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TREATMENT OF EPILEPSY.—CHOREA.\*

BY E. C. SEGUIN, M.D.

Whilst a knowledge of general therapeutics is easily obtained from text-books and didactic lectures, the practitioner must have recourse for information, as to the therapeutics of special diseases, to the medical journals of the day, new works and special lectures. In this field of special therapeutics caution must be exercised, for so much of the knowledge is premature, so much of the material raw, so many of the remedies simply due to turns of the wheel of fashion. Diligent search should always be made for the unsuccessful cases. Time and repeated tests will settle the status of any new remedy.

In epilepsy, when due to encephalic, peripheral or toxæmic causes, treatment must be directed to the cause of the condition, not to the condition itself. Under the name of idiopathic epilepsy, are included cases in which there is no gross lesion or toxic condition. Such idiopathic cases demand treatment of the condition. It must be remembered, however, that many cases, seemingly idiopathic, are eventually found associated with a gross lesion. This lesion may have been the starting point of the disease, or may have been inter-current. The wife of a physician, who had been declared

the subject of idiopathic epilepsy, by such a competent observer as Brown-Sequard, has come under my observation. She had for 10 years, attacks of both grand and *petit mal*. Suddenly the attacks increased in frequency and severity, and death resulted. Autopsy showed a glioma, which, doubtless, had been present since the primary epileptic manifestations: at first growing slowly, and then more rapidly.

Heredity predisposed to epilepsy. Alcoholic excess, sexual excess, and syphilis in the parents, rendered the child more susceptible. Injuries during delivery to the cranium and its contents predisposed. There might be a history of asphyxia at birth, with or without convulsions.

In the patient herself, a weak heart, masturbation or sexual excess, the abuse of alcohol, or any severe acute disease, might excite an attack.

As to infantile eclampsia, the hereditary tendency was an important thing to consider, for epilepsy might or might not date from such infantile convulsions.

Too much importance should not be attached to such supposed causes as defective eyes, disordered digestion, and dysmenorrhœa. These conditions should, of course, be remedied, but one need not expect to cure the epilepsy in this way.

Stevens, of New York, has laid great stress upon eye strain as a cause of epilepsy. Treatment of the eyes, by lessening the irritation, may reduce the sum total of predisposing causes, but will not cure the epilepsy. The report of the Committee of Investigation shows

\*Abstract of a lecture before the University of Toronto Medical Society.

this clearly. The hope of curing epilepsy by the removal of the ovaries, or the foreskin, is equally chimerical. It is true that some few cases of hystero-epilepsy have been cured by removal of the ovaries, but this should be undertaken, not as a last resort, but only when the diagnosis was most certain. The lesson specially impressed was, to search your patient, and by careful examination discover the seat of irritation, remove, if possible, the cause, and, at the same time, attend to secondary conditions.

Personally, I am a pessimist. I have never reported cases of epilepsy as cured. I have had a patient, after treatment, go without an attack for 11 years, another one for 7, and yet the epilepsy recurred. For a case to be reported as cured, there must not be any convulsion, nor any epileptic manifestation. I must state that I believe ordinary cases of epilepsy can be cured by long continued use of bromides, but such cures are very rare. The treatment in medical cases must be continued for 5 years. In 4th year, dose may be gradually diminished: in 5th year, dose may be discontinued. Surgical cases may be regarded as cured, if there is no recurrence in 2 years. Great skill is needed in finding the right dose: for if the dose be too small, there is no effect; if too large, severe bromism is excited. From one to two months are often needed before the proper dose is ascertained, and during this time the patient must be seen frequently. The capacity to resist bromism varied greatly. In some cases, 30 grains daily produced it, whilst in others, 150 to 250 grains daily had no such effect.

Little children bear much larger proportionate doses than adults, because the drug is more quickly absorbed, and more quickly excreted; 40 to 60 grains daily were needed by a child of 2 years.

The weight of the adult, and the condition of the general health, affects the size of the dose. Feeble heart, disease of arteries, or cardiac organic disease, lessen the resistance to bromides, and hence digitalis is useful in such cases.

Organic cerebral disease increases the susceptibility to bromide.

Unhealthy conditions of the skin, and other

excretory organs, demand lessening of the dose. The appearance of acne is no guide as to the size of the dose. This acne may be avoided by the administration of the bromide in alkaline waters, and an occasional dose of arsenic.

It is sometimes objected to the bromide treatment, that it predisposes to dementia and insanity.

This is to be met by the fact that, in former days, before the bromides were used, epilepsy had these same sequels, and indeed it is probable that now there are fewer cases of dementia.

A single bromide, administered in water, not in syrups or bitters, is preferable to any combination of bromides, such as that of Brown-Sequard. Personally, I prefer bromide of sodium, because it is comparatively tasteless, and less apt to disorder digestion.

R.—Bromide of soda,                    ʒiiss.  
Water to,                                    ʒvii.

So that a teaspoonful of the solution represents 15 grains of the salt.

I insist on great dilution—up to 30 grains—I give in a half glass of water, 30—60 grains in a full glass of water. In my experience, gastric irritation has been due to the use of concentrated doses. If it be advisable to use arsenic, belladonna, or digitalis, they should be given separately.

Any ill effects which may result from the bromide can be controlled or avoided by the use of the alkaline waters, such as the artificial vichy, the Buffalo lithia, or the lithia water manufactured by the Hygeia Company of New York, which contains a known quantity of lithia. For poor patients, almost as good effects may be obtained by adding a little bicarbonate of soda to the water, or the bromide may be given in milk.

The chronology of the attacks must be carefully studied, and the time of administration regulated accordingly. As few doses as possible should be given.

Just as quinine is given 4 to 6 hours before the malarial paroxysm, so the bromide before the epileptic fit. In the nocturnal epilepsy occurring between 12 and 2, the drug should be given early in the evening. If the attack comes on about daylight, the patient should be wakened up some hours before and given his

dose. If the attacks are irregular, the doses are given three times a day, as a rule, after meals.

When there seems to be a special predisposition to attacks at the menstrual period, the dose should be increased for the 4 or 6 days of danger. The dose should be increased as children grow older and larger, as puberty approaches, and when the patient is about to be exposed to unusual excitement or fatigue, such as theatres, balls, concerts, or railroad journeys.

The dose may be reduced after 3 years, if the patient continues well. I am accustomed to lessen it by  $7\frac{1}{2}$  grains every 3 months. During the autumn and winter, the dose should be increased; in summer, decreased.

During temporary ill health, e.g., colds, diarrhoea, etc., the dose may be decreased, but never omitted entirely. In very severe illnesses it may be discontinued.

I insist on the medicine being given by some other person than the patient himself, thus making some one else responsible, for the peculiar mental condition of the patient may cause him to forget it altogether, or he may take an extra dose.

As a rule, it is better to tell the patient that he has epilepsy, especially in cases between 16 and 30 years of age, because no engagement of marriage should be entered into.

I always leave written directions, especially where the patient is not under constant observation.

Can anything be substituted for bromide? I believe that chloral hydrate may be combined with, or may be substituted for it. I have had better success, however, with a combination of them. There is a severe confluent form of acne, affecting the legs especially, and producing deep ulcers, which cannot be got rid of unless the bromide be discontinued, and then chloral may be substituted. Unusual debility and mental dulness, mania, are indications for chloral. Rarely chloral causes ocular irritation.

In chorea, arsenic is the standard remedy, given in 10 to 15 minims of Fowler's solution after meals. This will produce symptoms of arsenical poisoning, and force you to discontinue it for some days. When the drug is recommenced, it should be with the dose at which it was discontinued. This point I wish to

specially emphasize, for I believe that many cases of unsuccessful treatment are due to the error of recommencing with the original dose. The dose may then be increased up to 30 minims. It is peculiar that after the arsenic is thus recommenced, symptoms of arsenicism do not recur. I would also lay stress upon the free dilution of the arsenic. It need not be taken at one draught, but may be sipped during the hour after the meal.

But once have I seen a herpes result from its administration. From time to time the urine should be examined for casts.

Rest, absolute rest, in bed is essential. The child should be put in a room by himself, and the other children kept out. But one adult at a time should be allowed into the room. The child should be kept recumbent in bed and should not be allowed to have toys, pictures, or books, and should not be allowed even to move his hands. For the first few days there will be trouble, but he soon yields and becomes contented. One difficulty in this rest treatment is, that insomnia is apt to occur. This may be treated with chloral, or hyoscyamia. The patient is to be kept in bed till every trace of the chorea is gone—usually, 6 to 8 weeks.

When he is allowed to get up, I insist that every afternoon for 2 hours he shall rest upon a lounge.

Chorea may be due to muscular weakness of the eye, or to errors of refraction, or to both. It is folly to say that all cases of chorea are of this origin, but patients should have their eyes examined. It may be that in this ocular condition we find an explanation of the value of rest, and of the injury caused by school work.

My experience is that exercise does harm. Regulated gymnastic exercises might be of use, if they were performed only in the presence of a single adult, and with all exciting elements excluded. After an attack, attention should be given to the eyes, and they should be examined each year before the beginning of school work.

Any anæmia will demand appropriate treatment.

The Legislature of California has passed a bill appropriating \$80,000 for the erection of a new Medical College for the University in San Francisco.

## THE CAUSE, DIAGNOSIS, AND TREATMENT OF PLEURISY.\*

BY L. C. PREVOST, M.D.

I have chosen for the subject of my paper this evening, the cause, diagnosis, and treatment of pleurisy.

In this paper, I shall endeavor to free myself from the influence of books, exposing personal views, the result of my own experience.

I can hardly understand the legitimacy and exactness of all those classifications into acute, chronic, tuberculous, caseous, cancerous, hemorrhagic, and purulent pleurisies.

Pleuritis means inflammation of the pleura, and this inflammation will constitute, if you like, a morbid entity, evolving according to *individuals*. The latter will cause the disease to follow different courses, according to the dispositions of their organisms, and the irregularities of their constitution.

The epiphenomena, which, in a given pleurisy, determine changes in the quality and nature of the effusion, do not authorize our giving to this pleurisy a special name. Because the exudation contains leucocytes, blood-corpuscles, fibrin, should we call the inflammation of the pleura a purulent, hemorrhagic, fibrinous pleurisy?

No; what we must ask ourselves is this:

Is there pleurisy, yes or no? The fever, the stitch, the cough, and especially certain physical signs, cause us to recognize that the pleura is inflamed; that is all we want. Let us, hereafter, carefully watch the evolution of the evil, and find out, in the patient's organism, the reasons which will cause the inflammation to divert from the normal natural course.

The tissues of the human body are governed by the immutable laws of normal and pathological physiology. Amongst the theories invented to explain pathological phenomena, one faithful expression of truth has survived, "*Ubi stimulus, ibi fluxus.*"

That stimulus may vary as to its nature, but nevertheless its presence is indispensable. Under its influence, the intimate exchanges, of which our tissues are the stage, deviate from the physiological course. There arises a disorder ruled also by the fixed laws of pathological physiology, but the accomplishment of

which can be disturbed by the nature of the soil where the phenomena take place. Hence, varieties in the behaviour of diseases, but varieties not susceptible of a methodical and uniform classification, owing to their differing with each individual.

The pleura is inflamed because it has been irritated. But where do these phlogogenic irritants come from?

From outside of the body, in the vast majority of cases; from inside, also, according to those who acknowledge, as causes of pleurisy, the sundry morbid blood conditions produced by various diatheses, such as tuberculosis, rheumatism, cancer.

The principal, the most important, most frequent cause of pleurisy is external; the sudden impression of cold on the surface of the body. The shock impressed at the periphery determines disturbances in the neuro-vascular apparatus of the pleura. The histo-chemical elements of the serous membrane, irritated by that sudden interference with their normal functions, lose their head, as it were, and inflammation begins, *ubi stimulus, ibi fluxus*.

Should there exist, by chance, in the organism, pathogenic germs, either latent or active, *e.g.*, the micro-organisms of the tuberculous, or cancerous, or rheumatic diatheses, they will rush on this new prey, and from that moment these microscopical despots will command the evolution of the morbid process, and cause it to deviate from the path traced out by the laws, that rule the normal course of phlegmasias.

If, on the other hand, the subject is absolutely sound, and void of the above mentioned dyscrasie, pleurisy shall then pursue its normal course. We shall have a simple acute inflammation of the pleura, "a frigore," free from all complications. This is the one I have in view in this present study.

By subjective and objective signs, attracting attention to the affected organ, we recognize the disease we have to deal with.

In every pleurisy, two things are to be considered. First, the inflammation proper of the serous membrane, and, secondly, the effusions which are the consequence of it.

When once the pleura has been irritated, it becomes the seat of an active hyperæmia; the subserous tissue impregnated with phlegmasie

\* Paper read before the Ottawa Medico-Chirurgical Society.

products is thickened; the epithelial cells become swollen and detached over a more or less extensive surface. The pleura denuded is rough, uneven—very soon it becomes shaggy, owing to papilliform granulations due to proliferation of the connected tissue. Later on these will undergo organisation, forming neo-membranes which will establish adhesions between its two layers, new blood-vessels will form into them, and they will then be endowed with all the properties of ordinary living tissues.

This hyperplasia solely constitutes the initial period of pleurisy. The interstitial exudation has not yet appeared, and to this fibro-plastic formation alone in the parenchyma is limited what has been called dry pleurisy, a bastard and exceptional form of pleural inflammation.

At that period, the patient complains of the rigor and fever which accompany all commencing inflammation.

The fever is, with regard to inflammation, what smoke is to fire. As long as it persists in pleurisy, the phlegmasic process has not ended its evolution. When it has disappeared, we may conclude that inflammation has almost, if not altogether, undergone all its periods.

Pleuritic fever is never very considerable, and it very seldom reaches  $104^{\circ}$  Fah. Ordinarily it oscillates between  $102^{\circ}$  and  $103^{\circ}$  in the evening, and its thermometric curve presents no uniform character as in pneumonia.

To the chill and fever is soon added an intense pain, generally situated under the nipple, and not produced by the sufferings of the pleura, but by radiation of the irritation and phlegmasic process of the serous membrane towards the intercostal nerves.

The pleura is not sensitive—it has no nerves, any more than the peritoneum, or the meninges. Intercostal nerves are in immediate relation with the pleura in the posterior third of their course; owing to this vicinity they are inflamed in pleurisy, as has been demonstrated by necroscopic observation. As all irritations of a nervous trunk resound at its terminal expansions, the stitch will be felt on the lateral or anterior part of the chest.

This pain is exaggerated by pressure. This accounts for the patient avoiding, at that period, lying on the affected side, contrary to what he will do later on.

The lung being still able to fulfil its functions, dyspnoea is slight, and caused solely by the fear of increasing the pain by a total amputation of the thorax, and also by the fever which increases combustion, and overloads the blood with carbonic acid.

As the inflammation of the parietal pleura transmitted to the intercostal nerves produces pain, so the inflammation of the visceral pleura, propagated to the adjacent cortical layers of the lung, and also to the bronchial ramifications, excites the terminal expansions of the pneumogastric, which carries the irritation to the bulb and produces by reflex action the contraction of respiratory muscles; the patient coughs.

The pleuritic cough is dry, not followed by expectoration, as in bronchitis and pneumonia, where a foreign body, exciting the expansion of the vagus, similarly provokes a tutelary reflex spasm, which expels the cause of irritation.

If you were called early enough, on applying the ear to the affected side, you shall no longer hear the soft vesicular murmur audible in the sound side, but a characteristic friction-sound, produced by the rubbing of the pleuræ thickened and covered with granulations. This friction fremitus, is of a dull, grating character, and consists of a quick succession of detached sensations, like the creaking noise of the bending of new leather. It is isochronous with the respiratory movements, and unaltered by coughing. Its intensity is sometimes so great that it becomes perceptible to the touch, and communicates to the hand, applied upon the thorax, a peculiar thrilling sensation.

Very soon the disease will enter a new phase. To the parenchymatous exudation will succeed the interstitial exudation produced by vascular exosmosis. The transuded liquid oozing through the serous membrane, deprived of its epithelium, infiltrates between the layers of the pleura, and gradually increasing, will soon fill up the pleural cavity. The effusion will modify the already existing symptoms, and give rise to new phenomena, manifested especially by physical signs, all of which result from the interposition of a non-conductor between the lung and the chest walls. This wholesome shower will, at first, relieve the clouds accumulated by the inflammatory storm in the parenchyma of the serous membrane. The intensity of the

subjective symptoms will immediately diminish. The stitch decreases with the diminution of the neuritis; temperature lowers; the cough partially loses its frequency, as well as its intensity, owing to the momentary relief of the pneumogastric irritation. It will not altogether disappear, on account of the irritation produced by the presence of exudation itself. Later on, however, owing to the deposit of false membranes on the surface of the pleural cavity, and the sensitiveness of the terminal expansions of pneumogastric being somewhat deadened by the habit of contact, the reflex action will no longer take place, and the patient will cease to cough, unless, by some sudden movements, *e.g.*, quickly sitting up in his bed, he allows the effusion, not yet totally filling the pleural cavity, to come and irritate peripheric branches of the vagus situated on a level with sound, bare, and unarmed portions of the pulmonary pleura.

We must not forget that the patient is generally resting in the dorsal decubitus, on a plane inclined downwards, the shoulder higher than the rest of the body.

Therefore, the superior level of the effusion, in most cases, is perpendicular to the horizontal surface of the bed, instead of to the axis of the body.

Besides, this effusion is not exclusively serous; as it is an inflammatory product, it contains a large quantity of fibrin, which renders it slimy and causes it to adhere to the pleura, and prevents its entire displacement when the patient sits up.

Such is the explanation of the parabolic percussion line of pleurisy, first described by Damoiseau.

Therefore, the effusion, at first, will collect at the postero-inferior part, and then rise by capillarity to the lateral, and, lastly, the anterior portion of the thorax. At the beginning, it only consists of a thin layer of liquid interposed between the lung and the chest walls, where it performs the functions of a vibrating reed. Not profuse enough to occasion a dulness appreciable to percussion, it already hinders the transmission of sonorous waves, and auscultation shows a weakened vesicular murmur. The voice has a trembling character, like the bleating of a goat. That sound, called *ægophony*, always indicates that the effusion is not abundant.

The effusion, increasing, the lung diminishes in bulk, owing to its retractility; but, very soon driven back, it allows the serous portion of the effusion to accumulate at the inferior part. At this level, vesicular murmur has disappeared, the percussion sound is dull, and the voice cannot be transmitted. At the superior part, we still hear a soft, clouded blowing, where the liquid sheet has remained thin enough to transmit the prolonged vesicular murmur.

The parenchyma of the lung, compressed by the gradual increase of the effusion, at last becomes impermeable. Only the sound of the middle bronchi is then transmitted through the liquid and the condensed lung tissue.

The timbre of the voice is, in the meantime, altered; there is bronchophony. I wish to call your attention to the fact that bronchophony has, with regard to the physical condition of the lung, the same diagnostic signification as the bronchial respiratory murmur. In all instances, its occurrence, its distinctness, its temporary disappearance and its reappearance, are dependent on precisely the same circumstances as bronchial respiration, and when the latter is absent, bronchophony also is wanting.

Later on, when the pressure of the effusion is at its utmost, the middle bronchi themselves will be flattened, so that nothing but the loud and voluminous sound of the large bronchi will be heard. Then silence will reign at the lower third of the chest, and at the upper two-thirds we shall have amphoric or cavernous respiration voice.

At last, when the pleural cavity is totally full of liquid, there will be a general flattening; the whole broncho-pulmonary apparatus becomes inaccessible to air; nothing can be heard.

As soon as the lung has begun to recede before the ever-increasing exudation, the percussion sound becomes dull, and gives to the hand a sensation "*tangam percussi femoris.*"

There now appears a phenomenon pathognomonic of pleuritic effusion. If the patient count aloud, while you successively apply your hand flat on either side of the thorax, you will perceive a total loss of vocal fremitus on the diseased side. This absence of vocal thrill is extremely precious and generally easily appreciable.

The lung, chased by the always rising tide,

reduced to the size of a shrunk up stump, seeks refuge in a corner of the anterior mediastinum, on a level with the sterno-clavicular articulation. If it still contains a certain quantity of air, percussion of the antero-superior part of the chest will produce a tympanitic sound, all the more appreciable owing to the general dulness of the rest of the thorax—the "*bruit skodique*."

When air can no longer enter the lung, even then we can sometimes determine another resonance, *sui generis*, due to vibration of the column of air in the trachea. This phenomenon—the cracked-pot sound—is very rare in pleurisy.

What does the patient say during all that time?

Not much. It tires him to speak; the least exertion puts him out of breath, for he has only one lung; the other one being obliterated. And even the relatively sound lung is not very valorous. Compelled to perform alone the respiratory functions, it is, besides, congested by the blood it receives from the opposite compressed lung.

At this period, decubitus is different to what it was at the beginning. The patient more willingly rests on the sound side, or on his back. It is all very well then, because the effusion still allows the diseased lung to fulfil more or less its functions. But later on, when that lung no more belongs, as it were, to the respiratory apparatus, if the patient should lie on the unaffected side, and thus render immovable, by the weight of the body, the ribs, allowing them, besides the liquid, to compress the only lung which permits respiration, he will simply smother.

Hence, at this stage, the patient always lies on the affected side, which is no longer painful, thus granting the healthy side all liberty of dilatation. Therefore, whenever a patient says he is habitually oppressed, but hardly coughs, that lately he has been unable to lie on but one side of the body, that he is immediately threatened with suffocation whenever he attempts to remain on the opposite side, we should suspect that he has an enormous effusion in the side upon which he is compelled to lie habitually and exclusively.

The general aspect of the patient, his walking, are also quite significant. It seems that the

pail of water, which lies heavy upon one side of his diaphragm, draws down the whole corresponding part of the chest. The patient is slightly stooped sideways, the shoulder a little lowered, the fore arm flexed, and the hand resting on a level with the belt; in this position he walks, prudently and slowly. Should the face be pale, the nostrils dilating, and the voice broken, to take breath, in the middle of a sentence, then think at once of a very abundant pleural effusion.

Inspection may be of great aid in the diagnosis. The effusion, if situated in the right side, forces down the liver; when situated in the left pleura, deviates the heart towards the right side. When the quantity increases to great extent, the chest gets enlarged and presents, on the affected side, a quite characteristic globulous shape.

When, later on, the fluid is absorbed, the return of the parts to their normal dimensions will depend upon the permeability of the affected lung. Should all parts of the lung become expansible, the thoracic wall will return to its physiological situation; there will be no deformity. If a portion of the lung remains definitely impermeable, it will not again fill up the whole thoracic cavity. A vacuum will be created, which will be filled by the chest-wall, yielding to atmospheric pressure.

Towards the end of the third week, in the normal course of the disease, the effused products are gradually reabsorbed. The liquid part is absorbed by the lymphatics: the solid, the false membranes, undergoes granulo-fatty metamorphosis, and is taken up in its turn; fever totally disappears, and after four, five, or six weeks, everything is over.

The disease with which we may confound pleurisy is pneumonia. In inflammation of the lungs, we meet, as in pleurisy, with rigor, fever, stitch in the side, dulness, bronchial respiration, and broncophony, but there exists, between the two maladies, certain shades in the symptoms, which ordinarily enable us to surely fix the diagnosis. Fever is altogether characteristic in pneumonia, and besides its much greater intensity, it runs a well known definite cycle. The cough is not dry, as the pleuritic cough; it is followed by pathognomonic, slimy and blood-tinged expectoration.



The percussion sound, although evidently dull, is, however, much clearer than in pleurisy, where the hand that receives the percussion-stroke feels as if the parts underneath were thoroughly deprived of elasticity. The bronchial murmur, the bronchophony, have not the muffled, distant character of pleuritic effusion. The resounding of the patient's voice also seems more superficial and louder, producing sometimes even a really painful impression upon the tympanum. The most important difference between these two diseases is the character of the vocal fremitus. Vocal vibrations, instead of being diminished or totally abolished, as in pleuritic effusion, are not only perceptible, but nearly always considerably increased. Therefore, careful examination of the vocal thrill, especially in doubtful cases, should never be neglected.

If, after the most particular attention, a doubt still persists, we have the hypodermic syringe.

I may not quit this subject of diagnosis without calling attention to the necessity of always carefully examining the chest in those obscure cases where the patient, although complaining of a mere uneasiness, and perhaps some slight dyspnoea, still has none of the classical symptoms.

These latent pleurisies often silently run their course without preventing the patient from attending to his duties, until at last the persistence of some stubborn symptom compels him to consult a physician, who himself is astonished to find an enormous effusion.

What shall we do with that mass of liquid which fills the pleural cavity? Our conduct will depend upon two considerations: 1st. The behaviour of the effusion. 2nd. The duration of the disease.

The natural course of pleurisy ordinarily tends towards recovery. Our duty is to remain passive, but attentive spectators, of the phenomena taking place under our eyes.

But if the effusion threatens to cause some accidents, or if the inflammation, having long ago disappeared, that effusion show a tendency to last forever, then we must act.

What way shall we interfere? The disease is in the first 15 or 18 days of its course; inflammation is still going on in the pleura; there is fever, dyspnoea, even orthopnoea; the patient is

suffocating; examination reveals an enormous quantity of liquid; it is obvious that we would be wrong in remaining idle in the face of such gravesymptoms. What shall we do? Shall we have recourse to blisters, purgatives, diuretics, to promote the disappearance of the effusion? You may thus, it is true, momentarily check the activity of the exudation; the effusion will not increase, but it will not diminish either.

The best thing, under these circumstances, is paracentesis. We might, in the meantime, if you like, tone up the patient by the exhibition of the tincture of muriate of iron.

Thoracentesis no more cures pleurisy than tracheotomy cures diphtheria, but in either case, we suppress an epiphenomenon which had become of a primordial interest.

Effusion may be reproduced, it is true, since the inflammation which gave rise to exudation still persists; we will remove it again; while we remove the immediate causes of the most alarming symptoms, nothing prevents our having recourse to local blood-letting, should the phlegmasic manifestations invite us to oppose a direct treatment to them. Twelve or eighteen leeches, in similar occurrence, never do any harm.

Even when no very alarming symptoms exist, there are cases in which we must never put off tapping the chest, whatever may be the stage of the disease; especially, when we ascertain the presence of a considerable effusion in the left pleura. These effusions in the left side of the thorax are always very dangerous, owing to the displacement of the heart, and the torsion of the large blood-vessels. Sudden death has often been the result of them, and it would be, at the least, a grave imprudence to wait before tapping the chest.

The disease has lasted four or five weeks, fever has disappeared, inflammation is extinguished, perfect calm has, for a long time, been reigning in the pleura; still, its cavity contains a considerable quantity of fluid, which threatens to everlastingly stay there.

Here pleurisy exists no longer, the effusion is nothing but the remains of it, a "caput mortuum," a part of the ruins the storm has left after it.

Shall we here, again, have recourse to blisters, diuretics, and purgatives? No more than in the first case.

After sero-fibrinous pleurisy, as has been lately demonstrated by Ranvier, Cornil, Wagner, and others, the lymphatics are filled with coagulated fibrin, and this obstruction surely opposes a barrier to the reabsorption of the exudation. How can we hope that this effusion could traverse the thick fibrinous coat spread out on the surface of the pleura, and which, before it disappears itself, will have to undergo very slow fatty degeneration?

Here again, and especially here, aspiration will get us out of trouble. A single puncture will settle the question, because, then, we need not fear the reappearance of the liquid, since inflammation of the pleura exists no longer.

The operation of thoracentesis is a thoroughly innocuous operation. Some have mentioned the possibility of wounding the intercostal artery with the needle of the instrument. Well, I defy the most inexperienced to do it. That artery is hidden behind the inferior border of the ribs, and is never met by the trocar, especially when the latter is introduced in the lateral part of the chest.

Order the patient to cross his arms, in front of his chest, and by a sharp push insert the needle at a point situated in the intercostal space corresponding to the inferior angle of the scapula, and a little outside of that angle, when the latter has been itself deviated outwards by the movement of the arm brought forward.

This point offers great advantages; first, it is easily determined, and it allows our putting the patient in an easy position for the operation. To avoid, after the operation, that violent and so alarming cough, which may persist for hours, and even be accompanied with the gravest asphyctic symptoms, you must not push the aspiration too far, taking care to never thoroughly empty the pleural cavity. We should never withdraw more than 40 to 50 ounces of liquid at one time, always following besides Bowditch's precept, who cautions us to suspend the withdrawal of fluid the moment the patient begins to suffer in breathing, even in the slightest degree.

The next meeting of the British Medical Association, will be held at Birmingham, during the last week in August, under the presidency of Dr. Willoughby F. Wade.

## Selections.

### THE TREATMENT OF INCOMPLETELY DESCENDED TESTICLE.

BY W. WATSON CHEYNE, M.B., F.R.C.S.,  
Surgeon to King's College Hospital, and the Paddington Green  
Children's Hospital, etc.

On account of the grave inconveniences which attend the retention of testicles in the inguinal canal, I have, like a good many other surgeons, made attempts in several cases to bring them down into their proper position in the scrotum, but I cannot say that the results of these attempts have been very brilliant. The following case, however, in which I adopted a new method, and in which the result was practically perfect, may be of interest. I may say that I have tried most of the plans suggested, and have in all cases, after freeing the cord and testicle, stitched the latter to the lower part of the scrotum by means of catgut, and afterwards placed catgut sutures in the external ring to prevent the testicle slipping up again into the inguinal canal. The immediate result is that as soon as the hold on the testicle is relaxed, it retracts to the external ring, drawing in the scrotum with it, thus forming a pucker, and the ultimate result is that the testicle lies at, or very little below, the external ring, in a position very little better than that which it formerly occupied. It struck me, however, that if we could keep up the tension on the cord for some days it would gradually stretch, and that then, when the tension was relaxed, the testicle would remain in its new position in the scrotum.

I had a small triangular wire frame constructed which fitted into the perineum and over the pubes, and was kept in its place by threads of carbolised silk, attached to each angle of the frame and passed round the abdomen and thighs. At a point opposite the apex of the scrotum a projecting bar was attached to the frame to which the thread which passed through the cord could be tied. The mode of operation in this case was as follows: The testicle and cord were freed and brought down into the scrotum, in which a pouch was formed for its reception. A strong catgut suture was then passed through the structures of the cord immediately above the testicle, and both ends were brought out through a hole at the

apex of the scrotum and tied around the projecting bar. Care was taken that the *vas deferens* should not be on the side of the cord through which the thread might cut its way. In this way any desired amount of tension can be kept up on the cord, and in this particular case I did not stretch the cord at the time of the operation as completely as I intended ultimately to do, but tightened it at the second dressing some days later. After stitching up the external ring and the wound, the whole arrangement was enveloped in antiseptic dressings. I did not in this case pass the stitch through the apex of the testicle, but through the cord, because I did not wish to set up orchitis, nor to destroy any of the testicular structure, while I thought the stitch would not cut through the cord so quickly as through the testicle.

Of course it is only in a certain proportion of these cases that any operation with the view of bringing down the testicle can be of benefit, and I should only attempt it in cases where the testicle was fairly movable in the inguinal canal, and could be readily made to protrude at the external ring. Where the testicle is retained at the upper part of the inguinal canal, the cord very short and the testicle much atrophied, I believe it is best, in view of the serious trouble to which it may afterwards give rise, to excise it at once and bring together the walls of the inguinal canal. The following is the case to which I allude.

H. E., aged 11, was admitted into the Paddington Green Children's Hospital on February 27th, 1889. Both testicles were lying at the lower part of the inguinal canal, and could be readily made to protrude at the external ring; they had been in this position since birth.

On March 1st I operated on the right side, but I did not employ the plan above described. In order to carry out the same principle, however, after stitching the testicle to the bottom of the scrotum, and while the assistant held it in that position, I passed a catgut stitch through the skin at the junction of the scrotum and thigh, through the cord just below the external ring and through the skin on the other side of the scrotum, with the view of, so to speak, anchoring the testicle in the scrotum. The wound healed by first intention, but the ultimate result has been that though the testicle is considerably

below the external ring, it is not in its proper position in the scrotum.

Before operating on the left side, I therefore had the wire frame described above constructed, and on April 2nd I operated on the left side in the manner which I have mentioned. The dressing was changed next day, and everything was looking well; patient comfortable. It was again changed on the 6th, and the catgut tightened as much as possible; the wound had healed. On the 13th the stitch was removed, the apparatus left off, and a small collodion dressing was fixed over the puncture through which the stitch had passed. The testicle hardly receded at all when the stitch was divided, and there was a good deal of thickening about the cord and the external ring, which no doubt helped to keep things in position. The patient was allowed to get up on the 15th, and went home on April 22nd. He was exhibited at the Medical Society about ten months later, when the left testicle occupied its normal position in the scrotum.—*British Medical Journal*.

#### THE EFFECT OF THE ENTRANCE OF AIR INTO THE VEINS.

Some months ago I published an account of experiments on seventy dogs, in which I found that the entrance of air into the veins of living animals was not so lethal as is generally believed. It has been taught that minute globules of air entering the veins will produce fatal results, or, at least, most serious symptoms. I discovered the fallacy of this by making injections of solutions of drugs. I found that when a small quantity of air was introduced accidentally, no evil results followed. On looking up the literature of the subject, I found that the mass of evidence was really against the common belief. There are quite a number of cases on record where patients have died suddenly during operations, and death was attributed to the entrance of air.

The first experiments are attributed to Wepfer, who is said to have killed an ox of stupendous size by blowing air with his mouth into its jugular vein; while Redi, over two hundred years ago, stated that he had killed in a similar manner two dogs, a horse, a sheep, and two foxes. Similar studies have been made by

Heyde and Brunner. Ruysch, Valsalva, Morgagni, and others, have at autopsies recorded the appearance of quantities of gaseous fluid in the vascular system, which they believed to be air. Very much later, Bichat made startling announcements as to the small amount of air required to cause death when so introduced, but Nysten, a few years later, showed the fallacies in Bichat's assertions.

"In 1818, a patient of Beauchene, at the Hopital Saint Antoine, while he was extirpating a tumor of the right shoulder and lateral and lower part of the neck, died very suddenly, 'under circumstances which made him believe that this was occasioned by entrance of air into the vascular system through an opening in a vein.' Further cases have since been reported by writers in this country and abroad, by Amussat, Mott, and others.

"In the experiments of nearly all the early investigators, the air was introduced by blowing with the mouth, or a syringe, but Amussat carried out a series of studies in which he opened the jugular vein and allowed any air to enter that could do so.

"The experiments of Nysten proved that only large amounts of air produce fatal results, the quantity varying from forty to one hundred and twenty cubic centimetres, according to the size of the dog.

"Barthelemy has also found that in six horses, weakened greatly by the withdrawal of blood, as much as from four to six litres of air must be introduced intravenously to cause death, and estimates, in consequence, that a man weighing one hundred and thirty-six pounds would be killed only by two-thirds of a litre. Even the experiments of Amussat force him to the conclusion that a considerable quantity of air must be used to cause death.

"The conclusion to be reached, therefore, from all experimental researches, is, that enormous amounts of air must enter a vein to cause death, and that no such quantity can possibly find its way into a vein which has been injured by the knife of the surgeon. While we have a large number of cases reported of sudden death under operations where veins were opened, in the majority of them the cause of death has been guessed at and not proved. The only case which approaches in any way toward

authenticity is that of Mott, who saw a serious but not fatal result induced by the entrance of air into the facial vein, and even this is not a proved case. The case of Barlow is equally doubtful as to the real cause of death.

"There are a number of cases on record where death has resulted, according to the physician in charge, from the entrance of air into the uterine sinuses.

"Supposing that ordinary atmospheric air is really capable of acting in the manner generally thought, the question arises as to the method of its influence. Erichsen believes it to be due to the frothy state of the blood, which prevents the due transfer of the circulating fluids through the pulmonary tissue, and Bell believed death to be due to the transference of air to the base of the brain.

"Cormack has thought death to be due to gaseous distention of the heart, and Moore thought it to be due to the entrance of air into the cardiac cavities. Other observers have found air in the right heart, and concluded that in this way the blood is prevented from eventually getting to the lungs and general system. Again, it has been thought that the air prevents the closure of the valves of the heart, or that the bubbles of air entering the smaller capillaries acted as emboli.

"Taking up the last theory first, we find, in the first place, there is no evidence whatever to prove that air may not be driven anywhere that blood can flow, and it is, to say the least, curious that any one should suppose that a bubble of air, which is compressible in itself, and capable of assuming any form under pressure, should form an impassable barrier against which a blood-pressure of two hundred millimetres could press in vain—a pressure made up of blood, a virtually incompressible body. This seems to be sufficient evidence of the falsity of any such theory.

"Again, why should the air in the cavities of the heart prevent the valves from closing? We are accustomed to test the tightness of rubber bags by inflating them with air or water, and if the valves can close on a current of blood, why can they not do so upon a current of blood and air mixed? If the air was as heavy as mercury, and as difficult of propulsion, such a theory might stand.

"Even the theories of the causes of the supposed deaths in man do not, therefore, stand before a rigid examination, which is hardly to be wondered at when we have proved that the quantity of air entering the veins under such circumstances cannot be very great.

"According to Ashhurst and Agnew, the veins of the neck are the ones most liable to be entered by air; and it is stated by Agnew that the frequency of this accident is due to the fact that the venous trunks in that region are in many places attached to the deep fascia, which prevents collapse of their walls when wounded; for this reason this part of the body is spoken of as the 'dangerous region,' according to Ashhurst.

"The explanation of the method by which the air finds entrance to the veins, is supposed to be a process of suction produced by the expansile movements of the chest in inspiration. Practically, most surgeons will agree with me in stating that generally the blood-pressure in the jugular vein is sufficient to cause so great a hemorrhage as to prevent any air entering the vein; and I have proved the fallacy of the suction theory any number of times by leaving an open canula in the jugular vein, the vessel being tied above to prevent hemorrhage."

Two dogs were then taken, and into the external jugular vein of one was injected twenty cubic centimetres of air, and into the jugular vein of the other forty cubic centimetres. The animals were subsequently released, and showed no apparent bad effects.—*H. A. Hare in The Cincinnati Lancet-Clinic.*

#### CHLORALAMIDE.

Chloralamide, one of the most recent of the new hypnotics—somnal alone being of later date—is the product of a mixture of chloral anhydrid and formamide. It is not a mechanical mixture. With urethane, paraldehyde, sulphonal and others, it is a member of the fatty ether series. It occurs in colorless crystals, and is soluble in nine parts of water and one and a half parts of alcohol. It has a mild, slightly bitter taste and neutral reaction. Alcoholic and aqueous solutions separate when the temperature is about 140° F. It is decomposed by caustic and carbonic alkalies, but is not affected by weak acids.

The reports, with few exceptions, are most favorable. The observations have been chiefly clinical. An analysis of these would lead to the belief that chloralamide is a valuable hypnotic, producing a quiet, natural sleep lasting from eight to thirty-six hours, varying irregularly with the dose. In the majority of instances no unpleasant after effects were produced, though at times there was giddiness, anorexia, or headache. No effect was produced on the circulation and urinary secretion or temperature.

The modes of administration have been various, in alcoholic solutions, in tea, beer, or hot water; or by enema. The dose advised is from thirty to forty-five grains, though in some cases even fifteen grains may give sleep. The drug is said to act in from one-half an hour to one and a half hours.

As compared with chloral and sulphonal, most of the writers find chloralamide superior, having equal hypnotic powers and but few unpleasant after effects; other advantages claimed are that it does not depress, is readily soluble, is pleasant to take, and is cheap.

Under Dr. Osler's directions, chloralamide, obtained through Merck, has been used in the hospital in fifty cases. The dose has varied from ten to sixty grains, both in single and in divided doses. The drug has always been given by the mouth, either in powder or in alcoholic solution. In order to estimate the value of the drug, the following plan was followed:

The patient was asked in the morning how he or she slept, while the night nurse was told to observe closely and note the time of sleeping, and the character of the sleep, making half-hourly memoranda. In the morning the patient was again asked as to the sleep of the night just passed, his condition on awaking, and his statements were compared with the written report.

An analysis of the results reveals the following: The drug was employed in fifty cases, and one hundred and eighty-six separate doses were given. Of the fifty cases, five were from the Dispensary, the remainder from the wards. Forty were poor sleepers, as a rule; ten were not troubled with sleeplessness. To the latter the chloralamide was given in order to note the effect on the pulse, duration of sleep, etc. The

list of diseases embraces phthisis, cardiac disease, chronic nervous affections, diabetes, aneurism, typhoid fever, pneumonia, bronchitis, and others.

The results were classified under three heads:—those in which there was an undoubted hypnotic action, those in which the action was uncertain, and those in which the result was unmistakably negative. As an example of the first class, Case VIII might be cited: C. J., male, colored, aet. 40; diabetes; a light sleeper, generally awoke four to six times through the night. He usually had six hours broken sleep. December 11th. Grains thirty at 9 p.m. Asleep a few minutes before ten—9.55—and slept soundly till 6. Not drowsy on awakening. No ill effects. Of the 186 trials, eighty-six fall under this head, or 46.32 per cent. of positive results.

Case XXXVII illustrates the negative cases:—

G. W., male, white, aet. 32, transverse myelitis, sleeping only four hours at night. January 6th. Grains twenty at 11 p.m. Slept lightly from 11 to 12, and from 3 to 5. January 7th. Grains thirty at 10 p.m. Not asleep till 3 a.m., when he dozed for two hours. Under this head came eighty-five administrations—per cent. 45.69. In fifteen trials the action was uncertain.

In sixteen instances ill effects followed—headache in eight, and a sense of being dazed and confused in four; while in two there was mental derangement.

Sleep followed within an hour after administration in nearly every positive case, and generally within the first half-hour. In only one case did it last more than nine hours. The largest single dose given was forty grains, and on three occasions this was followed by a second dose of twenty grains in five hours without any apparent effect, except to cause delirium and wakefulness in one of these. In one case twenty-seven consecutive doses were given, with uniform result, so that there does not seem to be a necessity of increasing the dose, nor was a cumulative action noticed.

From these observations, limited, it is true, we cannot speak very highly of chloralamide as a hypnotic. It is much inferior to sulfonal or chloral, and possesses no special properties

which warrant its introduction into general use.—*Harry Toulmin, M.D., in Johns Hopkins Hospital Bulletin.*

ON THE IRRATIONALITY OF THE TREATMENT OF DIPHTHERIA BY STEAM.—When, in bacteriology, we proceed to make pure cultures, one of the first things required is proper temperature; the ground for breeding having been selected and prepared, we inoculate it and place the culture in the required atmosphere, which is nearly always up to 35°C, and moist. In short, then, in moist warm atmospheres, colonies of micrococci flourish best, consequently, if we, by playing warm vapour upon upon such a festering hot-bed of micrococci as diphtheritic membrane presents, furnish the one essential necessary to promote their multiplication, is it any wonder that the results of such treatment prove negative, and that the membrane grows under our very eyes? The addition of an antiseptic substance does not neutralize the evil consequences of such unscientific treatment, for were the antiseptic fluid sufficiently strong to kill the micrococci, it would likewise kill the patient by absorption. Feed the patient on beef tea, chicken broth, and the like, in addition to this, and you supply him with the very materials we use in bacteriology for pure cultivations, in which micrococci develop best and increase prodigiously. Steam and antiseptic vapour, then, is decidedly injurious in the treatment of diphtheria, since it promotes the growth of the parasite, according to bacteriological dicta which are indisputable; the diet, which includes bouillon or gelatine, is also unscientific, and must be reformed. The frequent and continuous use of steam necessitates tracheotomy, by washing down into the larynx all the soluble and infectious constituents of the diphtheritic membrane, notably the micrococci, which are caught at the vocal cords and forced to breed through being fed continuously from above.—*F. W. Elsner, in Australasian Med. Gazette.*

THE INFLUENCE OF COLD IN PNEUMONIC INFECTION.—Dr. G. Lipari, of Palermo, in his recent experiments on the infectious nature of fibrinous pneumonia, essentially confirms what is known of Fraenkel's pneumonococcus, and has also succeeded in proving the influence of

cold as a factor in the origin of fibrinous pneumonia. The endo-tracheal injection of pneumonic sputa or pleuritic exudation of animals which had died from pneumococci gave a negative result, but when the author, before or after the endo-tracheal injection, exposed the animals to cold, the result was very different. Of eight animals so treated, six died with clearly established pneumonic infiltration. The author supposes that the cold paralyses the ciliated epithelium of the bronchi, and at the same time causes their mucous membrane to swell, both of which pathological processes favor the descent of the infectious material into the alveoli. These experiments were doubtless undertaken with a view to harmonise the old and new teaching upon the origin of this prevalent disease.—*Lancet*.

**FOREIGN BODIES IN WOUNDS.** By A. Frankel. The author made a series of experiments upon rabbits, by introducing foreign bodies, such as soiled clothing, etc., with views of determining to what extent, these, of themselves, would prove harmful; comparing the results obtained between those unprepared and used directly from wear upon the body and presumably infected, those previously disinfected or sterilized, and those which had been purposely infected with the staphylococcus pyogenes aureus, streptococcus pyogenes, etc.

As a result of these experiments, Frankel concludes as follows: 1. Foreign bodies, passing into wounds, do not of themselves set up phlegmonous processes, but are covered in by the healing process without any considerable general or local disturbance. 2. This may be equally true of smooth bodies, as well as those which have surfaces and interstices upon and in which numerous germs may lodge. 3. Those foreign bodies which were infected with specific pathogenic germs peculiar to diseases arising in the lower animals, such as anthrax, as well as certain chemical substances, such as croton oil, turpentine, etc., produced severe disturbances or progressive suppuration. The occurrence of tetanus is so rare that the entrance of earth and soil must likewise be comparatively dangerless, inasmuch as tetanogenic earth would be but seldom brought into contact with the wounded parts.

It may be said in commenting upon these experiments, that the wounds were immediately closed, and antiseptically treated, after the introduction of the foreign bodies. In cases of injury with the entrance of foreign bodies, the case is different, the wound remaining a longer or shorter time uncared for, and consequently the further entrance of germs from the atmosphere is invited. Although at the present time there is no reason to suppose that the tissues of rabbits break down into suppuration more readily than those of man, yet experiments bearing upon these points are still wanting.—*Wier Klin. Woch.—Annals of Surgery*.

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THE  
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS  
OF THE MEDICAL SCIENCES.

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TORONTO, MARCH 17, 1890.

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MEDICAL LEGISLATION IN BRITISH  
COLUMBIA.

The medical laws in this Province have been rather mixed of late years. When the Act of 1886 was passed, it was thought the Council then incorporated would have full power to deal with all medical comers, but it soon transpired that an Act passed in 1870 had not been repealed. This omission permitted men registered in Great Britain and Ireland to register here without submitting to the Council's regulations. Last year the Legislature enacted that homœopaths should also be allowed to practice in British Columbia, without being subjected to the rules and regulations of the Council. Thus, Canadian graduates were handicapped. But although the Medical Council was very apathetic in this matter, a champion was at hand in the person of Dr. M. S. Wade, of Victoria, B.C.

He issued, at his own expense, a pamphlet, giving publicity to this unheard of injustice, and he now has the satisfaction of knowing that his vigorous effort was not in vain, nor his money ill spent, inasmuch as the Attorney-General of British Columbia, impressed with the force of logic and equity, has just secured the passing of an amendment Act, by which all medical newcomers *must* submit to the Council. Homœopaths are only to be examined in anatomy, physiology, chemistry, pathology, obstetrics, and surgery.

### THE UNIVERSITY OF TORONTO MEDICAL SOCIETY LECTURES.

We referred in our last issue to the establishment of a medical lectureship by the University of Toronto Medical Society. The first series of such lectures was delivered in the new building of the Biological Department, March 11 and 12, by Dr. E. C. Seguin, the eminent specialist in nervous diseases, of Providence, R.I., formerly of New York. Dr. Seguin took as his subject certain diseases of the nervous system. The President of the Society, Dr. Jno. Ferguson, occupied the chair at each of the three lectures. Dr. Osler, of Baltimore, was present at the first lecture, and, at the call of the chair, made a few remarks, which were cordially received. The members of the faculty, as well as the students, are always pleased to hear from him on any occasion. We have much pleasure in giving an abstract of Dr. Seguin's first lecture in this issue, and will give abstracts of second and third lectures in succeeding issues. We are glad to state that the lectures were as highly appreciated as they deserved to be on their merits, and these merits were of the highest order.

We have to congratulate the President and members of the society on the success which has attended the inauguration of the annual lectureship, and are pleased to learn that the prospects for the future are very bright. We are all gratified at the interest which has been shown by the graduates, and feel assured that their kind assistance will do much to ensure future success. At the conclusion of the third lecture, it was resolved: Moved by Dr. Spragge, seconded by Dr. O'Reilly, that a cordial vote

of thanks be tendered Dr. Seguin for the delivery of his lectures, and for his kindness in visiting the society. Dr. Ferguson, chairman, in tendering the vote of thanks, spoke in high praise of the manner in which the lecturer had treated the subject. Judging by the success of these, the first lectures of the series, he had no doubt that the course would be continued.

The following resolution, moved by Dr. Lehmann, seconded by Dr. Field, was also unanimously approved of:—That this meeting of graduates, undergraduates, and friends of the medical department of the University of Toronto, thoroughly endorses the action of the Medical Society of the University of Toronto in establishing a medical lectureship, and expresses the hope that all the graduates shall assist in the maintenance of the same.

### THE CASE OF DR. WALLWIN.

We think that the recent arrest and imprisonment of Dr. Wallwin, of Toronto, was one of the most remarkable acts that has ever disgraced a free and civilized country. Dr. Wallwin is a young graduate of last spring, who, by his own unaided exertions, together with frugal habits, hard work, and steady perseverance, succeeded in passing creditably all the examinations necessary to obtain a University degree, and a license to practice from the Ontario Medical Council. A few months ago he commenced his life's work as a medical practitioner with, probably, all the hopes and fears that most of us, who are older than he in the profession, have experienced.

Early in February he was dragged from his home and imprisoned, on a criminal charge of attempting to procure an abortion. What was the evidence? Nothing but the unsupported statements of an angry and hysterical prostitute, who was well known to the police authorities as a person who had served a term of fifteen months imprisonment in the Mercer Reformatory, for that vile crime of endeavouring to procure young girls for immoral purposes! Medical evidence proved, so far as it can prove anything in this world, that this creature's statements were false in every particular. Newspaper reports inform us that after the arrest, it was



immediately realized that a mistake had been made, and the court was pleased to allow the *accused* "out on bail," with the understanding that he was to wait until it was convenient for his accuser, the Mercer Reformatory graduate, to appear against him.

In the meantime, this interesting prostitute, whose "word was law," was said to be in a very precarious condition, in the General Hospital. The physicians in attendance, however, failed to discover the precarious part of it. But, we are told, there had previously been a harrowing scene in a house of the shady sort in St. John's noble ward. A female was lying there in the agonies of what was supposed to be the last struggle. Her paroxysms were pitiful to behold, but, between them, she both repented and vomited. The prickings of her tender conscience were sharper than she could endure; justice must be done, even though she had to stop vomiting. The spectators were equal to such an emergency, and the authorities were called in. These astute fellows took in the situation at once, and carefully made their arrangements in accordance therewith. The correct machinery was set in motion, and anxious ears listened with breathless interest to the last expiring words of the unfortunate sufferer. Amidst doubts and fears, their efforts were crowned with success—an *ante-mortem* statement was obtained. The officers and onlookers then proceeded to wipe their eyes, and sagely deliberate. It was considered practically impossible that they should make any mistake, as medicine, law, virtue, and justice, were all fully and ably represented. They quickly decided on their plan of action. They sent the dying woman to the Hospital, they rushed the red-handed abortionist to the cells, they took proper precautions for the security of their treasure, the *ante-mortem*, and, proudly conscious of their promptitude and rectitude, departed in peace.

The hospital atmosphere proved rather unfavorable to the vagaries of this virtuous combination of hysteria and fury, as we have previously intimated. In due course the patient recovered, and appeared in the Police Court. She told her story—two medical witnesses were examined—and Dr. Wallwin was acquitted. There was no shadow of a case

against him, in the proper sense of the word.

One would naturally ask: who was responsible for this gigantic farce? We understand that no one claims sole credit for the performance. The participators are rather inclined to divide the honors. The *ante-mortem* statement is said to have been placed carefully among the city archives; and the powers that be appear to preserve a *judicious* silence.

For Dr. Wallwin the matter has been a very serious one indeed. He has been made the innocent victim of a monstrous outrage. He took a position, which all must admire, in manfully defying his enemies, who had deliberately planned a blackmailing plot. He was forced to submit to treatment which was as cruel as it was undeserved. The whole case furnishes a rather startling example of the risks to which ordinary law-abiding citizens of Toronto are continuously exposed, through the infamous stupidity of some who are armed with an authority which they are utterly unfit to exercise. We have to offer our sincere and hearty congratulations to Dr. Wallwin, not only upon his acquittal (which often means simply not proven), but also upon the complete removal of any suspicions which may have attached to him at any time.

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## Meeting of Medical Societies.

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### TORONTO MEDICAL SOCIETY.

March 4th, 1890.

The President, Dr. Atherton, in the chair.

Dr. Wishart read a paper on  
POST-NASAL, OR POST-PHARYNGEAL CATARRH.

This disease, although sometimes primary, is generally secondary, due to extension of inflammation from the nose, ear, or throat.

The branches of the olfactory nerve are distributed to the superior turbinated bone. Loss of taste results from the post-nasal swelling, shutting off access to this bone. The voice is injured and thickened by the blocking of the naso-pharynx; from this condition results also blocking of the eustachian tubes, perhaps otitis media, and perforation of the drum membrane and consequent otorrhoea. Not only is there

injury in this mechanical way, but extension of inflammation to the middle ear is favored by intimate relations between the blood supply of the tube and pharynx and middle ear, and by the anatomical continuity of tissue.

McKenzie of Baltimore, says that sixty to seventy-five per cent. of all cases of ear disease originate in morbid conditions of the naso-pharynx.

Digestion is disordered by the swallowing of a large amount of the mucus poured out by the diseased surface.

Rhinoscopy shows swelling of the lining membrane of the fossa, especially in and around the opening of the eustachian tubes, in the middle of the vault and on the septum. In children the hypertrophy may take the form of adenoid vegetations, involving the whole of the vault. In many cases the pharyngeal bursa of Thornwaldt may be found.

The eustachian tubes may be occluded by swelling of the mucous membrane, or by displacement, due to enlargement of the pharyngeal tonsil.

The mucous membrane may be either hyperæmic or anæmic. The veins, especially on the septum and around the eustachian openings, are frequently prominent. Cysts, due to the closure of gland ducts, may be seen in the vault.

The glands involved secrete an abundant viscid tenacious secretion, of a glairy, greenish, or yellowish color. The moisture is rapidly evaporated by the air, and thus crusts are formed. These act as foreign bodies, and the patient seeks to get rid of them by constant hawking and swallowing, by sneezing, or by forcible and rapid inspirations and expirations.

In the same way there is a constant sense of stuffiness in the nose at the back, and during the night and in the morning the mouth and throat feel dry. Inspection of the pharynx shows the well-known appearances. Reflex phenomena, such as paroxysmal cough, neuralgia, anosmia, asthma, and ear affections, may be produced.

Hemorrhage may occur in the vault, the blood, being swallowed, may excite coughing or vomiting, and thus lead the physician's attention away from the true cause.

Cold, *per se*, is not a cause of chronic naso-

pharyngeal catarrh. Heat is a much more important factor. Moisture, associated with heat or cold, is a very fruitful cause. Sudden changes in atmospheric conditions are the great cause.

Bronner attaches great importance to disease of the pharyngeal bursa, as causing naso-pharyngeal disease. The constant secretion poured forth by the diseased bursa sets up inflammatory changes, which spread. These are the so-called incurable cases.

Bucke emphasizes reflex influence from the gastro-intestinal tract as a cause of the condition. Uterine disease may be causative. As to treatment, the first effort should be to relieve the cause. General tonic and alterative treatment to restore the tone of the mucous membrane. The parts must be thoroughly cleansed preparatory to local applications. The post-nasal douche is the best. The spray through the nose or behind the uvula, or snuffing-up fluid, are not so beneficial. The nasal douche, even when used by the physician himself, is apt to set up inflammation of the middle ear.

The constant use of too much water is apt to prove injurious.

Enlargement of the posterior portions of the turbinated bones, or of the septum, and adenoid growths, demand operative procedures. If the pharyngeal tonsil be the cause of the disease, it may be extirpated by caustics or galvano cautery. Topical applications of powders, astringents, etc., are not to be relied upon.

Dobell's solution, Seiler's alkaline and anti-septic tablets, or more elegant preparations, as the biborate and bicarbonate of soda, dissolved in listerine and water, may be used for cleansing purposes. Absolute cleanliness of the passages is as necessary for the prevention of extension as for cure. Sanguinaria and galanga have their advocates. Seiler recommends the application of iodine to the post-nasal cavities.

*Discussion.*—Dr. Price Brown said that before operative measures were applied to the pharyngeal tonsil, due consideration should be given to its physiological function. He thought that Thornwaldt went even farther than Dr. Wishart had represented him, and held that all diseases of nose, and naso-pharynx, and their reflex

neuroses, were due to a morbid condition of Lüschenk's gland. Hill taught that the function of this gland was to elaborate leucocytes; Bosworth, on the contrary, holds that from it there is given off a bland secretion of mucus, which lubricates the posterior pharyngeal wall. If such be its functions, we should be somewhat cautious how we interfere with it. If we destroy it altogether, we may produce pharyngitis sicca, a most troublesome condition.

Post-pharyngeal catarrh often results from some morbid condition of the nose, by which the nasal secretion is diminished in quantity; or from stenosis of the nasal cavity, causing œdema of post-pharynx. In such cases the treatment must be directed to the nose.

Dr. R. A. Reeve said that one most important point in connection with post-nasal catarrh is the implication of the ear. For years he had realized the necessity of treating the post-nasal pharynx in cases which seemed to be so purely aural, as even impaction of cerumen.

He mentioned, as other conditions, recurrent earache, cold in the head, with accompanying earache, attacks of deafness in children, commencing in the beginning of winter and lasting more or less through the winter, which are all due to a redundancy of lymphoid tissue in the post-pharynx. Every general practitioner should pay attention to the condition of the post-pharynx, especially in children, and thus prevent the occurrence of troublesome and obstinate disease. Much easier than diagnosis by the finger introduced into the post-pharynx was Bosworth's test. If a spray was passed into one nostril it would reappear at the other, provided the post-nasal pharynx was not obstructed.

By this simple test the general practitioner, indeed anyone, might recognise the condition. Personally, he had treated these cases by means of the forceps, or a scraper. The improvement was, no doubt, due to the local depletion from the bleeding, and the consequent relief of the congestion and catarrh of the eustachian tube, so that the treatment of the ear itself might not be required. He remarked that some cases were incurable. These, as Toynbee taught, were cases in which the mucous membrane was compensating for deficient action on the part of the integument.

NEW YORK ACADEMY OF MEDICINE.  
SECTION ON ORTHOPÆDIC  
SURGERY.

Stated meeting—Feb. 21st, 1890.

V. P. Gibney, M.D., Chairman.

Dr. Frank Hartley presented a case of

DOUBLE CONGENITAL TALIPES EQUINO-VARUS.

The patient, a male, twenty years of age, and a cigarmaker, was admitted to the Roosevelt Hospital on May 27th, 1889. This deformity, which has been present since birth, increased between the sixth and twelfth years, and although it has not caused much pain, he walked with a curious shuffle of the foot from side to side. He was very desirous of an operation. Examination showed that there was about two-thirds of the normal motion of the ankle joint, and that the neck of the astragalus was twisted so as to look directly inwards, and the os calcis was placed obliquely to the tibia. He had the peculiar pallor of the skin, and mucous membranes, commonly seen in cigarmakers. Heart, lungs, and kidneys, were normal.

On June 5th, cuneiform osteotomy was performed over the greatest convexity of the left foot. The wedge of bone removed consisted of portions of the tibia and fibula, the whole of the astragalus, and enough of the cuboid, scaphoid, and os calcis, to allow of a reduction of the deformity. The foot was placed at once in proper position. Healing was normal, and on July 25th, a similar osteotomy was done upon the other foot. The wedge removed consisted, as in the other foot, of a portion of the tibia and fibula, the whole of the astragalus and scaphoid, and portions of the os calcis and cuboid. On August 24th, union in the left foot was good, and fairly good in the right foot. By the middle of October he was allowed to walk about the wards, and on Nov. 29th, he was discharged from the hospital, and has since been under observation in the Out-Patient Department. The muscles are gaining rapidly in size and strength, under daily applications of electricity. Crutches are only used for long walks, and judging from the progress so far, these can be discarded in a month or two, and possibly in four months even the retentive apparatus, which he now wears, can be removed. Dr. Hartley did not consider this deformity the result of an arrest of develop-

ment, but of pressure effects within the uterus. He believed these cases of secondary congenital club foot could usually be cured by mechanical measures, although the severest forms require, as in the present case, an operation.

Dr. John Ridlon presented a male patient, eighteen years of age, who came under observation last April, for a deformity of both feet, which had made walking difficult and painful for the previous two years. There was *cavus* and *equinus*, and on walking, *varus* of both feet. There were no reflexes on "point pressure." On April 4th, 1889, Dr. George S. Huntington divided the plantar tissues of the right foot by open incision, and having forced the foot into proper position by Thomas' wrench, divided the *tendo Achillis* subcutaneously. On May 8th, a similar operation was done upon the left foot, and was followed by primary union. The patient is now able to walk well, and without discomfort.

Dr. Ridlon also presented a boy of thirteen years, who first came under his observation on May 12th, 1889, having begun to limp about three months previous. The foot was found to be held rigid in the position of *valgus*, by contraction of the *extensor* and *peroneal* muscles; but when the patient was etherized, with the intention of dividing these tendons, the foot could be easily placed in a position of *equino-varus*. It was retained in this position by plaster of Paris for about two months. There was no pain following this manipulation and replacement of the foot; and when the plaster was removed, motion at the ankle and tarsal joints was normal, and the limp had disappeared. On October 4th, he was found to have relapsed into his former condition. The foot was placed in the best possible position, and has since then been retained in this position by plaster of Paris.

Dr. V. P. Gibney presented a lady, twenty-five years of age, who had been referred to him in December, 1887. She walked on the outer borders of the feet, where large callosities served as a base of support. The soles of the feet looked backward and upward, and her gait was especially reel-like. There were extensive cicatrices over the *tendo Achillis*, and it was quite impossible to correct the deformity by manual force.

On December 26th, 1887, a cuneiform osteotomy, after the method of Dr. Charles T. Poore, was performed; but after extensive section of the bones, and free division of the deltoid ligament, and of a few resisting points of the plantar fascia, it was not possible to place the foot in proper position. A free lateral incision was then made, and muscles and tendons divided after the manner of Dr. Phelps. After some further difficulty, a good position was secured, and the foot was placed in a Thomas' club-foot shoe, over which plaster of Paris was applied. The dressings were removed on the following day, on account of free oozing, and by Dec. 30th, it was found absolutely necessary to put her in charge of a trained nurse, and from this time until Feb. 16th she suffered from *septicæmia*. At the end of this period, the wounds were healing rapidly, and the foot was in excellent position. On Feb. 22nd, having secured her admission to the Hospital for Ruptured and Crippled, a similar cuneiform osteotomy was done upon the other foot, which was then brought into good position, and dressed antiseptically, and covered with a plaster of Paris bandage. Nearly all the wound healed by first intention, and recovery was uninterrupted, although retarded by the presence of corns and tender callosities. She gets on very well now, although the gait at present is very much modified by the condition of these corns.

#### DISCUSSION.

Dr. H. W. Berg took exception to Dr. Hartley's statement, that the deformity in his patient was probably caused by too little space in the uterus; he thought this theory had been pretty generally abandoned.

Dr. Hartley replied that he did not think this was the case, as in Bessel-Hagan's book on the Etiology and Pathogenesis of Club Foot, considerable space was given to this very thing.

Dr. N. M. Shaffer had found that a certain number of cases of adult club-foot yielded to mechanical measures; while in many of those which were only amenable to operative treatment, the patient's condition untreated was often as good as that obtained by operation. One great obstacle to the treatment of these cases is the cicatrices from previous operations.

Dr. H. L. Taylor said that a new instrument,

just perfected by Dr. Bradford, of Boston, offered another alternative to methods already in use. By it, the surgeon was able to obtain a very perfect grasp of the foot, and thus twist it into position.

Dr. Samuel Ketch remarked that Dr. Ridlon's second case showed decided reflex spasm and pain on rotation of the foot, and he considered the case one of valgus, symptomatic of some bone lesion. The rapid relapse seemed to favor the view of the osteitic origin of the trouble.

Dr. Berg thought the bone lesion was probably at the point where the outer malleolus impinges upon the astragalus. There was certainly no muscular trouble present.

Dr. Shaffer felt sure there was some bone irritation present, and as it was more resistant to adduction than to the other movements, when the astragalus and scaphoid were crowded together, he thought the lesion was probably located at the articulation between the astragalus and scaphoid, but not involving the ankle joint itself. He had had a similar experience in regard to the sudden disappearance of the deformity after etherization; but he had not suspected a tubercular osteitis, because he had never seen such cases go on to suppuration. They are more like inflammatory flat-foot, running a long course, and ultimately terminating not in ankylosis, but in recovery, with pretty good function.

Dr. A. B. Judson was likewise of the opinion that the case was one of articular osteitis, and its duration would favor this view. The circulation of the limb being normal, eliminated the presence of a nervous lesion.

Dr. Ridlon, in closing the discussion on this case, said he could not conceive it possible that a tubercular osteitis could be subjected to such vigorous manipulation without being followed by some evil consequences. When the spasm has existed, the patient has always complained of pain on attempted motion, but he walks and jumps around like other boys. Is it possible that an osteitis can exist for a year, as this has done, under such treatment, without an aggravation of the disease?

Dr. W. R. Townsend presented for Dr. Gibney the left knee of a case of double hip joint disease, which had been removed *post*

*mortem*. The joint had been immobilized in a plaster of Paris splint for eighteen months. There was no disease at the knee when the first plaster had been applied, and the long confinement of the joint showed that no gross changes had occurred in the bones or cartilages. The synovial membrane was removed, and found apparently healthy, and the joint contained a small amount of synovial fluid when first opened. The motions were limited to an arc of about fifteen degrees, and yet, after the ligamentum patellæ was divided, extension and flexion could be made to the full limit. The lateral ligament did not seem contracted.

Dr. Berg said that the specimen only showed that the joint surfaces were normal, but it did not show that the soft parts had not been affected by prolonged immobilization. The specimen was of medico-legal interest, because it was sometimes claimed that real and permanent disability had resulted from such prolonged immobilization.

Dr. Shaffer feared the results of prolonged immobilization, for, in an experience with seven cases of ununited fracture of the femur, it had resulted in effusion into the knee joint. He had employed in these cases an apparatus which made traction upon the thigh, but which was not applied below the knee.

Dr. Ridlon thought we should distinguish between the immobilization of cases of fracture adjacent to joints, and of healthy joints which were positively free from any injury, for the results in the two classes of cases were widely different. The traction apparatus employed by Dr. Shaffer might have produced constriction of the limb, and so led indirectly to effusion into the joint.

Dr. Judson said ankylosis was the result of inflammation, and immobilization of an inflamed joint, or the arrest of function was a primary antiphlogistic.

Dr. Hartley said that in fractures in the lower part of the thigh, where there was a possibility of hemorrhage into the joint, passive motion should be begun as soon as possible; but in fractures high up, with very little possibility of injury to the joint, longer immobilization was permissible. It is often very difficult to estimate the amount of injury to a joint at the time of a fracture or other severe injury.

Dr. Taylor said that he never hesitated to immobilize a healthy joint for any length of time that might be necessary, and he had never seen any bad results from it.

Dr. Ridlon described an easy and inexpensive method of producing the flat-foot plate used by Dr. Whitman. The usual method is to have an iron foot made, on which the plates are hammered out. Recalling the copper-plated plaster casts recently exhibited to the Section by Dr. A. M. Phelps, he had taken a plaster of Paris cast to Lovejoy, of 45 Rose Street, who had coated it with a solution of silver, and then, by means of electro-deposition, had obtained a copper plate of the desired thickness, and at a cost of only \$1.50. The copper plate so prepared was exhibited.

### Hospital Reports.

#### PARTIAL DISLOCATION OF THE RIGHT ASTRAGALUS FORWARDS.

UNDER THE CARE OF DR. M'PHEDRAN IN THE TORONTO HOSPITAL FOR SICK CHILDREN.

M. B., aet. 10, admitted October 1st, 1888. Four years ago, she fell from a tree, "spraining" her foot; since then she has been unable to walk properly. Her condition on admission to the hospital is as follows:—The foot is inverted, a marked prominence in the instep, where the outline of the partially dislocated astragalus can be clearly made out. The power of flexion and extension is very much restricted; the normal depression below the internal malleolus is wanting. In walking, the heel does not come to the ground, but the girl supports her weight entirely upon the ball of the foot, at the heads of the metatarsal bones.

The malleoli are nearer the sole than they should be; from malleolus to malleolus on the right foot 6 inches, left  $5\frac{1}{2}$  inches. There is also some shortening of the foot on affected side, thus: from inner malleolus to end of great toe, right foot, 6 inches, left foot,  $6\frac{5}{8}$ . From outer malleolus to end of little toe, right foot,  $5\frac{1}{2}$  inches, left foot, 6 inches.

Reduction by manipulation was impossible, and it was thought unwise to operate; the child was accordingly sent home.

### Books and Pamphlets Received.

*Transactions of the Kansas Academy of Science.*  
Vol. xi., 1887-88.

*Some complications of Chronic Endarteritis.* By Wm. B. Canfield, A.M., M.D., reprint.

*The Early Detection of Pulmonary Consumption.*  
By Wm. B. Canfield, A.M., M.D., reprint.

*Report of the Section on Practice of Medicine.*  
1. Relation of dusty occupations to Pulmonary Phthisis. 2. Present aspect of the question as to the etiology of pneumonia. 3. More recent treatment of pulmonary phthisis. By Wm. B. Canfield, reprint.

### Book Notices.

*A Manual of Organic Materia Medica, being a guide to Materia Medica of the Vegetable and Animal Kingdoms.* By John M. Maisch, Ph. M., Phar. D., Professor in the Philadelphia College of Pharmacy. Philadelphia: Lea Brothers & Co.

There is but slight change in the 4th edition of this well-known and standard text-book. Whilst the work is of but little use to the medical practitioner, druggists and pharmacists will appreciate it.

*Manual of Skin Diseases, with special reference to Diagnosis and Treatment;* for the use of students and general practitioners. By W. A. Hardaway, M.D., Professor of Skin Diseases in the Missouri Medical College, etc. St. Louis: Theo. F. Lange.

The diseases of the skin are considered in alphabetical order; a great sacrifice for the sake of a little convenience of reference. The descriptions are accurate, and form very good word pictures; the treatment is summed up as briefly as possible. The author does not hesitate to give his own opinion, as well as those of the standard authorities. We venture the opinion that this will become a favorite text-book for students.

*Text-book of Medical Chemistry for Medical and Pharmaceutical Students.* By E. H. Bartley, B.S., M.D., 2nd edition. Philadelphia: Blakiston & Co.

The author, in some 370 pages, covers the ordinary range of inorganic and organic chemistry, poisons, their antidotes, and treatment, and

the analysis of urine. It is to be feared that any student, who contented himself with this work alone, would pass a *mauvais quart d'heure* with the examiner at the College of Physicians and Surgeons.

*A Manual of Obstetrics.* By A. F. A. King, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Columbian University, Washington, etc. Fourth Edition. Philadelphia: Lea Brothers & Co.

This book has become quite popular in the United States as a manual for students, but we cannot recommend it, because we think there are better text-books available. Dr. King is an able obstetrician, a successful teacher, and a good writer, but we have to regret that his work is too brief to give students an intelligent idea of this important subject. It is only fair to add, however, that the book has the endorsement of many eminent teachers of midwifery.

*Annual of the Universal Medical Sciences.*

A Yearly Report of the Progress of the General Sanitary Sciences throughout the world. Edited by Charles E. Sajous, M.D., Lecturer on Laryngology and Rhinology in Jefferson Medical College, and seventy associate editors. Volume II.; F. A. Davis, Publisher, Philadelphia, New York and London.

This volume contains the following monographs: Diseases of Brain and Spinal Cord, by Drs. Seguin and Birdsall, of New York; Peripheral Nervous Diseases and General Neurosis, by Dr. Henry Hun, of Albany; Mental Diseases, by Dr. Brush, of Philadelphia; Inebriety, Morphinism, and Kindred Diseases, by Dr. Birdsall, of New York; Diseases of the Uterus, Peritoneum, and Pelvic Connective Tissue, Disorders of Menstruation, by Drs. Munde and Wells, of New York; Diseases of the Ovaries and Tubes, by Dr. Goodell, of Philadelphia; Diseases of the Vagina and External Genitals, by Dr. Parish, of Philadelphia; Diseases of Pregnancy, by Dr. Parvin, of Philadelphia; Obstetrics, by Dr. Richardson, of Boston; Diseases of the Newborn, by Dr. Currier, of New York; Dietetics of Infancy and Childhood, by Drs. Starr and Powell of Philadelphia; Growth and Age, by Dr. Minot, of Boston. The names of the various authors will furnish the best possible guarantee of the excellence of the different chapters.

*The National Medical Dictionary*; including English, French, German, Italian, and Latin technical terms, used in medicine and the collateral sciences, and a series of tables of useful data. By John S. Billings, A.M., M.D., L.L.D. Edin. and Harv., D.C.L., Oxon. With the collaboration of W. D. Alivater, M.D., Frank Baker, M.D., S. M. Burnett, M.D., W. T. Councilman, M.D., Jas. M. Flint, M.D., J. A. Kiddie, M.D., Wm. Lee, M.D., R. Lorini, M.D., Washington Matthews, M.D., C. S. Minot, M.D., H. C. Yarrow, M.D., in two volumes. Philadelphia: Lea Brothers & Co.

It is generally considered a difficult task to review a dictionary, but it is certainly a very pleasant duty to say a good word for Billings' new work. The name of the author would naturally lead us to expect something past the ordinary, and a careful examination of the two volumes will, we feel certain, convince any one that all expectations have been fully realized. The work was really needed. Dunglison's dictionary, an excellent book in its day, is wholly insufficient for our present requirements. Two other dictionaries, fairly well known to the profession, are scarcely up to the mark. The large work in preparation, under the supervision of Foster, is slow in appearing, only one volume having been published.

The total number of words and phrases defined in Billings' dictionary is 84,844, of which 25,496 are Latin, 9,158 French, 16,708 German, and 6,514 Italian. In the first volume there is a series of tables of doses, of antidotes in the most common forms of poisoning, of thermometric scales, etc., which will prove useful to general practitioners. We have much pleasure in recommending the work on its merits. We believe no physician, pretending to have a library, should fail to obtain it.

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### Personal.

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Dr. Cooke, Toronto, has removed to 202 Simcoe street.

Dr. Osler, of Johns Hopkins, Baltimore, was in Toronto, March 11 and 12.

Dr. R. S. Black, formerly of Halifax, now of Ontario, California, has lately had an apoplectic seizure.

## Births, Marriages and Deaths.

### BIRTH.

SPOHN—At Penetanguishene, on Tuesday, March 4, the wife of Dr. P. H. Spohn, of a daughter.

### DEATH.

GRANT—At Gravenhurst, on the 2nd March, D. J. Grant, M.D., aged 54 years.

## Miscellaneous.

A NEW CREMATORY AT TROY.—There have been twelve crematories erected in the United States. The last built, is the Earl Crematory, Oakwood cemetery, Troy, New York, and is said to be the most elaborate structure of its kind in the world, having a chapel and a lofty tower, in addition to the furnaces. Two bodies have been incinerated there. The crematory, with the chapel, were presented to Oakwood cemetery by the friends of the late Mr. Gardner Earl.

P. Blackiston, Son & Co., Philadelphia, will publish, about March 15th, a new Medical Dictionary, by George M. Gould, A.B., M.D. It will be a compact one volume book, containing several thousand new words and definitions, collected from recent medical literature, while the total number of words is beyond that in any similar book. It includes also elaborate and useful tables of the bacilli, leucomaines, ptomaines, micrococci, etc., of the arteries, nerves, etc., and of the mineral springs of the U.S., together with other collateral information.

RECENT SAVING OF LIFE IN MICHIGAN.—In a carefully prepared paper, read before the Sanitary Convention at Vicksburg, the proceedings of which are just published, Dr. Baker gave official statistics and evidence which he summarized as follows:—"The record of the great saving of human life and health in Michigan in recent years is one to which, it seems to me, the State and local boards of health in Michigan can justly 'point with pride.' It is a record of the saving of over one hundred lives per year from small-pox, four hundred lives per year saved from death by scarlet fever, and nearly six hundred lives per year saved from death by diphtheria—an aggregate of eleven hundred

lives per year, or three lives per day saved from these three diseases! This is a record which we ask to have examined, and which we are willing to have compared with that of the man who 'made two blades of grass grow where only one grew before.'"

DOCTORS' STORIES.—The *North American Practitioner*, Chicago, speaks as follows: Re-creation is ever to be enjoyed, but there seems to be a disposition among physicians to drop from a condition of constraint to one of unbridled liberty. Almost every one has heard, at least in our city, the most inelegant, if not positively obscene speeches at the banquets of medical men. Even in the lecture-room, it is reported that certain professors garnish their science with questionable anecdotes. It seems to us a sad comment on our profession that such a condition of affairs exists. Are there not enough objects of common interest to furnish postprandial topics of debate? Has the profession of medicine no local history to embellish, no *penates* to set up, no noble sentiments to cherish, that such a display of poor humanity should be dangled in our faces? Why should a medical man ever give utterance to a sentence which he would blush to hear his son repeat? Gentlemen, these things ought not so to be.

MEDICINE AND THE ARTS.—Every now and again comes a cheerful reminder that the pursuit of medicine does not destroy artistic perceptions, even though it is currently held that devotion to any science tends to develop the "scientific frame of mind" until it is all-absorbing. Those who have had no scientific training never seem to weary in denouncing the avidity for facts and the scepticism for theories with which they credit those whose habit of thought differs in many respects from their own. The medical profession in particular is selected for cheap satire. The interest of the dissecting-room and physiological laboratory and the watchful anxiety bestowed upon hospital patients are alike misunderstood by many who have never penetrated the inner life of the medical man. To those who know, however, there is a deal of human nature in the medical profession, and it seeks expression and distraction in many unsuspected directions. Painters, etchers, and photographers abound in our ranks, while music not only claims many



instrumentalists, but even the publication devoted to Wagner and all things Wagnerian is edited by a member of our profession.—*Lancet*.

INVITATION FOR AN INTERNATIONAL MEDICAL AND SCIENTIFIC EXHIBITION.—In connection with the Tenth International Medical Congress to be held in Berlin, between the Fourth and Tenth of August, there is to be an International Medical and Scientific Exhibition. The exhibits will be of an exclusively scientific nature, as follows :

New or improved scientific instruments and apparatuses for biological and strictly medical purposes, inclusive of apparatuses for photography and spectral analysis, as far as applicable to medicine.

New objects and preparations in pharmacological chemistry and pharmacy.

New foods.

New or improved instruments subservient to any of the departments of medicine, including electrotherapy.

New plans and models for hospitals, convalescent homes, and disinfecting and bathing institutions and apparatuses.

New arrangements for nursing, including transportation, baths, etc.

New apparatus in hygiene.

Applications or inquiries inscribed "Ausstellungs-Angelegenheit," and accompanied with a printed card containing the name and address of the firm thus applying, ought to be directed to the Secretary General, Dr. O. Lassar, Carlstrasse, No. 19, Berlin, N. W., Germany.

R. VIRCHOW, President.

AN UNTOWARD EFFECT OF SULFONAL.—As yet no well authenticated case of death following its use has been reported. Owing to this absence of directly traceable and immediate injuriousness, sulfonal has been recommended as an ideal hypnotic, having none of the after-effects of other remedies of this class. This is not the case, for in predisposed persons, it gives rise to untoward results, the same as other hypnotics. The fact that when it fails to produce sleep, a decided loss of equilibrium and a marked sensation of drunkenness is felt, ought to put us on guard as to its promiscuous and prolonged use. In various instances it has

seemed to me that sulfonal had a peculiarly dulling influence upon the mind, in those already suffering from mental trouble. My suspicion became a certainty when the following case came to my knowledge: A gentleman of 43, of nervous temperament, had been troubled with various symptoms of neurasthenia, precipitated by heavy losses in business. For over two years insomnia was one of the complications, for which sulfonal was used with the most gratifying effect. While drifting, like the typical neurasthenic, from doctor to doctor, he remained true to his sulfonal, which he took at a dose of 30 grains, originally prescribed for him. In the last five months he is said to have used more than 10 ounces. More than four months ago his family noticed a peculiar change in his manner, manifesting itself under the form of apathy and listlessness. He would answer questions put to him after marked and painful delay, as if comprehension was labored and unnaturally slow. Things and persons in whom he had formerly taken the keenest interest, became indifferent to him. He made mistakes in his books, which it took him a long time to discover; the computation of sums, formerly almost a matter of play to him, became laborious, and was at times impossible; naturally punctual in his affairs, he forgot his engagements: in short, his memory and judging power became visibly impaired, so that his partner suspected beginning softening of the brain, and insisted on an examination. During all this time the patient himself had no idea of his mental state, but did not show any surprise at the suggestion to withdraw temporarily from business and undergo a course of medical treatment. An examination revealed the facts detailed above, and especially the abuse of sulfonal, of which the family were cognizant without suspecting any deleterious action on the patient's mind. One week after the cessation of the drug, the first signs of mental improvement set in, marked by the declaration of the patient that he felt like awakening from a long sleep. After this, the recovery was very rapid, there being a perfect realization on his part as to the danger he had passed through. His memory and reasoning powers are apparently absolutely normal; so his friends assert.—*L. Bremer, i St. Louis Courier of Medicine.*