.—Dr. Rona (*Archiv. f. Dermat. u. Syph.*) describes an interesting case in which ichthyosis developed in an infant a few days after birth. The disease appeared in discrete reddish spots, which after a few weeks became larger, and then the epidermis began to exfoliate. By the end of the second month the disease had so far advanced that the whole skin had a shining appearance, with constant desquamation. Rhagades developed in the skin, the lips became like parchment, and there finally developed swellings in the skin, which discharged pus. The child died in the fourth month. Rona considers that the disease developed simultaneously in the papillary layer and in the epidermis, and it was only after some time that the hyperemia and infiltration of the affected parts of the skin became less evident. A second child of the same parents was seen by Dr. Rona when she was eleven years old, and in her the disease is stated to have been developed in the third month. The description of this patient shows the disease to have been present in a highly developed form. In the eighteenth month of this child's life the effect of the disease had been to prevent development and seriously to impair the health.—*Br. Med. Jour.*

SPURIOUS PREGNANCY AND LABOR.—Dr. Metzlar, of Leyden, has recently described, in a Dutch journal of obstetrics, an interesting case of this remarkable morbid condition. A woman, aged 41, applied, on July 1st, 1888, at a Leyden hospital for attendance at her next labor, due she stated in September. Dr. Metzlar was called in on Oct. 27th, the patient declaring that labor pains had set in. Thus, as has been observed in other cases, the delusion continued after the normal term, ac-

ording to the woman's own reckoning, had passed. The abdomen was much distended and universally tympanitic and no tumor nor enlarged uterus could be felt. Then it was found that the catamenia had never ceased throughout the course of the suspected pregnancy. The abdominal walls and the breasts had recently enlarged through fat. There was very marked lordosis. Under anæsthesia the arching forwards of the lumbar spine and the abdominal distension disappeared. As the patient recovered consciousness the lordosis slowly returned. Dr. Metzlar also noticed that the patient made very deep inspirations followed by very shallow expirations, and the abdomen steadily distended. Neither laxatives nor hypnotism had any effect in diminishing the size of the phantom tumor.—*Br. Med. Jour.*

WARNER'S ANTISEPTIC PASTILLES.—Following a suggestion recently made by Dr. C. Seiler in the *Med. Record*, Messrs. William R. Warner & Co., the well-known pill and compressed pastille manufacturers, of Philadelphia, are now placing on the market antiseptic pastilles for the treatment of certain nasal affections. These pastilles are not only powerfully antiseptic and comparatively innocuous, but also distinctly deodorant, as sodium bicarbonate, sodium baborate, sodium benzoate, sodium salicylate, menthol, and oil of wintergreen enter into their composition. One of the pastilles makes 2 oz. of a lotion or spray for the nostrils, and it is, according to Dr. Seiler, "sufficiently alkaline to dissolve the thickened secretion adhering to the nasal mucuous membrane, and as it is of proper density, it is bland and unirritating, leaving a pleasant feeling in the nose. As an antiseptic and deodoriser it is far superior to Dobell's solution or any other non-irritating deodoriser and antiseptic."—*The Chemist and Druggist.*

VIRGIL McDAVITT, M.D., Quincy, Ill., says: "I usually find Celerina to be a very agreeable and acceptable nerve tonic, quieting and calming nervous irritability and causing sleep oftentimes after spells of continued wakefulness, adapted to use in much the same cases as valerian, assafœtida, etc., not a cure at all, but a valuable addition to our armamentarium in the treatment of a class of cases which are often most vexatious and trying to the physician and worrying to the patient. In these cases I have often prescribed it alone or combined with other remedies with much success."

PROGRESS OF CREMATION.—There are now thirty-nine crematories in various parts of the world. Italy has twenty-three, America has ten, while England, Germany, France, Switzerland, Denmark and Sweden have one apiece. Since 1876 the crematories in Italy have been 1,177, and the total elsewhere only 1,269.—*Med. Rev.*

# THE CANADA LANCET.

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Criticism and News.**

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## MEDICAL EDUCATION.

Within the last twenty years the progress in the arts and sciences has been very great and it may be well sometimes to consider how this progress has affected and is going to affect the science and art of medicine. Twenty years ago, the chief object of the medical student was to secure a good apprenticeship, his desire was to place himself with the physician of large practice, who would afford him a good opportunity of becoming familiar with disease and the simple and ready ways of relieving pain and suffering; the trained nurse was seldom seen. The physician then had to know how to arrange his patient with the object of affording the greatest relief; he was the instructor of the attendants, his directions carefully noted, and carried out with the fullest confidence.

In the progress of a difficult and serious case and in more simple ones, the doctor was aided by the visits and reports of his assistant or student, made in the intervals of the regular visits. The student then, if we are to believe what is said by some of this present time, knew nothing of medicine; the huge volumes of chemistry over which the student of to-day pores, were then unwritten, he would have been puzzled to write the chemical equation representing the formation of P. from bone ash, or to give the formulæ and affinities of the class ptomaines; his knowledge of physiology was limited to that of the functions of the human body—he knew thoroughly and well the characters of the

human heart's beat, but he did not know of the wonderful differences existing in the heart of the turtle nor of the growing and numerous capillaries constantly supplying the numerous glands in the tail of the salamander; but he knew something; his knowledge of practical diagnosis would put that of many a clinical teacher of the present day to shame; the neatness and carefulness with which he would apply a bandage or adjust a splint, proved he was not entirely devoid of artistic taste; he compounded his own medicines and often from the differences in the age and quality of a drug correctly explained the variation in its action in different cases. Things have changed since the day when these old fogies gave their practical lessons to their assistants, medicine has become a refined and scientific profession. The demands of science have in many instances thrust from the field those of practice, the matriculation has been raised, and is to be still further raised, until the matriculant has had several other professional courses before he can reach that of medicine, thus insuring and ingraining in the mind at its very commencement, an innate love of science; his anatomy is to be more comparative and less of human, his physiology is to be biology, and the more it is surrounded by machinery the better; it must be scientific, to follow his course of to-day; he must be a thorough and practical electrician; his knowledge of physics be of the most perfect kind; he must be a practical photographer, a chemist and a glass-blower, a naturalist and a zoologist, a good general mechanic, understand thoroughly the construction and repairing of clocks, and a thorough optician. If his time should be too much occupied to apply his science to man, what of that, he can do that when he gets into practice. In his chemistry he must know how to assay, to test for the metals qualitatively and quantitatively; he must analyse solutions of arsenic, and determine to a fraction of a grain the quantity contained therein; he must manufacture gases, determine the laws of their expansion, by experiment, and perhaps take up urinalysis.

When he comes in *advancing years* to the undignified drudgery and study of real practice, he will be thrilled by able clinical lectures, he may see the bedside of a patient twice a week, he may in his whole course of education have to *report* the histories of *six* medical and *six* surgical cases.

He may have to produce certificates of having during his lifetime *been present* (properly aseptized and at a distance) at six accouchments. That in his surgical practice he has ever tied a ligature or passed a catheter it is quite open to question; as to his ever having seen a case of smallpox, scarlet fever or measles, why the suggestion of such a thing would call forth vengeance from any live and active board of health.

We do not desire to continue the picture; we are not sneering at, or belittling the practical, the marvellous, the applied discoveries and benefits of science. We only ask those anxious to thrust into the medical course every newly discovered science or scientific apparatus, Is it necessary? Is it not possible to appropriate and apply results? Is there a danger of controverting the medical course into a science course? In this age of clamorers for "practical courses," may not the medical students of the present become rather practical scientists than practical physicians? Can the student, in four brief sessions of six months and one summer of three months—in twenty-seven months—master the course? Canada is yet a young country, the best of her medical men have been those who, dependent upon their own efforts, by inherent energy and an application worthy of a people's homage, have so familiarised themselves with the science and practice of medicine, that to-day they are justly regarded as abreast of any in the world. If the course were extended to six, seven or eight years, the difficulty might in a measure be obviated but it would be living greatly beyond our means, and in the end result in injury to both the profession and the people.

When it is demanded of a student to qualify for the profession of medicine in such a superior manner by a prolonged course of mental and practical training, he is naturally led to expect a return in a measure corresponding to his outlay of time and money. We admit knowledge is in itself a never-failing source of pleasure; but it is unfair when a physician possessing a complete knowledge of science, literature and art, fails because of the unpractical nature of his *medical* knowledge, and one competing side by side with him succeeds, with a far less extensive education, whose habits may incline to that freedom of manner which enables him to be a companion to the village black-

smith and a croney of the keeper of the general store, who, more in sympathy with his surroundings, gains a popularity in his section of the country which the former cannot, for obvious reasons, bring his mind to compete for.

Let us not forget that the object of the physician's care is man, and every opportunity afforded the student to familiarise himself with his condition in both health and disease should be insisted upon by those who have the responsibility of framing the medical curriculum.

### CARCINOMA.

The question of the possibility of changing a benign neoplasm to a malignant tumor by meddlesome interference is up for discussion. This time the subject is started by the laryngologists, some of whom are convinced that simple laryngeal papilloma may be rendered malignant by rude and frequent attempts at removal. If we remember, this was one of the dangers which Mackenzie feared early in the treatment of the case of the late Emperor of Germany, and although at the time the idea was ridiculed, still the fact that the matter is discussed is an evidence that some influential surgeons are in accord with him. At any rate, right or wrong, it is an important point to settle, and should not be disposed of until we are persuaded in one way or the other. It is a little unfortunate, perhaps, that the laryngologists are the most exercised, because they are inclined to base their opinions upon the appearance and behaviour of disease in the larynx, which of all the organs of the body would be most liable to present such transformation, if the thing were possible. A laryngeal papilloma either sessile or pedunculated may be, as everyone knows, malignant or benign, and perhaps mixed. The body of the tumor may be a simple hyperplasia of connective submucous tissue, infiltrated with inflammatory products and leucocytes which, under the microscope, may show no evidence of cancer, yet this apparently innocent growth may spring from a decidedly cancerous base. Therefore, it is impossible for any pathologist to determine from an examination of a piece cut off such a tumor its nature unless by chance the instruments have gone deeper than usual. An epithelioma is often the immediate result of irritation and may undoubtedly

arise at the base of a simple papilloma of the skin. A small tumor on the skin of the face, of years' standing is benign, but if the individual pick at it, as he will often do from habit, he can through mechanical irritation start a malignant growth. Apart from the scientific aspect of the question then, it would be best to remove all such growths, tumors or warts, whenever they become a plaything for a person over middle life.

Given a simple papilloma on a vocal cord, at every breath it is moved on its base; its presence excites cough; consequently it is continually disturbed, irritated, inflamed and perhaps eroded; such continued irritation can induce a dangerous ingrowing of the epithelium at its base, and the starting of a malignant tumor. Admitting the possibility of such an occurrence it is easy to appreciate the reason of the present discussion, and still side with the majority, that the simple transformation of a benign neoplasm to a malignant tumor is improbable. When such apparent transformation takes place within the larynx, it is probable that it was cancer in the beginning or that its presence has excited the growth of an epithelioma in its immediate neighborhood. These probabilities are of importance in the treatment. The moment a tumor is discovered on a vocal cord it must be removed and its base destroyed if possible. The multiple attempts to burn away such a growth are dangerous in more than one respect. Unless the tumor is destroyed at one or two sittings the cautery simply stimulates it to renewed growth, broadens its base and renders it more difficult to remove by cutting instruments. Tumors of the larynx in middle life are dangerous; in the majority of cases they are malignant and demand the most formidable operations. Benign growths because of their locality are dangerous also, and should be removed at all hazards; the sooner the better

#### TREATMENT OF BUBOES BY INJECTION OF IODOFORM IN VASELINE.

It was the late Professor Ricord, if we remember correctly, who said that he expected to find his punishment in the next world, if he were so unhappy as to go down instead of up, in having numbers of patients around him clamoring for the cure of their gleet. Everyone who has had any

experience in treating venereal diseases can sympathize with him, in the weariness of curing that condition, and will feel that he might have extended his remarks by including the healing of buboes. To a nervous, worrying patient, an open bubo is a thing of horror, and soon becomes the same to the medical attendant. The following from the *Journal of Cutaneous and Genito-Urinary Diseases* will be refreshing to all who have much bubo practice:

The following is the manner in which Prof. Pontain proceeds: 1. Washing and antiseptics of the region by means of Van Swieten's liquid, diluted one half with hot water. 2. Puncture with the lancet if the skin is soft, with the straight bistoury if the pus is deeply situated. The puncture is small and made in the most fluctuating point; it is not necessary that the incision have a slope, for there will be no discharge in the next succeeding days. 3. Evacuation of the pus, pressing out completely all the liquid contents of the ganglion; it is indispensable to cause all that the ganglion contains to be gently and gradually pressed out, and this procedure is sometimes painful. A few injections of diluted Van Swieten's liquid are now made to wash out well the pouch. 4. Injection of iodoformized vaseline melted by heat; it is to be pressed gently in by means of a glass syringe previously charged and placed in hot water. 5. Dressing with absorbent cotton. As soon as the cavity is full of the iodoformized vaseline, a wad of cotton, soaked in cold Van Swieten's liquid, is placed over the adenitis, and kept in place with a spica. The contact of the cold congeals the vaseline, and makes a plug at the orifice of the bubo. After the first day all pain disappears, and ordinarily healing is complete without cicatrix in an average of six or seven days. It is at times necessary to renew the injections of vaseline. Out of forty-one buboes thus treated by the author, more than half were cured in less than five days. The most rebellious required twenty-three days.

#### ONTARIO MEDICAL ASSOCIATION.

The Tenth Annual Meeting of the Association, is to be held in Toronto in the first week of June next, and the following information with regard to the programme, will be of interest.

The discussion in Surgery will be opened by Dr. M. Sullivan of Kingston, who will read a paper on "Hernia," and will be followed by Dr. McFarlane of Toronto and Dr. Waugh of Lindsay.

In Obstetrics, Dr. A. T. Carson, Toronto, Lecturer on Obstetrics in the Woman's Medical College, will read a paper on the "Prevention of Post Partum Hæmorrhage," and the discussion will be led off by Dr. Powell of Ottawa, followed by Dr. Allen Baines of Toronto.

In Ophthalmology, Dr. Ryerson of Toronto, has chosen for his subject "The Ophthalmoscope in Relation to Diseases of the Nervous System." He will probably be followed in the discussion by Drs. Palmer and Wishart of Toronto.

The President has invited several distinguished gentlemen from across the border to be present and take part in the proceedings, and, while the arrangements are not fully concluded as yet, there is every reason to believe that the Association will have the pleasure of listening to Dr. Andrew Smith of New York, and Dr. Wm. Goodell of Philadelphia. Dr. Emmet, the distinguished gynecologist, has also promised to be present, if it be at all possible for him to leave New York at that time. With such a trio, we feel sure that the members of the profession will have a treat, the like of which has not been heretofore had in Ontario. While a considerable number of papers have been promised by the members themselves, the list is by no means as large as it ought to be and it is to be hoped that those who desire a place on the programme will not delay in sending their name and subject to the Chairman of the Committee on Papers, Dr. J. Graham, or to the General Secretary, Dr. Wishart.

Among others who have promised papers are Dr. Duncan of Chatham, who will read one on "Duodenal Ulcer," and Dr. Shaw of Hamilton.

The discussions in Medicine and Therapeutics will shortly be arranged for, those which had been made in Therapeutics having been upset by the sad and unexpected death of Dr. McKay of Woodstock.

ROYAL COLLEGE OF SURGEONS, ENGLAND.—From the *Hospital Gazette* we copy the following paragraph, which will be of interest to the profession in Canada generally, and especially so

to those who have "been there":—From the annual calendar, which has just been published, it appears that there are now 1,338 Fellows of the college (737 of whom obtained the distinction by examination); if to these are added the 17,170 members, there is a total of 17,907 qualified medical men, some of them practising in foreign States. The licentiates in dental surgery number 676. Diplomates in public health (diploma granted by the Royal College of Physicians and Surgeons) number 29. During the past collegiate year 170 candidates went up for the primary or anatomical and physiological examination for the Fellowship, 106 of whom were referred. At the pass or surgical examination, out of 83 candidates, 35 having failed to acquit themselves to the satisfaction of the court of examiners, were referred to their professional studies. The board of examiners in dental surgery held two meetings for the examination of 48 candidates, 31 of whom passed. For the first examination under the scheme for an examining board in England, in conjunction with the Royal College of Physicians, there were 735 candidates for elementary anatomy, 600 of whom passed; in elementary physiology 777 candidates presented themselves, of whom 607 passed. In chemistry out of 879 candidates 552 passed, and in *materia medica* 493 out of 804 passed. The examiners in anatomy and physiology, under the scheme, appointed in conjunction with the Royal College of Physicians, conduct the "primary" under the old regulations as well as the second examination of the examining board. In anatomy 937 candidates presented themselves, 382 of whom passed; in physiology 579 out of 1,069 candidates passed. At the final examination the court of examiners examined 864 candidates in surgery, of whom 476 passed and 388 were referred. The receipts from all sources during the collegiate year amounted to £121,337 14s. 5d., the largest receipt being from sale of stock—viz., £87,462 1s. 3d., and the next largest being fees

REMEDIES FOR NIGHT-SWEATS.—The practice of using gr.  $\frac{1}{60}$  or  $\frac{1}{100}$  of sulphate of atropia for night-sweats is very common, but occasionally cases are met with in which unpleasant symptoms, such as a scarlatinaform rash, dry throat, restlessness, numbness, etc., arise from even the smaller dose mentioned above. It is rather remarkable that

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the antidote to atropia poisoning, viz., pilocarpine, should in small doses act well in such cases, as indeed we have found it of much benefit in nearly all cases of night-sweating. The following, taken from the *Med. News*, will be of interest to our readers in this connection:—The various remedies brought forward at different times for this troublesome state have each in its turn proved useless in certain cases, and while agaricin may be mentioned as one of those which deserve the least praise, in our own experience pilocarpine amounting to the twentieth of a grain, given from one to two hours before the sweat is expected, are potent for good. The means by which this result is brought about are not far to seek. The drug in all doses greatly stimulates the peripheral ends of the nerves supplying the sweat-glands. In many instances we find excessive secretion dependent upon depression of function, as in a serous diarrhoea or a local sweating of the feet. These states pass away just so soon as the parts regain their normal tone through proper treatment. The night-sweats of phthisis are improved by pilocarpine, because this drug in all doses stimulates the sweat-glands. In large dose this stimulation amounts to diaphoresis; but in the minute dose such as we name, the stimulation just balances the depression, and a normal tone is acquired. While it is true that pilocarpine and atropine are physiological antagonists, it will be found practically beneficial to prescribe small doses of both in such cases as refuse to respond to either one alone, as by their antagonism they prevent over-action on other parts of the body, and both act in harmony in so influencing the sweat-glands as to be of service to the physician.

**CORROSIVE SUBLIMATE IN DYSENTERY.**—Chowdhovry, *Lancet (Med. News)*, states that he has had greater success in the treatment of dysentery with bichloride of mercury than with ipecacuanha. The latter treatment he found unsuited to many patients, the nausea produced seriously interfering with nourishment, though small doses, three to five grains, combined with sodium bicarbonate, are often useful in acute dysentery. In chronic dysentery at the Burdwan Hospital, with every variety of treatment, the mortality has remained very high. Thinking that ipecacuanha owed its power in this disease to stimulation of biliary secretion, and believing that corrosive sublimate

possessed the same influence with no nauseating effects, he resolved to give it a fair trial. His expectations were fully realized, and with the administration of this drug many chronic and seemingly hopeless cases were cured in a shorter time than could have been expected with any other method. The dose he administers is small, five minims of the British liquor hydrargyri (about 1 : 100 grain of sublimate) well diluted every four hours.

**THE HEALTH ADVANTAGES OF A SEA VOYAGE.**—Dr. Burney Yeo (*Nineteenth Century*) gives the following as among the advantages of a sea voyage: 1. Perfect rest and quiet, a thorough change of scene, and perfect and enforced rest from both mental and physical labour. 2. The life in the open air and the great amount of sunshine enjoyed, it being quite possible to spend fifteen hours every day in the open air. 3. The purity of the sea-air, no organic dust or impurities—the air of the open sea being the purest found anywhere. 4. The great humidity of the atmosphere and the high barometric pressure, which are considered to exercise a useful sedative influence on certain constitutions. 5. The exhilarating and tonic effects of rapid motion through the air—the sea breezes are constantly blowing over the ship. These breezes increase evaporation from the skin, and impart tone to the superficial blood-vessels.

**DISINFECTION OF THE PATIENT IN SCARLET FEVER.**—There can be no doubt that personal disinfection during the desquamative stage of scarlatina is of the utmost importance, as it is then the danger of contagion is greatest. Dr. Maus (*Med. Rec.*) gives the following instructions:

1. Sponge the patient thoroughly, morning and evening, with a tepid solution of corrosive sublimate, 4 to 1000, as soon as the eruption makes its appearance.
2. Wash the hair once daily with a solution of the corrosive sublimate, of the same strength, and also a solution of borax, 1 to 250.
3. Disinfect the urine, fæces, and expectoration, also the discharge from the ears and nose, if there be any. A solution of the bichloride, 1 to 1000, is best for this purpose.
4. as soon as the patient is permitted to leave the bed have the body washed with warm water

and soap, then sponged with the 1 to 4000 bichloride solution, wiped dry, and anointed with the following ointment:—

R—Sodii bichloridatis,  
 Zinci oxidi . . . aa . . . ʒ iv.  
 Ol. gaultheriæ, . . . . . ʒ ss.  
 Vaselini, . . . . . ʒ iv.

The hair should be thoroughly washed with the bichloride and borax solution.

5. The patient is then to be enveloped in fresh and clean clothes throughout, and allowed to leave the sick-room if his condition otherwise admits of it.

6. The bed-linen, soiled clothes, towels, etc., should be placed in a suitable sublimate solution and boiled, and the room well disinfected with sulphur. The sulphur candles are very convenient, and the disinfection should be repeated the second day, as the germs are very tenacious of life.

THE CONFORMATION OF THE CHEST AND THE TENDENCY TO CONSUMPTION.—The *Deutsche Med. Zeit.* contains an article on this subject by Dr. Maszkowski. The writer states that it is maintained by many observers, that disproportion in the form of the chest is an important factor in the tendency to tuberculosis. The results of a series of investigations have led him to coincide with the conclusions of others in this respect. He selected 275 healthy individuals and the same number suffering from various stages of pulmonary tuberculosis. These persons were subjected to close and careful comparative anatomical measurements, and from this the following conclusions were deduced: 1. That there existed no characteristic form of thorax in those predisposed to pulmonary tuberculosis. 2. That changes in the form and diminution in the capacity of the chest, when such took place, appeared as concomitants, and developed as the disease progressed.

ANTIFEBRIN IN EPILEPSY.—Dr. Diller (*Therap. Gaz.*) gives the following conclusions regarding the use of antifebrin in epilepsy:

1. In all the cases in which the drug was given continuously there was noted a reduction in the number of fits, ranging from about twenty-five to seventy-five per cent., as compared with other months during which patients were on bromide and tonic treatments alternately.

2. The remedy was in all cases well borne, producing no apparent mental or physical depression. This in marked contrast with depressant effects noted after a course of bromide treatment.

3. No skin eruption was produced.

4. In any given case in which a great number of fits are occurring, and where it is desirable to control them as soon as possible, the bromides would be of far more value than antifebrin.

FORMULÆ FOR DYSMENORRŒA.—The *Univ. Med. Mag.* gives the following formulæ for dysmenorrhœa:

R.—Bromide of ammonium, . . . ʒij.  
 Bromide of potassium, . . . ʒiv.  
 Aromatic spirit of ammonia, . fʒvj.  
 Camphor-water, sufficient to  
 make . . . . . fʒvj.—M.

Of this, from a dessertspoonful to a tablespoonful may be given every two or four hours.

R.—Aromatic spirit of ammonia, } āā fʒj.—M.  
 Spirit of nitrous ether, }

From a teaspoonful to a tablespoonful every two to four hours.

R.—Chloral, . . . . . ʒij.  
 Bromide of potassium, . . . ʒiv.  
 Camphor-water, . . . . . fʒvj.—M.

One tablespoonful every two to four hours.

If nerve prostration is marked, he considers a pill composed as follows very valuable:

R.—Arsenious acid, . . . . . gr. ʳo.  
 Dried sulphate of iron, } āā gr. j.  
 Extract of sumbul, }  
 Asafetida, . . . . . gr. ij.—M.

One pill after each meal, increasing to two pills after each meal.

FOR RUPTURING THE MEMBRANES.—J. B. E., writing to the *Lancet*, says:—For the sake of cleanliness and comfort I always keep my fingernails very short, and consequently have often great difficulty in rupturing the membranes in a confinement. The patient's friends have, as a rule, a not unnatural dread of one's using a pointed instrument. Called to a case to-day in which the woman had been in labor about thirty hours, I found the membranes roll about in the usual exasperating manner. It struck me that a thimble would answer the purpose, and borrowing one I introduced it on the point of the forefinger. The

moment I drew it across the membranes they ruptured, and the child was born in four minutes. I recommend that one should be carried in every midwifery bag.

**INFLAMMATION OF THE BREAST AND ITS TREATMENT BY ELASTIC PRESSURE.**—Dr. Horne (*Dub. Jour. Med. Science*) gives the following conclusions as to the management of the puerperal breast: 1. Mastitis is rarely seen, except in patients who have suffered from fissured or crushed nipples, and is the result of infectious matter gaining entrance. 2. That, as a rule, the secretion milk of continues only while the natural stimulus, as nursing or other, means, continues to be employed. 3. That the secretion of milk, either in normal or inflammatory state, begins to abate when such stimulus is withdrawn, and will entirely cease after a week or two. That in all cases of threatened or inflamed breast, well regulated pressure by means of an elastic bandage should be applied, and no attempt should be made to nurse or withdraw the secretion until the entire subsidence of the inflammatory movement. The advantages of the elastic bandage over an ordinary roller are: 1. It is easier of application. 2. The pressure is more uniform. 3. It is not so likely to slip. 4. It is more comfortable to the patient, as requiring much less material. 5. It is not necessary to apply it over the shoulders.

**THE PATHOLOGICAL EFFECTS OF CHLOROFORM INHALATION.**—Dr. Robert Ostertag sums up a lengthy paper (*Lancet*) on this subject as follows: 1. That after long-continued inhalation of chloroform by different animals there may arise fatty degeneration of organs, especially fatty infiltration of the liver, fatty metamorphosis of the cardiac and skeletal muscles, kidneys, and stomach. 2. These fatty changes result from the action of chloroform upon the blood (destruction of red corpuscles) and upon the tissue cells. 3. Some individuals have a greater susceptibility to this action of chloroform than others, and succumb at an earlier period to its effects. 4. The fatal effect is due to cardiac paralysis, which may occasionally be accompanied by but slight anatomical lesion of the myocardium, and also to gradual carbonisation of the blood.

**STAMMERING.**—Says the *Kansas City Medical Journal*: It is a well-known fact that stutters, when speaking in a whispering voice, show no impediment of speech. A new method of treatment has been advocated by Dr. Coen and is as follows: In the first ten days speaking is prohibited. This will allow rest to the voice, and constitutes the preliminary state of treatment. During the next ten days speaking is permissible in the whispering voice, and in the course of the next fifteen days the ordinary conversational tone may be gradually employed.

**MENTHOL IN PRURITIC AFFECTIONS.**—This remedy is highly recommended by Saalfeld in various forms of pruritus. He gives it either as a lotion or ointment, his formulæ being—

1. R.—Menthol, . . . . . gr. 22-37.  
Spirit vin. rect., . . . . . ʒ jʒ.
2. Menthol, . . . . . gr 37.  
Ol. olivarium, . . . . . (ʒ ij. ʒ iij.)  
Lanolin, . . . . . ʒ jʒ.

He has had excellent results in urticaria and various forms of pruritus.

**PERSPIRING FEET.**—Not long ago the relative values of various remedies for the treatment of perspiring feet were being tested by military surgeons abroad (*Med. and Surg. Rep.*) A weak chromic acid solution seemed to yield the best results and was adopted for the German army. Still, the acid solution is not entirely satisfactory, since it must be used most cautiously, and when applied to sore feet, not unfrequently gives rise to severe inflammation.

A simple and perfectly harmless preparation is the following:

- R.—Talc, . . . . . 10 parts.  
Alum, . . . . . 2 parts.

Mix, and dust freely and frequently on the feet.

This preparation has proved most efficacious and is largely used in the Swiss army.

**DEATH FROM SULPHONAL.**—A death has been reported (*Med. Rec*) following the use of two fifteen-grain doses of sulphonal, the doses being given an hour and a quarter apart. The fatal results occurred forty hours after the first dose. The patient was a woman with melancholia, aged twenty-eight. The mode of death was apnoea.

A PETITION for the placing of Medical and Surgical Instruments and appliances upon the free list, was forwarded last week to the Minister of Customs, on behalf of the Ontario Medical Association.

#### DEATH OF MRS. W. B. GEIKIE.

In the midst of her family, with nothing left undone that thoughtful care and affection could suggest to soothe her dying moments, Mrs. W. B. Geikie, the beloved wife of Dr. W. B. Geikie, Dean of the Faculty of Trinity Medical College, passed peacefully away in her 58th year, at her late residence, Holyrood Villa, 52 Maitland St., Toronto, on the afternoon of Thursday the 30th ult. As long ago as 1855, Mrs. Geikie, previously quite as strong as most persons, had a very sudden and most dangerous illness, after which, her health was never restored to what it had been before the attack. She was a lady of great energy in discharging every duty which devolved upon her in her home, which in her estimation had the principal claims upon her, as a wife and mother; and this large degree of conscientious devotion to home duties characterized her entire life.

About twelve years ago a severe attack of pleurisy nearly cost her her life, and since this illness she has been more or less a constant sufferer; of late years, the secondary results of the injury done to the left lung by the pleurisy, became more and more serious. Her heart's action became seriously and increasingly affected, and a very severe cough, paroxysmal in its character, greatly added to her sufferings; digestion became very feeble and within the past two or three years she became much emaciated, until compelled to keep her bed for the last four weeks of her life.

Mrs. Geikie, while unable from bodily weakness, to do a great deal that was seen or known publicly, was a very devoted and most earnest Christian worker—and a good many homes of the poor will miss her kindly visits. As we have said, her special life work has been very unostentatiously performed in her home, and her intense and constant solicitude for the temporal, but more especially for the eternal welfare of every member of her family, leaves a blank which can only be fully estimated by a household from which a most affectionate wife, and one of the best of mothers has been taken.

THE BOOKS in the medical department of the Public Library, 213 in number, were this week transferred to the Medical Library on Bay Street.

#### Books and Pamphlets.

A HANDBOOK OF DISEASES OF WOMEN, including Diseases of the Bladder and Urethra. By Dr. F. Winckel, Professor of Gynæcology, etc., etc. Munich. Edited by Theophilus Parvin, M.D., Professor of Obstetrics, and Diseases of Women and Children, Jefferson Medical College, Philadelphia. Second edition, revised and enlarged, with 150 illustrations. Philadelphia: P. Blakiston, Son & Co., 1889. Toronto: Carveth & Co., p.p. 766. Cloth, \$3.00; leather, \$3.50.

This edition is considerably improved. The editor is so well and favourably known as a specialist in his subject that the work coming from him is sure to be well received, as the earlier edition has always been popular in both Great Britain and America. The addition of a section upon diseases of the bladder and urethra will be welcome, and is in accordance with the wishes of Prof. Winckel, from whose monograph on that subject it has been chiefly derived. The work is clear and concise, and contains, we believe, all that is necessary for the ordinary practitioner, in a small compass.

THE STORY OF THE BACTERIA AND THEIR RELATIONS TO HEALTH AND DISEASE, by T. Mitchell Prudden, M.D. New York: G. P. Putnam's Sons, Toronto: Vannevar & Co., 1880, pp. 138.

The writer seems to have well accomplished his object, which is, he says, "to present some facts from a small corner of the domain of Science in such form as will be plain to the unscientific, and with these some extracts from the lore of the physician which will, it is hoped, be both interesting and useful to the lay reader."

A HANDBOOK OF DERMATOLOGY FOR THE USE OF STUDENTS, by A. H. Ohman-Dumesnil, A.M., M.D., Professor of Dermatology, St. Louis College of Physicians and Surgeons, etc., etc. Illustrated. St. Louis *Medical and Surgical Journal* Publishing Co. Toronto: Vannevar & Co., 1889.

A handy little book of 159 pages. It contains much useful and easily getatable information for students.