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THE TREATMENT OF CYSTITIS.*

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Miscere utile cum dulci, to impart useful information in an entertaining manner in general addresses of the character I am asked to deliver, seems to be a custom as old as, and closely akin to, the use of excipients to carry a drug which is not pleasing if taken in its naked strength. Who does not recall with pleasure the "elegant mixtures," the electuaries, and the compound syrups of our forefathers?

I have tried to meet your expectations, by bringing before this large audience, representative of the advanced medical thought of our day, one of the oldest and most rebellious of the enemies of our race, namely, cystitis, bound in chains; and I trust that you will find no small satisfaction as you note that one more step has thus been taken in the path of therapeutic progress.

The *résumé* I shall give you embraces over eighteen years of a personal experience, largely devoted to this particular subject.

In order not to raise too great expectations, let me declare at the outset that, as is often the case in that difficult art which we profess, I have no single drug or method to propose by which all cases can be cured. It is only by a painstaking study of all the conditions, and by persistent patient efforts that cystitis can be

* Read before meeting of Canadian Medical Association, Halifax, Aug. 22, 1905.

understood and successfully combated. The therapeutic side of the subject, in which your interest naturally focuses, is so large that I cannot do more than touch upon its history, etiology, pathology, chemical history, and diagnosis.

History.

The names of two of our great fellow-countrymen stand pre-eminent in the history of the treatment of cystitis, and to them alone will I refer in this brief *résumé*, as they are in danger of being passed over in the hurry which characterizes the progress of to-day. One of these is Willard Parker, of New York, who, in 1850, at the Bellevue Hospital, operated upon a case of chronic cystitis in the male, stating that, "The object in view is to open a channel by which the urine could drain off as fast as secreted, and thus afford rest to the bladder, the first essential indication in the treatment of inflammation." This case was reported in the *New York Medical Journal* for July, 1851.

The other name is that of T. A. Emmet, who, in 1858, operated for a vesical calculus, and by the advice of Marion Sims, left an opening in the vesico-vaginal septum, in order to afford greater facility in the treatment designed to restore the organ to a healthy state. Subsequently to this, Emmet "made an artificial vesico-vaginal fistula, with a view of giving rest to the organ by the free escape of urine." (*Amer. Pract.*, for Feb., 1872.) Emmet records several cases of cystitis treated by this plan in his classical work on vesico-vaginal fistula, published in 1868, while Parker also presented at the New York State Medical Society, in 1867, a paper on "Cystitis and Rupture of the Bladder Treated by Cystotomy."

One of Emmet's most rebellious cases, a woman who had suffered for three years, was examined "endoscopically," after cystotomy and irrigations of the bladder, by Dr. Newman, June 1st, 1869, and the bladder found free from disease, whereupon Emmet closed the fistula, and with some further slight treatments, she fully recovered.

I mention these facts, because I am sure we are too prone to forget the skilful labors of our predecessors, upon which all that we are successful in doing to-day rests as a sure foundation. All honor to these noble painstaking pioneers in this most difficult corner of our field of labor.

Etiology.

Again, I turn with no little pleasure to our clear-sighted Emmet, who, writing in 1872, says: "Neglect during labor to keep the bladder empty, exposure to cold, violence, and the habit

of long retaining the urine, are the chief exciting causes of the most serious forms of cystitis." In investigating this, as in other inflammatory affections, we have to consider two factors—the predisposing causes which prepare the ground for the cystitis, to which we have but little to add to what Emmet has said; and the exciting cause, the particular living organism, which is the immediate agent in setting up and in maintaining the disease. It is the establishment of this last important factor which has given us a new conception of the subject, and served to modify and direct our treatments.

Contrary to the opinions of some ten years ago, we now know that the mere presence of organisms is not of itself sufficient to excite a cystitis. This is seen in cases of bacteriuria, where although the urine is loaded with organisms, there is but a nominal lesion, or no lesion at all, in the bladder.

The following predisposing factors are important:

1. Localized congestion.
2. Traumatism.
3. Retention of urine.
4. Reduced health.
5. Two or more of these factors combined.

Congestion may result from "catching cold" and from exposure; or from the action of toxins or chemical irritants, excreted by the kidneys, on the bladder; or from a hyperacidity of the urine; or, again, from the presence of tumors in the pelvis.

Traumatisms arise from labor, especially where the forceps are used with the bladder not emptied; from the use of the catheter; and, most important, from surgical operations on the uterus, involving the detachment of the bladder; and from stones lodged in the bladder.

Retention of the urine from faulty innervation of the bladder, as in tabes or after labor, and retention from a sense of modesty followed by the use of the catheter is a prolific cause.

Ill-health renders the whole body liable to the invasion of organisms, and coupled with any of the preceding factors renders the bladder a *locus minimae resistentiae.*

What are the organisms, then, which serve, in the presence of such predisposing conditions, to bring about and maintain a cystitis?

To answer this question I turn to an admirable summary of my own cases, made by Dr. T. R. Brown, and published in the Johns Hopkins Hospital Reports, Vol. X., Nos. 1 and 2, for 1904.

There were twenty-five cases of acute cystitis, which revealed the presence of—

B. coli communis	15 times
Staph. pyogenes albus	5 "
Staph. pyog. aureus	2 "
B. pyocyaneus	1 time
B. typhosus	1 "
Proteus vulg.	1 "

And in 22 cases of chronic cystitis, Dr. Brown found—

B. coli communis	11 times
Staphyloc. pyogenes aureus	3 "
" " albus	2 "
B. coli communis (with tub. bac.)	1 time
Unidentified (possibly a variety of B. coli)	1 "
Pyuria sterile	2 times
A staphyloc. albus (which, decomposed in urea, was pyogenic, but either did not liquefy gelatine or did so extremely slowly)	2 "

There were also six cases of tuberculous cystitis.

Compare these findings with those of Melchior, and you will find the similarity is in some respects a striking one. (Kopenhagen, 1893.)

Melchior examined 36 cases of cystitis (17 women) and found—

B. coli communis	25—17	pure cultures.
Streptococ. pyogenes	5— 3	"
Proteus Hauser	4— 1	"
B. tuberculosis	3— 2	"
Diplococ. ureæ liquef.	3— 2	"
Staphyloc. " " Lundstrom	3— 1	"
Streptobac. anthracoides	3	"
Gonococ. Neisser	1	"
B. typhus	1	"

The great importance to be attached to a study of the etiology of cystitis is the discovery of several factors easily within our control, notably the traumata. By recognizing this fact we can do much, in many instances, to prevent a cystitis.

The most important group opened up by bacteriological study of the urine is that of the tubercular cases, which, as a rule, call for the more aggressive plans of treatment.

I will pass over the pathology, simply noting two important facts which bear powerfully on the treatment of cystitis.

First, that the disease is sometimes purely superficial, being seated only in the mucosa, while at other times it extends deep down, even into the muscularis.

Second, the disease is often localized in a few well-defined patches; it is rarely universal.

The following clinical forms may be recognized, apart from the determination of the infecting organism or organisms:

1. Catarrhal, involving the superficial mucosa.
2. Desquamative.
3. Ulcerative.
4. Granular.
5. Papillary.
6. Bullous edema.

The important divisions of cystitis into acute and chronic separate the cases according to duration and intensity of symptoms.

Diagnosis.

A diagnosis of cystitis may be made when pus is found in the urine, in association with an inflamed area in the bladder; it may be inferred by such symptoms as pain and frequent urination, and established by a direct visual examination of the interior of the bladder.

A persistent, acid pyuria, which does not yield any organisms on the ordinary media, should always excite suspicion of tuberculosis. The best way to settle the point, if the tubercle bacilli cannot be found, is to inoculate a guinea-pig with the sediment, injecting it either into the peritoneum or under the skin.

I must bear in mind that my remarks may fall into the hands of some busy practitioners who find it hard to get time to use the microscope. I would, therefore, utter the caution not to mistake a pollakiuria (frequent urination) for a cystitis. In my experience this has often been done, and then the active measures of treatment instituted have converted the innocent but annoying disease into a dangerous one.

Again, a dysuria from hyperacidity of the urine is likely to be mistaken for a true cystitis, unless some other test than the subjective symptoms is applied.

Yet another caution: a little affection in the vesical trigonum, by the intensity of the symptoms it provokes, may hide a much graver and more advanced latent affection in one of the kidneys.

The diagnosis, to be sure and satisfactory, should ascertain not only the existence of a cystitis, but its extent as well.

A diagnosis which begins and ends with the word "cystitis" is as accurate as the statement that a patient has thoracic disease.

Again, even though the nature of the infecting organism is determined, the diagnosis is still no more accurate than it would be to say that the patient has pulmonary tuberculosis. In the latter case you see readily enough how vital are the questions,

Where is the disease located? and, How extensive is it? Apply like questions to the bladder.

Let the man who is willing to go carefully into his cases rest his diagnosis on these factors:

1. History, including symptomatology.
2. Examinations of the urine, microscopic and bacteriologic.
3. Direct inspection of the interior of the bladder.

I cannot urge too forcibly the ease with which the examination is made through the open cystoscope, without any intervening medium of lenses or water; nor can I sufficiently declare the importance of the results thus obtained, in clearing up and giving precision to the diagnosis.

With such examinations, cases of "bacteriuria" become much rarer, as some infection of the vesical mucosa is almost always found, even though there is a remarkable disproportion between the local disease and the numbers of the bacteria.

Treatment.

I am especially glad to address you on the subject of the treatment of cystitis, as I have now had an experience of over five hundred cases, which have been carefully collated from my records by Dr. G. J. Campbell, of this city.

I think we have gone as far as we can under existing conditions, and must now await some fresh and important discovery before changing our present methods materially; and when the specialist feels that he has pretty well threshed a subject out, it is time to hand his work over to the general practitioner, to see how much of it the latter is ready and able to appropriate.

Three important factors enter into the successful treatment of cystitis:

1. A full, carefully written analysis of the case, including a description of the lesions seen in the bladder.
2. A well-defined campaign against the disease, progressive in character.
3. Untiring patience.

All preliminary discussions as to history, etiology, and pathology lead up to the two great practical issues: How to prevent the disease, and How to get rid of it.

Prophylaxis.—I am convinced that if we pay closer attention to prophylaxis there will be a prompt and a large reduction in the cases of cystitis. Many of the cases seen nowadays follow some abdominal surgical operation.

A potent factor in the prophylaxis is the proper use of the catheter, which I may summarize as follows:

A sterilized catheter; cleansing of the external genitalia and

urethral orifice before introduction; introduction of the catheter without touching the end introduced.

The bladder must not be permitted to become over-distended.

It is also important to remember that a patient, unaccustomed to urinating when lying on her back, often empties the bladder very imperfectly. If the urine tends to stagnate in the bladder, some warm boric acid solution should be thrown in to wash it out every time the catheter is used.

In abdominal hysterectomies, the bladder should be rubbed, touched, and bruised as little as possible. I have looked into the bladder after a hysterectomy for myomata, and seen large transverse striæ of submucous hemorrhages on the posterior wall.

In another case, in which I recently reopened the abdominal wound, the bruised bladder was at first mistaken for a large, fresh blood clot.

Further, where there is reason to fear cystitis, and always when the catheter is used, it is well to give urotropin for a few days, in 5 or 10 gr. doses t. d., as a prophylactic. The consensus is that cystitis will but rarely occur if this precaution is taken.

Remove the Obvious Cause.—The sister of one of our ablest practitioners got up from her lying-in bed with a bad cystitis, which numerous treatments failed to ameliorate in the least degree.

She entered my cystoscopic room for the first time; I put her in the knee-chest posture and looked into the bladder, and, lo! there was a white calculus as big as a pigeon's egg lying in the vertex. With the removal of the calculus she made a prompt recovery.

Take nothing for granted; if you can look at a sore throat, you can also, with a reflected light and the small amount of patience necessary to acquire a little more dexterity, look into an inflamed bladder.

Make also a searching examination of every contiguous pelvic organ. If there is a large myoma, or an ovarian tumor, or a pelvic inflammatory mass pressing on the bladder and interfering with its proper evacuation, take the tumor or the mass out.

In the case of another patient with a bad pyuria, whose kidney was about to be taken out, I found a small suppurating dermoid cyst opening into the bladder by a sinus; the removal of the tumor and the closure of the orifice cured the disease and saved her from a serious mutilation.

In any obstinate case, especially if it is one of lesser degree, always remember that the source of constant reinfection may reside above, in the pelvis of the kidney. If you find tubercle bacilli associated with a cystitis you may be sure that in nineteen cases out of twenty the primary focus is in the kidney.

As we consider the active treatment of a cystitis, let me urge two important factors, which serve as controls in testing progress towards recovery:

1. A careful preliminary examination and description of the local condition, as seen through the speculum, on the interior of the hollow vesical sphere. If there is any marked improvement, examinations from time to time will show it by the variations in color of the mucosa and in the extent of the lesions.

2. The taking of a measured quantity of fresh urine, say three platinum loops, spreading this on the slant agar, and then counting the colonies which grow out, as a means of testing the reduction of the amount of infection. These individual foci will often be found to diminish progressively, from countless to discrete, from, perhaps, 100 to 15, or 20 to 2 or 3, to finally none at all. Several sterile cultures ought to be secured before the case is considered free of all risk of relapse.

Let us now consider our resources in dealing with a particular case. They are: Rest and dietetic treatment, medicines by the mouth, injections into bladder, direct topical treatments of the vesical walls, surgical treatment, including incision of the bladder, and excision of the disease area.

Rest in bed is of the most importance. I can always do far better for a case if I can get her into my hospital, where she has rest associated with regulated diet, tonics, the due regulation of the bowels, massage, and baths.

Medication by the Mouth.—Large quantities of bland water is a valuable remedy here, as in pyelitis. The virtue, I think, in the various lauded waters resides in the pure *aqua potablis* which they contain, and not in the various salts shown in the analysis. Some patients will take, however, with better grace, three or four pints daily of a water which is imported in a big bottle with a sounding name, than the simple, but equally efficacious spring water from a home source. It is the old tale of the bread pill and the placebo.

Urotropin in 5 to 10 gr. doses is of value in the more recent cases.

The citrate of potash is valuable where the urine is too acid, while boric acid is of use to correct an alkaline urine.

There is some advantage in reversing the chemical reaction of the urine under which the organisms are flourishing, though not so great as one would have anticipated.

Cantharadin has been used by Freudenberg with the greatest benefit in a series of 56 cases, curing 32 rapidly. The formula is Canth. (Merck), 0.001 in 1.0 alcohol, dissolved in 100 water. Take three or four times a day, teaspoonful doses.

I use also fluid extract of corn silk (Zea mais) in teaspoonful doses, with advantage in the amelioration of the symptoms.

Irrigations form, perhaps, the most important means of treatment at our command, and with irrigation it is well to combine distention of the bladder.

The simple daily cleansing of the bladder in this way is of the utmost value, and many cases would recover rapidly, if only bland fluids were used.

The two most efficient drugs for this purpose are the nitrate of silver, 1:1500 to 1:500 or stronger, and mercuric sublimate, 1:1000.

As good a plan of administration as any is to connect a rubber tube with a funnel attachment to the catheter, and then slowly elevate the funnel two or three feet above the level of the pelvis. By the amount borne and the height, the progress of the more difficult cases towards recovery can be pretty well estimated. The quality of great importance here for both patient and practitioner is patience. It sometimes takes weeks or months to secure the first decided step in advance, with many apparent back-sets in the interim.

I must confess to you right here that in several of my cases, which we have worked over for one, or two, or even more years, securing a recovery in the end, I should never have had the courage to persevere had it not been for the unflagging interest and zeal of Miss Cook, my chief nurse, who has personally conducted almost all of the treatments.

Direct Topical Treatments.—When a cystitis is in the chronic stage, and is, furthermore, localized in a small area in the bladder, one, for example, which could be covered by the last joint of the thumb, direct topical treatments often hasten the improvement and even effect a cure. The bladder is emptied and the patient put in the knee-chest posture, then through an open cystoscope, using a head mirror or other suitable illuminant, the patch of inflammation is exposed and treated just as a chronic sore throat is handled, making a direct strong application by means of an applicator and a pledget of cotton. Nitrate of silver is best here, too, used over a small area, as strong as 50 p.c. For larger areas use 10 or 5 p.c., taking care that there is no excess of the solution to run down over the sound mucosa. I also use freely a 50 p.c. solution of argyrol. Subsequent treatments must be milder, and at intervals of from three to seven days. Solutions of 1 and 2 p.c. are often valuable in trigonal inflammation (trigonitis).

An admirable and effective combination is formed by associating occasional topical treatments with daily injections and distentions.

Surgical Treatment of Cystitis.—It is in the surgical treatment of cystitis that the greatest difference is found between our practice and that of our immediate predecessors, of even a decade ago. And it is here that I have some fresh additions to make, in the description of methods which have brought some utterly rebellious cases entirely within the scope of successful treatment.

There are two kinds of vesical surgery, minor and major.

Minor cystic surgery consists in the use of a sharp or serrated curette, or a wire brush, or a bunch of fine wire needles. I expected great help from these instruments when I began to use them, but I must confess to disappointment in the issue. The tissue removed is of value in differentiating a tubercular bladder, but I cannot see that the recovery is hastened, while harm may be done, as Sampson has shown, if the ureteral orifices are injured, by favoring an ascending infection.

Major Surgery.—When I receive a case of intense vesical inflammation, where all local treatments, even the mildest, are impossible on account of the pain produced, I, without loss of time, resort to major surgery, and propose, at the outset, to put the bladder at rest by making the Parker-Emmet incision, in order to secure good continuous drainage. I do this in a few seconds, often by putting the patient in the knee-chest posture and letting air into the bladder through the urethra; then lifting up the perineum the anterior vaginal wall is exposed and lifted a little on a pair of curved artery forceps, introduced through the urethra and slightly opened. A knife is plunged through the septum at this point, and the opening enlarged fore and aft until it is at least an inch long. I wipe out the bladder thoroughly with dry gauze, and sew the vesical mucosa to the vaginal at about six points, to prevent too rapid closure of the wound. All this takes about the same time to do as it does to describe the operation.

Such an opening ought to be left, as a rule, for from three to six months. The bladder and vagina should be irrigated every day either *per ureithram,* if not too sensitive, or *per vaginam.* A continuous daily hot water bath, as recommended by Hunner, leaving the patient immersed for hours, is a most valuable adjuvant in the worst cases. In due time the bladder will be found to have cleared up, perhaps wholly, when the fistula is closed, and the patient discharged. On the other hand, many cases clear up only to a certain point and go no further, and of these I wish to speak somewhat particularly, for this is that large residual group of our worst cases of cystitis, generally looked upon as hopeless.

Let me briefly outline the treatment of such a case. In the

first place, given one of these intensely inflamed old cases of cystitis in a patient worn out with vigils and suffering, mild courses of treatment are worse than useless, serving only to increase the distress. To avoid discouragement, tell the patient, who has suffered for years, that she must be content to give a few months or, perhaps, a year or more to getting well. Then begin by opening and draining the bladder, then when you find the organ cleared up to one spot, you may try for a few weeks to heal that by direct applications of nitrate of silver or argyrol, and in this you may succeed. If you fail and there is a tendency to relapse, make a suprapubic opening and cut out a crescentic piece, including the entire thickness of the bladder wall, and sew it up with catgut sutures on the inside and fine silk on the outer surface.

If you have to open the peritoneal cavity, and the bladder is a foul one, you can sequestrate the entire vesical region by suturing the round ligaments and the uterus to the abdominal wall from side to side, converting the peritoneal cavity behind the symphysis into a closed pouch, which is then drained over the symphysis. In a bad case which I treated in this way and had to open later for an ovarian trouble, there was no trace of the pouch left.

I have not found great help from the making of a small suprapubic opening in association with a vaginal opening for through and through drainage. If, however, worst comes to worst, I would make a big suprapubic opening, partially detach the recti, and put the patient in the hot tub for as many hours daily as she can stand.

Let me illustrate this group of difficult cases by giving you a brief outline history of seven of my patients. In two the disease was tuberculous, in the others the organism was a colon bacillus.

Case 1.—Mrs. R., aged 55, came to me in October, 1899, with a chronic cystitis, which had persisted for fourteen years in spite of being several times "cured." I found the entire vesical mucosa covered with scattered foci of ulceration pouring out a curdy pus. The urine was alkaline, containing a short organism, probably the bacillus colon.

She received under my care the following treatments: A borax and soda solution by irrigations, applications of the nitrate of silver (2 to 4 p.c.), insufflations of boric acid powder against the diseased vesical wall, formalin irrigations (1:15000 to 1:2000), irrigations of silver nitrate from ½ to 1 p.c. strength.

Under these treatments there was a steady improvement, the organisms decreased, and the capacity of the bladder increased from 60 to 280 c.c. She was cured in forty-one days. I tested

the efficiency of the treatment by making cultures on several successive occasions and noting that there was no growth. So since this cure there has been no relapse.

CASE 2.—Miss J. MacD., aged 33, came to me in 1899 suffering from frequent urinations with a slight pyuria and hematuria.

Examinations showed an area of intense cystitis at the vesical vertex; as she had suffered for four years I proceeded at once to surgery and opened the abdomen, excising an ulcerated area of the bladder at the vertex 3 x 2½ x 1½ cm. in size. This was closed without drainage, using sixteen catgut sutures in the first, and ten in the second layer. She recovered at once and has been in the best of health ever since.

The pathological examination of the greatly hypertrophied bladder wall showed granulation tissue and inflammatory infiltration.

CASE 3.—Miss J. R., aged 29, came to me in March, 1900. She had been suffering with her bladder for five years. It is probable that the frightful cystitis from which she suffered was induced by catheterization in a hyperacid bladder in a nervous woman. She was in a wretched mental state from the suffering night and day, emptying her bladder every few minutes.

The urine was full of pus and contained blood; cultures showed that the infectious organism was the colon bacillus.

Cystoscopically, the bladder was of an intense angry red color, with extensive areas of ulceration; there was not even a small area of sound tissue seen at any point. She simply screamed whenever she was touched.

She was about three years under treatment, and her recovery is largely due to the untiring efforts of my chief nurse.

The following treatments were used:

1. Curettage and the use of the wire brush over the whole inner surface of the bladder, followed by a 10 p.c. solution of silver nitrate.

2. Fourteen days later another curettage.

3. Ten days later I was able to catheterize the left kidney and demonstrate a left pyonephrosis, which was opened and drained. At the same time a suprapubic cystotomy was done to facilitate irrigating the sensitive bladder. I left a mushroom catheter in the kidney wound and a ureteral catheter in the ureter, to facilitate washing out the kidney.

4. Dilatation of the renal and suprapubic openings.

5. Left nephrectomy (intracapsular enucleation) by morcellation. Closure of the suprapubic opening.

6. Plastic operation narrowing the urethra, which had been overstretched before she came to me.

7. Plastic operation repeated.

The bladder was so small when I began to treat her that she could not hold as much as 10 c.c. of fluid, and even under extreme anesthesia she strained and forced the fluid out if more was thrown in.

During all the time of the above treatments she received 135 irrigations of either boric acid or silver nitrate with boric acid.

Under this regimen the bladder recovered its capacity and normal appearance. To-day she is in perfect health and suffers no pain. The only remaining discomfort is that she urinates often, and this I have been unable to overcome, although I can now put 400 c.c. into her bladder.

CASE 4.—Miss C. P., aged 52, came to me in October, 1902. I saw her first in bed, a hopeless invalid, in intense pain, with spasmodic exacerbations day and night. I never saw a sadder picture. She lay moaning like a suffering animal in a constant state of apprehension of pain, and screamed when the vagina was touched, even for the purpose of making the gentlest examination. The entire bladder was the seat of intense inflammation and ulcerations from the vertex to the left ureter. Its capacity was two-thirds of an ounce (20 c.c.).

She has made a perfect recovery and has remained well, under the following treatments:

1. October, 1902, a vesico-vaginal fistula was made for drainage.

2. November, 1902, a suprapubic fistula was made to wash through and through; at the same time I enlarged the vesico-vaginal fistula. A plastic operation was necessary to open the vulvar orifice, which acted like a sphincter, retaining the foul urine in the vagina and bladder.

3. January, 1903, dilatation of suprapubic fistula with Hegar's dilators and introduction of a self-retaining catheter.

4. February, 1903, left nephroureterectomy, removing a tubercular kidney and ureter.

5. April, 1903, closure of the vesico-vaginal fistula.

Irrigations of a half-saturated solution of boric acid were given from one to six hours daily, amounting in all to 1,000 hours of treatment.

The result has been an absolute recovery, and she is now stout, robust and able to attend to all her household duties in town and country.

CASE 5.—Miss L. M., aged 24, came to me in January, 1900. She had had a vesico-vaginal fistula made to drain an intensely inflamed bladder three years before.

After trying various palliative measures, I opened the bladder above the pubis, trimmed off numerous granulations from the posterior vesical wall, and then drained the bladder with iodoform gauze.

In November, 1902, I excised the entire diseased area, including all the bladder wall, removing a triangular area from the vertex to the base of the bladder 1 cm. in thickness, and closing the opening with interrupted catgut sutures tied within the bladder. This is the case in which the whole bladder area was excluded from the peritoneal cavity by sewing the round ligaments and fundus of the uterus to the anterior abdominal wall. (See *Johns Hopkins Bulletin,* 1903, p. 96.)

All of the disease was not removed at this time, and I had subsequently, on account of repeated hemorrhages, to open the bladder again (November, 1903), and excise three pieces, one in front, one at the vertex, and one at the posterior wall.

The wounds were again closed with interrupted catgut sutures tied on the inside of the bladder. It was wonderful to see how little traces were left of the sequestration operation; there were only a few adhesions between the bladder and the tubes and ovaries.

Remarkable features in this case were, first, the fact that giant cells were found in the tissues excised, when we had been utterly unable to discover any tubercle bacilli in curettages or in the urine, examined repeatedly over periods of months' duration; second, that the disease was primary and confined to the bladder as far as the urinary organs were concerned; there was no renal disease.

Case 7.—Mrs. H. M., aged 34, came to me in May, 1901. She was an utter wreck from nine years of suffering, extremely emaciated, and abandoned to die of an advanced tuberculosis of both kidneys and bladder. The bladder was ulcerated from vertex to urethral orifice and there was not a sound spot to be seen.

I began, May 4th, by draining the bladder by the vagina and giving rest from the constant suffering.

May 18th, a left nephrotomy was done.

June 15th, left nephrectomy and a ureterectomy as far as the pelvic brim.

October 14th, closure of the vesico-vaginal fistula.

October 22nd, 1902, extirpation of the lower end of the ureter.

February 24th, 1903, suprapubic resection of the bladder, taking away about one-half of the bladder, including the left ureteral orifice.

April 9th, 1903, closure of the vesico-vaginal fistula.

With these surgical measures were associated irrigation and distention treatments, as well as topical treatments with silver nitrate.

From holding nothing at all, the bladder has increased to an almost normal capacity, in spite of the extensive resection; in October, 1903, it held 225 c.c.

She is now practically a well woman, stout, hearty, and attending to all manner of household and social duties.

I trust, in conclusion, gentlemen, that I have demonstrated that, granted the important elements, skill and patience, practically all cases of cystitis, even the worst, can be cured.

The first important step is to make a correct diagnosis, so as to treat as a cystitis a case of irritable bladder.

The next step is to determine the grade of the disease and the character of the infection, and, most important, to differentiate tuberculosis.

Again, the kidney must be borne in mind as a possible source of reinfection in cases very slow to clear up.

After a thorough study of the field, begin an aggressive, well-defined campaign on the lines indicated, which shall be sustained in a progressive manner until the patient is cured.

CATARACT AND OPTIC NERVE ATROPHY.

By JOHN P. MORTON, M.B., L.R.C.P., Hamilton.

Miss R. S— called me in to treat her ears. After I had finished the treatment, she asked me if I thought anything might be done for her eyes, as she was blind.

She gave me the following history: "When I was two years old a sharp-pointed stick ran into my left eye, and some of the fluid ran out. Dr. Nettleship, of London, England, treated me. About two years after this accident I began to lose the sight of my right eye, and in a short time I couldn't see at all. I was taken to Australia by my sister, and then sent to my brother in Canada, and through him I was put into the Brantford Institute for Blind. I am now thirty-two years old, and have been examined by seven or eight specialists, and they have all said to me, without reserve, that an operation on the right eye would be useless."

Examination showed the left eye to be atrophied and aneurotic. The right eye had a mature cataract, and by examination with a sixteen-candle-power lamp had neither perception or projection of light. She said that sometimes she thought she saw light, and wished to know if there was a chance in a thousand of getting any sight by removing the cataract. I told her it would do no good, but her importunity was such that I finally agreed to remove the cataract, and this I did at Hamilton General Hospital. The cataract came out nicely, but the patient immediately afterwards said she could not see light, and of course this was the result I expected. The eye healed quickly. During the two following months she was frequently brought to my office, and she thought she was gradually "commencing to see." I told her to hold certain objects in a good light and study them with her eyes while she handled them.

Although it is difficult of explanation, my patient gradually regained her vision, until it reached $\frac{6}{24}$ with + 9 D. Sp., 3 + 3.5 D. Cyl. axis horizontal. She is now working, and has written me several letters.

The results in this case are very surprising and undoubtedly contrary to what the classic tests in regard to light projection and light perception would allow us to expect.

Two years after the injury, and with the left eye in a condition of phthisis bilbi, there commenced in the right eye an

optic neuritis, and probably a sympathetic plastic iritis, as indicated by some posterior synechiæ; following this the lens gradually became cataractous. The optic nerve was not completely destroyed, but either the optic nerve or the occipital centres forgot their functions so far as not to answer to an electric light. Even after the cataract was removed, perception and projection of light were absent. With the light striking again directly on the fundus, the nerve and occipital centres seemed gradually to resume their functions.

Remembering this case, we should be more backward in advising against cataract removal when the projection and perception tests give negative results. This seems to me an important case, as it apparently upsets these two classical tests which we always apply before operation for removal of cataract.

Perhaps the explanation lies in the early age at which the sympathetic optic neuritis arose, there remaining a considerable period of development after this injury to the nerve. This newly developed nerve tissue never experienced the light, except in so far as this traversed the cataract, and had to learn its function after the extraction. Perhaps the occipital centres would have the same experience to go through.

MEDICAL THOUGHTS, FACTS AND FANCIES.*

By JAMES S. SPRAGUE, M.D., Stirling, Ont.

A patient tells me she was attended in her confinement by a Miss Dr. ——, resident fourteen miles distant from her. The doctor's fee was munificent—being five dollars. From what I learn, from good authority, no liveryman in Dr. ——'s city will personally drive his own horse and lose thirteen hours' time away from his stables unless he secures a larger amount of money than our confrere in the next city. Comment is unnecessary when such work is being done throughout Ontario, and we suffer for the thoughtless acts of our brothers and *sisters* in medicine. And the worst feature is the pronounced injury to the profession.

Osler warns us not to give expression to our complaints, yet I consider it advisable to air them now and then, for as a rule we are apt to run in very shallow grooves of thought, which, too, are very erroneous and delusive, and occasion fossilization antagonistic to research and study, so much remarked in these progressive times, even when error, false guides, even sciolists, are bewildering the thoughts of the very elect in medicine.

I have often wondered why the highest dignitaries in our profession, even the professors, did not give us more light from their lanterns—mental lights. By such I do not refer to the disgraceful testimonials which now and then, yes, too often, are seen in medical journals, advertising their names and marking commercialism on the temples of Hippocrates. Medicine, unlike divinity, or the creeds of churches, or the law, freed from the shackles of monasticism, superstition, and other impeding conditions of time and circumstances, demands the exposition, by our best men, of their successful researches, so that we, many years in practice, can keep up to and with the thinking of the giant minds.

A matured man—in life, in judgment, and in medicine—told me recently that of his many mistakes the one most grievous and really irreconcilable is that made once, several years ago, when he, in a very brief spell of insanity or of supposed kindly feeling in heart, recommended an only son—selfish and narrow-minded—the only son of a noted cut-throat, schemer, blackguard, rich and out-and-out mean man—*although among his list of patrons—to study medicine.* Moral: The best men—the ideal men in medicine—have not

* Read not to criticize, but to consider, to adopt, to confirm, or to reject.

had brutes for parents, even if the parents, to cover their sins and to establish family respectability, spent tainted money for the son's M.D. degree.

If more attention was directed to the study of the fathers in medicine, and of the inspirations exercised and aroused by them, we would form ideals of much more excellency and devotion, worth reverence by us, with such an illustrious heritage, dating with no uncertain landmarks in history through the ages, even from demi-gods, and to the very gods themselves. Imbued with such teachings, our young men would soon bring our profession, although so highly honored among men, to such exalted levels as existed when Athens was in its literary glory.

Several M.D.'s, yet young men, whom I know, will curse and forever curse medicine. A few of them are yet in the profession, and others abandoned it, at times when becoming really useful, actually safe men in practice. What is the cause of this malediction, this relinquishment, this indifference to practice? Such is attributable to the fact that these misguided brothers, flattered and patronized during their first five years in practice, foolishly concluded that caressing and patronage were due them by their merits, and the fruits of their best efforts went to build a house—no common one—*actually on a bed of sand,* so fickle is patronage and the littleness of friendship so characteristic of our people.

I am of the opinion, judging from several observations, that there are very few villages or towns of any importance in Canada or the Eastern States that cannot show one or more *abandoned-hopes* residences, erected by M.D.'s in the first ten years in practice—no longer occupied by them or owned by them. In one Canadian village, whose population never reached 1,500, any old citizen can show you four abandoned castles, built by doctors, who do not live in them or own them. How illustrative is the doctor's life, in small communities, of these lines:

> "Friendship often ends in love,
> But love in friendship never."

A wise country doctor, a friend of over half a century, was wise enough to secure fifty acres of land near his village. He there built a castle. Assailed more than once by new arrivals, and sometimes sorely besieged, he cannot be dislodged as long as seed time and harvest continue. Here is a good lesson.

No greater blot on medicine is there than the unregenerated scion of an unregenerated parentage, who claims M.D. to his

name. He is in the profession for its spoils, its wreckages. His ribs fatten with the cries of the misfortunates who unfortunately secure his services. The kindly feelings which warmed the bosoms of the venerable ones in our history of ministering to the poor and helpless are unknown to him, and will ever be unknown. It takes the life-work of the most venerable man in medicine to even overcome the injury to medical progress done by such undesirable ones in our ranks.

I am of the opinion that in time the State government shall be the referee of those who want to engage in medical studies, in fact, adopt such rulings as pertain to the selection of candidates for the West Point Military Academy in the United States. If so, then the heavens will shine on medicine. But before such regulations be adopted, it is desirable that candidates be made perfect, actually purified, by classical studies. If possible such influences can ennoble and eradicate hereditary meanness of character and disposition, before the divine studies in medicine be commenced. For the noblest class of men our profession is calling, and has called, since man's creation, for the *ideal man.*

"It is no mean thing to have been born the possessor of much virtue." Such I think is expressed by "Non mediocris felicitatis est ad virtutem nasci"—said of Osler by Weir Mitchell, one of the fathers in medicine; and if the leaders in law, in the church, as well as medicine, were to give us sketches of their lives, this happy gift to us at birth must be recognized as the factor that causes some men to come out from the crowd, to tell us or do for us what no others think—at least do for us. Of such men is the kingdom of medicine, and if jealousy be silenced, Osler holds the torch in that kingdom.

Selected Articles.

CONCERNING OXFORD.

By ERNEST PATERSON.

In medicine I do not think that Oxford has hitherto held a very prominent place; but there seems to be the greatest confidence that the recently appointed professor, with his great distinction as a scholar, his remarkable skill as a teacher, and his boundless energy, will work a veritable revolution. The readers of this magazine will be glad to know that Professor Osler is clearly anxious to be identified as a Canadian, despite the fact that the States are so eager to claim him as their own on the strength of his long residence there; and that one of the first things he did when he reached Oxford was to join the Colonial Club.

So many authors have chosen Oxford as the scene of their hero's adventures that we are all more or less familiar with the everyday life of the students—their manners, their conversation, their work, their amusements. Though some of these books were written many decades ago, the picture that they present is not, in the main, untrue of present customs. Wine-parties, apparently so prominent a feature in the life of the old days, are almost obsolete. All things that served to emphasize distinctions of ranks have been abolished, so that the etymology of the word "tuft-hunter" has become a piece of antiquarianism. These and other reforms have come about in the fulness of time, but the general tenor of the life has not greatly altered since Tom Brown and Charles Ravenshoe came to Oxford, for few places in this big world are less liable to change. The residence system—to the value of which the University of Toronto has shown itself so keenly alive—is, of course, the distinguishing characteristic, and forms no insignificant part of the Oxford education. The undergraduate's entire life during the academic year is passed in the society of his fellow-students, except such time as he spends with his books in the privacy of his chamber. Many of the American Rhodes Scholars have complained that very little work is done at Oxford, as compared with the colleges of their own country. This I believe to be altogether a fallacy. Indeed, the large amount of ground covered by the Oxonian in his four years is

sufficient evidence in itself. It is nothing but the fact that he studies more regularly, and distributes his reading more evenly over the whole year, that has given rise to the impression. Ten hours in a single day seem to the ordinary Oxford undergraduate altogether preposterous; but, on the other hand, he maintains a fair average of work throughout the term. Indeed, the system of tutors and the frequent tests insure a certain amount of work every week. But more than this (and here lies the great distinction) he does a large part —in many cases even the larger part—of his studying during the vacations. For example, if he is pursuing the Classical course, he will usually read all his texts away from College.

The great prominence given to athletics is a feature of Oxford that always astonishes the stranger; but results seem to furnish its justification. The old division of "reading men" and "rowing men" is a thing of the past; the number of students who win high honors on graduation and show equal prowess with oar or boat is indeed remarkable. Everything is done to encourage sport; the position of the College eight on the river is considered, by dons and undergraduates alike, as of great importance. Rowing, of course, holds the chief position, but almost every game finds its place. As each college has at least one team in every branch of sport, there is a good opportunity for everyone who wishes to participate. Indeed, there are very few who do not take regular exercise in some form or other. During two or three hours in the afternoon, reading is suspended and the period devoted to sport. Almost every man in the College sallies out, clad in suitable garb, to take part in whatever game he affects. This characteristic of Oxford athletics is a most splendid thing. There is not the large body of students that we have in Canada who give no thought to sports, nor that other class of men who are indeed keenly interested, but merely as spectators. At Oxford very few watch the various matches; every man is off playing some game on his own account. The whole tone, too, that permeates Oxford athletics is exceedingly admirable. The spirit of sport for sport's sake is nowhere more prevailing. The desire to win is not at all lacking, but it is subordinated to sheer love of the game. I cannot but think that the Englishman is fonder of physical exercise, as exercise, than the Canadian. If games fail him, he will don light clothes and go for a run round Christ Church meadows. And yet—paradoxical as it may seem when his attitude is such—he is very grave and solemn and sober over his sports. He betrays

little excitement, few smiles, almost no laughter. One is struck by the absolute truth of the old saying that the Englishman takes his amusements seriously.

The Canadian at Oxford is rather at a disadvantage so far as his chances of winning pre-eminence in athletics are concerned, owing to the fact that he is likely to be unfamiliar with the most popular forms of sport. It will seldom happen that he has rowed to any extent; and if he has, his plight will be worse, since he will have to overcome the great "faults" that are inherent in the "American style." It is not probable, either, that he has devoted much attention to cricket, and English Rugby will also be strange to him—unless he be a Nova Scotian. Perhaps, however, he will have some skill in Association football, or lawn tennis, sports that he will be able to pursue at Oxford with great advantage. Lacrosse, too, is played to some extent, though it has not yet gained a very large following. And even if it chances that the Canadian has played none of these games before, he will readily find abundant opportunities for enjoyable exercise, if he is at all athletically inclined.

About Oxford men, as men, one hesitates to pass any definite judgment. Generalities are dangerous at their best, and, unless based on a wide and deep knowledge, almost worthless. One with the slight experience of a single year is apt to measure all by the small circle of his acquaintance, and to infer differences of character from differences of custom. There are many types at Oxford—perhaps even more than at our universities. Men come with aims extremely diverse. On the whole, I should say that so far as "soundness" is concerned—an expressive word which is in common use among Oxonians—the standard is high. The general tone and atmosphere is essentially wholesome. "Honor" has a deep significance for the Englishman, and is inseparably bound up with the meaning that he gives to the word "gentleman"; nor is unselfishness, generosity—"decency" in a word—wanting among the men. It is true that a Canadian will miss a certain warmth and heartiness of manner to which he has been accustomed. The Oxonian will seem to him, especially on first acquaintance, rather formal, even a little stiff and cold. This reserve, which we commonly regard as an English trait, is nowhere more evident than at Oxford. That it is something affected because considered "good form" is an inference that we are rather apt to make: but I am certain that such an inference is altogether wrong. The fact that individuals who do

not possess this national characteristic are by no means regarded with disfavor, is sufficient to show that it is a pure matter of temperament. The distinction is more or less clearly recognized, I believe, and I have even heard a don speaking, not without a note of approval in his voice, of "colonial geniality." The obvious retort to the charge I have made, if it be considered as a charge, is that this trait is mere manner, nothing more than a surface peculiarity, and that when one comes really to know him, the Englishman will reveal the warmest of hearts. I hope, in all sincerity, that I shall never have reason to think otherwise; I by no means wish to be understood as believing the contrary, though, indeed, whether there can be such a thing as mere manner, a superficial growth entirely distinct from the underlying man, may perhaps be fairly questioned. But what I wish to suggest is this, that regarded as nothing deeper than manner, the trait is somewhat unfortunate; that cordiality of speech and bearing, that genial *bonhomie* to friend and stranger, which adds to life so much pleasure and beauty and grace, is surely no insignificant thing. Is it possible that England has not yet freed herself completely from the fault with which Goldsmith reproached his country a hundred and forty years ago ?

I fancy that it must be admitted that the Oxford man is more widely read than the Canadian student of the same age. It must be remembered that those who go to Oxford are, in a sense, picked men. The typical undergraduate comes from a cultivated home, "a reading family." From childhood he has "tumbled about in a library" (to use a phrase of the kindly Autocrat), and lived in an atmosphere of books. But what impresses a Canadian even more strongly is the deep interest that the Oxford man takes in politics. He is thoroughly in earnest about it; he informs himself carefully in regard to the prominent questions of the day, and is eager to support his views in debate against those who hold other opinions. The Union, that training-ground of statesmen, is, of course, the centre of this activity, but there are many other societies that concern themselves with similar subjects, and every college has its own two or three debating clubs. One cannot but feel that this ardent interest of university men in politics is a magnificent thing for England.

The Canadian is, I am afraid, apt to imagine, for some reason, that the general tone of Oxford is essentially aristocratic in the narrow sense of the word. As far as my experience extends, I should say that this idea is utterly erroneous.

Few places, I believe, are more genuinely democratic. A man is taken at his intrinsic worth, whether he be the son of a shop-keeper or a peer. Class distinctions are given no emphasis, and wealth counts for absolutely nothing. It is true that more regard is paid to good-breeding than with us; but perhaps the fault is ours, a fault that is almost inevitable in a new country. The men speak better than we do. I do not refer to what is vaguely called "accent." We have in Canada unfortunately deviated in some respects from the English standard of pronunciation; but that is quite irremediable, and perhaps is not of vital importance. But what I mean is that Englishmen speak more carefully and accurately, with less haste, and with, I fancy, a better choice of words. Moreover, though their speech is made vivid and picturesque by a certain amount of "slang," they do not come to depend on it, do not allow themselves—I might almost say—to be enslaved to it, as is the danger with Canadian young men; nor do they indulge in the "slang" that consists in violations of construction and breaches of syntax. And, finally, it is annoying to be forced to confess that their voices are better than ours, less harsh, and pitched in a deeper key.—*University of Toronto Monthly.*

COLD AIR IN VARIOUS DISEASES AND FOR HEALTHY PEOPLE.

Cold air in tuberculosis is now being given the credit for the wonderful results in mountain resorts. It is almost an axiom that one winter in the Adirondacks, for instance, does as much good as two summers. Patients, both here and in Europe, are kept out-doors all the year round, even when the thermometer drops to 30 or 40 deg. F. below zero, and the cold air of itself seems to cure in a manner which nothing else can accomplish. In some sanatoriums forced feeding is not practiced in the incipient stages, as it is not as beneficial as a merely good, generous, animal diet, and though hyperalimentation is a positive necessity in later stages, particularly if any emaciation has occurred, it is not a means of treating the early cases which have not suffered loss of weight. Sunshine is not essential—excellent results may be obtained in climates where the sun is very rarely seen. Mere outdoor living seems to be the essential element, and yet there does not appear to be any

doubt that quicker results are obtained in the cold season than in the summer.

* * *

The cold-air treatment for infantile pneumonia is discussed in a vigorous manner by Dr. W. P. Northrup, Professor of Pediatrics of Bellevue (*New York Medical Record*, February 18th, 1905). The method is such a startling change from the orthodox treatment of past generations, and yet so in line with recently acquired knowledge in other directi ns, that it is time for the profession of medicine to call a halt and overhaul its stock opinions. If the child's temperature is 105 deg. F., it certainly is illogical to make it higher by hot chest poultices, heavy coverings, crib in a corner of the room, steam kettle boiling, gas leaking into room, and every breath of fresh air carefully excluded. Yet this is just the course instinctively followed by every mother, who always associates pneumonia with cold and its cure with heat. Northrup details two desperate cases treated upon the opposite plan, and though he leaves but little doubt as to the perfect reasonableness of it all, it is to be confessed that it will be difficult to make the average mother carry out the treatment. A room temperature which compels the attendants to wear overcoats and furs does seem harsh, but if the results are explained there should be no complaint. Cyanosis disappears, the blood reddens, restlessness diminishes, sleep comes on, the heart is stronger, the respiration is less labored, indigestion is improved—and all from the cold air which bathes the little sufferer's face and enters its lungs. If such great good can be accomplished by this simple means, surely an effort should be made to induce mothers to carry out the method in all such cases.

* * *

The cold-air treatment in pneumonia of adults has also been tried with apparent benefit. It is said to reduce cyanosis, lessen the rate of respiration and pulse, steady the heart, lessen fever, and reduce the discomfort and pain. It also seems logical to keep the patient cool all the time, instead of reducing his temperature only periodically by sponge baths, or even tubbing. In northern winters the windows have been kept open in the sick-room, even when the thermometer was much below the freezing-point. The patients promptly complain if the windows are closed and the air becomes warm and stuffy. It is not mere fresh air and ventilation, but the coldness which is appreciated. Taken with the results of similar treatment in tuberculous infection, it seems that there is some special

benefit derived from cold air in all pulmonary infections. Pneumonia is said to be very rare, or even unknown, in the Arctics, and yet Eskimos perish of this disease when brought south. In the cold parts of the north-west, pneumonia rarely appears in the bitterly cold winter months, but is more a disease of spring, and even summer. Dr. Charles E. Page, of Boston (*New York Medical Journal*, Dec. 23rd, 1905), not only emphasizes the necessity of cold, fresh air in pneumonia, but also the benefit of cold applications to the chest—constant cold, not periodical. He has many caustic things to say of the opposite methods, which appear to increase the dangerous symptoms. Perhaps we can detect a growing tendency to keep all fever patients in cold air whenever practicable. The Japanese seem to obtain good results by this method, for their hospital wards in cold weather are kept at a low temperature, which would be considered brutal with us.

* * *

Cold air for typhoid and all other infections is but a step further—not cool air but cold. If all these new ideas are to be carried out to their legitimate conclusion, it is surely proper to immerse every patient in his normal cold atmosphere and not a tropic one. He can be properly covered, even if he is breathing air freezing cold, but to make him breathe hot air seems as illogical as to place trout in warm water. The Brand method of cooling typhoid patients is known to save several in every hundred, and its remarkably beneficial effect on the nervous system is said to be the main reason. A walk through a typhoid ward where cold baths are given, reveals so many bright, intelligent faces—so different from the stupor of typhoid curing itself—that one almost thinks it is a different disease. It seems to have the same tonic effect as cold in surgical tuberculosis, but it is in order to inquire why the patient cannot be kept in cold air to continue the effect, properly covered, of course, so that it merely bathes his face and head and upper air passages. Perhaps the cold air of mountainous regions is the reason why typhoid takes such a mild course that it was actually considered a different disease for so long a time. The whole matter is worth considering in every other infection, if with no other therapeutic view than with the mere idea of placing the patient in the normal European atmosphere known to be good for his ancestors.

* * *

Cold Air for Healthy People.—The thought is naturally suggested that perhaps cold air has hygienic as well as thera-

peutic uses. Warm sleeping rooms are strictly modern inventions, and pneumonia as a serious menace to life is also a comparatively recent affair. It is time, then, to inquire if our over-warmed houses have any relation to the appalling increase in pneumonia. Does not this continual tropic house warmth actually reduce the tone of the tissues and make them more susceptible to bacterial invasion? Foreigners bitterly complain of the heat of our houses, and Americans abroad have equal objections to the coldness of foreign houses—keenly suffering in a Parisian hotel, for instance, which is perfectly comfortable to the native. In Japan it is the same, Americans apparently being unable to live in the paper houses of the natives, who are comfortable even when huddled around a few coals of fire. Perhaps the types of men in northern Europe, through ages of exposure to cold, have actually developed a physique which is not only inured to cold, but actually functions better in cold air than in hot. They surely are healthy and strong now, and do not suffer in the least from the cold. We rather look upon hot weather as relaxing and destructive of vitality, and expect health with return of cold weather. Brook trout perish if the water they breathe is raised only a few degrees in temperature. There is enough in this matter to cause us to think about it a little. If so many cured tuberculous patients are now sleeping in cold air every night and living in it in the daytime, too, as much as possible, perhaps the rest of us are only injuring ourselves by the opposite course. Only a few years ago the cold-air fiend, who slept with windows wide open in the coldest winter, was considered a crank. Perhaps he will prove to have been the only sensible one among us, and was merely imitating the ways of his ancestors, who had practically no way of warming their houses.—*American Medicine.*

Editorials.

BRITISH MEDICAL ASSOCIATION.

The Transportation Sub-Committee makes the following announcements as to fares, etc., for those attending the meeting at Toronto, August 21-25, 1906:

1. *Fares, Going Dates, and Limits.*—(*a*) Domestic Business, Certificate Plan Arrangements: free return regardless of number in attendance. Passengers going rail, returning R. & O. Nav. Co., or *vice versa,* rate to be one and one-half fare. (*b*) European Business: On presentation of certificate, to be prepared and signed by the Secretary of E. C. P. Association, and countersigned by the Secretary of the Canadian Committee, or the Secretary of the British Medical Association, one-way tickets to be issued at one-half lowest one-way first-class rail fare; round-trip tickets at lowest one-way first-class rail fare between all points in Canada. Rates to Pacific Coast subject to concurrence of T. C. P. Association. Steamship lines to advise Secretary what, if any, additional arbitraries are required.

Dates of sailing, July 1st to September 30th, 1906, inclusive. Final return limit, September 30th, 1906.

2. *Extension of Time Limit.*—On deposit with Joint Agent of Standard Convention certificates issued from points in the Maritime Provinces, from points west of Port Arthur, and from points in the United States, on or before August 28th, 1906, and on payment of fee of $1.00 at time of deposit, an extension of time until September 30th to be granted. Joint Agency to be conducted in the name of G. H. Webster, Secretary, E. C. P. Association, will be kept open from August 21st to September 15th, 1906.

3. *Side Trips.*—Side trip tickets to be sold from Toronto to delegates from the Maritime Provinces, from all points west of Port Arthur and from the United States, on presentation of validated certificate, or deposit receipt, at lowest one-way first-class fare for the round trip, to all points in Canada.

Dates of sale, August 23rd to September 1st, 1906, inclusive. Return limit, September 30th, 1906.

Usual additional arbitraries *via* Upper Lake steamships to apply, viz., going lake, returning same, $8.50 additional to be collected; going lake, returning rail, or going rail, returning lake, $4.25 additional to be collected. Also usual arbitraries *via* St. Lawrence route, for delegates desiring to return by steamer on presentation of tickets to purser, viz., $6.50 Toronto to Montreal; $3.50 Kingston to Montreal.

Via Northern Navigation Company, on lines where meals and berth are not included, the rail rate will apply; on lines where meals and berth are included, rate to be single fare plus meal and berth arbitrary.

THE CANADIAN MEDICAL PROTECTIVE ASSOCIATION.

It is exceedingly satisfactory to learn from the officers that they are much encouraged with the work of the Association, and that they feel assured that its usefulness has been abundantly proved. We hope that our readers who have already joined this society will continue to do some work in its interest and especially induce others to join. The membership is still small when compared with the big army of physicians in Canada.

The annual fee is three dollars. The officers prefer remittances by postal note, post office order, or express order. By resolution at the Halifax meeting the membership has been made permanent, and each member will be liable for annual dues until he resigns. If remittances are not received by the first week of February the Treasurer will draw on each delinquent through the banks.

THE NEW HOSPITAL FOR TORONTO.

It is difficult for many of us to realize the fact that the subscriptions for the new hospital for Toronto exceed consider-

ably the million dollars, the amount at first asked for by the present Board. A bill will be introduced in the Ontario Legislature at the coming session which will create a new charter. The representation of the various interests on the new Hospital Trust will be as follows: The Government, 8; the University, 5; the City of Toronto, 5; the benefactors, 7; total, 25.

Dr. Brown, the present Superintendent of the Toronto General Hospital, recently told the Toronto *World* that the present trustees, certain members of the City Council, members of the Faculty of Medicine, and certain benefactors, were dealing with the new hospital scheme. This body has divided itself into four sub-committees. One is dealing with the question of a site; a second is considering the choice of an architect; a third is framing a new charter, and a fourth is considering the methods of providing relief for patients suffering from tuberculosis.

THE AMALGAMATION OF SOCIETIES IN NEW YORK.

We are pleased to learn from the *Buffalo Medical Journal* that the Medical Society of the State of New York and the New York State Medical Association, after twenty-two years of separation, have recently agreed to unite, and thus form one great medical society for the "Empire State" of the neighboring republic.

The original society, known as the Medical Society of the State of New York, was organized in 1807, and held its one hundredth meeting January 30th, 31st, and February 1st. About twenty-five years ago some trouble commenced in the city of New York respecting what was known as the old code, and a new code came into existence. The advocates of the different codes became two hostile bands, and one of the results was a split in the old State Society and the formation of a new association.

The *Buffalo Medical Journal*, in an editorial on the subject, gives much credit to two distinguished American physicians, speaking as follows:

"But we must not forget, in the haste of the moment, to accord credit to two men above all others, for laying the foundation of medical unity in the State of New York. We refer to Dr. Lewis S. McMurtry, of Louisville, reigning president of the American Medical Association, and Dr. Charles A. L. Reed, of Cincinnati, a former president of that body. Both of these gentlemen attended a meeting of the society fifteen years ago, read papers and took active part in the proceedings. They made the acquaintance of the society, its members and methods, and have taken an active interest in its affairs since that time. They have visited it occasionally since, and through these visits resolved to do all in their power to end the dual systems of state medical organizations."

We may add that they were induced to attend the meeting referred to by the able, active and genial president of that year, Dr. William Warren Potter, of Buffalo.

NOTES.

A Retreat for Women Physicians.

A number of the women physicians of Toronto received invitations to attend a Retreat for Catholic women physicians (at which non-Catholic women physicians were also welcome), to be given by the Rev. Father Pardow, at St. Regis Convent, 140th Street and Hudson River, New York City, from Thursday evening, December 28th, 1905, till Monday morning, January 1st, 1906. This is, so far as we know, a new departure, and the kindness of the invitation was appreciated by the ladies to whom it was extended.

Mrs. John Elder, LL.D., of Glasgow University.

The death of Mrs. John Elder, of Govan, the widow of the great ship-builder and engineer, Mr. John Elder, of Glasgow, removes from the world one who was a benefactress, and will ever be remembered in the great city where she lived for her generosity and public spirit. There are many nowadays who have made a million, but Mrs. Elder in her life-time gave away a million (£200,000 and more) to medical education

and to other good works. She built Elder Cottage Hospital and endowed it in her will with £50,000. In the year 1883 she presented to the newly-founded Queen Margaret College (of which she was one of the founders) the Women's Department of the University of Glasgow, one of her own residences, the buildings and grounds of which have ever since been occupied by the College. This great gift was on condition that an endowment fund of £20,000 should be raised. The endowment was undertaken by Mrs. Campbell, of Tullichewan, who collected and presented to the College a fund of £25,000. Queen Margaret College is now a great institution. It has an average attendance of 400 women, and in the Medical Department alone there are 80. When the University of Glasgow celebrated its ninth jubilee, the honorary degree of LL.D. was conferred upon Mrs. Elder and Mrs. Campbell, they being the first women to receive such an honor. And Mrs. John Elder has now passed away. How many important things are *not* cabled to us from Britain, and how many unimportant things *are*. The memory of the just is blessed.

Ontario Medical Association.

The attention of the profession throughout the province is called to the annual meeting of the Ontario Medical Association for 1906, under the presidency of Dr. George A. Bingham, of Toronto, with Drs. D. J. Gibb Wishart and H. J. Hamilton as chairmen, respectively, of the Committees on Papers and Business and of Arrangements.

By vote of the members at the last meeting, that of this year will take the form of a business session, preceding the meeting of the British Medical Association, which will begin August 21st. Consequently our provincial meeting will be convened Monday evening, August 20th, at 8 p.m. We will thus avoid conflicting with the necessary sessions of the Canadian Medical Association, and the members will arrive in none too early time to participate in the Imperial meeting of the next day.

Members are particularly requested to remember this announcement. Notification of the various committees will be made at the accustomed date.

TECHNIQUE TO BE OBSERVED IN THE OPERATING ROOM OF THE TORONTO GENERAL HOSPITAL.

Bearing in mind the use to which the amphitheatre is devoted, great care should be exercised to keep the floor and seats of that part occupied by the students as free from dust as possible.

Preparation of Arena for Operations.—The floor should be scrubbed at least once daily with soap and water, and afterwards thoroughly wet with a solution of bichloride of mercury, 1-2000. The walls, seats, fixtures and all movable apparatus should be scrubbed once a day, and afterwards washed with bichloride solution, 1-2000. The operating table should be thoroughly wetted with carbolic solution, 1-20, immediately before each operation. If the table has been used for a septic case, it should have a thorough scrubbing and douching with soap and water, followed by bichloride solution immediately after the operation.

Dress of Surgeons.—The operating surgeon and all assistants should be clothed in sterilized gowns with sleeves long enough to be overlapped by the gloves, and with caps provided with visors to cover the nose and mouth. Each surgeon may, and assistants shall, wear rubber gloves, and care should be taken that these gloves are free from holes.

Dress of Onlookers.—All onlookers on the floor of the operating room in important operations should be clothed in gowns and caps with visors. No such onlookers are, however, to be admitted except by consent of the operating surgeon.

Dresses of Nurses.—Similar to that of operating surgeons and assistants, except that the cap should be of folded gauze large enough to cover the hair.

The gowns, caps and gloves of all surgeons and nurses should be put on by a nurse (sterilized) detailed for this work. This nurse should take pains to avoid touching any part of the clothing of those whom she is dressing, and, in case of such accident, she should frequently rinse her own hands in bichloride solution, 1-2000. She should not assist in this work after putting on her gloves preparatory to handling the sponges.

Sterilization.—All linen, gowns, caps, towels and dressings should be sterilized by steam, at a pressure of 15 lbs., for at least half an hour.

In the case of prepared dressings, such as iodoform gauze,

double cyanide gauze, or other manufactured gauzes, the receptacles containing such should be sponged off with bichloride solution, 1-200, before being opened; and should be handled by sterilized hands and instruments, such as forceps, for removing the gauze.

Tubes of sterilized catgut, silkworm gut, horse hair and silver wire should be kept completely covered in a carbolic solution, 1-20 (this solution should be changed once a week), and removed therefrom before the operation to sterilized water or an antiseptic solution. Silk or celluloid sutures or ligatures should be boiled for half an hour on first preparation, and afterwards be stored in ac. carbolic, 1-20, or in alcohol.

Rubber tubing for drainage purposes should be washed with green soap and water—where possible, inside as well as outside—then rinsed in sterilized water and afterwards scrubbed with ether, then boiled for half an hour and kept covered with carbolic acid, 1-20. This should be changed once a week.

The rubber tubing, nozzles, etc., for irrigating purposes should be kept in carbolic acid, 1-20, and after operations should be disconnected, washed and boiled.

Jars, funnels, basins, and all receptacles should be thoroughly scrubbed with green soap solution or sapolio, then rinsed with sterilized water and boiled in the carbonate of soda solution.

The basins to be used in the operation should be carried in a basket, covered by a towel, to the operating room, and placed in position by a nurse whose hands have been sterilized.

Instruments.—All scissors, scalpels and needles should be wiped with alcohol, then soaked for half an hour in carbolic solution, 1-20, and afterwards transferred to sterile water. All other instruments should be boiled in carbonate of soda solution for 10 minutes immediately before the operation, and then transferred to sterilized water. To prevent discoloration of steel, the instruments should not be immersed until the water is boiling.

Instruments in Emergency.—Should any instrument, not previously prepared, be called for during the progress of an operation, it should be entirely immersed in pure carbolic acid for 2 minutes, then seized in a pair of sterile forceps and vigorously rinsed for a moment in sterilized water before being handed to the surgeon.

List of Instruments.—A record of the number of forceps, scissors and needles used in each abdominal or thoracic operation should be kept, and the number accounted for before the

wound is closed, the house surgeon in charge of the instruments being held responsible.

Care of Instruments after Operation.—(*a*) After cleaning cases, all instruments, including scalpels, scissors and needles, should be washed and scrubbed with a brush in warm (not hot) soap suds, then transferred to hot, sterilized water for a few moments. This water should then be poured off and the instruments very carefully dried while still hot.

(*b*) After septic cases, all instruments, including scalpels, scissors and needles, should be scrubbed and washed as above, then boiled for five minutes, and afterwards dried as above.

Gloves.—Before operation, gloves should be wrapped in a towel and boiled for five minutes, totally submerged, and then placed in sterilized water or antiseptic solution.

(*b*) After operation, gloves should be thoroughly washed in green soap and water, then turned inside out and thoroughly washed again. While in the solution each glove should then be very carefully examined for holes and rents, and, if any be found, such gloves should be set aside for repairs. If they have been used for septic cases they must be boiled after being scrubbed. They should then be stored in bichloride solution. 1-2000, or dried and powdered.

Repair of Gloves.—The part around the hole should be wiped with gasoline or benzine, slightly roughened with fine sand-paper or emery-cloth, then smeared with rubber cement, which should be allowed to become almost dry. The patch to be applied should be prepared in the same way, and when the two surfaces are nearly dry they should be pressed firmly together. The patches should be placed upon the inside of the glove. It should be recognized that the damaged glove is a menace, because not only may septic matter be pumped into the surgeon's fingers, but macerated epithelium and germs may be pumped out from the skin of the surgeon to the wound of the patient through a very small opening.

Extra Gloves.—There should be on hand, prepared, two or three pairs of extra gloves, in case the operating surgeon or assistants should deem it advisable to change during the operation.

Cleansing of Hands.—The hands of all surgeons and nurses, and the forearms, including the elbows, should be thoroughly scrubbed with soap and water and a brush under running water for at least five minutes, then washed in alcohol (65 per cent.), and afterwards soaked in 1-40 carbolic, or 1-2000 bichloride solution for two minutes. After disinfection the

hands should never be dried on a towel, nor allowed to dry in the air.

Gauze Sponges, Wires and Pads.—These should be of various sizes, adapted to the needs of various operations. They should be made of gauze of good quality, so prepared that there are no loose edges upon the surface. They should be sterilized by steam under pressure, as above described, and should be rinsed out of sterilized water or antiseptic solution.

In quite clean cases they may be rinsed out of sterilized water and used over and over again during the operation, but in septic cases, or when contaminated with feces, urine, mucus, etc., they should be discarded after being used once.

In abdominal operations all gauze sponges should be provided with tapes, and should be carefully counted before operation and accounted for before operation is finished. A number of very large gauze sponges, say 1 foot wide by 2 feet 6 in. long, should be constantly on hand in case of abdominal operations in which large masses of viscera are necessarily exposed, as in operations for intestinal obstruction.

Sea Sponges.—Sea sponges, after preparation, should be kept in 1-20 carbolic acid; when required for use they should be removed from this solution to sterilized water or antiseptic solution. Sea sponges should be on hand in every operation about the mouth or throat, and in other operations when preferred by the operating surgeon.

Stock Solutions.—There should be kept on hand in very large bottles solutions of the following: Acid carbolic, 1-20; acid boracic, 1-20; hydrarg. bichloride, 1-500 and 1-1000; sterilized normal saline solution (double strength); rectified spirits; ether; turpine; gasoline, in pint bottles.

In making up solutions from these stock mixtures great care should be taken that these solutions are of the designated strength, and vessels of known size should be used in compounding the solution, or the basins should be graduated by easily observed lines indicating quarts.

Spare Basins.—There should be available for the use of the surgeon during an operation: (*a*) a basin of carbolic acid solution, 1-40, or bichloride solution, 1-2000, according to individual preference; (*b*) a basin of sterilized water or normal saline solution.

A similar arrangement of basins should be available for the nurses.

Number of Surgeons and Assistants.—In all major operations there should be, in addition to the operating surgeon, a

first, second, and third assistant, and at operations of unusual magnitude, such as amputation at the hip joint, a fourth assistant will be required. For minor operations two assistants only may be required.

Number of Nurses.—The operating room nurse should be sterilized, and have general supervision over all her assistants and the general conduct of the operation and operating room. She should not merely superintend but be prepared to lend a hand where her judgment shows that she may be useful. For major operations she should have three assistants. The nurse who is to hand sponges may assist without gloves in preparing the operating room and dressing the surgeons and nurses before the operation commences, but after she takes charge of the sponges and towels she should not be required to do anything else, and should take the utmost pains to prevent the accidental infection of her hands or the sponges, towels and dressings in her charge. In case of any such accident she should rinse her gloved hand thoroughly in 1-2000 bichloride solution.

Care of Patient after Operation.—After the completion of the operation the responsibility for the proper care of the patient rests upon the senior house surgeon, who should either accompany him to the ward himself or instruct a competent junior to do so.

It is the duty also of the house surgeon, on the return of patient to the ward, to acquaint the nurse in charge of the patient with the character of the operation which has just been performed, and with instructions as to the after-treatment and any emergencies which may arise owing to the peculiar nature of the operation.

Preparation of Area of Operation while Patient is in the Ward.—With regard to the area to be prepared, it is difficult to lay down any definite rules; but the general principles may be indicated by saying that, for example, when the operation is upon the trunk of the body, such as in kidney cases, an area extending at least 15 inches in all directions from the actual seat of operation should be prepared. Where possible, the preparation should be commenced the day before the operation, and should be carried out as follows:

(1) The whole area should be shaved; (2) the part should be thoroughly wetted and rubbed gently for about one minute with turpentine. In case of mechanics with very much soiled and greasy hands, gasoline is an excellent solvent, and should be used before the turpentine is applied; (3) thoroughly scrub

the whole area with a soft nail brush, using soap and acid carbolic solution, 1-40; (4) apply a wet dressing of bichloride solution, 1-2000, over night; (5) next day, two hours before operation, repeat the wetting with turpentine; (6) repeat scrubbing with soap and acid carbolic solution, 1-40; (7) apply a layer of gauze, thoroughly wetted with bichloride. 1-2000, and bandage in position until the time of operation; (8) when the patient is on the table and everything ready for the operation, this gauze should be removed and the whole area thoroughly swabbed with 65 per cent. alcohol. In case of emergency operations this method of disinfection should be carried out as thoroughly as possible, using gasoline instead of turpentine, after the anesthetic is administered. The preparation should be conducted by either a competent nurse or the house surgeon.

Special Technique in Septic Cases with Pus.—Where it is known that pus will flow as the result of the operation, the surgeons and nurses should join their efforts to confine the pus and the septic products of the operation to the smallest possible area. The operating table should be entirely overlaid with rubber sheeting covered with sterilized towels or sheets. Vessels should be provided and put into position to catch the pus as soon as it flows. Large, loose tampons should also be used to mop up any escaping pus, and a receptacle for these should be provided immediately at hand, so that the pus is not passed across the operating table or to the nurses' table. These tampons and all infected sponges and gauze should, of course, afterwards be destroyed.

Recognizing the almost insuperable difficulties of disinfection after contact with virulent septic products, the utmost care should be observed by house surgeons and nurses not to become infected with such toxic matter. Forceps may often be used to handle infected sponges.

After such operations, any utensils or instruments known to have come in contact with the pus should be carefully kept from contact with uninfected utensils and instruments during the process of cleaning up.

INTERNATIONAL MEDICAL CONGRESS.

Arrangements are being completed with regard to the fifteenth congress, which meets in Lisbon from the 19th to the 26th of April. The principal general addresses will be delivered by Sir Patrick Manson, London; Prof. Brissaud, Paris; Dr. Jose Maria Esquerdo, Madrid; Dr. P. Aaser, Christiania; Prof. Azevedo Sodre, Rio de Janeiro; Prof. Neumann, Vienna; Prof. Prince Jean Tarcharoff, St. Petersburg; Prof. E. von Bergmann, Berlin.

The different nationalities are well grouped. The delegates from Great Britain, Canada, Australia and the British colonies will have a common meeting place.

As to the service of lodging, it will be in charge of M. Manuel Jose da Silva, Praca dos Restauradores, Palacio Foz, Lisbon, to whom may be addressed all correspondence on this subject.

Applications for membership will be received until the hour of the opening of the congress and during the congress, but in order to secure reductions granted by railways and navigation companies it is necessary to give your name as soon as possible. All such correspondence may be addressed to the Secretary-General, M. le Professor Miguel Bombarda, Nova Escola Medica, Lisbon.

Regarding the *fetes* and receptions which will be given in honor of the members of the congress, it is announced that there will be three general *fetes* and there will probably be several receptions and dinners *de gala*. A bull fight according to the old Portuguese way will be organized at the expense of the congress. The definite details will be published at a later date.

We understand that a number of Canadians have already decided to attend the congress. Any member of the profession in Canada who desires to join the Canadian committee is requested to communicate at an early date with Dr. A. McPhedran, or Dr. W. H. B. Aikins, of this city, who will be glad to furnish all available information.

HAMILTON MEDICAL SOCIETY.

The regular monthly meeting of this society was held January 3rd, in the Hotel Royal, the President, Dr. Ingersoll Olmsted, occupying the chair. The programme was as follows:

1. "Round Ulcer of Duodenum," Dr. J. Albert Dickson.—

In the discussion which followed the reading of notes of three cases, attention was directed to these points: That in one case the patient was syphilitic, in the second tubercular, and the third an alcoholic, with cirrhotic liver and kidneys; that accurate diagnosis of the condition is difficult or impossible before hemorrhage or perforation occurs.

2. "Compound Fracture of Skull," Dr. L. W. Cockburn.—A case was presented, with history, where the patient in an accident had a complete osteoplastic flap removed from the head. Both bone and scalp were replaced and the wound drained. Patient made a perfect recovery.

Dr. Cockburn also presented a patient who illustrated strikingly the value of conservative surgery. The man had had a complete crushing of his right hand, so that the member was practically disorganized. Instead of the usual procedure in such cases—amputation at the wrist-joint—the hand was cleansed as well as possible and dressed. As a final result the patient showed instead of a stump a comparatively useful, though deformed, hand.

3. Microscopic specimens, Dr. J. Albert Bauer.—Demonstration of stained sections of some interesting pathological specimens.

4. Gross pathological specimens were shown by Drs. Olmsted and Mullin, with reports of the cases.

Fever During Menstruation as Early Sign of Tuberculosis.

Franck announced four years ago that a rise in temperature preceding or during menstruation is a strong presumptive sign of a morbid process somewhere in the body. It points especially to tuberculosis, and if the woman is anemic and thin, with a tendency to sweat and to catch cold readily, the physician will do well to inaugurate antituberculosis treatment or to recommend a sanatorium, superfeeding or a course of cinnamic acid or iron and arsenic. He is convinced that the normal limit of the temperature is 37.5 C. (99.5 F.), measured in the rectum, and that even a fraction of a degree above this is fever. Sabourin and Kraus have also recently pointed out the importance of fever during menstruation as an early sign of tuberculosis. Measured in the rectum, a fraction of a degree above normal may be due to the hyperemia of some inflammatory affection in the adnexa, but, if such can be excluded, then the assumption is in favor of tuberculosis.—*Ber. Klin. Woch, and J.A.M.A.*

MEDICAL ITEMS.

The following physicians were elected at the recent political contest in Saskatchewan: Dr. W. Elliott (Tor. '93), for Wolseley; Dr. D. D. Ellis (Vict. '85), for Moosomin, and Dr. A. S. Shad (Trin. '98), for Kinistino.

The fourth annual dinner of the New York University of Toronto Club was held at the Hotel Astor, January 26th. Dr. Algernon Temple and Dr. Charles Sheard, of Toronto, were the guests of honor, and both delivered excellent addresses, which were highly appreciated.

The following have been appointed for the usual six months' service on staff of Toronto General Hospital: In surgery, Dr T. D. Archer, Campbellford, Ont.; Dr. J. H. Soady, Toronto; Dr. J. H. Kidd, Peterboro'. In medicine, Dr. K. H. Van Norman, Toronto; Dr. F. W. Ralph, Markham; Dr. F. J. Buller, Toronto.

The following were elected officers of the University of Toronto Medical Society, January 26th: President, P. J. Kirby; vice-president, H. L. Emmett; treasurer, R. F. Bennett; corresponding secretary, J. L. McPherson; assistant treasurer, J. McInnis; curator, R. Richardson; councillors, L. J. Simpson and Wm. Brace.

The following physicians have been appointed associate coroners: Dr. Robert T. Porter, of Walkerton, for county of Bruce; Dr. Francis R. Seager, of Brigden, for county of Lambton; Dr. George W. Graham, of 249 Avenue Road, for Toronto; Dr. Francis W. E. Wilson, of Niagara Falls, for county of Welland; Dr. Enoch L. Roberts, of Simcoe, for county of Norfolk.

The sixth annual meeting of the Canadian Association for the Prevention of Consumption and other forms of Tuberculosis will be held in the Railway Committee Room of the House of Commons on the 28th of March next. The Hon. Senator Edwards will preside in the afternoon. In the evening a public lecture will be delivered in the lecture hall of the Normal School, by Dr. Arthur J. Richer, of Montreal, which will be illustrated with stereopticon plates, showing the stages of consumption, and some of the appliances now in use to check and cure the disease. The chair will be taken in the evening by His Excellency, Earl Grey.

Personals.

Dr. W. H. Harvey, of Toronto, left for England, Jan. 13th.

Dr. T. B. Stevenson (Tor. '04) has settled in Ponoka, N.W.T.

Dr. C. E. Spence (Tor. '05) has gone to West Hope, North Dakota.

Dr. A. C. Sinclair has removed from Rossland to Vancouver, B.C.

Dr. J. C. Beatty (Tor. '05) is spending part of the winter in California.

Dr. Kenneth D. Panton (Tor. '04) is practicing in Portland, Oregon.

Dr. Harold P. Martin has commenced practice at 36 Carlton Street, Toronto.

Dr. J. L. Turnbull (Tor. '89), of Goderich, leaves for England some time this month.

Dr. James M. McCormack, of Toronto, was married to Miss Taylor, of Hamilton, December 27th.

Dr. Hopkins has been appointed medical health officer of Toronto Junction in the place of Dr. Mason, resigned.

Dr. Roland Hill (Trin. '90), of Greenleaf, Mich., was married to Miss Nesbitt, of Gilford, Ont., December 27th.

Dr. Arthur Wright, of Toronto, went to New York, January 10th, for post-graduate work in Bellevue and Roosevelt Hospitals.

Dr. Robert P. McLaughlin (Tor. '03), of Cumberland, Ont., was married to Miss McLive, of Niagara Falls, Ont., January 11.

Dr. Arthur T. Emmerson (Trin. '89) will succeed Dr. Jas. L. Turnbull in Goderich, becoming the partner of Dr. Walter S. Turnbull (Tor. '03).

Dr. Alexander Murdock, of Brucefield, who has been doing post-graduate work in Edinburgh and Glasgow during the last two years, has returned to his home.

Dr. Brefney O'Reilly, after a short sojourn in London, England, started on a six months' voyage to Japan by the Red Sea, Ceylon and Malay Peninsula, calling at all important points.

Dr. T. A. Whitelaw (Tor. '94), of Edmonton, N.W.T., paid a visit of two weeks to Toronto in the first half of January, spending the greater portion of his time in the hospitals and university laboratories.

Miss Alice B. Sinclair, a graduate of the Toronto General Hospital Training School for Nurses, and also of the Sloane Maternity, New York, has been appointed head nurse of the Toronto Burnside Lying-in-Hospital in the place of Miss McKellar, resigned.

The new Household Science building, the gift of Mrs. Massey-Treble to Toronto University, will be erected on the corner of Hoskin Avenue and Queen's Park Crescent, east of Wycliffe College, this site having been selected by the university authorities.

The Hamilton Medical Association held its annual business meeting and banquet recently. The following officers were elected for the coming year: Dr. Ingersoll Olmsted, president; Dr. D. G. Storms, vice-president, and Dr. McNichol, secretary-treasurer.

Miss Nina McKellar, the efficient head nurse of the Burnside Lying-in Hospital, connected with the General Hospital, Toronto, for seventeen years, resigned January 1st, and is now residing in Ingersoll. The best wishes of all connected with the Burnside follow Miss McKellar.

Dr. John William Ballantyne, of Edinburgh, Scotland, has been appointed professor of midwifery and diseases of women and children in the University of Edinburgh. Professor Ballantyne is an Honorary Fellow of the American Association of Obstetricians and Gynecologists.

Dr. George W. Badgerow (Tor. '94), who has been living in London, England, for the last seven years, paid a flying visit to Toronto at Christmas time, after which he returned to England, sailing from New York, January 15th. He will go to the south of France for a few weeks.

Professor Wm. Osler came out to Canada from Oxford in December, and spent a portion of Christmas week in Toronto. He was entertained at luncheon at the Dean's residence, University of Toronto, December 26th. He gave a course of clinical lectures at Johns Hopkins during January, also some lectures in Philadelphia. He said the profession of Great Britain were taking a great interest in the coming British Medical Association in Toronto, and hoped that about four hundred would come from the Old Land.

Obituary.

THE LATE DR. FRANK BULLER.

We abstract the following from an obituary notice which appeared in the *Montreal Medical Journal:*

"It is not easy to describe the characteristics of so many-sided a man. Dr. Buller had much of the strong persistent force that marks his English race: his picture stands lined in clear definite outlines, and his character had the firmness that his face betokened. A certain brusqueness of demeanor overlay, but did not conceal one of the kindest of hearts; a decisive, if abrupt, mode of thought was reflected in the decisive action which, applied to his profession, carried him far toward greatness. A striking characteristic—which was part and, in fact, the outcome of his strong nature—was his interest in an obscure case. Such called out all his energy and application, and the possibility of defeat was the only stimulus necessary to invoke the greatest effort of which he was capable. To this may be attributed much of the success that he attained, because such cases make the reputation of the one over the many: the reputation which he gained, he was ever jealous to guard, and his painstaking care was a byword. The physician who safeguards himself by safeguarding his patient first, fulfils 'the greater commandment.'"

A colleague who knew him very intimately, says:

"In very delicate cases, where he feared to trust patients in the hands of untrained attendants, and they were too poor to hire professional nurses, he has been known to stay with the patients all night, after an operation, and attend to the dressing himself, lest the eye, so tender and in such a precarious condition, might suffer needless pain or be injured through a slight mistake. The poor were given the same attention as the rich.

"He would never admit defeat; this was one of his strong points. It inspired confidence in the patient, and study was often and often rewarded with success in cases which others had given up as beyond human aid."

It is a simple thing to utter the words and to pen the sentence of condolence; however heartfelt, they seem to pass away with the occasion that called them forth. A far more enduring thing is the knowledge—that can remain for all time in the minds of those that loved him—that in our colleague our art has lost a very honorable adherent and many a sufferer has lost a friend.

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ALEXANDER H. COOK, M.D.

Dr. A. H. Cook, of 232 Dearborn Ave., Chicago, a graduate of Victoria, 1861, died January 9th.

DR. JOHN L. KANE.

Dr. Kane, of Aultsville, died December 7th, from injuries received in a runaway accident, aged 31.

WILLIAM M. CAMERON, M.D.

Dr. Cameron, of Halifax, one of the best-known physicians in Nova Scotia, died of paralysis, January 24th.

GEORGE W. THOMPSON, M.D.

Dr. G. W. Thompson, of Toronto, formerly of Humberstone, Ont., died at his residence, 129 Walmer Road, January 20th, aged 69.

WILLIAM JOHN EARLEY, M.B.

Dr. Earley, of Owen Sound, died January 25th. He received his medical education in Toronto, and graduated M.B., from the University of Toronto, 1890.

WM. ARMSTRONG, M.C.P. & S.O.

Dr. Armstrong, of Toronto, died at his home, 13 Fenning Street, January 11th, after a short illness, aged 79. He formerly practiced in Orangeville, but was a resident of Toronto for twenty-six years.

ORLANDO SAMPSON STRANGE, M.D.

Dr. Strange, of Kingston, died January 2nd, aged 80. He was for many years surgeon to the Garrison Battery; was surgeon to the Penitentiary for eleven years, and one of the Governors of the General Hospital for twenty-five years.

JOSEPH CARBERT, M.D.

Dr. Carbert, of Toronto, died January 1st, aged 79. He became a Licentiate of the Medical Board, 1852, and M.D., Victoria, in 1856. Before coming to Toronto he was engaged in a very large practice for many years in Orangeville.

MILTON BAKER, M.D.

Dr. Baker, of Brantford, died in the General Hospital of that city, January 23rd, aged 38. He graduated M.D. from Trinity, 1894, and practiced for about nine years in Springfield, Ont. He removed to Brantford about two years ago. Death is said to have been "due to an ear affection which finally spread to the brain."

FREDERICK W. LAPSLEY, M.D.

Dr. F. W. Lapsley, son of the late Dr. Lapsley, of Scarboro', Ont., died at Wesley Hospital, Chicago, January 12th, of pneumonia, aged 37.

Mrs. Scadding, wife of Dr. Crawford Scadding, of Toronto, died January 31st, of erysipelas.

Book Reviews.

A Text-Book of Pharmacology and Therapeutics, or the action of drugs in health and disease. By ARTHUR R. CUSHING, M.A., M.D. (Aberd.), Professor of Pharmacology in University College, London, Eng.; formerly Professor of Materia Medica and Therapeutics in University of Michigan. Fourth edition. Thoroughly revised. 52 engravings. Philadelphia and New York: Lea Brothers & Co. 1906.

Complaints are frequently heard from older practitioners that the recent medical graduates are therapeutic nihilists. If this text-book were used in the colleges, the cry would soon cease, the "detail man" of the drug houses would become an anachronism, and perhaps even the "proprietary" medicines—the bane of our profession at the present time—would be directed into legitimate paths. There can be no doubt that therapeutics is the most poorly taught subject on the curriculum of the majority of medical schools. Most of the lectures consist of a re-hash of the supposed properties of the drug in question, dating back, sometimes, as far as Galen. This was the kind of teaching which kept medicine at a standstill for seventeen centuries, and it is high time it was thrown from its last stronghold, materia medica. Professor Cushing has rendered a great service to science, especially in America, where we are behind the continent in these matters. Since he has returned to England, a new revision of the U. S. Pharmacopeia has necessitated a new edition of his excellent text-book, which has, of course, included also some of the latest researches. Especially may we mention wood alcohol and chloroform. This is a volume which we can confidently recommend to the practitioner of many years as an antidote to his tendency for polypharmacy, and to the young man, student or graduate, to woo him gently back from his agnosticism.

Culbreth's Materia Medica. A Manual of Materia Medica and Pharmacology for Students and Practitioners of Medicine and Pharmacy. Comprising all Organic and Inorganic Drugs which are and have been official in the United States Pharmacopeia, together with important Allied Species and Useful Synthetics. By DAVID M. R. CULBRETH, Ph.G., M.D., Professor of Botany, Materia Medica and Pharmacology in the University of Maryland, Departments of Medicine, Pharmacy and Dentistry. Fourth edition. Revised to accord with the new U. S. Pharmacopeia, 8th Decennial Revision. Octavo, 976 pages, 487 illustrations. Cloth, $4.75. net. Philadelphia and New York: Lea Brothers & Co., Publishers. 1906.

This is a manual by a practical pharmacist, who knows the everyday problems of the drug trade. The new edition has been brought into accord with the recent revision of the U.S. Pharmacopeia, in which the dosage and strength of many im-

portant drugs was materially changed. There is an exceedingly useful appendix, covering poisons, prescription writing, abbreviations and pronunciations—the two latter being especially good, because they are so seldom found in books of this kind. We regret, however, to observe that the word *co-ca-ine* is omitted from the list—a word universally mispronounced on the American continent.

The new United States Pharmacopeia makes many changes in the strength of drugs and preparations, reducing some, increasing others as much as double. The law recognizes the current U.S. Pharmacopeia as the standard. To avoid accidents and damage suits on the one hand, and puzzling lack of results on the other, both the druggist and doctor must follow the same standard. As a convenient pocket reminder of these changes, the importance of which must be at once obvious to every physician and pharmacist, Messrs. Lea Brothers & Co., the medical publishers, of 706-8-10 Sansom Street, Philadelphia, and 111 Fifth Avenue, New York, have issued for free distribution a carefully prepared leaflet giving an alphabetical list of the important changes. The strength of each preparation listed is given as in both the old and the new U.S. P. To aid in preventing untoward or negative results in the e of powerful drugs this leaflet will prove handy and valuable. A postal card request will bring a copy to any physician, druggist, student or nurse.

Selections.

Ten Years' Experience with Diphtheria Antitoxin.

Billings shows that the mortality rate from diphtheria in New York City in 1889-91 was 37.3 per cent., whereas in 1902-4 it was only 10.8 per cent. The mortality has apparently been reduced over 200 per cent. Very much better results are being obtained at present than during the first few years following the introduction of antitoxin. Of 2,447 cases of diphtheria treated between 1895-1897, 641, or 26 per cent., were laryngeal. Of 4,730 cases treated from 1902-1904, only 628, or 13 per cent., were laryngeal. Billings says that there can be no doubt that this decreased frequency of laryngeal involvement is directly due to early, larger and more frequently repeated doses of antitoxin. Less than 0.5 per cent. of all children immunized contracted the disease.—*N. Y. M. J.*

Control of Nasal Hemorrhage.

Mulford's method consists in the subcutaneous injection of adrenal extract into the arterial supply at the nearest accessible point to the bleeding area. The injection may be made directly into the artery supplying the part, or it may be thrown into the tissue closely adjacent to the artery. The ingoing arterial current sweeps the solution directly into the leaking area, all the vessels of the part are constringed, and almost at once the hemorrhage ceases.—*Amer. Med. and J. A. M. A.*

Carcinoma is a Parasitic Disease.

Butlin insists that carcinoma is a parasitic disease, not in the limited sense in which this term is sometimes employed, as synonymous with infective, but in the larger and wider sense in which it should be employed, to express the fact of one organism living at the expense of another, each pursuing its otherwise separate and independent existence. He maintains that the carcinoma cell is an independent organism, like many a protozoon; that it lives a life which is wholly independent and proper to itself; and that it lives as a parasite in the body of the animal which is affected with carcinoma, deriving its nourishment from this host and doing nothing to repay the host for sustenance of which it robs him. The biology of the carcinoma cell is discussed at great length. Butlin urges that a careful study be made of the life history

of this cell outside the body of the host, and with this end in view repeated attempts should be made to induce the parasite to thrive and to multiply under artificial conditions which will permit the study of every phase of its existence.—*Brit. Med. Jour.*

Causes and Treatment of Arteriosclerosis.

Klemperer describes two cases of arteriosclerosis in men of 37 and 44, who had long smoked from 30 to 100 cigarettes a day, or from 6 to 12 cigars. The circumstances of the cases suggest that the tobacco alone was responsible for the arteriosclerosis. In another man of 45 sexual excesses were likewise the sole etiologic factor that could be discovered. The patient was unmarried and of a robust constitution. A third patient was a man of 35, married for 11 years, with two healthy children 9 and 10 years old. Since the birth of the last child intercourse had been frequent, but exclusively by coitus interruptus. These two cases, Klemperer states, emphasize the importance of the sexual factor in the etiology of arteriosclerosis. He reports in conclusion a case of pronounced arteriosclerosis with enlargement of the heart in a man of 52 somewhat addicted to alcohol and tobacco. The patient took 1 gm of sodium iodid regularly for two years with remarkable subsidence of all his symptoms, the dosage one tablespoonful of a 5 per cent. solution in a glass of milk after dinner. The heart has returned to normal size, and the blood pressure and tension of the vessel walls are much reduced. The systolic murmur has vanished, possibly from regeneration of something abnormal in the wall of the aorta. The patient has eaten ordinary mixed diet without regard to its lime content, but he was advised against carbonated baths.—*Therap. der Gegenwart.*

Formaldehyde Disinfection of the Tubercle and other Acid-fast Bacilli. Spengler (*Zeit. für Hyg.*).

The author expresses astonishment that in so many places formaldehyde should be recommended for the disinfection of tuberculous serum, and points out that one classical method for obtaining pure cultures of the tubercle bacillus is to treat the sputum with formaldehyde, which acts destructively upon the other micro-organisms without destroying the tubercle bacilli themselves; so that when such sputum is transferred to appropriate culture media these organisms are in a condition to vegetate.

The same thing is probably true of all formaldehyde disinfection of tubercle bacilli. The tubercle bacilli are not killed; they are unable to vegetate so long as they remain in contact with the formaldehyde; but so soon as they become removed from it their vegetative and pathogenic power returns.—*Medicine.*

The After-Treatment of Diphtheria.

White (*Journal of the American Medical Association*) tells us that the after-treatment of this disease consists in a sufficient period of rest in bed, and then in watching the effect of mild exercise on the heart, for several months at least, and grading it to meet individual requirements. Tonic drugs, such as strychnine and iron, are occasionally useful.

How rigidly the rest cure must be enforced depends entirely on the individual case. It was found last year in a study of cases in the hospital that it was not necessary to keep all patients in bed who had cardiac murmurs and a pulse which was slightly irregular and somewhat increased in rate. After four or five weeks of rest in bed the cases of moderate severity experienced no ill effects from being allowed to sit up for short and progressively longer intervals, if the heart was carefully watched; frequently the heart's action seemed to be improved by this change.

It has also been the case that many mild cases after leaving the hospital with murmurs and slight cardiac enlargement and irregularity became entirely well in a month or two without special care. The writer believes it would be a mistake to invariably keep these children at home and put them to bed, but over-exertion should be carefully guarded against.

The writer also believes that much of the cardiac dilatation which was often seen in the first few weeks after leaving the hospital could have been avoided by more intelligent restraint of these children at home. Even the milder cases should be carefully watched, and whatever causes shortness of breath, pallor or fatigue, or affects the heart unfavorably by notably increasing the pulse-rate, causing irregularity or any increase in the cardiac area, should at once be stopped, whether it consists of running, walking, playing, or even in simply being out of bed. The heart must be given abundant opportunity to rest and recover its normal function. This is the only conservative treatment and the only way to avoid permanent damage to the heart in some instances.

All the severe cases require rest in bed and careful watching of the heart for months or years afterward.

White concludes that:

1. The cardiac disturbance after diphtheria usually presents the picture of a mitral insufficiency with irregular heart action and few symptoms. Occasional cases have rapid pulse or cardiac irregularity without any other signs.

2. Moderate disturbance of the heart is very common after diphtheria, and in a large number of cases persists from two to six months after the original illness.

3. In many cases the cardiac lesion does not clear up in the first half year, but lasts much longer; some ultimately recover; others probably do not. The duration of the heart trouble is usually in proportion to the severity of the original illness.

4. The fact that children often have few heart symptoms after diphtheria must not mislead us as to the importance of the injury to the heart.

5. Cardiac disturbance of long duration following diphtheria may be entirely recovered from. It is not necessary to give up hope of recovery in individual long cases.

6. The treatment of this condition consists in a sufficient period of rest in bed, and then in watching the effects of mild exercise on the heart for several months at least and grading it to meet individual requirements.

Arterial Angioma of the Scalp.

A very severe case was cured by Krogius (*Centralblatt fur Chirurgie*) by the use of subcutaneous sutures. A curved needle with the eye in the point was passed beneath the mass of vessels and brought out through the skin about an inch away, threaded with one end of a heavy silk suture, and withdrawn. It was then reinserted in the same spot, passed between the skin and the angioma, and brought out at the same opening as before, threaded with the other end of the suture, and withdrawn. A second suture was passed in the same way, the last hole of the first suture serving as the first opening of the second suture, this being continued around the entire proximal edge of the growth; all the ligatures were tied tightly. The angioma almost disappeared after the first operation, leaving only a small mass at its distal part, which was treated in the same manner with complete success.—*Therapeutic Gazette.*

Recovery from Diabetic Coma under Alkaline Treatment.

The alkaline treatment of diabetic coma is theoretically sound, but the number of cases reported in the literature in which recovery has followed the administration of alkalies is

only sixteen, an abstract of which is given. The cases include all grades of coma, and are accepted on the authority of the reporters. The diagnosis does not appear to have been established in a number of instances. In some cases the histories do not harmonize with the usual symptoms of true diabetic coma. The diagnosis of threatened coma is not always easy. Disturbances of digestion and general depression may precede its onset, but it is not a necessary sequence, and recovery from such conditions has not infrequently occurred spontaneously. The alkaline treatment is certainly a remedy for diabetic coma, as acid intoxication is its cause. The proper administration of alkalies will sometimes indefinitely postpone the onset of coma, and it will occasionally arrest its progress at the beginning, and in some rare cases rescue a patient from its fully developed stages. The alkalies are purely symptomatic remedies which combat effects and not causes. They can only be of use before changes in the tissues have occurred. Acting as a chemical antidote, it is necessary that the dose of alkalies should be sufficient to neutralize the offending acids. The greater success reached in the treatment of children is probably due to the larger amount of alkali employed. Various routes have been employed for the introduction of alkaline solution, and all have been followed by successes. Hypodermic injections are usually followed by suppuration and necrosis. The intravenous route is free from this danger, and its stimulant effect may be of great advantage.

The patient observed by the writer was thirteen years old, and he had been under observation for four months, during which time he had suffered from excessive hunger and thirst and had passed large quantities of urine. His strength had steadily failed, and the weight had fallen from 79 to 55 pounds. At the time he was admitted to the hospital he was semicomatose. The breath smelt strongly of acetone, the skin was harsh and branny, with a purpuric eruption. The extremities were cold and cyanotic. The pulse was rapid and barely perceptible, the temperature 99 deg. The pupils were dilated but reacted to light. The urine contained 5.3 per cent. of sugar and a trace of albumin. Acetone and diacetic acid were present. Directly after his admission he was given eight ounces of sterile salt solution, in which bicarbonate of soda was dissolved almost to the point of saturation, under the skin of each breast. An unsuccessful effort was made to give the alkaline solution by the bowels. A heaping teaspoonful was added to a tumbler of water and was given by the mouth to the

limit of the patient's capacity. No record of the amount was kept, but as thirst was great large quantities were taken. The stupor rapidly decreased, but the patient was drowsy for several days. Convalescence was interrupted by uremic convulsions, which were accompanied by a marked diminution in the quantity of urine. In spite of the large doses of alkali the urine remained persistently acid throughout the patient's stay in the hospital. The sugar varied from 1 to 3 per cent. under a diet which contained a little bread and considerable quantities of milk. Acetone was more frequently present in the urine than absent, but its odor persisted only a few days after entrance. Suppuration occurred at the site of the hypodermic injections. The abscesses were long in healing.—G. G. Sears, *Boston Medical and Surgical Journal.*

A Case of Recovery after Talma's Operation.

In November, 1904, the writer was consulted in a case of ascites due to cirrhosis of the liver. The patient had to be tapped every two or three weeks, removing each time from three to five gallons of fluid. In the operation the method advocated by Talma was followed. The abdomen was opened between the umbilicus and the ensiform cartilage, evacuating the accumulated fluid. The liver was rubbed with a nail-brush until there was a slight hemorrhage, and the peritoneal covering of the diaphragm was treated in a like manner. Five sutures of forty-day catgut were used in stitching the abraded surfaces of the liver to the abraded surface of the diaphragm. Five or six loops of omentum were then stitched to the peritoneum, and they were also included in the sutures which closed the abdominal incision. The establishment of collateral circulation was slow, and the patient was tapped three times before it was complete. The accumulation of fluid in the abdomen became less, and in three months the patient resumed his occupation. The patient has gained about twenty-eight pounds in weight, and his nutrition is good. As yet only eight months has elapsed since the operation, and it is too soon to affirm positively that the recovery is perfect, but the results are sufficiently so to justify the operation in properly selected cases.—G. C. Stemen, *New York Medical Journal.*

Treatment of Pityriasis Versicolor.

P. Gallois, in a communication to the Therapeutic Society of Paris, recommends a solution composed of peroxide of hydrogen, eight ounces, to which is added one drachm of borax. The daily application of this lotion will remove the unsightly stains of this disease in about two weeks.—*Medicine.*

Miscellaneous.

Hospital Economy.

The question of hospital economy is one that is of great interest to many practitioners. Dr. Gerster, of New York, in discussing this subject in a recent number of the *Medical Record* first compares the daily cost per patient in different hospitals in this country and Europe, the result showing that in America the outlay is very much greater. These facts serve as arguments in favor of the view that in order to meet successfully the conditions now existing, when the large hospitals usually show an annual deficit, retrenchment is the proper remedy, and not an appeal for greater liberality on the part of the comparatively few philanthropists who furnish most of the funds for the hospitals. In analyzing the conditions which underlie the extravagance and waste in hospital management in this country, the author emphasizes the necessity for more active participation in the executive control by the members of the medical staff. The plans of organization of the great hospitals of Hamburg, Berlin, Vienna, and Budapest are described in detail. The essential features are that the position of the lay superintendent is occupied by one or more salaried medical directors, the attending staff is very limited, so that the service is a permanent one with salaried visiting physicians and surgeons, and the house staff also is composed of paid assistants, whose positions are permanent. In this way all those concerned are able to give the necessary time to details of economical management, and also acquire the experience necessary to carry them out with effect. The present plan of conducting hospitals here resembles that in use in medieval Europe, and the author predicts that sooner or later a system similar to that now employed in Europe must be adopted. While opposition to reform in this direction is to be expected, restriction in the number of those who attend at our hospitals is essential to economical improvement, and is urgently required also to effect a betterment in the care of the individual patient. —*Medical Age.*

The Relation of Pleurisy to Tuberculosis. VON RUCK (*N. Y. Med. Jl.*)

Formerly the pleural cavities were regarded as exceedingly well protected against localization of bacteria, not only because of the protection afforded by the chest wall, but because the lymphatic system of the lungs was supposed to carry centripetally away from the pleura everything otherwise liable to

reach it. More recent investigations and clinical observations lead to opposite conclusions. After weighing the data at hand the author concludes that the pleural cavities are *readily* accessible to bacterial invasion, and that the great majority of pleurisies with effusion are due to infection with tubercle bacilli. This is proved by autopsy findings, methods of exact diagnosis and subsequent clinical histories. The so-called idiopathic dry pleurisies are likewise usually tuberculous.

The subjective symptoms of inflammation of the pleural apices often simulate those of myalgia or rheumatism.

Tuberculosis should be suspected in every case of pleurisy or persistent pain in the chest or shoulder which cannot be ascribed to other causes, and if the physical examination proves negative, the patient should be regarded as tuberculous, and should be kept under careful observation. The tuberculin test may be relied upon to confirm or exclude the tuberculous nature of pleurisy in case of doubt.

The application of these principles will lead to an earlier recognition of tuberculous disease of the lungs, and to the institution of a treatment at a period which will in many cases secure to the patient most important advantages in his prospects for recovery.—*Interstate Med. Jour.*

The Medical Man, Anno Domini 1906.

The rapid evolution of scientific medicine presents us with an ever-shifting kaleidoscope of professional knowledge. The practitioner of to-day, no matter what his standing or his peculiar bent, must keep abreast of main advances, or in a few years he will find himself lagging hopelessly in the race. In so wide a field he cannot hope to know particularly more than one or two branches and to have a general acquaintance with the rest of the multitudinous subjects that fall within the range of modern medicine. Indeed, it seems almost hopeless for the general practitioner, burdened as he is with incessant calls upon his energy, to keep himself well educated from the professional point of view. Even where post-graduate education is at hand, it requires no little determination to find the necessary time to attend classes and demonstrations. The medical diplomate or graduate is turned out from school or university a highly finished educational product, charged with a vast amount of information that will be simply an encumbrance to him when called upon to discharge the end and aim of his adopted career, namely, to comfort and heal the sick. There are several saving clauses, however, in the compact be-

tween general practice and medical science. The first is that while great, and in some cases enormous, strides have been made in the various branches of medical science and art, that of therapeutics has for the most part lagged behind with slow and halting steps. A lecturer will discourse eloquently upon the etiology, the pathology, the symptomatology, and the diagnosis of some condition, while the therapeutic aspect is disposed of in the last two or three minutes of his allotted hour. Yet treatment is the all-important thing for the future practitioner, not to mention the patient, an interested person of whom we are apt to lose sight at times in the excitement of our scientific ardor. Of what use is it to the medical attendant when sitting at the bedside of a sick person to ransack his mind as to Professor So-and-So's refinements and subtleties of diagnosis? Sick-room practice and laboratory research are for the most part poles asunder, and in the rough and ready tumble of general practice the advance has been made at a few points here and there rather than all along the line. So the general practitioner treats symptoms, trusts to a few approved remedies and throws advanced science to the winds—at any rate, until its advocates can furnish a convincing as well as a plausible case. In fact, he has been taught the lesson that much so-called knowledge is not really knowledge when tested in the crucible of experience. An amusing instance of misapplied high standard smartness recently occurred in a provincial centre of light and leading. A country surgeon sent a lad to the hospital of a neighboring town for the purpose of having a deep-seated abscess opened. A country surgeon sent a lad to the hospital professor of world-wide fame, but he was sent back home without operation because an examination of his blood did not afford the evidence deemed necessary for the diagnosis of internal abscess. Thereupon the country surgeon called in a brother practitioner to give chloroform, and speedily relieved his long-suffering patient of his dangerous burden. The truth of this story, however much it may be suggestive of science run mad, is vouched for on the best authority. It illustrates one of the more disquieting sides of professional life nowadays, namely, the decay of skilled clinical observation, and the exaltation of laboratory methods that are in not a few cases complicated, fallacious, and technical to a degree.—*Medical Press and Circular.*

Mark Twain's Rules of Health.

On the occasion of his seventieth birthday the great American humorist took occasion to call attention to the methods by

which he has secured the psalmist's three score and ten years. He has been regular about going to bed and getting up, making it a rule to go to bed when there wasn't anybody left to sit up with, and to get up when he had to. He had been consistently regular in his early years in taking food that frequently disagreed with him. In regard to smoking, the only restriction he has imposed is to smoke one cigar at a time. He is not quite sure when this habit was contracted, but some time prior to his eleventh year it was resorted to secretly, and since that time he has been an open and avowed smoker. In reference to drinking he prefers to remain dry excepting when others are about and there is drinking going on; then he likes to help. He does not recommend this practice to others, as he points out that dryness does not hurt him, but might easily injure other constitutions. He says: "I have never taken any exercise except sleeping and resting, and I never intend to take any. Exercise is loathsome, and it cannot be of any benefit when you are tired; I was always tired. I have lived a severely moral life, but it would be a mistake for other people to try it or for me to recommend it; very few would succeed. Morals are an acquirement like music, like a foreign language, piety, poker, or paralysis. No man is born with them; I wasn't myself, I started poor."

We are not quite sure that the remarks of Twain are very illuminating or that they conduce very much to longevity, but they are up to the average level of those who have attained to advanced years, and who undertake to enlighten others on how they did it.—*Medicine.*

The following points and suggestions regarding the prevention of consumption, which deserve the attention of everybody, are gathered from a recent article by Dr. Knopf, of New York, which is to be found in the *Medical Record,* of November 18th, 1905.

"There are more cases of advanced tuberculosis to be treated than any other disease.

"There is no disease where so much can be done to render the patient comfortable and hopeful as pulmonary tuberculosis in the advanced stage.

"There is no disease where one case in a family can more readily become the cause of infection of other members, particularly in the stage where the consumptive begins to be confined to the close association of the family members only.

"It is extremely important to remember that advanced

consumptive patients who are able to go about, perhaps able to work at their ordinary calling in the office or factory when ignorant or careless, constitute the greatest danger to the health of the community. They must be considered as the most frequent cause of infection. The careless, ignorant or helpless consumptive when confined to bed can do little more than infect his room, but the advanced patient able to follow some calling can, if he is careless, scatter 7,000,000,000 bacilli every day with the greatest ease.

"Of all tuberculosis patients he should be the most carefully instructed, and should be most deeply impressed with the fact that carelessness in the disposal of the sputum is dangerous to himself as well as to his neighbors.

"As yet people generally have not been educated up to the point at which they are willing to carry and use a pocket flask or cardboard purse. Being desirous to conceal their condition, they are extremely reluctant to do anything which would call attention to their infirmity. Some way less likely to cause remark must be found. Probably the best that can be done in the meantime is to suggest that tuberculous men should have two pockets lined with some material which can be easily cleaned, and that they should carry in one of these pockets very cheap handkerchiefs, or bits of cheesecloth, or other cheap material cut like handkerchiefs, which when used can be put into the other pocket and there kept until the close of the day when they can be easily destroyed or sterilized by boiling after their return home. In this way they can escape observation, and at the same time secure their fellow-workmen and associates against danger. When so simple a precaution as this, and one so easily within the reach of every right thinking man, is available, not to make use of it would seem to be little less than criminal neglect."

Youthful Marriages in Manitoba.

A marriage license recently reached the Department of Agriculture at Winnipeg from a Galician settlement, which gave the ages of both contracting parties as only twelve years, and as a result the legislature passed a bill amending the marriage laws so that no one can marry under twelve, and up to the age of eighteen the consent of the parents must be received.

It is wrong to perform any radical operation for an ulcer of the tongue without preliminary microscopical examination. Clinical symptoms, no matter how typical, are often misleading.—*American Journal of Surgery.*