

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

THE CANADA MEDICAL RECORD.

Vol. XI.

MONTREAL, FEBRUARY, 1883.

No. 5

CONTENTS.

ORIGINAL COMMUNICATIONS.

The Chloral Hydrates..... 97

PROGRESS OF MEDICAL SCIENCE.

The Indications for the use of Digitalis, 97.—Boracic Acid for Ringworm, 99.—Carbolized Iodoform, 99.—The Doctrine of Desquamation, 100.—Eczema of the Genitals, 100.—Iodide of Potassium in Frontal Headache, 100.—On the Curability of Acute Tuberculosis, 101.—Calcium Sulphide in Suppuration, 104.—Constipation, 104.—Catarrhal Conditions—Insufflation of Medicated Powders, 104.—The Effect of

Thread and Round Worms upon Children, 104.—Urticaria, 105.—Atropine in the Treatment of Epilepsy, 105.—Treatment of Membranous Dysmenorrhœa, 106.—Puerperal Fever, 106.—A Simple Means of Checking Pulmonary Hemorrhage with Shawl Straps, 106.—Quinia in Excessive Sweating, 106.—The Rational Treatment of Menorrhagia, 107.—Treatment of Varicose Ulcers of the Leg by Levigated Sub-Nitrate of Bismuth, 108.—Treatment of Nocturnal Earache in Children, 109.—Treatment of Chronic Abscesses by Injections of Alcohol, 109.—Rule for Examination of

Urine, 110.—The Causes and Treatment of Pruritus Vulvæ, 110.—Neuro-Dynamic Medicine, 111.—Venesection in Heart Disease, 112.—Irrigation of the colon, 113.—Convulsions in Children..... 114

EDITORIAL.

The Collective Investigation of Disease, 115.—Adulteration of Brandy, 117.—Tubercle-Bacilli in Urine, 117.—Personal, 117.—Obituary, 118.—Wood's Library of Standard Medical Authors for the year 1883, 118.—Reviews, 118.—The Duration of Isolation of Subjects of Contagious Diseases..... 120

Original Communications.

THE CHLORAL HYDRATES.

By JOSEPH BEMROSE, F.C.S., Lecturer on Practical Chemistry, Medical Faculty Bishop's College.

For a number of years one of these anæsthetics has been prescribed by physicians and dispensed by druggists under a wrong name. When Liebreich introduced the "Croton Chloral" into medical practice, it was supposed to have—owing to an error in the hydrogen estimation—a composition agreeing with that of the trichlorinated aldehyde of crotonic acid; the mistake was discovered by Krämer & Pinner in 1876; and in the *British Medical Journal* of February 12, 1876, will be found a report of an article by Liebreich from the *Deutsche Med. Wochenschrift*, wherein he states that the compound is really a butyric chloral.

To show clearly the relation existing between the acids—acetic, crotonic and butyric—and their aldehydes and tri-chlor derivatives we may formulate them as follows:—

Acid.	Aldehyde.	Chloral.
Acetic CH_3COOH	CH_3COH	CCl_3COH
Crotonic $\text{CH}_3(\text{CH})_2\text{COOH}$	$\text{CH}_3(\text{CH})_2\text{COH}$	$\text{CCl}_3(\text{CH})_2\text{COH}$
Butyric $\text{CH}_3(\text{CH}_2)_2\text{COOH}$	$\text{CH}_3(\text{CH}_2)_2\text{COH}$	$\text{CCl}_3(\text{CH}_2)_2\text{COH}$

The hydrates of the first $\{\text{CCl}_3\cdot\text{C}(\text{OH})_2\text{H}\}$ and of the third $\{\text{CCl}_3(\text{CH}_2)_2\text{C}(\text{OH})_2\text{H}\}$

of these chlorals only are in use in medical practice; and although this has been pointed out many times since 1876 we still find the latter more frequently prescribed by the wrong name, Croton Chloral Hydrate, than by the right one Butyric (or Butyl) Chloral Hydrate.

Progress of Medical Science.

THE INDICATIONS FOR THE USE OF DIGITALIS.

Dr. J. Milner Fothergill, in a paper published in a recent number of the *Glasgow Medical Journal*, says, touching the use of digitalis:

The correct use of this potent remedy—invaluable in certain cases of lack of power in the heart—is scarcely as yet general. Old established views take a great deal of uprooting; and yet they must be uprooted before new views can be built up in their place on the same ground. Digitalis was long regarded as a cardiac sedative, "the opium of the heart," because it rendered the heart's action slower or less tumultuous. Slower, certainly, in those cases where the rapidity is due to the action of an irritable muscle; irritable, because becoming exhausted. But when the rapidity of the heart's action is due to nervous disturbances the digitalis is useless, or very nearly so. Digitalis then is not useful "because it slows the action of the heart." This is an error. In many cases it exercises no action worth estimating upon the rapidity of the heart's contractions. While in others it is of the greatest service when the action

of the heart is not accelerated before its administration, nor slowed while the good effects are being felt. "Less tumultuous," most certainly, in many cases. Where a heart is laboring hard, yet accomplishing little—when the muscle is doing its best to the utmost of its power, but is heavily handicapped—then digitalis will usually calm its action, not, however, by any sedative effect, but by increasing the vigor of the cardiac contractions. In other words, it may be said that digitalis achieves the more complete emptying of the ventricle at each systole; and that is what is wanted in these cases.

Now, sometimes digitalis will both slow the heart's action and do away with palpitation at one and the same time. This is most commonly seen in simple dilatation of the left ventricle, without necessarily any valvular lesion; the mitral valve may leak, but not as the result of any distortion of the valve curtains, but rather the ostium has stretched with the yielding of the heart-muscle, and the valve curtains become insufficient to close the ostium completely on the contraction of the ventricle. Such a condition is common where the dilatation has taken place too swiftly for the valve curtains to stretch *pari passu* with the yielding of the muscle. Here digitalis is usually of priceless value. But its utility will be greatly enhanced here by putting the patient at complete rest; which means strictly confined to bed—just as much as if the case were one of broken thigh.

"Digitalis is to be given in mitral disease, but withheld in aortic disease," is a rule of thumb driven into the student's mind, like a nail into a plank, by some teachers. Well, as a broad rule it is well enough; digitalis is usually of service in mitral disease; but how about aortic disease? When a fairly hypertrophied left ventricle is struggling against a contracted aortic orifice, but not quite successfully, how about digitalis? The system is suffering for want of arterial blood because the ventricle is unequal to driving a *sufficiency of blood through the narrowed ostium in the normal time* to keep the arteries full. Here digitalis often acts most potently, indeed furnishes the most brilliant illustration of its properties. By increasing the vigor of the driving power—the ventricular contractions—the normal amount of blood is pumped into the arteries in the normal time, and tissue nutrition is improved every where, including the structures of the heart itself. Or aortic regurgitation is dilating the left ventricle too swiftly for hypertrophy to be built up to arrest the dilating process; what is the value of digitalis here? Simply inestimable. It arrests the dilating process! the ventricle recovers its size, and, with that, much of its vigor; the muscle is better nourished, and then that compensatory hypertrophy is built up which often enables the patient to pursue an active life for years.

Certainly, on the other hand, both in aortic stenosis and aortic regurgitation, while the muscu-

lar compensation is complete and sufficient, and the patient is fairly well, there is no good end to be attained by giving digitalis. We do not give digitalis because there is valvular disease present, but when the system is suffering in consequence of the said valvular lesion. The digitalis has no influence upon the injured valve. But it is of mighty service when the muscular hyperplasia, which compensates the valvular defect to a great extent, is not provided by the powers of nature. By the aid of digitalis the natural powers will often be enabled to surmount the difficulty and secure a muscular growth, or hypertrophy, which is practically compensatory. Such compensation by muscular hypertrophy is most perfectly seen in aortic stenosis. And on this hangs the good prognosis of aortic stenosis.

It is quite clear that under these circumstances the action of digitalis is powerfully aided (1) by rest, reducing the demand upon the heart; (2) good food to aid in nutrition of the tissues; and (3) iron as a hematic. In mitral disease the effect of digitalis upon the right ventricle often leads to most satisfactory results.

Now, when we come to discuss the effects of digitalis upon the right ventricle, there is something more to be considered than the heart merely. There is the respiration! Ordinarily we breathe eighteen times per minute or thereabouts. There are about two hundred and fifty inches of "residual" air in the thorax, and the act of respiration takes place normally about eighteen times per minute. By such "tidal" air the "residual" air is kept fairly pure. But when the thoracic space is encroached upon either by (a) air in emphysema; by (b) connective tissue in cirrhosis; by (c) diminution of the caliber of air-tubes from thickening of the bronchial lining membrane; or (d) by engorgement of the blood vessels in mitral disease, then the respiration must be more frequent in order to keep the residual air fairly pure. The stimulus to respiration is the effect of venous blood, laden with carbonic acid, upon the respiratory center in the medulla.

When there is an excess of carbonic acid in the blood circulating in this center, then the respiratory efforts are increased in vigor until the excess of carbonic acid is got rid of. Now, when the right ventricle is embarrassed, it is not usually enough to give digitalis to increase the energy of the contractions of the right ventricle. Though, of course, all medical men of much experience have met with striking illustrations of the almost magical effects of digitalis in the pulmonary engorgement of mitral disease; many also can tell of cases where digitalis failed to afford relief under these circumstances, or even increased the respiratory embarrassment. Now, my rule for some time past has been, under these circumstances of mitral lesion, no matter what form, with embarrassed respiration, to give strychnia, a well recognized "respiratory stimulant."

Here, the effect of the digitalis upon the right ventricle, and that of the strychnia upon the respiratory center, work together for good with most satisfactory results. The good effects of this combination are conclusively demonstrated in those cases where digitalis, given alone, fails to do good, but where the addition of strychnia at once makes a striking alteration. Inversely, when there exists any condition of lung or bronchiæ by which the respiration is embarrassed, or the thoracic space diminished, then digitalis may be added to the cough mixtures with decided advantage. Whenever the breathing is embarrassed and the radial pulse feeble, while the contractions of the heart are vigorous upon auscultation—a condition which tells that the right side of the heart is laboring—then digitalis may be given with a respiratory stimulant, as ammonia, or nux vomica, or both, to the great relief of the patient. Usually, that is. Of course, if there be anatomical changes which forbid real relief, then the effects are less palpable. The proper relation of digitalis to stimulants of the respiratory center is a matter not understood as generally as is desirable.

The indication then for digitalis is not a murmur in the heart, nor a certain form of valvular lesion, nor tumultuous action, nor yet rapidity of action, but, as Rosenstein has put it, whenever it is desirable "to fill the arteries and empty the veins." That is the impression which each student of medicine should form in his mind as to the action of digitalis. If he would do so, the doubts which otherwise may beset his mind in the exigencies of practice will not often embarrass him. To remember Rosenstein's axiom will serve him well many a time and oft, when in doubt as to what to do—to give or withhold digitalis. Say it is a case of aortic regurgitation: if the arterial system is well filled then digitalis is contra-indicated; but if the wall of the heart be yielding in the later stages, then surely it ought to be given. In almost all cases of mitral lesion digitalis is indicated. But there is another condition in which digitalis is sometimes given with injurious effects which contrast with these conditions. The hypertrophied gouty heart often palpitates when there is arteriole spasm, and the larger arteries are tense and full of blood. The resistance offered by this full arterial system to the onward flow of the blood at the cardiac systole is such that the ventricle palpitates in its efforts to contract effectually. Such a condition is commonly seen in the "chronic Bright's disease without albuminuria;" so well described by Dr. Mahomed. Here digitalis does no good, but harm; for the arteries are already full to the risk of apoplexy. Indeed this last accident has followed the administration of digitalis under these circumstances. The full artery, then, is a contra-indication, just as much as an empty artery is an indication for the administration of digitalis, whether the heart be diseased or not.

Digitalis is a diuretic, says another: "Whenever the bulk of urine rises then I know digitalis is doing

good." Certainly, if a horse be yoked to a cart previously stationary, and after that the cart be seen moving away, it is a pretty accurate inference that the horse is drawing the cart. The bulk of urine, as Traube taught, is the index of arterial fullness. When the arteries are filled by the action of digitalis the bulk of urine is increased. The rise in the bulk of urine tells in the most unmistakable manner that the action of the drug is filling the arteries. In dropsy, when the bulk of urine is low and the specific gravity is high, then digitalis is pre-eminently useful. When albuminuria is present from venous engorgement in heart failure, the administration of digitalis will often be followed by its disappearance. As the arteries are filled the veins are depleted; the albumen, which tells of venous congestion, disappears as this state of the veins is relieved; as the arteries are filled the bulk of urine rises.

The great matter for the practitioner to remember about digitalis is, that it increases the energy of the ventricular contractions; and that the clinical indication for its administration is an empty artery. With such view before his mental vision the practitioner will rarely experience any difficulty in deciding when to give, or when to withhold the potent digitalis—potent for good or harm according to the circumstances under which it is prescribed.

In cases of cerebral anemia digitalis may often be prescribed with advantage when it is desirable to raise the blood-pressure within the arteries.

BORACIC ACID FOR RINGWORM.

℞ Acid. boracic., gr. xx;
Alcoholis, fʒj;
Ætheris, fʒj.

Sig.—To be forcibly rubbed into the affected parts of the scalp three times, daily with a rag or moderately stiff brush. The head also to be thoroughly washed each morning with soap and hot water.—CAVAFY.

CARBOLIZED IODOFORM.

The following formula is given by C. Sherck (*Berliner Klin. Wochenschrift*) as a great improvement over plain iodoform:

℞ Iodoform., 10 gr.;
Acid. carbolic., .05 gr.;
Ol. menth. pip., 2 drops.

The acid is to be rubbed up with the iodoform, and the peppermint oil added subsequently. The disagreeable odor of the drug is completely covered, and it is not again developed, even at an elevated temperature.

THE DOCTRINE OF DESQUAMATION.

There is hardly any disease in regard to which diagnosis is at once so difficult and important as scarlet fever. All authors agree in saying that almost every prominent symptom of it may be wanting. All the symptoms of the earlier stages may either be absent or may be overlooked—sickness, sore-throat and rash. And even the temperature, judged by one or two observations, may be below 100°. All authorities describe, and all practitioners are familiar with, cases in which no suspicion of diseases exists until the occurrence of desquamation, in circumstances which leave no doubt that it is only a part of scarlet fever. But surely desquamation itself is also a most variable process, so variable as to excite a good deal of opinion on it, which undoubtedly exists. It may be almost entirely absent, it may occur out of proportion to the amount of rash, it may be long delayed or it may extend over a very variable period. The recent correspondence was based on the case of a boy at a large public school near London, whose scarlet fever was detected only by close observation, the amount of rash being small, and the whole attack unusually light. The medical officer of the school gave his sanction for the boy returning home three weeks after the attack, who never had any sign of desquamation. The father having other children at home during the Christmas holidays who had not had scarlatina, naturally felt afraid, and wisely (we presume with due precautions for the boy and others) removed him to an infirmary specially intended for such cases. Between two and three weeks later, and six weeks from the commencement of the attack when the boy should have returned to school, he was found by a practitioner to be peeling. The medical man of the school considered the peeling to be unconnected with the attack which he had at school, and to be due to eczema. The father of the boy associated it with the attack that had been so well diagnosed at school, and saw in it a justification of his caution in not allowing his son to return home. The majority of authorities will be disposed to agree with Dr. David Page, that patients recovering from scarlet fever may have their desquamation much deferred, and that certainly they are not desirable as members of society for at least eight weeks. This is very hard, especially in cases where the disease is slight, where there is no sense of illness, and but slight or no appearance of desquamation, but it is sound doctrine. The precautions may be excessive, but the case is one for great caution. Still it must be admitted that even among authorities there has been a variety—not to say looseness—of teaching which goes far to explain, especially in connection with the acknowledged variations in the process, the view taken by the medical officer of the school. Let us notice only a few that are at hand. Trousseau says: "Desquamation in scarlatina is not very well understood by the majority of physicians."

He instances a case in which, though at the seventy-second day, it was still going on. Trousseau would have been apt to regard even Hebra as unsound, for Hebra speaks of desquamation as ending at the "end of the third week." Dr. J. Lewis Smith, a very good observer, of New York, speaks of desquamation as succeeding the disappearance of the eruption and occupying "several days." Mr. Malcolm Morris says it begins in the latter part of the second week, but may commence as the rash fades, or not until the end of the sixth week. Dr. Bristowe says the period of desquamation is of various duration. "It is sometimes completed in one or two days, not unfrequently extends over a week or two, and occasionally is prolonged for several weeks." Whether difference of opinion is sound excuse for difference in practice, the variety in the process itself and the occasional instances in which it is deferred indicate the safety of a rule of exclusion of at least six weeks, and if possible eight. Parents and patients will often rebel against this hard doctrine, but, considering the gravity of the disease, it is a safe one for medical men to hold. A correspondent reminds us that all desquamation is not scarlatinous. He described one case in which it seemed to result from the administration of turpentine for hematuria. This suggestion is one to be remembered, when sanitary law and professional duty in connection with desquamation are often both delicate and difficult.—*Lancet*.

ECZEMA OF THE GENITALS.

Devergie recommends:

℞ Alumin., 10–20 grammes;
Aque, 500 "

Or the following:

℞ Hydrarg. chlorid. corrosiv., 10–20 cgrm.;
Aque destillat., 500 grammes,

in solution, applied three times a day.—*La France Médicale*.

IODIDE OF POTASSIUM IN FRONTAL HEADACHE.

Dr. Haley states, in the *Australian Medical Journal*, that for some years past he has found minimum doses of iodide of potassium of great service in frontal headache. A heavy, dull headache, situated over the brow, and accompanied by languor, chilliness, and a feeling of general discomfort, with distaste for food, which sometimes approaches to nausea, can be completely removed by a two-grain dose dissolved in half a wine glass of water, and this is quietly sipped, the whole quantity being taken in about ten minutes. In many cases the effect of these small doses has been simply wonderful. A person who, a quarter of an hour before, was feeling most miserable and refused all food, wishing only for quietness, would now take a good meal and resume his wonted cheerfulness. The rapidity with which the iodide acts in these cases constitutes its great advantage.—*Boston Journal of Chemistry*.

ON THE CURABILITY OF ACUTE TUBERCULOSIS.

By OCTAVIUS STURGES, M.D., Physician to Westminster Hospital.

The case I propose bringing forward involves a curious problem of practical medicine in the nature of a dilemma. Acute tuberculosis is represented to us from the anatomical point of view as a disease which is uniformly fatal. At the bedside, however, we meet with examples, undistinguishable from acute tuberculosis, which nevertheless recover. Are we to say of these that our diagnosis has been in error, or that the statement of the uniform fatality of acute tuberculosis is not without exception? Is it more probable that the diagnosis is wrong or the treatment curative? If the diagnosis be an error how may such errors be avoided in future? If it be the treatment that makes all the difference, in what manner is such treatment to be employed, what is the evidence of its efficacy, and to what stage of the disease does it apply? I need not say that questions like these are of the highest practical interest. They are so from the pathological side, owing to the very intimate likeness between acute tuberculosis and enteric fever. They are so still more from the treatment side, owing to the assertion of some that the hypophosphites of lime and soda are directly curative of acute tuberculosis.

Now the case shortly summarised from the notes of Mr. Butler, clinical clerk, is as follows:—

George C—, aged sixteen, a well nourished youth, but of tubercular aspect (his mother being consumptive, and two of his maternal aunts having died of acute phthisis), was admitted on May 31st. Just a month before, he had been standing at a pier-head when heated from fast running, and in that way, as he supposed, caught cold. Shivering came on the next day, and he kept his bed for a fortnight, being "very ill;" the chief symptoms were coughing, with much expectoration, repeated nose-bleeding, and profuse sweating, especially at night. At the end of the fortnight the boy improved sufficiently to get up. He had lost much flesh during his illness, and his cough and sweating continued. As soon as he could bear the journey he came to hospital, where he was admitted at the date mentioned. When first seen the patient's aspect and pose indicated extreme depression, and there was that blush on his cheeks which, taken together with his lustrous eyes and long lashes, would suggest to the observer, other things being excluded, acute tuberculosis. The temperature was 104.2° on the first night (for the next eight days the highest daily reading reached or exceeded 104°). The tongue was furred; bowels confined. Pulse about 100. A very careful examination of the lungs discovered large bronchi merely, no dullness; no small bubbling; no physical evidence of any kind, except of bronchial flux; the sputum bronchial and uncoloured. Such was his condition on admission, and so it continued for

fourteen days; a condition, namely, of extreme depression, temperature ranging daily between 102° and 104.6°; absolute loss of appetite; sleeplessness, night-sweating, and wearing cough, with mucous expectoration, sometimes blood-streaked; the bowels being confined (except for one occasion, when they acted copiously after medicine), and the pulse seldom much exceeding 100. But what was the most striking and the most suggestive, or, as it seemed, probative of the diagnosis of tuberculosis, was that with the progress of time the patient rapidly wasted. That and the profuse sweating and prostration were the main features of the case, yet still with no more positive physical signs than those mentioned. Between the sixth and the twelfth days from admission the prostration was so extreme that it was only with great difficulty he could be raised, or indeed moved, for the purpose of examination. Yet, with an eye to possibilities, attention was continuously directed to the lungs, and it may be said positively that although bronchitis persisted, and some small bubbling was audible for a time at the left base, there was never any sign of consolidation or pneumonia. Howbeit, on the fourteenth day from admission (which would be six weeks from his first seizure and a month from the time when he had a temporary mend) signs of improvement were observed in that the night temperature fell from 104° to 103°, and the bodily weakness was less. From that day to the nineteenth a continuous progress began to open out hope of ultimate recovery. By the twenty-second day (making sixty-two days from the commencement of illness) that hope became almost assurance. The temperature had gradually fallen, and was now hardly above normal, the wasting and sweating had ceased; and, above all, the extreme bodily prostration had disappeared. With this marked improvement the catarrhal sounds within the lungs underwent but little change, and on the twenty-eighth day, when he was up and convalescent, some bubbling bronchus was audible at both bases. During the extremity of his illness it was impossible to take his weight; the only measure of the loss of flesh, therefore, is quite inadequate to express the fact. Before his illness he weighed 7st. 10lb.; on the twenty-seventh day after admission, and when approaching convalescence, he weighed 6st. 8½ lb.; a week later he had gained exactly 4lb. As regards treatment, all that it is necessary to say now is that on the 7th of June, when near his worst, and seven days before he began to mend, the boy was given ten grains of hypophosphite of soda every four hours, and this was continued for the rest of the acute illness.

In the main features of this remarkable case there are, as I think, to be found some important practical lessons—facts which are too little recognized and probabilities which are too easily set aside. Take first the fact itself. Better than all theories or precarious deductions is the knowledge which this case gives that in a tubercular subject

a pyrexia of indefinite duration, which entails such wasting as almost to reach the point of emaciation, and is attended by profuse night sweats and extreme prostration, is a condition which may and which does recover. Let it be enteric fever or acute tuberculosis, or what you will, this combination of symptoms, grave as it is, as a rule fatal as it is, is not absolutely hopeless. That made certain, many other questions press for consideration. What are the probabilities in regard to diagnosis, and how are these affected by the fact of recovery? What are the particular circumstances of these recovering cases as to treatment? What is the likelihood that we may ever succeed in making recovery more common?

It has been said—the expression indeed is attributed to a very sagacious physician of our day—whenever you have to deal with pyrexia of anomalous character, the other symptoms not fitting in with any recognized pattern of disease, always put to yourself this question: "Have we here to deal with enteric fever?" But this admirable hint, so serviceable to prevent grievous errors, is not to be twisted from its real meaning. Some would put it not as a question to be deliberately decided yea or nay, but as an affirmation. Here is a pyrexia with anomalous symptoms. I cannot fit it to anything in particular; I will call it enteric fever, an affection which has so many forms that it may be fitted to anything.

Only just now, while I am speaking, we have an illustration at hand of the errors that may be committed and the valuable clinical knowledge that may be overlooked by such conduct as this. A patient in Burdett ward, with symptoms corresponding in many respects—in aspect, in temperature, in nervous prostration, in the color and consistence of the motions—with enteric fever gets, too easily, credited with that disease. And if by any accident she had passed from our notice in the second or the third week of illness, her precise condition would take its place in our memory as a contribution toward the full conception of the many ill-defined modes of enteric fever. But it so happened at the end of the fourth week she died, exhibiting post mortem, not enteric fever, or any trace of it, but the most characteristic and extensive ulcerative endocarditis.

In the case before us, however, there is not the same excuse as in the other—nay, the same necessity, we may almost say—for making use of enteric fever to eke out a doubtful diagnosis. Except for febrility, this youth had nothing of enteric fever about him, either in his symptoms or in their duration. We put the question as we are advised, and we answer it without hesitation in the negative. Be it what it may, the disease we have before us is not enteric fever. Proceeding, as is the custom in such cases, upon the principle of exclusion, that alternative, at all events, may be dismissed. But may we not go further, and say of this boy not only that his illness was *not* enteric fever, but that it *was*

acute tuberculosis? Remember that while acute tuberculosis is very commonly mistaken for typhoid fever, the converse of this is not true. We have here the proper tubercular symptoms clearly marked out from the rest, symptoms which have been met with repeatedly in connexion with grey miliary granulations. There seems hardly room for mistake. Only when we are confidently expecting the boy's death, he disappoints that expectation and recovers.

Is, then, the fact of recovery to negative the diagnosis of acute tuberculosis? Of the actual deposit of tubercle it may indeed. No one, I suppose, believes that these little bodies may be thickly strewn throughout the lung in the way that we find them and the patient nevertheless recover. But there is much reason for believing that we may approach—who shall say how near?—to that pathological event and then stop short; just within the boundary, it may be, which separates extreme peril of death from the absolute certainty of it.

Did time serve I could adduce much evidence to prove that the condition we recognize clinically as acute tuberculosis is not necessarily fatal, whether occurring in youth and tending toward the lung (yet with no admixture of phthisis in the sense of lung destruction), or occurring in childhood and tending toward the pia-mater. We get the very same group of symptoms in cases that are exceptional in that they recover, as in cases that form the rule in that they die; and, moreover, the earlier in life the observation is made—the nearer we get to that period when tuberculosis is seen, so to speak, in perfection—the more does it appear that individuals may exhibit all the symptoms, not only premonitory of tuberculosis, but which are commonly believed to announce it, and then when the diagnosis is complete, and the prognosis seems certain, turn round and recover.

But I would ask you to look at the matter upon a somewhat broader ground. The recovery from tuberculosis, meaning by that term the clinical phenomena commonly supposed to be indicative of the deposition of miliary tubercle, so far from being rare, is a matter of frequent experience. What is rare, although less rare, I believe, than seems owing in great measure to the habitual invocation of enteric fever, is its recovery when it has passed a certain stage. We all know and teach that children of a particular conformation, whose scalps sweat at night, who grind their teeth and but half close their eyes in sleep, and so forth, are especially prone to tubercle and to death by meningitis. We advise that particular care should be taken to preserve such children from cold, from foul dwellings, from over mental application; and we insist that the first signs of pyrexia or sickness, signs insignificant with other children, need immediate attention with them. Yet, in spite of all our precautions, or for the want of them, such children get pyrexia more often than others. A certain proportion—the most tubercular, if we may so speak—will inevitably

die; the rest will die or not, according to the care that is taken of them, the food they get, and the place where they live. But hardly any, until the time of their special liability is over, will escape attacks in which they will be pyrexia and waste, and show symptoms, cerebral and other, which are often absolutely indistinguishable from those that usher in a fatal meningitis.

Still more striking is the case of young adults who are tubercular. With these we know that the chief danger is not for the brain, but for the lungs; and we have strong hope that if we can tide them over the period of youth later manhood will give them comparative security. But how is it with them during this time of jeopardy? Much more than with the little children, it is apparent that they will live or not, according as their circumstances are ordered; that their life depends, that is to say, upon the conditions of living being made the easiest for them. A young man of tubercular tendencies (I am quoting from the fact) wastes, and sweats, and coughs, but with nothing discoverable in his chest beyond bronchial catarrh. Soon he is too weak to leave his room. He is advised to take a sea voyage, and to remain for a year or more in New Zealand. There he loses his cough and his weakness, puts on flesh, takes to an active out-door life as a sheep farmer, and presently, as is but natural, pining for his home and his old profession, and believing himself perfectly recovered, he returns to England. Again there are the wasting, the cough, and the depression; and this time the symptoms are so threatening that there is grave doubt whether he can be got on board ship, or whether in his extreme state a long journey is justifiable. But once more away from the country which is not liveable for him the threatening symptoms disappear, and his health returns.

Who then, I ask, will venture to say or to write in a book to what particular stage in the tubercular fever (so to call it) all expectation of recovery is cut off; or rather let me say, not so much expectation as possibility? It would of course be a grotesque misrepresentation of nature to pretend that such a case as ours in Burdett ward is not highly exceptional; or that with such symptoms any other result than death is to be looked for. But who is to draw the line between recoverability and irrecoverability? who is to say what particular phase or event in the clinical history represents the actual development of tubercle and seals the doom of the patient? We have ample justification, I contend, in laying down as true this proposition, in youth as well as in childhood threatened tuberculosis recovers. We can tell when such recovery is to be looked for; we can tell when it is highly improbable; we can hardly tell, certainly we cannot tell precisely, the point at which it becomes absolutely impossible.

But there is another point for consideration. Tubercular individuals, children at all events, will present the clinical symptoms of tubercular menin-

gitis, and die in the usual way, but by post mortem neither tubercle nor inflammatory exudation will be discovered. We have to reckon, then, with the following facts, and to make out of them the best hypothesis we can. There is a certain set of symptoms by means of which acute tuberculosis is commonly recognised at the bedside. Such symptoms commonly end fatally, and after death grey granulations are found in certain situations. But to this rule there are two kinds of exceptions. One where the symptoms in question do not end fatally; the other where, although ending fatally, no trace of the grey granulations is to be found.

What, then, is the hypothesis—I mean the working provisional hypothesis, which best fits this state of facts? I think it is this: Acute tuberculosis regarded from the clinical point of view is to be distinguished from the actual deposition of tubercle regarded as an anatomical fact. The early symptoms of acute tuberculosis are those which precede the actual development of the grey granulations. This latter event, analogous in some respects to the eruption of a specific fever, is preceded by certain phenomena extending over a variable period of time, during which restitution is still possible. And while, on the other hand, the deposition of tubercle marks the termination of hope, on the other the stress of the premonitory fever which precedes that occurrence may of itself suffice to produce death.

But here the therapeutist steps in, and clearly there is a place for him. If his experience be large, it will furnish him with examples which will easily push aside the assertion that the acute tuberculosis which seems to recover is in fact not what it seems, but enteric fever, or something else. He has, then, only to appeal to the dogma that acute tuberculosis, pursuing its natural course, is necessarily fatal in order to reach the position he desires—the doctrine, namely, that the cure of this disease is accomplished through the agency of the hypophosphites of lime and soda. My own practice with reference to such drugs is this. In the belief that they are at least harmless, that they are commended for a class of affections very bare of remedies, and where some medicinal treatment or other is reasonably expected on behalf of those who are acutely and progressively ill. I have uniformly given the hypophosphites in every case of acute phthisis or acute pulmonary tuberculosis that has been under my care for many years. Without being at all struck with the effects of a remedy very highly commended in some quarters, I can certainly quote instances where the hypophosphites have been so far injurious that patients have improved on there being discontinued. In the present case ten grains of the hypophosphite of soda were given every four hours, commencing a week after the patient's admission. His worst and weakest time, you will remember, was the week succeeding. How far this is consistent with any curative power

of the hypophosphites I leave you to determine. For myself, I believe that when cases like this one of ours are more widely recognised; when the fact of recovery is admitted not only by those who profess to have brought it about, but by others as well, who are prepared to note all the circumstances under which it occurs—when that time comes the curability of tuberculosis will be found to depend not upon the hypophosphites or any other preparation of pharmacy, but upon the employment of those agencies for its cure which are suggested by the causes that provoke it. Is there no therapeutical teaching in the fact that the tuberculous children of the poor develop tuberculosis as the rabbits do by living in impure air and damp underground cellars; or the fact that a youth of tuberculous family will escape the fate of his brothers and sisters, and the fate that over and over again has threatened himself, by removing to some better country?

Those who are the most firmly persuaded of the incurability of acute tuberculosis will not deny that there are certain well-recognised signs by means of which the tuberculous are distinguished from the rest of the community; they will not deny that there are certain localities and certain modes of living the least hostile, each for each, to the lives of such persons, and that by having recourse to such places and plans the life that is repeatedly menaced during childhood and youth may reach a healthy and secure manhood. But why need we stop here? I firmly believe that the time will come when what everybody admits will no longer be applied partially, but carried out to its full conclusion; and when it comes patients suffering like this boy whose case we have been discussing will be removed, wherever feasible, from their town surroundings, and placed without delay or fatigue in the best possible conditions for recovery upon some hill or mountain top, or, at all events, in the pure air of the country.—*Lancet*.

CALCIUM SULPHIDE IN SUPPURATION.

Dr. A. H. Smith (*New York Medical Journal*, June, 1882), after careful analysis of several cases, claims that he is warranted in concluding that in many cases of suppuration an appreciable and often marked benefit is derived from the use of calcium sulphide. At the same time the action of the drug is not perfectly uniform, and in apparently favorable cases it may fail entirely. The drug is somewhat prone to irritate the stomach, which affords an indication for small doses frequently repeated. One tenth of a grain every two hours will generally, in acute cases, secure the full therapeutic effect of the drug, but large doses may sometimes be required, and some patients bear well a grain three or four times a day. Even in small doses the drug may occasionally produce headache, and the patient be more or less annoyed by eructations of hydrogen sulphide.—*Chicago Medical Review*.

CONSTIPATION.

When constipation is due to torpor of the muscular layer of the intestine, combined with defective secretion of the mucous membrane, Dr. Bartholow uses either of these formulæ: ℞. *Tr. nucis vomicæ*; tr. *belladonnæ*; tr. *physostigmæ* aa. f. ʒ ʒ ij. M. Sig. Thirty drops in water, morning and evening. Or, ℞. *Ex. physostigmæ*; *ex. belladonnæ*; *ex. nucis vomicæ*, aa. gr. v. M. Et. ft. in. pil. No. x. Sig. One pill at bedtime.—*Medical Gazette*.

CATARRHAL CONDITIONS—INSUFFLATION OF MEDICATED POWDERS.

According to Dr. D. H. Goodwillie, New York, the following powders have been found most useful:

Number 1.—℞. *Benzoicæ*, ʒ ʒ; *morphiæ mur.* gr. vi.; *bismuthi subnitrat*; *potassi nitrat.*; aa ʒ ss.

Valuable for its sedative action. To be used in hyperæmic conditions, with pain. In the beginning of an attack of rhinitis coat the mucous surface with it.

Number 2.—℞. *Aluminis*, ʒ ʒ; *acaciæ*; *bismuthi subnitrat*; *potassi nitrat.*, aa ʒ iv.

Useful where a strong astringent is indicated. In case of hæmorrhage from the nose, remove all the clot, and immediately blow in this powder abundantly until the bleeding ceases.

Number 3.—℞. *Iodoformi*; *camphoræ*, aa ʒ j.; *bismuthi subnitrat*; *potassii nitrat.*, aa ʒ jss.

A good antiseptic. To be used where the discharges are fetid, or where ulceration is present, or an excessive amount of granulations. The camphor masks the odor of the iodoform. These powders, when impalpable, and with the therapeutic integrity of these drugs preserved, can be more effectually applied to the nasal passage than spray, and their good effect is certainly more prolonged. For the general practitioner they are vastly more convenient than sprays.—*Arch. Med.*
—*The Southern Clinic*.

THE EFFECTS OF THREAD AND ROUND WORMS UPON CHILDREN.

M. Archambault recently made some clinical remarks at the Hospital des Enfants Malades, Paris, on the effects produced by the *Oxyuris vermicularis* and the *Ascaris lumbricoides* in young children. He said one of the smallest and most curious worms, the presence of which causes so much trouble to young children, is undoubtedly in the so-called "thread-worm," the *Oxyuris vermicularis*. This helminth has its abode in the lowest part of the rectum, just within the anus. It is the cause of a number of troubles, and of very severe itching, which is chiefly nocturnal, and therefore often characteristic of the presence of this

particular worm. The itching is sometimes so severe as to make children cry; it prevents sleep, and so gives rise to extreme irritation, which may bring on convulsions. This worm is also met with occasionally in adults, and has, by the intolerable itching to which it gives rise, brought on a veritable condition of hypochondriacism. Another effect, in certain cases, is an inflammation of the rectal mucous membrane, accompanied with tenesmus and muco-sanguinolent stools. In female children the worms may find their way into the vagina, and so bring on a vulvitis, more or less intense, with secondary effects which are most undesirable. Thus, although the presence of these minute worms is not in itself dangerous, yet the secondary consequences may be really grave. Their treatment is as follows: Administer an enema, for five or six consecutive evenings, of lime-water; if this is not sufficient, add—as Dr. West advises—a little perchloride of iron, and the worms will be almost certainly destroyed. Or a mercurial suppository may be tried if the enemata do not succeed. It is very desirable that the enema be properly administered, and in sufficient quantity; it should pass up as far as, or even beyond, the sigmoid flexure, so as to dislodge any worms which may have crept up beyond their usual site. As regards the lumbrici, it may be said that they are harmless (*asæz innocents*); it is only when very numerous that their presence becomes dangerous. M. Archambault was once called to see some children who had just arrived from Brazil, and who had been taken ill with convulsions, vomiting, and diarrhoea. Finding in the stools a number of these round worms, he ordered calomel and santonin. An immense number of worms was passed—"it would be no exaggeration to say that the three children in three days passed a hatful of these helminthes." There are so many other anthelmintics than those just mentioned, that the physician's chief difficulty is the *embarras du choix*.—*Medical Times and Gazette*.

URTICARIA.

H. J., 18 years. Here is a young lady who comes to us suffering from "the hives." Here, upon the forearms, you see these large, red blotches, each with a pale or whitish centre, no regularity as to distribution, but lying close together on some parts of the limb, while upon the hand, considerably removed from the others, are more patches. They are quite prominent, and give rise to a most exasperating sensation of burning and itching. Even now you see she cannot refrain from scratching the parts. Both arms and hands, and the face as well as neck, are involved. Doubtless the body and lower limbs share the affection in turn. There is never any difficulty in recognizing the disease, the wheals are so characteristic. In no other disease do we find wheals appearing

suddenly, and, after remaining a varying time, disappearing as rapidly and mysteriously as they came. It is a most common difficulty, and the diagnosis is easily made out. But what causes it is not always so easy to ascertain. A case of urticaria or nettle rash, in which the exciting cause is unknown, is one of the most stubborn and unsatisfactory of all, and the doctor to whose lot it falls is apt to become disgusted with the study of dermatology. The exciting causes of urticaria are divisible into three heads: local irritants, a polluted circulation, and reflex irritation. Without going deeper into the subject, let me say that the first two causes are easily disposed of, and it now remains to be seen how reflex irritation is responsible. The patient yesterday morning indulged in fish for breakfast, and in the course of the afternoon felt a burning and smarting upon various parts of the body. It was not severe, however, till night, when she got warm in bed, at which time it became almost unbearable. Once or twice before fish has had the same effect upon her, but not for several years. She is of a nervous temperament, evidently, and this fact renders it all the more easy for the disease to manifest itself. My assistant tells me that just before coming into the room there was no sign of wheals, yet upon her entrance, I was able to show you some very fine specimens of them. The disease is, I feel convinced, a neurosis, not alone in the case before us, but demonstrably so in every case. The divisions I gave you a few moments ago are made for the sake of convenience only, and if the first two so-called heads be eliminated, I think that reflex action can be clearly shown to be the cause of the cutaneous phenomena in every case.

The treatment in the present case shall consist of three compound cathartic pills. Considerable constipation is present, and as no stool has been had since the eating of the fish, it will have the effect of removing the remnants of it and clearing out the alimentary canal. Locally, a lotion, as follows:

℞ Ammoniz carbonatis, 3 ss.
Plumbi acetatis, ʒj.
Glycerinæ, fʒj.
Aqz rosæ, fʒv.

M. Sig. Use as a wash, several times daily.

Without doubt our patient will obtain relief by these measures.—Clinic of Dr. F. Le Sieure Weir, reported in *Medical and Surgical Reporter*.

ATROPINE IN THE TREATMENT OF EPILEPSY.

Dr. David advises the treatment of epilepsy by the simultaneous employment of atropine and the bromides of potassium and ammonium. For a period of six months, he orders twenty grains of the bromide of ammonium—thrice daily. At the same time the patient is instructed to take a granule of one milligramme of sulphate of atropine

morning and evening. At the end of six months the following pills are prescribed :

℞ Valerianate of zinc,	4 centigr.
Extract of belladonna,	6 milligr.
Arsenious acid,	2 milligr.
Extract of gentian,	q. s.

Two of these pills are taken daily during twelve months. Should the faintest symptom of the threatened occurrence of the epilepsy appear the treatment must be kept up for yet another twelve months.—*Glasgow Medical Journal*.

TREATMENT OF MEMBRANOUS DYSMENORRHOEA.

Mr. Orsby (*New York Med. Record*) gives five cases of painful menstruation, accompanied by the shedding of flakes of membrane, successfully treated with calomel in combination with opium. His formula is as follows :

℞ Ext. opii,	gr. vi,
H' drarg. chlo. mit.,	gr. xij.

Divide in twelve pills, one to be given every four hours till the gums are affected.

He regards the known efficacy of mercury in all forms of hyperplasia, acute and chronic, as justifying *a priori* its exhibition in a complaint in which the hyperplastic element is recognized by pathologists, and his practice has completely confirmed this view. Calomel has been the only salt of mercury tried, as it produces its effects rapidly, with little irritation.

PUERPERAL FEVER.

In the *Edinburgh Medical Journal* for October is contained an interesting and short paper by Mr. John Lowé, on "Puerperal Fever: its Treatment and Prevention," in which occurs the following judicious expression of views in regard to treatment :

"I am strongly of opinion that by early and repeated aseptic intra-uterine injections, a rapidly acting cholagogue, washing out the bladder, if necessary, with some aseptic solution, and the timely and liberal use of stimulants, will avert death in many instances. It is no use giving the nurse instructions to wash out the uterus; we must do so ourselves by means of a long tube in the uterine cavity itself. Ammonia and brandy I regard as the medicines for the disease; indeed, when food is refused, brandy is not only most grateful to the patient, but is peculiarly well adapted to supply the place of ordinary food, and no amount of fever or other symptom contraindicates stimulation when changes so destructive to the vital fluids and tissues of the body are in terribly rapid progress. To give aconite or veratrum viride in such cases is, in my opinion, as unscientific as it is useless: and yet these remedies have been

vaunted and are actually used by men of undoubted ability and eminence. To get rid of a fermentative poison from the blood, we must adopt some such practice as I have indicated, and not stop to theorize about the physics of the circulation. We must, in other words, support vitality and eradicate the poison. That salicylates and sulphocarbolates taken internally do not rectify the turbid urine in puerperal fever I am convinced from experience: and I would strongly urge that all depressant remedies are both hurtful and dangerous.

The use of carbolic spray, and irrigation of the uterus and vagina with carbolic solution, immediately after labor, are considered important means for the prevention of puerperal septic poisoning.

A SIMPLE MEANS OF CHECKING PULMONARY HEMORRHAGE WITH SHAWL STRAPS.

Dr. H. Holbrook Curtis gives, in the *New York Medical Record*, a novel way of arresting pulmonary hemorrhage. Called in a case of emergency, Dr. Curtis purchased a pair of ordinary shawl-straps punched with holes a quarter of an inch apart, and braided three strands of drainage-tubing, making two cords of as many feet long. He laid a folded napkin over each femoral vein just below the fold of the groin, and adjusted the straps above the thighs as high up as possible so that the buckles would be over the napkins. The straps were tightened enough to stop the venous return without interfering with the arterial supply of the extremities. Then the arms near the shoulders were bound by the rubber tubing. The hemorrhage was checked almost immediately, and in about five minutes the straps and tubing were loosened. This was no sooner accomplished than the patient complained of a great shock to "the sore place," and the bleeding recommenced. The same procedure checked it as before. In about five minutes, the extremities becoming markedly cyanotic, the straps were loosened, a hole at a time, when no hemorrhage recurred. The shallow and difficult respiration was greatly relieved by keeping an arm and the opposite leg strapped. As soon as a member became cyanotic the strap was changed to the opposite side.

QUINIA IN EXCESSIVE SWEATING.

Dr. T. H. Currie, Lebanon, N.H., says, in *Michigan Med. News* :

For over thirty years I have used the following prescription, without a single failure, in sweats from whatever cause :

Alcohol,	℥ j.
Sulphate of quinine,	ʒ j. M.

Wet a small sponge with it and bathe the body

and limbs, a small surface at a time, care being taken not to expose the body to a draught of air in doing it. In one case a neighboring physician was poisoned while dressing a mortified finger. He suffered untold misery, and was drenched with perspiration for a number of days, and his life despaired of. When I saw him I ordered him to be bathed immediately in the above solution, and that this be repeated once in two hours. The third application stopped all perspiration, and conyalescence began at once.—*Quinologist*.

THE RATIONAL TREATMENT OF MENORRHAGIA.

Dr. Arthur W. Edis read a paper on this subject, in the Section of Obstetric Medicine, at the last meeting of the British Medical Association (*Brit. Med. Jour.*), from which we extract the following. In the term *menorrhagia* he includes all cases of uterine hemorrhage occurring in the practice of the gynecologist, whether as profuse or prolonged menstruation, or as a loss of blood from the uterus other than that which occurs at or about the time of parturition. Sometimes it acts as a safety valve, a smart attack of hemorrhage often serving to avert a still more serious effusion from the ovary, or its surrounding plexus into the peritoneal cavity, or even preventing an attack of apoplexy at the so-called climacteric period. Diagnosis is the most important element of treatment, for menorrhagia is merely a symptom, not a disease. The age of the patient will often give us a clue to the cause; cardiac complications from rheumatic fever, hæmatocele, ovarian irritation, constipation, etc., in the young; polypi, fibroids, retroflexion, retained products of conception, in the middle-aged; climacteric irregularities, cancer in its various forms, hepatic disorders etc., between the ages of forty and fifty. In young plethoric girls, when menstruation is profuse, instead of iron, which will increase the trouble, regulate the diet, limit animal food and use bromides, to lessen ovarian irritation, along with an occasional saline aperient. In anæmic patients, when iron is used it should be combined with salines in moderate doses, as a chalybeate water. In single patients, where menorrhagia is marked, and persists in spite of general treatment, an examination should be insisted upon. When the slightest irregularity in the appearance of the catamenia leads to the suggestion of the possibility of pregnancy, any attack of menorrhagia, and especially if it recur, should be regarded as a threatened miscarriage and treated accordingly. When uterine hemorrhage is severe, whether from imperfect expulsion of an early ovum, intra-uterine polypus, submucous fibroid tumor, or other similar conditions, in place of attempting to restrain the flow by linen or cotton packed in the vagina, a far more rational and scientific method will be to insert a sponge tent into the cervix uteri. This will check the

hemorrhage and dilate the cervix to facilitate subsequent examination. Hæmatocele is a frequently overlooked cause of menorrhagia, as is also extra-uterine gestation at an early stage.

If hemorrhage be severe and continuous, and the probability of extra-uterine gestation exist; the patient's life being evidently jeopardized by the amount of effused blood withdrawn from the circulatory system, the only hope of saving the patient is to make an exploratory abdominal incision, secure, if possible, the bleeding vessel, or remove the ruptured cyst, as may be found advisable.

Retroflexion, accompanied by congestion of the uterus, in patients who have borne children, is not an unfrequent cause of menorrhagia. A correct diagnosis is here essential before treatment is likely to prove of service. The two conditions are often so intimately associated that, unless both of them be dealt with simultaneously, permanent relief is not obtained. The misplacement serves to keep up the congestion, and the latter equally tends to prevent the uterus from assuming its normal position. Puncturing, scarification, or the application of leeches, followed up by hot water injection and glycerine plugs, may first be tried, to lessen the congestion, a ring pessary, or other appropriate support, being then inserted, to keep the uterus in its normal position, and thus lessen the tendency to a recurrence of the congestion.

The management of hemorrhage, due to large intramural or submucoid fibroids, is one often of much difficulty. Where ergot, bromides, cannabis indica, gallic acid, digitalis, and other similar remedies, fail to arrest the flow, and the patient's health is markedly affected by the repeated or severe losses, the question of spaying, division of the cervix uteri, or removal either of the fibroid or of the entire uterus, should certainly be entertained. The results obtained during the last few years by operative interference in the cases are most encouraging, and the operation well deserves more extended trial. No patient, the subject of uterine fibroid, where the symptoms are so severe, as to impair her usefulness or threaten her life, should be allowed to die unrelieved, without having the option of operative interference.

Vascular disturbances at the climacteric, or change of life, as it is popularly spoken of, should never be treated lightly, but always carefully investigated.

In some instances, regulation of the bowels, restriction as to diet, especially the amount of alcohol, and a proper amount of out-door exercise, will be all that is requisite. In others, the hemorrhage persists, in spite of all treatment, and, on a careful investigation, epithelioma of the cervix uteri is at once detected, probably too late for any operative interference. In no case should hemorrhage at this period be diagnosed as change of life, without a careful examination being made and a correct diagnosis formed.

In cases of epithelioma of the cervix, when hemorrhage is a marked symptom, in place of giving

ergot or iron and plugging the vagina, it will be much more rational to remove as much of the diseased mass as may be deemed prudent, with the *écraseur* or curette, or both combined, and then to apply either the liquor ferri perchloridi fortior, the persulphate of iron or the actual cautery.

TREATMENT OF VARICOSE ULCERS OF THE LEG BY LEVIGATED SUB-NITRATE OF BISMUTH.

It was not my intention to make this report today, wishing before doing so to carefully record the result of a large number of cases treated by this method.

Having already treated *twenty* cases *successfully*, with the sub-nitrate of bismuth, I have only carefully written out the last. This is, however, a typical and conclusive case. I think this case will show conclusively the efficacy of this remedy in certain ulcers, especially in those of varicose origin.

I propose to continue the use of this treatment and to report the results, at some future meetings.

Before approaching the subject proper of these remarks, I deem it useful to briefly review with you the varied methods now followed in the treatment of these ulcers.

1. *Antiphlogistics* were advised, but they are subject to many objections in certain cases.

2. *Stimulants*, such as aromatic wine, ointments of styras, divers preparations containing red precipitate, solutions of vinegar of different strengths, various mineral acids more or less diluted; solutions of soap, more or less saturated; solutions of nitrate of silver, perchloride of iron, chloride of lime, blisters, carded cotton, and even the red-hot iron.

All of the above remedies are occasionally useful, but are frequently attended with many disadvantages in their use.

3. The *water dressing* as used in England.

4. Methodical compression, as effected by carefully applied flannel bandages, or by strips of adhesive plaster, or emplastrum vigo.

5. Electricity.

6. *Incisions*, in cases of retarded cicatrization.

7. *Destruction* of the dilated veins.

8. Lastly, by *skin grafting*.

I now reach the use of the sub-nitrate of bismuth, of the efficacy of which I was ignorant, until its use was so highly recommended by my friend and colleague, Dr. Mary Durand. The method of its application is as follows:

The bismuth is levigated, which means reduced to an *impalpable* powder, the ulcers and surrounding skin are carefully sprinkled with this powder to a thickness of several lines (3 mm.); over this a tight pad of cotton wadding, retained in situ by

a bandage applied sufficiently tight to create slight compression.

The limb is then placed in a slightly bent position, and absolute rest enjoined. At the end of three or four days this first dressing is removed. If there is found a commencement of cicatrization, which is frequently the case, the *adherent* scabs are respected, and those that are loose carefully removed. The same dressing is renewed, without washing or cleansing. The third dressing is made after a lapse of three or four days, according to the case. When the process of cicatrization is progressing favorably, dressings are renewed at much longer intervals. After the cicatrization is completed, for several days cold douches are practiced, upon the cicatrix, to strengthen the tissues, these douches are made with an irrigator, or other suitable instrument.

Mode of action.—According to Monnerat, Gintrac and others, sub-nitrate of bismuth is most generally an inert substance, covering the diseased parts, and affording mechanical protection as it were, against all causes of irritation, similar to that afforded by greasy applications, collodion, and salves generally. Sometimes, however, bismuth becomes a chemical agent, combining with the gaseous emanations, watery exudation, mucus, or acid, and acts as a disinfectant.

This chemical action is proved in the intestinal canal by the production of the sulphide of bismuth, and by another circumstance that the *curative* and beneficial effects of bismuth are never more evident than when the dejections are blackened and sulphurous.

I am not certain that the action of the sub-nitrate of bismuth may not be due in some measure to the presence of a certain amount of acid, which it almost always contains in the ordinary specimens found in commerce.

To whatsoever it may be ascribed, the first effects of bismuth locally applied certainly are to rapidly reduce inflammation, relieve pain, and diminish secretion.

Certainly the position of the limb, rest and light bandaging, may be considered useful adjuvants in the process of cure. I have witnessed, however, in the *Invalides* under the care of Dr. Mary Durand, the use of the same treatment with the bismuth, the patients allowed to walk and take exercise while under treatment, where the cure was *delayed*, but not prevented.

In making this communication it is not my object to present a new remedy, possessing infallible action in all cases. No. I wish simply to call attention to a remedy possessing many qualities to recommend its trial in *varicose ulcers*, where the *rapidity of action*, and the infrequency of repeating dressings, are real advantages over many others hitherto employed.—*Journal de Médecine*, abridged from the *New Orleans Medical and Surgical Journal*, Feb., 1883.

TREATMENT OF NOCTURNAL EAR-ACHE IN CHILDREN.

By A. D. WILLIAMS, M.D.

What physician has not been puzzled to know what to do for the constantly recurring earaches of children at night? Some children cry night after night from pain in one or both ears. They cannot sleep themselves, and will not let others sleep. During the day they are not bothered at all, but as soon as they retire at night the earache begins, and with it the poor mother's trouble begins. All pains are worse at night than in daytime. It is quite probable that the ears of such children are more or less painful during the day, but their attention being entirely occupied with their plays, they do not notice the pain. At night, their minds not being otherwise occupied, the slight exacerbation that naturally takes place then is sufficient to keep such children from sleeping.

Now, what is the best treatment for these night earaches in children? The most effectual treatment that I have ever used, or seen recommended for this trouble, is the local use of a solution of sulphate of atropine. I brought this method of treatment to the notice of the profession some years ago, and have had no occasion since to change or even modify it, its effect being so very satisfactory. In fact, I have not yet met with a case of this kind which was not at once relieved by the local use of atropine. The solution is to be simply dropped into the painful ear, and allowed to remain there for ten or fifteen minutes. Then it is made to run out by turning the head over, the ear being wiped off with a dry rag. The solution may be put in cold, though it is better to have it slightly warm, as it does not shock the child so much. From three to five drops should be used at a time.

The strength of the solution must vary according to the age of the child. Under three years, one grain to ounce of water; over three years, two grains to ounce of water; and over ten years, four grains to ounce of water. In a grown person, almost any strength can be used. In a small infant, not more than half a grain to ounce of water should be used. All ages will bear a stronger solution in the ear than in the eye.

The application should be repeated as often as may be necessary. It is not often necessary to use it more than once the same night. Usually, a few applications permanently stop the pain.

The good effect of atropine in painful ears is because of its anodyne power. If physicians will try this plan of treatment in this class of cases, I am sure they will not be disappointed. In acute abscesses of the drum, and acute inflammation of the external meatus, the atropine will only slightly palliate the suffering, but in the recurrent nocturnal earaches of children it is practically a specific.

—*Medical Brief.*

TREATMENT OF CHRONIC ABSCESSSES BY INJECTIONS OF ALCOHOL.

M. Assaky reports fourteen cases of chronic abscess treated after Professor Gosselin's method. This method consists in the injection of alcohol, and is based on the antiseptic properties of this agent, and its action on inflamed or suppurating tissue. An incision about a third of an inch in length is first made, and the abscess-cavity, after its contents have been discharged through this opening, is washed out with alcohol of 90 deg. strength. The quantity of injected alcohol varies according to the dimensions of the abscess. It is necessary that the quantity be sufficient for application to the whole of the internal surface of the cavity. The seat of the emptied and injected abscess is then covered by a dressing of camphorated *eau-de-vie*. On the following day there is an abundant secretion of dark-coloured and thick fluid. The secretion diminishes in quantity from day to day, and, as it diminishes, its density becomes lower, and its colour lighter. In the ultimate stage of the treatment it presents a serous transparent fluid resembling lymph. When, on pressure, this serous fluid only can be forced out, and in small quantity, the abscess is on the point of becoming healed, there is no longer any cavity, the walls are adherent to each other, and there remains but the small incision, which closes in the course of two or three days. This method, M. Assaky states, has the following advantages; it necessitates only a small wound of the integument, and so there is less risk of the ordinary complications of wounds, and the cicatrix is small and is hardly apparent. The superiority of the method, however, consists chiefly in the considerable abridgment it effects in the duration of the treatment of chronic abscess. It is very evident, M. Assaky states, that the number of days occupied in the healing of an abscess by this method must depend on the extent of the sac. But all other things being equal, the duration of treatment, in a case of abscess punctured and injected after Gosselin's method, is much less than that of one submitted to ordinary methods. In small abscesses, and those of medium size, cure may be effected between the second and seventh days. This treatment may be applied to any chronic abscess that is circumscribed, and consists of one regularly shaped cavity. In most cases, one injection only of alcohol is necessary; but when the abscess is very large, two or three may be required. The indication for a repetition of the injection would be a persistent purulent discharge. The injection of alcohol into the inflamed tissues, it is asserted, is not very painful. The pain varies with the sensitiveness of the patients. One will complain of lancinating pains, and of burning or pricking sensations which will last from ten minutes to an hour, whilst another will not complain of any painful sensation. Sometimes, though rarely, the injection of alcohol is followed by more or less extensive sloughing of the skin.

This result has seemed to M. Assaky to have been usually associated with too long delay on the part of the patient in applying treatment, so that the seat of the abscess has become much inflamed, and the skin hot, red, and very tense. Associated with this condition, there may be a further cause in some faulty diathetic condition of the patient.—*Gaz. Med. de Paris*, Nos. 6 and 7, 1882, and *London Med. Rec.*, June, 1882.

RULE FOR EXAMINATION OF URINE.

1. Sediment in the urine has no significance unless deposited within twenty-four hours.
2. Albumen in the urine does not indicate kidney disease unless accompanied by tube-casts. The most fatal form of Bright's disease—contracted kidney—has little or no albumen.
3. Every white crystal in urine, regardless of shape, is a phosphite, except the oxalate of lime, which has its own peculiar form, urine alkaline.
4. Every yellow crystal is uric acid if the urine is acid, or a urate if the urine is alkaline.
5. Mucous casts, pus, and epithelium signify disease of the bladder (cystitis) or of other parts of the urinary tract, as determined by the variety of epithelium.
6. The urine from females can often be differentiated from the urine of the male, by finding in it the tessellated epithelium of the vagina.
7. Hyaline casts (narrow), blood, and epithelial casts signify acute catarrhal nephritis. Much albumen.
8. Broad hyaline casts and epithelial dark granular and oil casts signify chronic catarrhal nephritis. At first, much albumen; later less.
9. Hyaline and pale granular casts and little or no albumen signify interstitial nephritis.
10. Broader casts are worse than narrow casts, as far as diagnosis is concerned, for the former signify a chronic disease.
11. The urine should be fresh for microscopical examination, as the micrococci will change hyaline casts into granular casts or devour them entirely in a short time.
12. Uric acid in the urine may in Trommer's test for sugar form a protoxide of copper, thus often deceiving the examiner in the belief that he has discovered sugar. Thus when urine shows only a trace of sugar, other methods of examinations besides the Trommer's must be used—preferably the lead test.
13. The microscope gives us better ideas of the exact condition of affairs in the examination of urine than the various chemical tests. Therefore the time has come when every true physician should know how to handle a microscope.—Dr. Formad, *Louisville Med. News*.

THE CAUSES AND TREATMENT OF PRURITUS VULVÆ.

In a clinical lecture on this subject (*British Medical Journal*, Vol. I, 1881, p. 327) Dr. Wiltshire mentions the animal and vegetable parasites as frequent local causes of this condition. Ascarides, pediculi, and acari are among the former, and certain low forms of vegetable life, as thrush fungus (*oidium albicans*); among the latter. Among other local causes we have—1. Diseases of the vulva (as vulvitis, abscess, carcinoma, oozing tumor, lupus, elephantiasis, etc.); 2. Diseases of the urinary system (urethra, bladder, and kidneys); 3. Vaginitis (gonorrhœal and other); 4. Diseases of the uterus (metritis, endometritis, senile catarrh, cancer, fibroids, polypi, acrid discharges arising from the foregoing or occurring mainly in association with menstruation); 5. Skin affections (eczema, ecthyma, herpes, urticaria, acne, etc.). As regards the latter, eczema may be associated with diabetes, producing terrible suffering, while urticaria suggests ovarian disease. Ecthyematous spots with ashen-gray bases may indicate grave cachexy (syphilitic?); while the herpetic vesicles are prone to crop out periodically in females of gouty parentage just before each menstrual period. A pustular form of acne is sometimes accompanied by troublesome itching. Venereal warts may excite itching.

Malignant disease of the uterus and upper part of the vagina may provoke itching in two ways: First, by acrid discharges; and secondly, reflexly—the latter uncommonly. The same may be said of fibroids, polypi, sarcomata, etc. Dr. Wiltshire has known pruritus to exist for a long time apparently as a consequence of pelvic effusions, e. g., hæmatocele, cellulitis, partly, perhaps, from venous obstruction and partly from implication of nervous structures. Some discharges from the womb are virulently acrid, and excite excoriation of the parts over which they flow. These are revealed by the speculum. Urethral and vesical affections—e. g., vascular growths, stone, incontinence, etc.—are sometimes complicated by vulvar itching. Careful local investigation is therefore necessary; for even when some general condition, as diabetes, is present, the local condition may give valuable information.

Among general causes we find diabetes, pregnancy, gout (or lithiasis), syphilis, and pruritus senilis. Diabetes is not an uncommon cause, and vulvar pruritus may be one of the first symptoms which lead to its detection. Pregnant women are liable to a severe form of pruritus vulvæ, accompanied usually by an abundant creamy discharge. Sometimes aphthæ or erosions are seen upon the turgid labia or cervix, or there may be vaginitis granulosa. Most of the cases which Dr. Wiltshire has seen have been accompanied by extreme venous turgescence. Gouty pruritus is apt to be brought on by indulgence at the table or any diet which increases the deposit of lithates in the urine. Char-

eres and venereal warts [which last Dr. W. apparently considers syphilitic.—Ed.] may provoke irritation. Pruritus senilis is often associated with general cutaneous-hyperæsthesia. Klob says there are little elevations of the skin, like goose flesh, consisting of growths analogous to tubercular formations, and giving rise to violent itching. These cases are grave. Some are amenable to the bromides used locally as well as internally. Arsenic and cod-liver oil are also indicated.

All forms of pruritus vulvæ are subject to periodical exacerbations. Some patients suffer only at night, after becoming warm in bed, experiencing comparative freedom during the day. All who menstruate are conscious of aggravation at that time. Stimulants, as a rule, exert an injurious effect. Sedentary occupations, piles, and hepatic disorders aggravate pruritus.

In the treatment of Pruritus Vulvæ, Dr. Wiltshire says that the first thing is to find, if possible, the cause. Extreme cleanliness must be enjoined. Demulcent washes are better than soap; unless carbolic or coal-tar soap be used; and usually even these are inadmissible. Almond meal, strong bran-water, decoction of rice, marsh-mallow, slippery elm, or fine oatmeal are suitable, especially the first, which, if pure, yields during use a marked odor of hydrocyanic acid and appears to soothe materially. When the pruritus is due to animal parasites, ointment of white precipitate, sulphur, or stavesacre speedily cures by destroying the insects and their ova. If nits persist about the pubic hairs, a lotion containing bichloride of mercury and acetic acid will dissolve them. Ascarides are destroyed by a carbolic lotion (1 to 60): general treatment, however, should be used, as iron, quinine, cod-liver oil, together with enemata of hamamelis, lime water, iron, etc.

The vegetable parasites are treated by washes of borax, boracic acid, sulphurous acid, etc. Parasiticidal lotions are certainly the most useful in the majority of cases, which points towards vegetable organisms as the commonest cause of the pruritus. The borax lotion should be of the strength of a drachm to five ounces of warm water, or stronger; hydrocyanic acid, say 3 j of the dilute acid, to water 3 x, or morphia (2 gr.), atropia (½ gr.), aconitia (½ gr.) or veratria (½ gr.) to the same amount. Infusion of tobacco (half an ounce to the pint) alone relieves some cases, and forms a good vehicle for borax or boracic acid. It is not well to use glycerin with the borax, as a rule, as it is apt, owing to its affinity for water, to aggravate the irritation. Strong solution of poppy is a good vehicle for borax. Chloral frequently does not suit. Ice suits some, very hot water others. In some cases ether spray might be tried. Ointments, if used, should be of non-rancid fats or cosmoline. Two drachms of iodine [tincture?] in two ounces of elder-flower water sometimes answers. Electricity may afford relief in neurosial cases. Probably fatadism would be the preferable form.

In simple vulvitis, borax or carbolic acid lotions relieve. An ointment of calomel, or bismuth is also good. Malignant affections of the parts call for ablation, but where this is not practicable sedative applications (conium, opium, belladonna) alone are often all that we can employ.

Of course urethral carbuncles, urethritis, vaginitis, etc., should receive thorough treatment. When there is congestion with loading of the portal circulation a mercurial and saline purge is helpful. When eczema with fissure is present, a poultice made of the clot formed by adding two drachms of lead-water to ten ounces of new milk is most useful. Diabetes must of course be combated, and frequent ablutions with borax washes form a good local treatment. In wakefulness from diabetical pruritus, codia in one-grain doses in pill is often useful. The bromides are also useful.

Pregnant women often suffer terribly. When *oidium albicans* is present, sulphurous acid gives relief. A tablespoonful should be freshly mixed with half a pint of warm water, barley-water, or almond emulsion for each application. Chloroform locally, in liniment, ointment, lotion, or vapor, answers well occasionally; bichloride of mercury, gr. iv, ad ʒ viij mist. amygdalæ, gives relief in some cases. It should not be used when there is abrasion. Section of the pudic nerve has been suggested in desperate cases, but has never been practised.—*Philadelphia Medical Times*.

NEURO-DYNAMIC MEDICINE.

Dr. B. O. Kinnear contributes an interesting and valuable article to the *Boston Medical and Surgical Journal*, on Dr. Chapman's system of neuro-dynamic medicine. This system consists in the theory that ice in disease, used properly, in rubber bags of the right length and width, over the spinal and sympathetic centres, dilates the arterioles controlled by such centres, and arrests at the same time hypersecretion from the glandular system, checks spasmodic and irregular muscular movements of voluntary and involuntary muscles, and arrests hypernutrition by its sedative action upon trophic centres. Heat used likewise acts in an exactly opposite manner. He has been able to relieve the pain of neuralgia, in some cases by ice and others by heat, as quickly and in many instances more rapidly than by hypodermic injections of morphia. Besides the swift relief afforded, this method of treatment has the additional advantages of not producing nausea, vomiting, headache or any other bad symptoms. In a case of agonizing pain from passage of gall stones, ice was applied over dorso-lumbar region, and in three minutes all pain and tenderness had disappeared, whereas in previous attacks morphia had been wholly inadequate to relieve the suffering. In wind colic, applied over the same region, it will give immediate relief. It will relieve bilious attacks and sick headache

when applied over same region. In acute diarrhoea it will check the bowels, allay vomiting if it exists, and in the severer forms will restore warmth to cold and cramped extremities. In the vomiting of pregnancy, carefully used, it promises much. In gastritis, in simple leucorrhœa, and in constipation, he has used it advantageously. He has derived excellent results in hysteria from the effect of ice in subduing the hyperæmia of the sympathetic ganglia, and those spinal centres which give rise to the muscular spasm when unduly excited, as in these cases. In sleeplessness due to excessive use of the brain, from almost any cause, ice applied low down (dorso lumbar region) will produce sleep by dilating the arterioles of the lower body, thus withdrawing from the cerebral circulation its excessive supply, the cause of the sleeplessness. When the ice is not sufficient, thus applied, to have the desired effect, a double-columned hot water bag may be used over the sympathetic ganglia of the cilio spinal region of Chapman, or, in other words, the cervico-dorsal vertebræ, and will assist, by stimulating these ganglia, to a hyperaction, causing thereby a contraction of the blood vessels of the brain. He used it with benefit in one case of asthma.

Dr. Kinnear, in conclusion, says: "I would again suggest to those of my medical confrères who may decide to try this method, not to do so without a careful attention to those *dangers* with which a careless or ignorant application will certainly bring them face to face. Upon these *dangers* Dr. Chapman gives very clear and minute directions and cautions."

VENESECTON IN HEART DISEASE.

In the *Lancet*, Dr. Bedford Fenwick, in the course of an interesting article on this subject, says that his attention was first called to the value of venesection in heart disease by a mere accident. A young man was admitted into the hospital with mitral stenosis and aortic regurgitation. His condition became gradually more and more critical until he became drowsy, almost comatose, and his death was hourly looked for. When in this condition he threw up his arm, and striking his nose violently, it began to bleed very freely. Attention being called to another patient, his nose was allowed to bleed, thinking that it would soon stop. He lost some twelve or fourteen ounces of blood, and when again examined was found perfectly conscious, breathing quietly, and calmly said that he felt much better. His improvement was uninterrupted, and in a few days he returned home. Loss of blood is a common cause of fatty degeneration, therefore it would not be wise to bleed where we have or fear fatty degeneration.

Dr. Fenwick only uses leeches or cupping to remove blood directly from the cardiac region in cases where stenosis exists. He imagines that we obtain thereby more certain and more rapid results

with a more accurate loss of blood than when venesection from the arm is resorted to. Still this is a matter of such great practical importance to the patient's welfare and to our own success, that he feels bound to state distinctly some reasons for his judgment: 1. The patient and the patient's friends usually object less when leeching or cupping is suggested, than when "bleeding" is proposed, and they are less alarmed—a local application to the seat of disease than at the procedure necessary to open a vein and keep it bleeding. 2. The quantity of blood to be abstracted can be more accurately measured and controlled, and is generally much more easily obtained, in cases of advanced stenosis, by local than by brachial venesection. 3. Even, as, like all practical men, he gives a hypodermic injection of morphia at the seat of pain, although he cannot explain why its insertion there should give so much greater and more rapid relief than when introduced into the same blood at a distance, so he cannot explain why a little blood removed from the cardiac region should afford greater and quicker relief than is derived by the abstraction of even a somewhat larger quantity from the arm. He does the former and leaves the latter undone in these cases, because he is convinced of the great practical truth that thereby greater good is gained.

He has been astonished to find how drugs which had been given for days or weeks without apparent benefit, as soon as even a little blood has been removed, seem at once to assert their power again. Next, with regard to acute pericarditis and endocarditis, he has not had the opportunity of using venesection in many such cases, but where he has done so he has invariably bled by cupping the cardiac region, and always with good result—so successfully, indeed, as to make him believe that if this measure be taken at the onset of the disease it will very often, if not always, cut the attack short, or at least greatly mitigate its severity.

Finally, with regard to pain, more or less severe and more or less persistent in the cardiac region; he has found nothing give such rapid and complete relief as local abstraction of blood. In conclusion, he summarizes thus:—

1. In cases of valvular stenosis, if dyspnoea, or pain, or urgent symptoms be present, bleeding is generally useful; that it appears to be better to bleed often, if necessary, but to take only a small quantity each time, and this by means of leeches or the cupping glass, direct from the cardiac region.

2. In cases of valvular incompetency, if urgent dyspnoea or cyanosis or stupor be present, it appears best to bleed freely from the arm, to about sixteen or twenty ounces, if necessary, and if possible once for all.

3. In cases of acute pericarditis and endocarditis the attack may possibly be cut short by freely cupping the cardiac region at once.

4. In cases of cardialgia, without any evident cause, leeching or cupping over the heart's area will probably give relief.

IRRIGATION OF THE COLON.

By CHARLES W. DULLES, M.D., Surgical Registrar to the Hospital of the University of Pennsylvania.

As we are now getting into that season when diseases of the intestines carry off the greatest number of victims, I desire to call attention to a method of treating inflammations of the colon, which has never—as far as I know—been at all generally adopted or even understood in this country; although it is not uncommonly practised in Europe. It is not difficult or dangerous; on the contrary, it is simple and easy to carry out, and it cannot possibly do harm. The method was called by Dr. Alois Monti, of Vienna, whom I saw practice it often in 1876 and 1877, "irrigation of the large intestine."

It is carried out in the following manner: The patient being placed on the side, or back, or with the belly downwards, and the pelvis a little elevated, a large, moderately flexible catheter, if for an infant or child—or a stomach tube, if for an adult—is inserted in the rectum. To this is attached, by a tube, a reservoir of water,* the height of which can be varied as may be required.

The water is now allowed to flow from a height of about two feet, until the rectum is distended; meanwhile the end of the catheter or tube in the rectum is pressed gently but steadily upward toward the left iliac fossa. Very soon it will be found that the water has opened out the folds of the bowel and straightened the curves, so that the tube finds its way beyond the sigmoid flexure and into the descending colon. Unless the operator be very unskillful it may now be pushed gently on, the flow of water continuing without interruption, until it reaches the left hypochondrium, when the transverse colon becomes the descending.

The flow of water is now to be continued until the whole colon, all the way to the cæcum, has been gently distended; the operator assuring himself of this by the amount of fluid used, and by palpation and percussion. The tube is now withdrawn and the operation is complete.

The fluid remains in the bowel a variable length of time. Sometimes it begins to come away in a few minutes; but it sometimes remains a half an hour or more.

This method I have seen used by Monti for various inflammatory disorders of the large intestine, as well as to cause expulsion of worms and flatus; and I have myself used it a number of times with results calculated to give me great faith in its usefulness.

The most striking case, I now recall, occurred in 1878, when I was summoned in the night to an

infant a few months old, whom I found screaming and struggling with the pains of acute colitis. I took it on my knee, had cool water and a fountain syringe brought, attached the silver catheter from my pocket case, oiled it and slipped it first into the rectum and then up to the bend of the colon, and allowed about a pint and a half of water to flow in at that point. As the water filled the bowel the child's struggles and cries ceased, and it actually went to sleep before I was done, and only waked when the water began to be discharged.

Such striking results cannot be considered the rule, of course; but there can be no doubt that so complete a lavement must be of advantage in soothing the angry lining of the bowel and diluting and bringing away both the cause and the products of irritation.

To fill the outlines of the method a little, I will add that in general the fluid used should be cool, not cold water. It is rarely necessary to use astringents. When they are desired, the best is alum, in a one or two per cent. solution, with perhaps a few drops of laudanum added. The irrigations may be frequently repeated; and, in cases that do not get well promptly, various temperatures may be tried—from 70° or 80° to 40° Fahr.—depending on circumstances.

The amount of fluid to be used varies with the age of the patient. It should always be enough to fill the *entire* colon. An unweaned infant may require more than two pints, an adult several quarts.

No real syringe should be used if hydrostatic pressure can be obtained; though, if this is not to be had, I have found the syringe, carefully and slowly used, will serve very well.

Thus far I have referred mainly to such intestinal troubles as are most frequent in summer. The method is, I think, invaluable in all inflammatory affections of the colon, from diarrhoea to dysentery, and useful—for reasons I cannot go into now—in inflammation of the small intestine also.

Before leaving the subject, I want to speak of another use which I learned by experience last winter. I was called into the country to see a child about two years old, whom I found in convulsions. The use of revulsives had been tried without effect. I could get nothing in its mouth to produce vomiting or catharsis. The means at hand were very limited. I was satisfied from the history that the convulsions were due to irritating ingesta. I concluded to see if they were in the colon. So I took my silver catheter, attached it to a syringe, passed it through the anus, distended the rectum, pushed the catheter up till I could feel it through the abdominal wall, just below the left costal cartilage, and filled the whole colon with warm water, in which a little soap had been stirred. After about three minutes the water came away and brought a mass of undigested and indigestible stuff that was quite sufficient to cause the trouble. The convulsions stopped, and the child got quite well.

* A fountain syringe or any of its substitutes serves this purpose well.

From this case, I think, a useful hint may be gathered, and I am sure I shall repeat my experiment the next time I have to treat a case of convulsions due to intestinal irritation.

I recall attention to this method because I think it too valuable to be allowed to be forgotten; and I hope that it may prove a helpful adjunct to our other therapeutic resources against intestinal disorders.—*Medical News.*

CONVULSIONS IN CHILDREN.

Infantile convulsions must always possess for the practical physician a keen, almost a fascinating, interest. The cases are by no means of equal importance—some may be immediately dangerous to life; some may be merely symptomatic of diseases varying immensely in severity, and some may possess but little significance. As regards the symptom—convulsion—the phenomena are various. The convulsions may be general, and involve all the muscles of the animal life, or they may be limited to a single group of muscles. The symptomatic and the therapeutical diagnosis demand the clearest conception, the greatest fertility of resource, and the utmost promptitude of action.

As above suggested, a convulsion may mean much or little. At the outset, it is best to have as definite a conception as possible of what a convulsion is. That the pons varolii and medulla oblongata are centres of reflex actions has long been known, but it was reserved for Nothnagel to demonstrate the position and define the limits of the "spasm centre." Irritation of this centre induces general convulsions, and this irritation may be direct or reflex, centric or excentric. The results of experimental physiology receive support from pathology. Ladame, in his *Hirngeschwulste*, has formulated this conclusion: When the symptoms of brain tumor exist, if there are convulsions, the tumor is not in the medulla, which may be interpreted as follows:

When a tumor develops in a position to injure the *spasm centre*, convulsions become impossible because the injured part has lost its power of functioning.

Various causes increase the irritability of the spasm centre. Abnormal irritability may, indeed, be hereditary. It is well known that certain families exhibit the tendency to convulsions, and all the children may experience attacks, or they may be confined to one sex. This tendency may be so strong that infants in the womb are affected, but it is in the first two years of infantile life that the greatest irritability of the spasm centre is found to exist. Beside this tendency, which is inherited, various constitutional states increase the liability to attacks of eclampsia. Rickets has a prominent position as a pathogenetic factor. This state acts, probably, by so increasing the irritability of the centres of reflex action that very slight peripheral irritation sets off the high-strung spasm centre. The state of nutrition of the child is not without influence.

When much reduced by long illness, the reflex functions are correspondingly lowered, and hence when, under such circumstances, convulsions occur, it is reasonable to suppose that no peripheral irritation has sufficed, but that some "coarse lesion" of the intra-cranial organs is the cause. Hence it follows that the nutrition of the child suddenly attacked with convulsions has diagnostic value; if the child be fat and healthy, the convulsion is a symptom of some excentric irritation; if weak and emaciated, it signifies some centric lesion, notably tuberculous. It is not affirmed that such a rule has no exceptions—only that it has diagnostic value.

It is important to distinguish between eclampsia and epilepsy. Age is an influential element. If a convulsion occur after four or five years of age, if it is over in ten minutes, and no cause can be discovered for it, these constitute good grounds for suspecting epilepsy. If the attack is accompanied by high fever, if albumen can be detected in the urine, or if some acute disease follow, the seizure is one of eclampsia, although the patient may be anywhere from two to ten. Again, the character of the attendant phenomena—the behavior of the convulsion itself—throws strong light on the diagnosis. When the convulsions are limited to the face, to one limb, to one side of the body, it may be concluded that the lesions are intra-cranial. Again, if any part, the seat of convulsion—the face, the limbs, etc., should continue paretic or paralyzed for some days after the seizure, or if a squint should continue, or an eyelid droop, or the pupils remain unequal, cerebral lesions probably exist.

The prognosis of convulsions is usually difficult. When arising from intra-cranial lesions, the prospect is gloomy. Such evidences of cerebral mischief as squinting, irregular pupils, coma, etc., are of evil omen. In the convulsions due to uræmic poisoning, the most unfavorable symptoms may be recovered from, but the case wears a less hopeful aspect the more persistent the failure of the urinary excretion. When the breathing continues labored, and there is deep cyanosis, with lividity of the face, and the pulse is very rapid, the case has a most unfavorable appearance. A convulsion at the onset of an acute affection, as scarlet fever, affords no certain indication of the future gravity of the disease, but does illustrate the mobility of the nervous centres. Convulsions occurring toward the close of an acute disease, are unfavorable, and often signify that the disease has taken a more serious direction, or that tubercular meningitis has come on. In some children so irritable and mobile is the reflex centre of spasm that but trivial peripheral impressions suffice to bring on convulsions. Amongst other causes, are indigestible food, swollen gums, earache, etc. Such children may have repeated attacks, which, if known, must lessen the gravity of the prognosis. A guarded opinion should be given as respects the future condition of such children, for if convulsions

occur readily during the first and even second dentition from slight causes, this is a reason for apprehending the subsequent occurrence of epilepsy. Habit is such an influential factor in determining attacks of nervous diseases that we may well be solicitous regarding its power here.

The treatment of convulsions has an importance determined entirely by the cause of the seizures. Is the attack merely an excited state of the spasm centre from simple peripheric irritation? Has the child eaten some indigestible food? Are there worms, irritating foods, scybala, etc., in the intestinal canal? Is there a stone in the bladder, preputial irritation, or other source of irritation in the genito-urinary tract? Has sufficient urine been passed, and is the urine albuminous? Is an acute disease beginning, and is fever present? Has the child passed through an illness recently, especially of scarlatina or whooping-cough? Is the child emaciated? Has the child rickets? The treatment is much influenced by the answers to these questions. Causes of irritation must be at once removed by emetics, purgatives, vermifuges, etc., as required. Then follow the measures to allay the excitability of the spasm centre; bromide of potassium, chloral hydrate, and the inhalation of chloroform. When time presses, the last-mentioned expedient has great value. It is sometimes advised to administer ether instead of chloroform, but this suggestion indicates a failure to appreciate the excitant qualities of the former. Chloroform is well borne by children, and is more effective than ether. Chloral, by the rectum, renders an incontestable service. It is safe in the case of children; it is effective, and, although not so prompt, is more sustained in action than chloroform. Bromide of potassium is most useful after consciousness is restored to prevent future or impending attacks, or to allay the excitement, muscular twitching, etc., which may indicate the onset of convulsions. When swallowing is impossible, bromide may also be given by enema, and it may be combined with chloral for all of the purposes to which the latter is applied. If the surface is cold, the circulation feeble, and the skin dry, the child should be put in a bath 100° Fahr. If the same conditions exist in a moist and clammy skin, dry heat should be used, the articles affording it having a temperature of 100° also. If, on the other hand, the temperature of the child is high, reaching 103°, 104°, or 105°, or more, the cold bath, or the cold wet pack should be employed without hesitation. The character of the bath prescribed will necessarily be affected by the state of the urinary secretion. If it is necessary to compensate in an increased action of the skin for the diminished activity of the kidneys, a warm or vapor bath may be necessary. If albuminuria exists, and the urine is very scanty, the convulsions being distinctly uræmic, a very powerful action of the skin must be secured, and this can be affected by no measure so successfully as by pilocarpine. There can be no doubt of the great

good accomplished by this remedy under these circumstances, but any prudent practitioner will avoid inducing a dangerous cardiac depression by the use of large doses. Compensation for the diminished urinary secretion can also be obtained by free catharsis.

We should not fail to mention the remarkable results obtained by Loomis in cases of uræmic convulsions, by the hypodermatic injection of full doses of morphia. Although such treatment has been applied to adults only, and may be inadmissible in children, it throws light on the therapeutical diagnosis. In the simplest cases, almost no treatment may be required. A child has eaten an indigestible meal, has a convulsion, and vomits freely. The stomach emptied, the nervous disturbance ceases, but it is always well in such cases to prescribe some bromide of potassium to allay the reflex irritability and the excitement of the spasm centre. Here, as under all circumstances, no treatment should be instituted that is not the result of a careful survey and a logical deduction from the facts.—*Medical News Editorial.*

THE CANADA MEDICAL RECORD,

A Monthly Journal of Medicine and Surgery.

EDITORS:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P., LOND.

R. A. KENNEDY, M.A., M.D.

JAMES C. CAMERON, M.D., M.R.C.P.I.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

All communications and Exchange must be addressed to the Editors, Drawer 356, Post Office, Montreal.

MONTREAL, FEBRUARY, 1883.

THE COLLECTIVE INVESTIGATION OF DISEASE.

The British Medical Association has recently inaugurated a scheme for the collective investigation of disease, which bids fair to become a decided success. Professor Humphrey of Cambridge in his Presidential address of 1880 so earnestly advocated the merits of collective investigation that steps were immediately taken to carry out his suggestions. Fifty-four Committees, including from eight hundred to a thousand of the leading practitioners of England, Scotland and Ireland, have already organised to prosecute the work, and cards of enquiry issued concerning acute pneumonia, chorea, acute rheumatism, contagion of phthisis,

diphtheria and certain sanitary questions. The response has, so far, been most encouraging.

It has long been felt by general practitioners that, no matter how zealously they may prosecute their enquiries, they can accomplish very little single-handed, owing to the press of their daily work, their limited opportunities for observation, and the vastness of the field. General conclusions based upon individual experience are imperfect, and often misleading. Original work has been left chiefly to hospital men, whose experience is larger and more varied; and the bulk of the profession have been generally content to accept their conclusions and teachings. But the hospital physician also labors under certain disadvantages which materially affect the accuracy and reliability of his conclusions. As Sir William Gull admirably puts it (*British Medical Journal*): "In hospitals we have more largely to do with organic lesions and with isolated cases of acute inflammations or developed fevers, and in all with an incomplete personal history and without any family record. We cannot thus learn with any exactness either the beginnings or endings of disease. Patients come under observation with their maladies far advanced, and often pass from observation but imperfectly cured, thus leaving fallacious histories, both in pathology and therapeutics; and if they die, morbid anatomy can often give but a confused and inextricable mass of facts, which it may be difficult or impossible to put into their true relations. One might as well hope to determine the physical geography of a country by measuring and analysing the contents of its rivers as they fall into the sea, as to hope to reach a true pathology from studying alone the results of disease on the *post mortem* table. In disease one stream of morbid action naturally falls into another; and whilst morbid anatomy gives us the final synthesis of results there is but one possible means of analysis, and that through noting beginnings order and progress. When the morbid anatomist is engaged in our hospitals and medical schools in demonstrating the effects of disease on the several organs and tissues of the body, we desire that all the practising members of the profession over the country, in the colonies, and in other parts of the world, should assist in the inquiry as to the origin of diseases, their early symptoms, their mode of spreading in families, their combinations, the causes of their intensity, their modifications in individuals, in families, their occurrence according to time of year,

locality, sanitary conditions, occupations and many other circumstances—some as yet but dimly discerned, and others not yet suspected. The value of this movement will be obvious, for had we leisure, proper means at our disposal and, from previous training, a fitness for observation, we should find in general practice one of the most valuable fields of pathology, as here only we have before us the earliest signs of departure from health, and the only opportunities for tracing the course of a disease from its beginning to its end. Having passed many years in hospital and private practice, I have come to see that experience gained in the latter is necessary for the correction of that acquired in the former, especially as helping towards a truer pathology. We must have in many instances the life histories of the parents or more remote ancestors, before we can fully unravel the causes of irregular menstruation, hysteria, anorexia, uterine flexions and the like. And the same line of inquiry applies to the headache, pallor, dyspepsia and seminal hypochondriasis of the males of such families. The hereditary transmission of the rheumatic diathesis, its occurrence in intra-uterine life (as appears to be shown by some of the congenital cardiac malformations) and its association with other diseases prevailing in the same family, throw a light on its pathology not to be gained at the bedside or in the *post mortem* room. Life histories, as Sir James Paget pointed out, would give us the genesis of new and rare forms of lesion, and I hope I may add they would also show how the organic laws, favored through generations, prevail over and wear out disease from the stock. Take the inquiries of to-day respecting infectious diseases, and the increasing evidence that such states are due to agents which we may hope to fix and analyse. How is it that the same poison acts with such varying intensity in different families; in some the organism breaking down at almost the first touching of a poison; others suffering but little; and others having almost or altogether immunity. Does this depend upon certain family peculiarities; and if so, what? Does the immunity come from ancestors having passed through the ordeal, as occurs to the individual in vaccination and syphilitisation? Family histories will show us how far these immunities and susceptibilities extend; and with what peculiarity of the nervous system they are associated, and how acquired."

It is to be hoped that the excellent example set by the British Medical Association will be speedily followed by other Associations. We in Canada have many promising fields for investigation, especially in sanitary matters, but we will have little share in the solution of these interesting problems unless we make a united organised effort. What Professor Humphrey amongst us will begin the good work?

ADULTERATION OF BRANDY.

Some startling revelations have recently been made by the U. S. Consul at Rochelle regarding the quality of the liquor exported from France as brandy. He states that the whole business has become a gigantic fraud, and that little or no genuine brandy can be obtained, even by purchasers upon the spot. All the owners of large vineyards are distillers, and they are said to be heaping up colossal fortunes by manufacturing beet and potato spirit, which, by judicious diluting and flavoring, is made to resemble in taste and appearance brandy of any required age or make. When they sell brandy purporting to be twenty or thirty years old, or of a particular vintage, they simply mean that the article looks and tastes like genuine brandy of that stated age or vintage. The vile compounds with which the market is being flooded are highly injurious, not only from the irritating properties of fresh beet and potato spirit, but also from the poisonous qualities of the flavoring and coloring ingredients. As brandy ages, it loses its fiery properties, gains aroma and bouquet, and is then more suitable for medicinal purpose. Fresh new brandy should never be prescribed. It is therefore somewhat startling to learn that we cannot procure a genuine old brandy at any price, even from direct importers, and that we are probably prescribing for our patients the vile combinations of fraudulent French distillers instead of a bland and potent stimulant. If these corrupt practices are not speedily amended, the profession will have to seek elsewhere for a pure and reliable form of alcoholic stimulant, suitable for internal administration.

TUBERCLE-BACILLI IN URINE.

In the last number (No. 5, Feb. 3) of the *Centralblatt f. d. Medicin Wissens.* Professor Rosenstein announces that he has been able

to demonstrate the bacilli of tuberculosis in the urine of a patient with urogenital tuberculosis; Lichteim previously mentioned having found these organisms in the pelvis of the kidney of a patient dead from the same disease. The case reported by Rosenstein is one of a man aged 37, with a good family history. Up to four years ago he was quite healthy. Then for the first time he complained of pain during, as well as previous to micturition. Two years ago he noticed, first in the right, later in the left epididymis a hardness which appeared to be about the size of a small walnut. The testicles were quite free; no swelling of any lymph glands, nor was there present any sign of disease of the lungs. His general condition was good, no fever was present at any time. The patient passed urine in small quantities, about 50 grammes (1½ oz.) at a time. The total quantity in 24 hours varied between 800 and 1660 Cctm. (25 to 52 oz.), sp. gr. 1012 to 1018. Urine was of a pale yellow, acid, highly albuminous, cloudy even when just passed. Whitish flocculi about the size of the head of a pin floated in it. After standing, an abundant sediment of a whitish-grey color was deposited, composed almost exclusively of pus corpuscles and but very little blood. For examination, the urine was passed into a solution of thymol, and the fluid drawn off after standing 24 hours. A drop of the sediment was placed on a cover glass, dried in the gas flame, and treated according to Ehrlich's method. Observations made with Hartnack 3 obj. 9 shewed that in the smallest particles described as flocculi, bacilli were present in great numbers. Prof. Rosenstein further remarks that the urine preparations require 24 hours immersion in the staining solution, in this respect differing from those of sputa, which can be well seen after only half an hour immersion. He also considers it important that the urine preparations after decolorizing with nitric acid should be stained with a watery solution of methylene blue because, notwithstanding the urine may have been passed into a solution of thymol, the bacteria of decomposition might be present, in which case their blue color would readily distinguish them from tubercle bacilli.—GEO. WILKINS, M.D.

PERSONAL.

Dr. Louis Robitaille (M.D., McGill, 1860), a brother of the Lieut.-Governor of Quebec, has been called to the Dominion Senate.

Dr. J. A. Grant, B.A. (M.D., McGill, 1882), has passed the L. R. C. P. London.

Dr. Wolfred Nelson (C.M., M.D., Bishop's, 1872) has been appointed Port Surgeon of the Pacific Mail Steamship Company at Panama.

Dr. Kollmyer, Professor of Materia Medica in Bishop's College, is seriously ill. He has not been able to lecture since the end of November. Dr. William Young (Bishop's 1878) has read his lectures for him.

Dr. Kennedy, Professor of Midwifery Bishop's College, has been confined to the house since early in January by an attack of Pleuro-Pneumonia. He is now thoroughly convalescent, and will soon resume his duties. Dr. McConnell (Prof. of Botany) has read his lectures to his class.

OBITUARY.

DR. JOSHUA CHAMBERLAIN, OF FRELIGHSBURG.

This gentleman, whose death took place on the 14th of January last, occupied a well-deserved position of esteem and respect among his confreres in this Province. He was born in the State of Vermont in September, 1799, and was thus in his 84th year when he died. He came to Canada in 1810, and after some general medical experience among some of his relations who were members of the profession, he eventually determined to acquire a regular medical education. For this purpose in 1825 or 26 he became a student of the Montreal Medical Institute. In 1827 he passed his examination before the Montreal Medical Board, and received his license. He soon after settled in Frelighsburg, where he continued to follow his profession up to the period of his last illness. In the troubles of 1837 he took a prominent part in support of British connection. He acted as a combatant officer in the Skirmish at Moore's Corners, and subsequently brought his medical knowledge into service and attended to the wounded. In 1849 he was elected a Governor of the College of Physicians and Surgeons, and was re-elected every tri-annual meeting up to 1880, when failing strength induced him to refuse re-election. In 1877 the College presented him with an engrossed address, congratulating him on having attained his 50th anniversary as a Practitioner of Medicine. He was a man of great ability of resource, and living as he did for many years in a sparsely settled

country, this faculty was often called into requisition. He was of a jovial, hearty disposition, carrying sunshine wherever he went. A man with such a character could not but be beloved, and he was. Full of years, and highly honored by the public and his professional brethren, he passed away, but his memory and his example will be long cherished by those who knew him.

WOOD'S LIBRARY OF STANDARD MEDICAL AUTHORS FOR THE YEAR 1883.

We have received the first volume of this Library for the year 1883, with a list of the works which it is intended shall be issued this year. We believe that the subjects chosen for the present series are superior in every way to those issued last year. We draw particular attention to this fact, as we are aware that among some the last series issued did not give satisfaction. The volume before us is a "Manual of Gynecology," by D. Dewy Hart, M.D., Lecturer on Midwifery at the Edinburgh Medical School, and A. H. Barbour, M.B., assistant to the Professor of Midwifery at the Edinburgh University. We have given it a careful perusal, and believe that it will give satisfaction. It is profusely illustrated, and printed on paper superior to any yet used in the "Library." The binding deserves especial notice, the color is beautiful, and the workmanship leaves nothing to be desired.

REVIEWS.

The United States Pharmacopœia. New edition. Wm. Wood & Co., New York.

The United States Pharmacopœia of 1880, just issued from the press, very much resembles in general appearance and arrangement the British Pharmacopœia, but it is much better printed, the type more distinct, and the heading so arranged as to catch the eye readily, so that in searching for a preparation it is scarcely necessary to refer to the copious index at all. In size the book is full octavo, and the binding is everything that could be wished. The Committee of Revision and Publication was appointed at the National Convention for revising the Pharmacopœia (being the sixth decennial Convention) held in the City of Washington on the 5th of May, 1880, and was composed of twenty-five members, about one-half being pharmacists and the other half physicians. Nobly has

their work been done, and although it stands to reason that such a book cannot possibly be made to meet the peculiar views of every one, nevertheless it is acknowledged on all sides to be far ahead in practical utility to any other Pharmacopœia extant.

Many changes in nomenclature have been introduced, thus the Latin names of alkaloids have been made to terminate in *ina*, as for instance morphina, quinina, etc. So-called neutral principles have been made to terminate in *inum*, as santonium. The English names being morphine, quinine, etc., for alkaloids, and santolin, etc., in the case of neutral principles. Alumen denotes the sulphate of aluminium and potassium, instead of the sulphate of aluminium and ammonium; chirata, asafoetida, cambogia, for chiretta, assafoetida, gambogia, sulphidum for sulphuretum; manganum for manganese, etc. Some of these changes appear at first sight frivolous, but doubtless the revisers had good reason for their action.

The substitution of parts by weight for the actual weights and measures has been carried out, and will save a good deal of trouble to manufacturing pharmacists. Formulæ for pills and lozenges are given in grains and grammes.

There have been 229 substances dismissed which were official in the Pharmacopœia of 1870, while the number added amounts to 256. Among the pharmaceutical preparations added may be mentioned 11 abstracts, 10 solid extracts, 35 fluid extracts, 11 syrups, 22 tinctures and 6 wines.

The absence of doses to all the official preparations appears to be the worst feature of the book, and it will to a great extent prevent that supervision or checking of doses in prescriptions by the pharmacist, which was undoubtedly a great protection to the physician.

The tests of purity, detection of adulterants and physical properties of drugs are given with great minuteness of detail, and are evidently the work of certain well-known pharmacists on the Committee.

A change which has taken place, and which it would be as well to bear in mind, is in Ext. Aconite. The new extract is prepared from aconite root, while the extract of the Pharmacopœia of 1870 was made from the leaves. The strength of the former is stated on good authority to be about nine times that of the latter. In the same way conium seed has taken the place of the leaves in all preparations of the drug. The dose of Laudanum

of the new Pharmacopœia, judging by the formula, will be about 20 drops, while that of 1870 was 30 drops. Castoreum may be mentioned as one of the drugs of animal origin dropped from the Pharmacopœia. Castoreum is very largely used, especially by country practitioners in this Province. Ointments are still made with lard as their base, benzoated lard being ordered in most cases. Other ointments, such as carbolic acid ointment, have Unguentum as a base. Unguentum being composed of 80 parts of lard and 20 parts of yellow wax. A new base for ointments under the name of Petrolatum is introduced, but its use is left to the judgment of the prescriber.

We may return again to an analysis of the new United States Pharmacopœia and some of the new preparations contained therein, meantime we would say that the book as a whole is a great stride in advance. Fluid extracts have been brought almost to perfection. The new line of preparations called abstracta will be a great assistance, in pill making, besides being more exact than the old solid extracts. It is easy to be hypercritical and find fault, it is not quite so easy to revise and republish a Pharmacopœia. Every professor of Materia Medica and every manufacturing pharmacist will doubtless find something to say in the way of criticism, forgetting perhaps that they were invited to make their suggestions to the revisers long before the book was published.

The Compend of Anatomy, for use in the Dissecting Room, and in preparing for examinations. By JOHN B. ROBERTS, A.M., M.D., Lecturer on Anatomy in the Philadelphia School of Anatomy. Third edition. Philadelphia: G. C. Roberts & Co., publishers, 1882.

This little book seems to be admirably arranged, so as to give the most information in the least possible compass. We cannot say more in its favor, for this is precisely what it aims to do, and we think that its author has succeeded.

Essentials of Vaccination, a compilation of facts relating to Vaccine Inoculation and its influence in the Prevention of Small-Pox. By W. A. HARDAWAY, M.D., Professor of Diseases of the Skin in the Postgraduate Faculty of the Missouri Medical College. Chicago: Jansen, McClurg & Co., 1882.

Any one wishing to post himself thoroughly in all the facts concerning vaccination cannot do better than purchase this little volume. It is well

and concisely written, and brings its information down to date. The objections to vaccination are discussed, and very plainly shown to have no foundation in fact.

The Planet, a monthly Journal of Medicine, Surgery and the Collateral Sciences, Dr. C. E. Nelson, New York, editor and proprietor.

Our friend Dr. Nelson has entered upon the field of Medical Journalism, and he has our heartiest good wishes for his success. His *Planet* is not a large one, but we fear that his programme—a portion of it at least—will soon give him no end of trouble. He promises to accept all that is sent to him in the way of original communications—"No rejections." This is the height of good nature, but we seriously question its wisdom. Dr. Nelson is a pithy writer, and will give his readers common sense views on the Medical questions of the day.

Scrofula and its Gland Diseases. By FREDERICK TREVES, F.R.C.S., Eng. Philadelphia: Henry C. Lea's Son & Co., 1883.

But little has been written on the subject of Scrofulosis for several years, so that this little work of about one hundred pages should receive some attention at the hands of the profession. While its author has derived some of the material from the German and French schools, the greater part is the result of his own investigations. It is issued in paper cover at the very low rate of 10 cents, so that on the score of expense no one can object to purchase it.

THE DURATION OF ISOLATION OF SUBJECTS OF CONTAGIOUS DISEASES.

M. Hillairet, in the name of a commission composed of MM. H. Rodger, Bergeron and Hillairet, read before the Académie de Médecine a report in reply to the inquiry addressed to the Academy by the Minister of Public Instruction, as to how long a pupil affected with a contagious disease should be kept away from school.

The report considered the following diseases: varicella, variola, scarlatina, rubeola, mumps, and diphtheria, and the conclusions are as follows:

Varicella, whose progress is often irregular, may require ten to twelve days for the fall of the crusts: The isolation should be about twenty-five days.

Variola has a prodromic period of three to four days; four or five days of eruption; three or four days of suppuration; desiccation requires three days; fall of the crusts, six days. Then comes a period of furfuraceous desquamation without definite limit. Isolation should not be less than forty days.

In scarlatina the period of invasion occupies from six to forty-eight hours, or exceptionally three days; the eruption is completed in from five to eight days; desquamation commences on the fourteenth or fifteenth day, and lasts from fifteen to twenty-six days. Isolation should last forty days.

Rubeola has a prodromic period of three to four days; exceptionally from six to eight, or even twelve days; the eruption is completed in twelve or forty-eight hours, then it declines for twenty-four hours; desquamation lasts from eight to fifteen days. Isolation for forty days will be sufficient.

Mumps, as a rule, has a duration in ordinary cases of six days; convalescence lasts from six to seven days. If any complication of metastasis occurs, it lasts usually about nine days. Isolation for twenty-five days is sufficient.

The duration of diphtheria is very variable, but isolation should be maintained for at least forty days.

The Commission consequently proposes the adoption of the following measures:

1. Pupils affected with chicken-pox, small-pox, scarlet fever, measles, mumps, or diphtheria, should be strictly isolated from their comrades.
2. For small-pox, scarlet fever, measles, and diphtheria, isolation should not be shorter than forty days; for chicken-pox and mumps, twenty-five days is enough.
3. Isolation should last until after the patient has been bathed.
4. The clothing worn by the patient at the time he was taken sick should be subjected to a temperature of 90° C. [194° Fahr.], and to sulphur vapor and then well scoured.
5. The bedding, curtains, and furniture of the sick-room should be thoroughly disinfected, washed and aired.
6. The pupil of a school, after recovery from one of the above contagious diseases, should not be readmitted to the school unless furnished with the certificate of a physician that the above precautions have been observed.

These conclusions were adopted by the Academy.—*Gaz. Méd. de Paris.*