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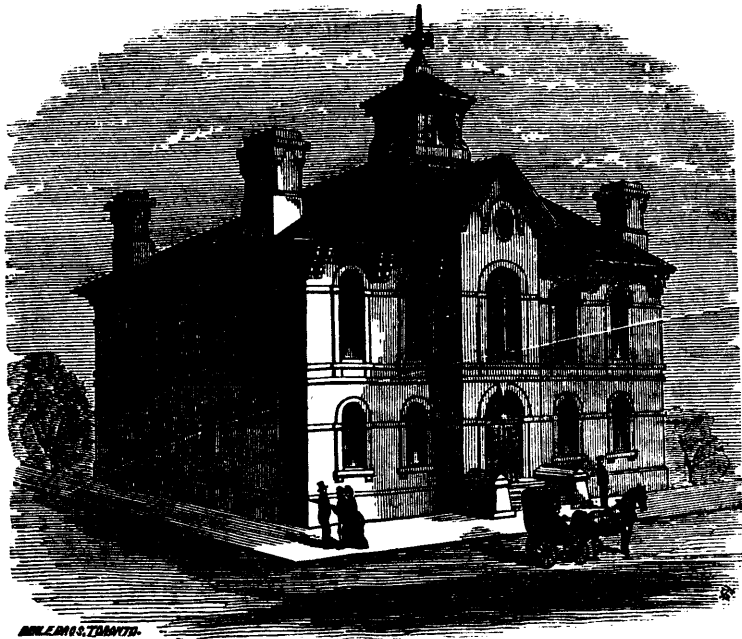
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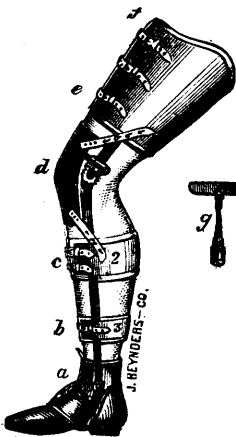
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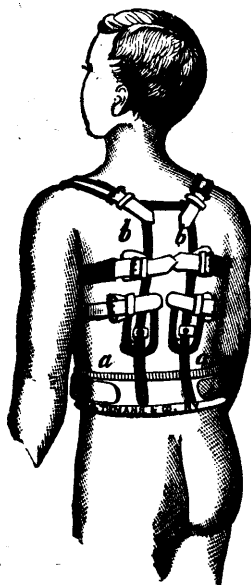
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TORONTO, MARCH, 1876.

Selections: Medicine.

TREATMENT OF CROUPOUS PNEUMONIA.

BY PROF. JUERGENSEN.

(Ziemssen's *Cyclopaedia of Medicine*, Vol. 5.)

[Communicated by F. H. WRIGHT, M.B., L.R.C.P., Lond.]

Juergensen defines croupous pneumonia, anatomically considered, as an acute inflammation of the alveoli and bronchioles, in which a fibrinous exudation is poured out upon the free surface of the mucous membrane and there coagulates.

Before entering on the question of the treatment of the disease it is necessary to define whether one regards it as a constitutional or a local affection. The author puts the following queries: "Do facts justify us in regarding the anatomical changes always found in the lungs in croupous pneumonia as the essential cause of the other symptoms, especially the fever and constitutional disturbance? Or, are the pulmonary lesions and the fever both due to a common fundamental cause? Is there also a specific morbid agent, which excites what we call croupous pneumonia as a result of its variable action upon an organism already predisposed to the disease?"

His answer is: "Croupous pneumonia is a constitutional disease, and is not dependent on a local cause. The pulmonary inflammation is merely the chief symptom, and the morbid phenomena are not due to the local affection. The hypothesis of a morbid cause is indispensable. Croupous pneumonia belongs to the group of infectious diseases."

In Vol. I of the *Cyclopaedia*, Liebermeister divides infectious diseases into three groups: 1. Purely contagious; or, those diseases the poison of which is conveyed from one individual to another by direct contact, or by *mediate* contact as in the case of vaccine, which is conveyed by means of the instrument used by the vaccinator. 2. Purely miasmatic diseases, in which the morbid poison develops itself outside the body, and which is not reproduced within the body so as to affect others secondarily, as intermittent fever. 3. Miasmatic contagious diseases which are not conveyed from one person to another by direct contact, but by means of a poison which originated within the body and underwent some change after leaving it.

The fact that the anatomical changes in croupous pneumonia are distinct from every other pulmonary inflammation is a telling argument. Croupous pneumonia cannot be produced by any of the usual causes of inflammation, however strong or weak their action, as in typhoid fever there must be a special exciting cause.

In support of his views from a pathological standpoint he adduces the following arguments:

1. "During the whole course of pneumonia there is no constant relation between the local and the febrile symptoms, nor dependence of the one upon the other. The smallest pneumonic consolidations often run their course with the severest fever, and, on the other hand, we find extensive inflammations with a very moderate fever." He then points out that days and weeks may elapse after the temperature has become normal before the local lung trouble is entirely cleared up.

2. "Croupous Pneumonia is a disease which runs a typical course. No affection which arises from a local lesion presents a career so definitely limited in point of time, as is the case with croupous pneumonia. Intermittent fever, the acute exanthemata, the different varieties of the typhoid group, in short, all the diseases which we regard as due to the action of a specific morbid cause are characterized by a regularity connected with certain days. So long as the morbid cause continues its sway, the laws established by it continue in force. Now, besides these laws, the body is subjected also to the laws of vitality, and the co-existence of these destructive and conservant forces can be clearly recognized. When the activity of the morbid cause subsides, it only remains for the conservant forces to restore the normal condition." Moreover, every infectious disease may be divided into two periods. The first, that during which the morbid cause dominates, the second, that which is governed by the strength of the patient's constitution. The manner in which croupous pneumonia runs its course is closely allied to that of the acute infectious disease.

The author then argues that croupous pneumonia, acute articular rheumatism, and epidemic cerebro spinal meningitis, should all be classed under the head of malarial infections. He then goes on to say that he is the more desirous that croupous pneumonia should occupy its proper position, because the moment we are convinced that we are dealing with an acute infectious disease—a constitutional affection with local symptoms, and not with a local affection with constitutional symptoms—from that moment the indications for treatment are radically changed.

"When we realize that we have to combat, not an inflammation, but rather a constitutional disease, and one, moreover, of comparatively short duration, we readily fall into an expectant treatment which bides its time, interferes only when necessity requires, and does not see in the mere name of the disease an indication for attack. If we regard croupous pneumonia as an acute infectious disease, the indications for treatment are very much simplified. Nature cures, and the only duty of the physician is to maintain life until this cure is effected. This

is the principle which underlies the management of all acute infectious diseases, and is applicable here unconditionally.

"Can we succeed in cutting short or aborting a pneumonia?" If the disease be regarded as simply a local inflammation, then we are justified in resorting to those remedies which are known to be of service in the treatment of local inflammations, as blood-letting, etc. The same thing may be said in regard to all other modes of treatment which are asserted to cut short the disease, for if we regard a pneumonia as a constitutional disease then such treatment can only be regarded as empirical.

"If we analyze the morbid phenomena, which are constantly present in this disease, we find that they consist of—(1) An interference with the function of the lungs; (2) Fever. Neither of these conditions is fatal by itself. As soon as the falling temperature announces the crisis, the pulmonary affection becomes almost completely subordinate and insignificant, although the functional disturbance in the lungs has, to all appearance, undergone but little change." In the majority of cases the increase of temperature is of such short duration and so moderate in amount that it is not sufficient to cause death; rarely, the fatal result may be due solely to the extent of the infiltration, or to the height of the fever.

"The danger in croupous pneumonia threatens principally the heart of the patient. Death results from insufficiency of the heart. And now for the proof of this opinion.

1. "The exudation in pneumonia produces an increased resistance in the pulmonary circulation, and consequently increased effort on the part of the right ventricle.

2. "The changes produced in and near the lung by pneumonia diminish the total amount of force to be furnished by this organ for the movement of the blood.

3. "In pneumonia the surface over which blood and air come in contact with each other is diminished by the exudation, and this fact necessitates increased labour on the part of the forces which impel the blood and air whenever an abundant exchange of gases is required.

4. "The fever first brings to expression the local disturbances produced by the pneumonia.

5. "The fever induces increased labour on the part of the heart, and at the same time inflicts a direct injury upon it."

From all sides the threads run together to a central point. It is the heart, and always the heart, upon which the burden is ultimately thrown. It is therefore the duty of the physician to enable the heart, during pneumonia, to

perform the additional labour made necessary by the disease.

"This duty involves two subdivisions.

1. Prophylaxis against exhaustion of the heart.

2. Control of already existing exhaustion. This is shown by the fact already repeatedly urged, that notwithstanding the continuance of the local derangement, the force of the disease is usually broken when the fever abates.

Is it proper to bathe a patient who is ill with pneumonia, to abstract heat directly? It may be fairly urged that from the moment when the peripheral vessels contract under the influence of cold, the bath produces an increased resistance in the vessels, and consequently an increase of work for the heart. It becomes a question, therefore, whether the overloaded heart may not in this way become completely paralyzed. The author assures us that neither he nor his pupils have ever met with such a result, although he has used the bath both frequently and systematically, and at a very low temperature. He does not deny that fatal collapse may occur during the bath, or that the bath may be a direct cause of death; but he insists that the collapse may be avoided by a very simple precaution—the administration of stimulants. The common objection to the use of the bath, namely, the danger of contracting a cold, is shown to be imaginary; indeed the author under unavoidable circumstances has allowed his patients to bathe while exposed to a draft of cold air, without their receiving any injury. Nor has he noticed that such sequelæ as chronic pneumonia, phthisis, &c., were apt to occur from this cause. Hence, in case the abstraction of heat were necessary, and no water were to be had, he would not hesitate to expose his patient to cold air until the necessary amount of cooling was obtained.

"The amount of heat to be withdrawn depends upon the amount of fever. A bath at the temperature of well-water should be administered as often as the temperature in the rectum reaches 104°F. The duration of the bath should depend upon the effect obtained, and should vary from seven to twenty-five minutes." In aged or very fat persons, or in those of feeble constitution, in whom the temperature

rarely exceeds 103°F., tepid baths are administered, for from twenty to thirty minutes, between the hours of four and seven a.m., and this, especially if assisted by a dose of quinine, will generally suffice to keep down the temperature for a very considerable time. As long as the low temperature lasts, the heart, so to speak, takes a rest; of course the baths may be repeated at any other hour in the day. The careful examination of the pulse will readily detect when the proper effect of the bath has been attained. With young children the wet sheet may be used.

In extreme cases of pneumonia, where the temperature is much elevated, the fever can only be subdued by the most energetic use of the bath. The author gives us most convincing evidence of his own faith in its use when he tells us that in the case of his own child, where the temperature rose above 105.8°, and returned of quickly after baths 60.8°F., he found himself compelled to reduce the temperature of the water to 41° and 42.8°F., and to continue them for ten minutes. His child recovered, and at no time during the employment of these extreme measures, extending over several days, was there the slightest indication of collapse. One precaution, however, is most positively insisted on;—a patient with pneumonia must never be bathed without the administration of stimulants before and afterwards, and the amount of stimulant must be increased when water of a lower temperature is used, or the duration of the bath is lengthened. Stimulants should be used after the bath, because the cooling process, which does not reach its maximum till from fifteen to thirty minutes later, is very apt to produce symptoms of collapse in persons with feeble hearts. If the bath be quite cold a stimulant is given before the bath, repeated while he is in it, and immediately after he leaves it. No absolute rules can be laid down; the quantity must be determined by the character of the pulse. Once more, he says, "let me insist most positively, that if we wish to treat pneumonia by cold baths, without unfortunate accidents, we must not spare stimulants."

In addition to the direct abstraction of heat, quinine is always used. "Above all other antipy-

retic medicines it possesses the invaluable advantage of reducing the temperature without injuring the heart, and this it accomplishes by diminishing the production of heat." When properly used, quinine diminishes the temperature for at least twelve hours. The greatest reduction takes place from five to seven hours after the medicine is taken. The following formula is recommended as a suitable dose in moderately severe pneumonia for an adult: \mathcal{R} quin. sulph. gr. xxx, acid muriatic q.s., aq. distil. \mathfrak{z} iiiss, misce. To be taken at one dose. This should be given between six and eight, p.m., and should be repeated in forty-eight hours, the reduction in temperature being greater when so administered. When the fever is intense 77 grains may be given to an adult, and 15 grains to a child under one year. The author further states that he has never seen any harm done by these large doses, and he does not believe they are the limit. He has but one caution to give. In those cases in which the temperature has at some time been 105.8°, and has risen again rapidly after an unsatisfactory abstraction of heat, it is not necessary to give, forthwith, 77 grains of quinine, this should be done only when the repeated use of decidedly cold baths has lowered the temperature for but a short time, and smaller doses have proved useless. If the dose be refused by the stomach it may be given in the form of enema, in a mucilaginous vehicle, with a few drops of laudanum. The author strongly objects to the use of tartar emetic, veratrine and digitalis, except when the latter is used as a cardiac tonic. The antifebrile action of venesection is slight and uncertain. "The physician who bleeds in pneumonia on account of the fever, resembles the philosopher who cuts down the fruit-tree in order to get the fruit. The advocates of this indication for blood-letting furnish in their own reports of cases the most convincing evidence of the inadmissibility of the measure. At all events, this indication should disappear from the text-books. To the conscience of the weak man, whom fate makes a physician as a punishment to his fellows, it serves as a welcome salve, when he lets blood merely to gratify a popular demand and establish his own position."

In the way of nourishment the author recommends a plentiful supply of milk, eggs, soup, and finely scraped rare meat, on bread and butter. He believes that the frequent cleansing of the mouth and teeth is an important aid in maintaining the appetite.

In the antipyretic treatment of pneumonia it is considered absolutely necessary that the patient should take light wine in amount suitable to his age and habits; for an adult say from half to a whole bottle daily. The portion which is not used just before and after the bath may be mixed with water and drunk at pleasure during the day. He has no objection to good beer. Has no doubt that alcoholic drinks lower rather than elevate the temperature, and it is more than probable that the alcohol acts as a direct preservative of the tissues. The former prejudice, which is still prevalent, has been shown by Bowvier and Binz to be unfounded.

Pain and sleeplessness should never be allowed to go unrelieved. For the relief of the former the hypodermic injection of from one-sixth to one-fourth of a grain of morphia generally answers, and will also relieve the cough. Insomnia should be relieved by narcotics in sufficiently large doses. The bedroom should be well lighted and ventilated.

In the treatment of already existing exhaustion of the heart stimulants are strongly recommended, as they not only spur the cardiac muscles to do more work, but they also directly enable the heart to perform it. Every vigorous pulsation of the heart forces more blood out of the overfilled right ventricle into the left, and benefits first of all the heart itself by supplying it with more oxygen and removing the accumulated débris of oxidation. It is possible by the proper and bold use of stimulants to maintain life in pneumonia for at least three or four days after the heart has shown indications of exhaustion.

In the less serious forms of cardiac exhaustion four ounces of a strong wine will generally be sufficient. If these milder attacks occur frequently an emulsion of camphor, two scruples to six and a half ounces of water—a tablespoonful every two hours—is preferred. If the symptoms continue, without becoming

alarming, a tablespoonful of strong wine is given alternately with the camphor emulsion every hour or half-hour. Should sudden and severe collapse take place, musk may be given in $\frac{1}{2}$ of a grain to 2-grain doses, with champagne every ten to thirty minutes. Musk acts rapidly like champagne, camphor more slowly, but its effects last longer. More rapid still in its effects is cognac or whiskey, given hot.

Convalescence is promoted by abundant nourishment, especially albuminates; beer and wine are given with caution. In the way of medicines he gives ferruginous preparations, and prefers, of these, ferrum redactum.

The author has treated 248 cases according to the principles above described, with 30 deaths, or 8.26 per cent.

ON THE PROPRIETY OF BLEEDING IN ACUTE DISEASE.

BY J. T. MITCHELL, F.R.C.S., ETC.

"Medio tutissimus ibis."

During more than thirty years I have filled the office of medical director of one of the largest life-insurance companies of the country, and one part of my duty in it has been to record the cases of death that occur therein, and the causes thereof; and from the frequent instances in which death has occurred from acute pleuro-pneumonia, peritonitis, and other inflammatory attacks of vital organs, in subjects many of whom were young, and who, before these fatal illnesses, had enjoyed robust and vigorous health, I have been induced to ask myself—What has been and what is the cause of this fatality?—when, in considering its comparative rarity in my own extensive and protracted experience, I have been drawn to the conclusion that the valuable theory of inflammation taught by the immortal Hunter is thoroughly misunderstood, and has been so now for a long period, and therefore the most palpable means for its relief has been so neglected. I allude to general and free bleeding in the early stages of such affections—a practice which for many years has been most unwisely and unjustly reprobated by teachers and hospital practitioners, and which now is scarcely ever heard of but as one to be utterly condemned.

During the last year, however, my hopes have been revived in the belief that physiologists and pathologists are returning to a wise reconsideration of the legitimate use of this effective agent—the lancet. First, as it was shown in the address of that acute observer, deep thinker, and worldwide-esteemed pathologist and physiologist, Sir James Paget—given by him before the assemblage of the British Medical Association at its meeting in 1874 at Norwich—in which he alluded with so much force of argument to the neglected practice of general bleeding in acute disease, and to its great value when adopted under the guidance of sound medical intelligence; and, secondly, in the published opinions on the same subject, made by Dr. Richardson and others who have had extensive and convincing experience in the proper use of the remedy, found in papers published in the medical periodicals.

I remember, also, that some years since I was present at a meeting of the Hunterian Society of London, when the late Mr. Solly read a paper on the subject of bleeding, in which he expressed himself very much in the same manner, and having the same object above him as Sir James Paget had in the address before alluded to, setting forth the neglect into which this remedy had unfortunately fallen, considering, as he did, its great value when used with sound discretion, and confining its use to cases in which recently established congestion or inflammation existed in vital organs—a state which, if not unchecked in the early and first stages, so rapidly runs on to destructive disorganization, such as sphacelus, abscess, dangerous hemorrhages (in the brain or lungs), dropsies, injurious adhesions, outpourings of coagulable lymph, and death, as well as in permanent enlargements and indurations of viscera, and many other chronic affections with which modern practice has continually to contend, and which, by the adoption of this remedy at the proper period, would often have been entirely prevented.

I am quite willing to acknowledge that there was a time when many men, guided by mere custom or ignorant routine, most inconsiderately bled, too frequently, and to a most injurious extent, by which recoveries were greatly im-

peded, and perhaps where even death was the result; but there never was a time when, in robust subjects attacked with acute local congestion, bleeding, adopted at a sufficiently early period, did not readily suspend excessive vascular action, and so tend to prevent subsequent disorganization. But I repeat that it is only at a very early period that this remedy can be so advantageously employed; for after the first stages of these affections are passed, seldom anything but disadvantage can be expected to follow, for then every drop of blood—the very “*pabulum vite*”—the essential material required to carry on the reparation of the damage done by the disease and restoration of the lost strength,—and every means having reparation for its object, must be devised and adopted—*is* urgently wanted.

I will, however, most earnestly emphasize my fixed conviction, by declaring that nothing that I have observed in the extensive field of public and private practice, now protracted as student and practitioner beyond sixty years, has ever shown me that the abstraction of blood under the circumstances described has ever done harm, or has not been the most ready and efficient means of cure.

(The writer then gives the history of a case of pleuro-pneumonia to which he was hastily summoned during the year 1847. On reaching the patient he found him pulseless, with extreme difficulty of breathing, lividity of the face, cold extremities, and, to all human appearance, in a moribund state. The course of treatment adopted—certainly a very heroic one—with its result, is very well worthy of perusal.)

I first procured two large pails, and got them filled with water about 100°. Having placed them at the side of the bed, I carefully raised him from the recumbent to the sitting position on the edge of the bed, and put each foot and leg into one of the pails. I then had two wash-hand basins nearly filled with water of the same temperature, and placed his hands and arms as deeply as I could get into them. I then tied up his right arm, for the purpose of “raising a vein.” At first, pulseless as he was at the wrist, no vein would rise, but after a minute or two a vein became sufficiently prominent to enable me to make a free incision into it: the

first effect of this was that blood flowed only drop by drop, but in a short time a small continuous stream followed, until enough blood had passed to relieve the stagnant circulation, when the stream increased, and at last it flowed *pleno rivo*,—upon which my young friend’s formerly sceptical countenance changed, and began to brighten with evident astonishment, and he expressed his wonderment. By this time the pulse at the wrist had become restored to considerable power, the venous livid congestion of the face had considerably lessened, and very soon it entirely passed away. I now requested the man to inspire as deeply as he could, upon which he said the pain in the chest and side was greatly lessened. I still allowed the blood to flow, until sixteen ounces had been collected in the basin, at which time he said he had no more pain, but he felt extremely faint; upon which, having secured the vein, I removed him from a sitting to a recumbent position, and gave him two grains of opium; after which, having darkened the room by drawing down the blind, we left him, having directed the wife to give him nothing but warm milk, and as much as he might be disposed to take; and if he should fall asleep, by all means to prevent his being awake. All this took place about mid-day, and at six in the evening we went again to see him, when we found him with a countenance bearing a natural aspect, pulse distinct and of moderate power, and about 100 in the minute; his breathing very much relieved, but still more frequent than natural; but the pain in the side had returned to a slight extent, upon which I again tied up his arm, and, from the same orifice previously made in the vein, drew off in a good stream, six ounces more blood: this entirely relieved him. I then repeated the dose of two grains of opium, and left him, having reiterated the instructions given in the morning. From this time, by implicit rest, sedative diaphoretic medicine, counter-irritation by mustard-plasters on the chest, and light nutritious diet—chiefly milk—he day by day rapidly improved, so as to be able to return to his work after a fortnight’s interval. On observing the conspicuously sudden and unmistakable result which followed the bleeding, my young friend declared as we walked

from the house, that he had learnt more of practical pathology, therapeutics, and physiology relating to the functions of the heart and lungs from this case and treatment than he had gained by all his previous studies and observations made during the time which he had spent at the hospital, and in the course of his four years previous apprenticeship, which he had passed in a large dispensary in a populous town in the West of England.

Innumerable cases of the same severe type as the one described, perhaps a few of the same very alarming character, have been treated in like manner, and with the same success, in my experience, and especially cases of puerperal peritonitis, of which twenty-seven have fallen under my treatment within the last fifty years, one only of the number have proved fatal. Therefore my faith in the judicious use of the lancet has never forsaken me during the protracted period of clamour which has so long existed against it.

It may well be asked, Why is it that within the last thirty years so great a revolution has taken place in the practice of medicine, and that teachers now almost universally reprobate abstraction of blood in the treatment of strongly marked congestions and inflammations? The answer appears to me to be this—that cases such as I have described scarcely ever are admitted into hospitals in the very early stages, and at the time when this remedy can be advantageously used; for in most cases many days have necessarily intervened from the day when the attack first came on to the day when thus admitted, and the time has gone by for the judicious abstraction of blood, and the stage of the illness has arrived when the repairing functions alone are to be considered and aided; and the patient has to be supported by tonics, cordials, and judiciously selected food. Another great impediment has stood in the way of the practice of judicious bleeding, which is the strong objection felt by patients against submitting to any, the most trifling, surgical operation, which has been allowed to guide the decision of medical advisers too frequently. And I fear that a third cause may be found in the incapacity and bungling in the performance of the operation felt by some unpractised hands.

If the abstraction of blood in all cases be so injurious, as many pathologists have taught, why is it that in so many cases of extensive hemorrhage, produced by natural causes, so little injury is known to follow?—as in epistaxis, in cases of vertigo, in which pints have been lost within a few hours, and fatal apoplexy has been averted; or in hæmatemesis, in cases of gastritis, when immense quantities of blood have been vomited, and nothing but the cure of the patient has been the result; or in cases of post-partum hæmorrhage or in miscarriages, where women have lost enormous quantities of blood, when the normal quantity has been soon restored, and no anæmic evils have after a time been left.

Clapham-road, London.

[Copy.]

16, Henrietta-street, Cavendish-square,
November 6, 1875.

Dear Mr. Mitchell,—I have carefully read your paper, which I herewith return to you.

I agree entirely with you in thinking that, whereas general blood-letting was, at one time, often employed too indiscriminately and in blameable excess, its subsequent almost total disuse was unwise, and in many instances disastrous.

The complete disuse was, in my judgment, a more serious mistake than over-use had been. At present, however, I see as you do, plain indications of a return to a better and more rational practice in respect of the employment of the lancet in certain acute forms of disease.

Believe me to remain, very truly yours,
J. T. Mitchell, Esq. THOS. WATSON.

TINCTURE OF GELSEMINUM IN NEURALGIA.

Dr. Spencer Thompson extols (*Lancet*, Nov. 6, 1875) the beneficial effects of tincture of gelseminum in neuralgic pain of the jaws generally, and of the teeth and alveoli more particularly. He gives it in doses of twenty minims, and if this does not afford relief in an hour and a half or two hours, he repeats the dose. He has rarely had to order a third dose.

DRUNK OR DYING ?

THE CHIEF CAUSES OF COMA, AND THE DIAGNOSTIC MARKS OF EACH VARIETY.

BY DR. GEORGE JOHNSON, F.R.S.,

Professor of Medicine in King's College, Physician to King's College Hospital.

The attention of the profession and of the public has lately been directed in an especial manner to the means of distinguishing drunkenness from apoplexy and other forms of sudden coma. When I am addressing my pupils on the subject of apoplexy, I am in the habit of referring to the difficult question of diagnosis in the terms of the following extracts from one of my lectures:—

Diagnosis.—You are called to a patient in a state of insensibility; you know nothing of his previous history, except that he has been found unconscious in the street, and you are required to ascertain the cause of his alarming condition. You must first consider what are the *possible* causes of the symptoms. He may have a clot of blood in his brain, the result of disease or a blow on the head; he may be in that comatose condition which not unfrequently follows an epileptic fit; he may be poisoned by opium or by an excess of alcohol; or he may be suffering from the effects of uræmia.

Now, you will be less likely to make an erroneous diagnosis if you continually bear in mind that in some of these cases an accurate diagnosis is not only extremely difficult, but absolutely impossible until the progress of the symptoms has been watched for a certain time. That the case is one of cerebral hemorrhage would be rendered probable by such symptoms as extreme relaxation or convulsive twitchings of the limbs on one side, lateral deviation of the features, or inequality of the pupils; but with hemorrhage on the *surface* of the brain none of these paralytic symptoms may be present. Marks of internal injury, especially about the scalp, should be carefully looked for in every case. A black eye or a cut or bruised scalp may have resulted from a drunken man falling down, but the fall may have fractured his skull or ruptured a blood-vessel in the brain.

That the coma is a sequel of an epileptic fit might be suspected if it were found that the

tongue is bitten and bleeding, and if there are hemorrhagic spots beneath the conjunctivæ or the skin; though these signs are frequently absent in epileptic cases. Epileptic coma is usually of short duration, and the speedy return of consciousness removes any doubt that may have existed as to the nature of these cases.

In cases of poisoning by opium, one of the most striking and constant symptoms is extreme contraction of the pupils. The skin, too, is usually bathed in a profuse perspiration. With respect to the contraction of the pupils, it has been observed that in cases of apoplexy with hemorrhage into the pons Varolii the pupils have been as much contracted as in opium-poisoning.

When the patient's breath is tainted by the odour of some alcoholic liquor, we of course suspect that he is drunk. It must not, however, be forgotten that as a drunken man is especially liable to be seized with apoplexy, and to suffer from accidental mechanical injury in the streets of a crowded city, so we may have to deal with the complication of alcoholic intoxication and cerebral hemorrhage on a fractured skull. It is a common practice to give brandy or some form of alcoholic stimulant to anyone who has become faint or giddy, and so it may happen that an unconscious patient's breath is tainted with the odour of drink administered after an onset of apoplectic seizure.

In cases of uræmic coma the urine is usually albuminous, and presents other physical and chemical signs of renal disease. Uræmic coma, in a large proportion of cases, is preceded by convulsions. The tongue is commonly brown and dry in these cases, and the breath has a most peculiar and characteristic fetor. Yet, even with all this evidence of renal disease, the case may not be one simply of uræmic coma; there may, in addition, be the complication of cerebral hemorrhage, which, as we know, is a frequent result of chronic Bright's disease.

The difficulty of diagnosis between renal disease and drunkenness is sometimes increased by the fact that the urine may be rendered temporarily albuminous by alcoholic intoxication. A remarkable case of transient alco-

holic albuminuria occurred when my friend and colleague Dr. Baxter was House-Physician to the Hospital. A man between twenty and thirty years of age was brought in one night by the police. He was unconscious, and breathing stertorously. He appeared to be drunk, and a large quantity of vinous liquid was pumped out of his stomach. The unconsciousness continued, and it was then suspected that he might be suffering from uræmic poisoning. This suspicion was confirmed by the fact that his urine, drawn off by a catheter, was "loaded with albumen." He was then put into bed, cupped over the loins, and a purgative was given. When Dr. Baxter visited the ward the following morning, he found the man up and dressed, and clamouring for his discharge. He said that he had been very drunk overnight, but now he had nothing the matter with him; and he passed some urine which was found to be in every respect quite normal. The temporary albuminuria was the result of renal congestion caused by the excretion of an excess of alcohol through the kidneys.

In all doubtful cases of this kind it is better to err, if you err at all, on the side of caution and safety. Obviously it is better to allow a drunken man to recover his senses in the ward of a hospital than to send an apoplectic patient to die in the cell of a police-station. When a mistake is made on the opposite side, and a supposed drunkard dies apoplectic, it is a very natural, though it may be a very erroneous inference, that some one is to blame and deserving of punishment. — *Medical Times and Gazette.*

THE *Medical Circular* states that a patient, suffering from inflammation in the chest, recently submitted his expectoration to a scientific authority. The practitioner consulted wrote back:—"It is evidently of parasitic nature, but with respect to the precise individuality of the entophyte I have not yet decided quite to my satisfaction. My mind still hovers between two conclusions, viz., as to whether it is an aborted specimen of a cyclocotuloid macromalacoidium, or a highly developed cryptococceous megacyst of a strongylopleuron batracholeucopridon."

ON THE USE OF QUININE AS A GARGLE IN DIPHTHERITIC, SCARLATINAL, AND OTHER FORMS OF SORE THROAT.

BY DR. DAVID J. BRAKENRIDGE,

Assistant Physician to the Royal Infirmary, Edinburgh.

Since Binz published his famous experiments, showing the action of quinine on the white corpuscles of the blood, numerous authorities have confirmed and extended his observations. The following facts, among others, may now be regarded as established:—

1. Quinine is a protoplasm poison, and limits the number and movements of the white blood corpuscles and pus cells.

2. It prevents the pathological migration of the blood corpuscles into the tissues of the membranous and parenchymatous organs exposed to the air, both when it is given subcutaneously and when it is directly applied to the part.

3. It restrains the dilatation of the blood-vessels.

4. It is an antiseptic, and exerts a paralysing, or, in larger doses, a destructive influence on microzymes.

With these facts in view, the theoretical appropriateness of quinine as a gargle in diphtheria with abundant proliferation of micrococci, and in scarlatinal, and various other forms of sore-throat, especially when attended with membranous exudation, pultaceous secretion, or ulceration, is apparent. For it antagonises all the visible factors of such forms of inflammation.

Before employing it for this purpose, I was familiar with the use of solution of quinine as a dressing in bed-sores and other tedious ulcers. The marked diminution in the secretion of pus and the rapid improvement which I observed to take place in these cases when so treated, first led me to anticipate good results from quinine as a gargle.

For the last four months I have treated every suitable case of sore-throat that I have met with in my wards in the Royal Infirmary and elsewhere, with a gargle composed, as a rule, of two grains of sulphate of quinine and five minims of dilute sulphuric acid to each ounce of water. Sometimes I have been able to increase the strength; sometimes I have

been compelled to diminish it. When well tolerated, the stronger it is the better.

The results I have obtained fully confirm my favourable anticipations. From a considerable number of cases I draw the following conclusions :—

Simple non-syphilitic ulcers of the throat, under this treatment, at once assume a healthier aspect and heal rapidly.

In syphilitic ulcers, the local treatment has always been accompanied by the internal administration of iodide of potassium, or some other suitable constitutional remedy; but my impression is that, in these cases, the cure is hastened by the quinine gargle.

Its effect in the sore-throat of scarlatina is very marked, the pultaceous secretion being checked, and the inflammatory swelling diminished.

It is of comparatively little use in the early stage of cynanche tonsillaris, over which tincture of aconite, in minim doses frequently repeated, has so decided a control. When, however, abscess followed by abundant discharge of pus results, its beneficial influence in checking the suppuration and promoting healing is marked.

In the slighter forms of diphtheritic sore-throat it answers admirably, preventing the extension of the disease, and promoting the separation of the membranous exudation.

It is, however, in severe cases of true diphtheria that I hope it will prove most useful. I have now employed it in three cases of this disease, and in all the result has been highly satisfactory.

Dr. Brakenridge then gives the history of a typical case of diphtheria, which he describes as one of "*unusual severity*," and in which this mode of treatment was adopted after having tried chlorate of potash and tincture of the perchloride of iron internally and Condé's fluid as a gargle without any perceptible improvement to the patient. His formula was as follows :—

R. Quiniæ sulphat, gr. xviii.; acid. sulphur. dilut. m. xlii.; aquæ ad ʒ vi M.

This prescription was alternated every half hour with Condé's fluid, and the patient afterwards did well and made a complete recovery

from the primary disease by the 13th day after the first attack.

I have found the quinine solution useful as a wash in aphthæ, stomatitis, and other affections of the mouth; but my experience of it in these cases has been limited by the difficulty attending its use in childhood, owing to its very bitter taste.—*Practitioner*, August, 1875, p. 110.

SYPHILITIC PHTHISIS.

Fournier sums up in the following four axioms the conclusions he has reached on this subject :

1. Tertiary syphilis can produce in the lungs lesions which, either locally or by re-acting on the general health, simulate pulmonary phthisis.

2. These pulmonary lesions of syphilis are often amenable to specific treatment; however grave and important they may appear, they are far from being always beyond the resources of art.

3. Consequently, when a case of pulmonary lesion presents itself, it is important, unless the existence of tuberculosis be quite certain, to ascertain if the lesion can be traced to syphilis. It is necessary always to bear in mind that syphilis is a possible cause of pulmonary lesions.

4. When syphilis can be suspected to be the cause, the primary indication is to prescribe specific treatment, which in similar cases has sometimes been followed by the happiest results.

In making a differential diagnosis, Fournier relies mainly on the syphilitic lesion being unilateral, circumscribed, and without predilection for the summits of the lungs. It generally affects a portion of the lung not more than a few centimetres square, constituting a little islet of disease surrounded by healthy lung-tissue. When the morbid changes are far advanced in the circumscribed spot, the diagnosis of syphilis is pretty safe. The co-existence of a fair degree of health and *embonpoint* with advanced pulmonary changes, points to syphilis as the cause of the latter, as does also a slow development of the pulmonary lesion, the general condition remaining good. Of course, a close examination of the entire body for the ordinary symptoms of tuberculosis or syphilis must never be omitted. There is no hereditary transmission of pulmonary syphilis.—*N. Y. Record*.

THE RAPID RELIEF OF NEURALGIC PAIN.

Dr. Spencer Thomson considers that instead of the employment, as of old, of external applications to palliate suffering in neuralgic affections, employed with the hope that the disease might be conquered after a longer or shorter interval with quinine, carbonate of iron, arsenic, and other antiperiodics which were not always certain, we may now congratulate ourselves that a large number of cases of so-called neuralgia may be quickly, either permanently cured by the relieving remedy, such as phosphorus, or relieved, until such time as specially curative agents, or curative general treatment, have removed the tendency to the recurrence of the pain. As one of the newest of the remedies he first alludes to one which is much too slowly making its way into the domain of practical therapeutics—the recently introduced “tincture of gelsemium sempervirens,” or yellow jasmine. In his presidential address delivered before the South Western Branch of the British Medical Association in 1874, he alluded to this remedy as having proved very successful in his hands, and in a paper he read this year at the Plymouth meeting he was able to state how fully it had fulfilled his expectations during the twelve months that had elapsed since his former notice of it. Directly or indirectly it had been used by him, or by his authority, in at least forty cases to which it was applicable, and with almost constant success. In using the word “applicable,” he does so in accordance with his own experience that the remedial power of the gelsemium seems confined to those branches of the trifacial nerve supplying the upper and lower jaw, more particularly the latter, and more especially when in either jaw the pain is most directly referred to the teeth or alveoli; indeed, he can scarcely recall an instance of the above in which relief was not speedily and thoroughly given. The usual expression of the patient has been, “It acted like a charm.” In illustration he gives one case.

On Sunday afternoon, June 20th, the housemaid of a friend, a retired medical man, came to him with a note from her master, stating

that she had been suffering from agonizing pain of what was thought to be toothache, for six-and-thirty hours. Nothing gave relief, and no dentist could be found to remove the only suspicious tooth. He sent her home with a bottle of gelsemium tincture, which he kept for home use, desiring that she should have twenty minims at once, and twenty more within two hours if not relieved. Her master sent him a note in which he stated that the patient had experienced immediate relief.

In the notices he has met with on the use of the gelsemium, the doses quoted seem all too small. Dr. Thomson now almost invariably prescribes for an adult twenty minims of the tincture as a first dose, to be repeated any time after an hour and a half if relief is not given. He has rarely had to order a third dose, and he has never found any inconvenience result from the larger doses. In one instance, a gentleman who, unadvisedly, took thirty minims at once, and immediately afterwards went out driving, told him he experienced for an hour or two some uncertainty of vision when guiding his horse. A severe attack of neuralgia of the jaw was, however, cured by the one dose, and did not return.

After referring to the solution of Calabar bean, to the tincture of *actæa racemosa*, and the nitrite of amyl, Dr. Thomson concludes by saying that, with morphia, and occasionally—but only occasionally—atropia, to use hypodermically, with phosphorus in solution, with gelsemium, aided at times by the ordinary external appliances, such as heat, or freezing if need be, aconite, and chloroform, one ought to feel fully prepared to meet and subdue at the time most cases of neuralgic pain, and, indeed of pain generally.—(*Lancet*. December 1875.)

AN ancient medical manuscript, discovered some years ago among the bones of a mummy, and lately purchased by Dr. Ebers, a German archaeologist, is talked of. It is believed by the learned to be one of the lost Hermetic books, and about contemporaneous with Moses. It is not yet completely translated, but is expected to throw some light on the practice of medicine in those remote centuries.

THE USE OF ALCOHOL.

It is not surprising that the extent to which alcohol is employed in our hospitals and infirmaries is occasionally the subject of questioning scrutiny by the lay authorities. There exists a very widespread belief that doctors are, as a rule, prone to the indiscriminate administration of stimulants, and that the amount of alcohol they order is in many cases far beyond the real need. Possibly there has been in the past some justification for the charge. The wave of stimulation which swept, with Dr. Todd's influence, over medical opinion, may here and there have carried the practice to an injurious degree, but we believe that the recoil has left little room for criticism, and that the great bulk of the members of our profession entertain and act upon a very just estimate of the time at which and extent to which alcohol should be given. But the annual consumption of wine and spirits in a hospital in which a large number of acute cases are treated makes a formidable figure in the total expenditure. It is not, therefore, surprising that the governors of the Newcastle Infirmary, on finding that the annual consumption of alcohol in their wards was at the rate of something like 1000 bottles of wine and 400 bottles of spirits, wished for a careful report on the subject by the Medical Board. This was recently supplied, and its assurance that the employment of alcohol has been strictly regulated by the needs of individual cases was satisfactory to the authorities, although it appears to have been a matter of not unreasonable regret to some that alcohol should be necessary to cure the mischief which alcohol had had so large a share in producing. The Newcastle Infirmary is a large institution, a considerable number of the cases treated are of great severity, and the amount of stimulants we have mentioned corresponds only to an average of something like two-thirds of a bottle of wine and one quarter of a bottle of spirit for each patient during the whole of his stay in the hospital; certainly a very moderate amount.

A still more simple justification was available for Dr. Roe, of Ellesmere, in reply to a foolish circular on the needlessness of stimulants

in acute disease, sent to him by the guardians of the parish. The total cost of stimulants for the sick poor under his care had amounted to 2½d. per head per week. In a very sensible letter he points out the fallacies on which the hasty conclusion as to the needlessness of stimulants had been based, and urges, with great point, that the judicious use of alcohol, by lessening the period of convalescence, effects a direct saving to the guardians of the poor, which must often far more than counterbalance the prime cost of the stimulants. We are glad to see that the letter carried conviction to the guardians to whom it was addressed.—*London. Lancet.*

BACTERIA FOUND IN THE PERSPIRATION OF MAN.

Dr. Eberth, of Zurich, Switzerland, has found, says the *Medical Record*, by the aid of the microscope, in the sweat of the face some corpuscles which he considered as bacteria. This view became confirmed when he examined the axilla, breast, and inner side of the thigh of several persons in a state of perspiration. The sweat of these parts contained nearly always enormous numbers of bacteria. In most cases they originated from minute bodies found upon the hairs in the mentioned regions, forming little nodules on them, and giving them a grayish or a brick colour. They were recognized by the author as accumulations of micrococci. They may rapidly increase in number, are smaller than the diphtherial micrococci, and are nearly indifferent to re-agents (concentrated acids, alkalies, alcohol, ether, chloroform). Iodine colours them yellow. The vegetation of bacteria on the hairs may be observed in cases where they are changed already, beginning in places which have clefts between their cells. The vegetation occupies large spaces, especially in the direction of the longest diameter of the hair.

Dr. Eberth observed a mycelium and micrococci, and thinks that the latter are the fruits of the former. Other investigators observed coloured sweat, red and blue, which contained micrococci. It was difficult to decide in these cases if the colouring matter was adherent to the micrococci, or if it was a product of the vegetation.

ERGOT IN HÆMOPTYSIS.

Dr. Jas. M. Williamson states (*Lancet*, Nov. 13th, 1875) that he has administered ergot in fifty cases of hæmoptysis occurring in different stages of phthisis. The amount of hæmorrhage varied from abundant bright streaks on the sputa, to the expectoration of several ounces of blood. As the cases all occurred in hospital practice, very little time was lost between the advent of the hæmoptysis and the exhibition of the remedy. The ergot was invariably given by the mouth and in the form of the liquid extract. Much has been said about the success of the subcutaneous injection of ergotin and its superiority to this plan, but since there was no difficulty in any of the cases in administering a draught, and as the drug acted in most instances with a promptitude which was sufficiently satisfactory, the hypodermic method was not employed. Forty-minim doses of the liquid extract may be given twice within the first hour, and guided by the results, at least every two hours afterwards, the dose being diminished and given less frequently as the hæmorrhage subsides. He has never observed any disagreeable effect follow, even upon the administration of large quantities within short periods, but, as a general rule, if four or five full doses make no distinct impression upon the hæmorrhage, the remedy should be abandoned for another. Care should be taken to use a sound and fresh preparation of the ergot.

Out of the 50 cases the drug rapidly checked all bleeding in 44 instances. Of these, 16 were women and 28 men, and in at least one-fourth of the number the hæmoptysis merited the term profuse. In forty of the forty-four cases it was the first and only remedy given; in two others it was successful after a mixture containing gallic acid, alum, and dilute sulphuric acid failed; in another it was effectual after acetate of lead with opium proved useless; while in the remaining instance it repressed the bleeding after both of these plans were unavailing. The ergot was ineffectual in six cases.

In three of the cases of failure gallic acid equally failed. Over gallic acid ergot has the distinct advantages of never causing griping or constipation, and more especially of not inter-

fering with a liberal use of milk. The larger portion—equivalent to 88 per cent.—of the cases in which ergot succeeded, not only testifies to its great value and claims for it our confidence, but also strongly justifies the recommendation that it should be the first drug tried in all cases of hæmoptysis.

RENAL TUBE-CASTS IN NON-ALBUMINOUS URINE.

Dr. Finlayson, of Glasgow, in an original communication to the January number of the *British and Foreign Medico-Chirurgical Review*, after discussing several cases of tube-casts occurring in non-albuminous urine, makes the following remarks:—

Tube-casts are almost invariably found in marked cases of jaundice, and as a rule this occurs without albuminuria. In showing some typical specimens of this class to the Glasgow Pathological and Clinical Society in May, 1874, I stated that, so far as I had then examined the subject (twelve cases), my observations confirmed those of Professor Nothnagel as to the almost invariable presence of tube-casts in the urine if it were deeply jaundiced, and as to the absence of albumen in about two-thirds of such cases. Since then other cases have come under my notice, and further observation confirms the statement made. The cases observed included many varieties of jaundice, so that one is forced to the conviction that the tube-casts are due to the jaundice itself, and not the special diseases producing it. In view of the facts and cases adduced in this paper, one is led to look for some mechanical (or, perhaps, some chemical) irritation of the renal tubules as a possible explanation of the presence of tube-casts thrown off in jaundice. When we remember that renal calculi and gravel, and even hedgehog crystals of the urate of soda give rise to, or at least are the only obvious cause of, tube-casts in the urine, and that such casts are found with the minutest possible traces of albumen, and, indeed, as we have seen, sometimes without any trace at all, we seem to have before us an analogous phenomenon. For in the sediment of jaundiced urine we find, at times, little coloured particles composed, apparently, of the biliary colouring

matter; a similar material has been found after death in the tubules of the kidneys themselves. Frerichs, in his chapter on Jaundice ('Obs.,' vi), speaks of the urinary sediment containing "brownish-black angular granules," and in the post-mortem report of the same case he says, "the little tubes were filled with a black brittle material," and that "nitric acid produced, in most of them (the deposits), the play of colours known to be characteristic of bile-pigment." It is worthy of remark that, in this case, although the secreting functions of the kidney were essentially impaired by the morbid process, no albumen had been found in the urine. These particles, perhaps from their size, perhaps from their nature, no doubt cause much less irritation than the renal calculi or gravel to which I have ventured to compare them, for we do not find hæmaturia to be one of the facts in jaundice; but they may suffice for the production of tubercasts, although they do not cause hæmorrhage, and but seldom albuminuria, just as the cases of renal irritation already detailed exhibited all the transitions from a profuse hæmaturia to an almost imperceptible albuminuria, or even to a total absence of any evidence of blood or albumen in the urine in which the casts were found.

NITRITE OF AMYL IN ASTHMA.

BY J. J. LEISER, M.D.

The following report of cases may be of interest:

Mrs. G., aged 40, for several months had her sleep interrupted regularly at 4 o'clock A.M., and was compelled to sit up the remaining part of the night in agonizing efforts at breathing. Large doses of quinine had some influence over the paroxysms, and when fully under its influence she would escape one or more nights. It began finally to lose its influence, and I gave her the amyl. The first use of it seemed to fail, but only because she did not inhale freely enough of it. The second night it was administered until the prominent effects became apparent—fulness and flushing of the face, throbbing sensation of the temples, etc.—when she experienced immediate relief, and returned to sleep at once. After a short use of it her

spells left entirely, but I attribute such results to the season.

Mr. M., aged 15, came into my office suffering from a severe attack of asthma. I gave him five drops of nitrite of amyl to inhale, with immediate relief. This patient was afflicted with severe paroxysms of asthma on every occasion of a slight cold, and it now requires that at such times he shall take several inhalations daily and at bed-time, by which he can shield himself effectually from distress. It is the only remedy which, after a search of years, has proven satisfactory. He uses five to ten drops.

Mrs. R., aged 60, simple paroxysmal asthma. She has become accustomed to the use of nitrite of amyl, and inhales it direct from the bottle—enough to cause some of the effects of the remedy, which always disperses the asthma and leaves her comfortable. She considers her bottle of amyl her nearest companion.

I have given the amyl salt in a number of cases, and in only one has it failed; in this I think the patient did not use it effectually, as she was completely prejudiced in favour of an asthma specific, which usually relieved her.—*Med. and Surg. Reporter.*

SURGEON-MAJOR THROBALD RINGER, M.D., reports a curious case of incessant hiccough in the *Indian Medical Gazette* for December 1st. The patient, a native trooper, was admitted into hospital for a severe attack of secondary syphilis (rupia), and treated with the bichloride of mercury. At the end of five weeks he was seized with hiccough, which continued with little cessation for five days, in spite of the exhibition of chloroform, hydrate of chloral, sinapisms, subcutaneous injections of morphia under intercostal muscles, belladonna plaster to epigastrium, and calomel, in one large dose. On the sixth day a blister was applied to the origin of the phrenic nerve, and he was given extreme doses of iodide of potassium every six hours, and a full dose of quinine once a day, with iced soda water to drink. This treatment was carried on for eight days, the hiccough becoming daily less frequent, until on the tenth day it entirely stopped. The dose of iodide of potassium was gradually reduced as improvement took place, and on the twenty-third day the man was "discharged to duty."

Surgery.

CLINICAL LECTURE ON THE DIAGNOSTIC VALUE OF THE ILIO-FEMORAL TRIANGLE IN CASES OF INJURY OF THE HIP-JOINT, MORE PARTICULARLY OF IMPACTED FRACTURE.

BY THOMAS BRYANT, F.R.C.S.

The interest that is attached to the subject of injuries of the hip-joint, the difficulty that occasionally attends their diagnosis, and the injury that is too often inflicted upon a patient, in the attempt to make out a difficult case, are some of the reasons that have induced me to bring before your notice on the present occasion, a means of diagnosis in these cases that I have long employed and taught, although I may not have formulated it before the present year. I have described the means in this paper as the ilio-femoral triangle, and I have done so because the triangle is formed between the ilium and the femur. The lines which form it are readily made out, and any shortening of the one which I have called the base and to which I am about to draw your special attention, can be easily detected. The triangle is formed as follows, and is a right-angled triangle. One side of the triangle is formed by a line drawn from the anterior superior spinous process of the ilium to the top of the trochanter major. The second is drawn from the anterior spinous process of the ilium, directly downwards to the horizontal plane of the recumbent body. And the third, which is the base of the triangle, is drawn at right angles to the second line and falls upon the first line, where it touches the great trochanter. It is to this line my observations refer. The first line, it will be seen, corresponds, in part, to Nelaton's well-known line, which is drawn from the anterior superior spinous process of the ilium to the most prominent part of the tuberosity of the ischium. This line in the normal position of the head of the femur touches the upper border of the trochanter major in every position of the limb, and I believe that if this line is to be considered to be the test line for dislocation of the head of the femur backwards—which I take it to be—I must claim the base of the triangle

I have described to be the test-line for the fracture, or shortening of the neck. At any rate I can confidently assert, after repeated proofs, that whilst in a healthy subject these ilio-femoral triangles are exactly similar upon the two sides of the body, with equal sides and equal angles, I can, with equal confidence, assure you that in all cases of injury to the hip in which shortening of the neck of the thigh-bone exists, the amount of shortening can readily and accurately be made out on comparing the bases of the triangles on the two sides. That in impacted fractures of the neck of the thigh-bone, where on the sound side the base of the triangle will, in the adult, measure its average normal length of two and a half inches, on the affected or injured side, it will measure from half an inch to more than one inch less. These measurements being taken with the patient in the horizontal position, the pelvis straight and the two femora parallel.

* * * * *

In practice the line is easily made out and the test as to shortening of the neck of the femur readily applied, and with these facts before us, the value of the means for diagnostic purposes can hardly be disputed. In my own hands the test line has helped me much in many difficult cases, and in the hands of my dressers it has been of no less value, for it has enabled them to diagnose with facility, and without dangerous manipulation, many cases of impacted fracture of the neck of the thigh-bone that would otherwise have been overlooked, and to a certain extent, would have been roughly and injuriously handled. By means of this line I maintain the diagnosis of an impacted fracture of the neck of the thigh-bone can, as a rule, be made out with facility and certainty; and that in a large number of obscure cases of injury to the hip the doubts and difficulties that were formerly experienced may be exchanged for the confidence of accurate knowledge. I do not mean, however, to say that by means of this test line all obscure cases of injury to the hip-joint can be cleared up, for such an assertion would not be true; but I would wish you to believe what I have found to be the case—that by its use a large number of cases, that would have been called obscure, have ceased to be so. It is true

there may be some shortening of this line in fracture of the great trochanter, and it is likewise possible that there may be no shortening of the line in some cases of impacted fracture; but these cases are exceptional, and they in no way tend to diminish the diagnostic value of the means I have to-day brought before your notice, in the majority of cases of fracture of the neck of the thigh-bone, and in all cases in which shortening of the neck of the femur may be found.

* * * * *

During the last three years, at least 16 consecutive cases of fracture of the neck of the thigh-bone have been admitted into my wards, and all these 16 left them with good union of the broken bone and useful limbs. You must know, also, that all these patients were advanced in years, the youngest having been fifty-nine, and the oldest seventy-eight, the average age of the 16 having been seventy-four. The injured patient was simply placed on a firm bed with his pelvis brought to a right-angle with the spine and his lower extremities slightly extended; a tape was then allowed to fall from the anterior superior spinous process of the ilium of one side to the horizontal plane of the body, and a second tape employed to measure the distance between this vertical tape and the upper border of the great trochanter on the same side. (This horizontal line forming the test line.) Similar measurements were taken on the opposite side. The two lines on the respective sides were then compared, and when no difference was found between them, it was generally assumed that no fracture of the neck of the femur existed; but when the test line on the injured side of the body was found to be shorter than the other, and this shortening had taken place after a direct injury of the hip, the inference was drawn that there was some shortening of the neck of the thigh-bone, and that this shortening was probably due to a fracture; the amount of shortening in the neck of the bone being fairly represented by the amount of shortening in the test of line of the affected side. In many cases no tapes were used, the index finger of one hand being employed to represent the superior vertical line, with its tip placed upon the anterior superior spine of the ilium,

and the index finger of the opposite hand as the horizontal test line, the thumb marking off upon the index finger the distance between the vertical line and the top of the trochanter.

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—*London Lancet*, Jan. 22, 1876.

TREATMENT OF PORRIGO, TINEA FAVOSA, ETC.

BY DR. HENRY MACCORMAC.

[The results of treatment for parasitic cutaneous diseases are often disappointing, but Dr. Maccormac has found much more satisfactory results from petroleum than from any remedy previously tried.]

The first thing I do, the scalp being concerned, is to clip or, where it can be done, or as far as it can be done, shave the hair closely off, and keep it so. In cases that have been neglected, it will be desirable to premise a few simple poultices, bread or linseed meal. I direct the petroleum to be applied twice daily, by inunction, in the form of one part petroleum to two of lard and a few drops of oil of lavender or, say from half a pint to a pint of petroleum in a pound of lard, with twenty drops of oil of lavender. The vessel or jar which contains these, may be stood in a basin of boiling water, occasionally renewed, stirring with a wooden spatula until the whole is intimately blended.

This unguent is to be applied, gently but thoroughly, once or if it be practicable, twice daily. A soft brush is a very good implement to use, and the ointment when about to be applied, may be moderately warmed beforehand by standing the cup or gallipot, which contains it, in hot water. Judgment must be used in apportioning the strength of the ointment and the amount of the application to the state of the parts and the irritability of the subject. After the application a piece of dry soft clean linen rag may be laid on—an old cambric handkerchief answers very well—and over all, a soft clean linen cap.

Before the next application of the petroleum ointment, the head must be thoroughly but gently washed with black or fish soap and fresh warm soft water. The ointment is then to be reapplied as before. Every rag or cap, once

used and past further use, should be thrown into the fire, but if intended for further use, plunged in a hot soda lye, and after being well washed, finally rinsed in water containing a little carbolic acid.

The last instance of porrigo which I had to deal with, was in a cutler's daughter. Her case was rather a distressing one, with many sores, the hair had mostly disappeared, and there were vermin as well. The very first application proved advantageous, and the patient did well in every respect, except as to regaining her hair, afterward. The family have removed, and I cannot speak of the young woman's present state, but I have no reason to doubt but that it is satisfactory.

In a recent case of trichophyton tonsurans in a youth of eighteen, a large patch of hair, producing great disfigurement, was absent. I must here observe that I had begun with pencilling a weak alcoholic solution of corrosive sublimate over the parts. I then had recourse to the petroleum ointment and black soap. The case, after some continuance of treatment, has done extremely well. A vigorous growth of hair now covers the previously denuded surface. A preceding case of trichophyton occurred in a pretty young Jewess. A naked patch rather larger than a crown piece, subsisted at the very vertex. The young lady has since married, and the vertex, when I saw her last, bears no trace of having ever been wanting in respect of its hairy covering.

I wish to add that the petroleum ointment with black soap, is an excellent remedy in itch, removing it with ease and safety. It is a capital remedy for lice, destroying them on the pubis, in the axilla, or on the head. In two or three instances where these hideous vermin had extended over the whole surface, the petroleum ointment with black soap and the warm bath, employed twice daily, removed them with magical celerity. In insane persons, whereon vermin often house, petroleum ointment and soap proves most useful. So far as I have had an opportunity of trying it, I find the petroleum alike serviceable in the mange of dogs, swine, and horses, destroying the minute parasites along with the cutaneous affections which they engender.—*Practitioner.*

ON THE HYPODERMIC TREATMENT OF INDOLENT ENLARGEMENTS OF THE CERVICAL GLANDS.

BY DR. MORELL MACKENZIE.

Physician to the Hospital for Diseases of the Throat, London.

Indolent glandular enlargements should be either cured radically or left altogether untreated. Half-measures only give rise to disappointment and cause disfigurement. An enlarged gland may be a slight blemish, but when it has been blistered, poulticed, painted with iodine, incised, or subjected to any of the various modes of treatment recommended in such cases, it often becomes a deformity.

As a rule, parents and young ladies are very desirous to get rid of these glandular swellings, not only on account of the disfigurement which they occasion, but because they are regarded as blots on the family escutcheon. It becomes important, under these circumstances, not only to disperse the tumours, but to leave behind as slight traces of their previous existence as possible. For the last eighteen months I have been engaged in trying various remedies, hypodermically, with a view of curing indolent glandular swellings. I have tried solutions of pepsine with and without dilute hydrochloric acid, dilute hydrochloric acid alone, dilute acetic acid, tincture of iodine, alcohol, solution of nitrate of silver, solution of chloride of zinc, and several other remedies.

In carrying out hypodermic treatment the cure may be effected either by resolution or by destruction. In the former case absorption takes place; in the latter the injection is followed sooner or later by suppuration. It is desirable, if possible, to cure by resolution. I have found acetic acid, as recommended by Dr. Broadbent for the treatment of certain kinds of cancer, the most useful remedy for this purpose. With this agent I have treated twenty-seven cases; of these fifteen were completely cured by resolution, four were greatly benefited, in five suppuration took place, and three patients discontinued treatment without any decided effect having been produced. I have used the ordinary dilute acetic acid of the British Pharmacopœia, and have generally injected from five to twenty drops, according to the size of

the gland to be treated, seven or eight drops being an average dose. The injection should not be made more than once a week. The fluid should be injected well into the middle of the gland. Suppuration has generally resulted from the solution having been injected either too frequently or too superficially. If suppuration take place, the fluid should be drawn off with a hypodermic syringe or aspirator. The average duration of treatment by resolution is three months.

For treatment by destruction and suppuration, a solution of nitrate of silver answers best. The solution should be of the strength of one drachm to the ounce, and not more than three to five drops to be used. Considerable interstitial destruction is generally produced after three or four injections, sometimes after a single injection. When pus forms, it should be drawn off as already directed. Treatment by destruction, if successful, is rather more rapid than that by resolution, but induration of the outer portion of the gland sometimes follows the treatment, and interferes with its success. I have treated five cases in this way; in three of them the cure was complete, in two incomplete. The treatment by pepsine and dilute hydrochloric acid was rapid, but was twice followed by superficial sloughs of the skin, and for that reason I abandoned it.—*Medical Times and Gazette.*

MEDICAL DIPLOMAS FOR WOMEN.—The *British Medical Journal* states that the Council of the Royal College of Surgeons of England has arrived at the important decision to admit women to examination for its licence in midwifery. This diploma will entitle them to a place on the *Medical Register*, and will give them a legally recognized position in this country as practitioners in the obstetric department of medicine and surgery. The clause in the College Charter under which the right to admission has been claimed was, it appears, expressly framed by the use of the word "persons," to meet the case of female as well as of male practitioners; and the College has been advised that it could not legally refuse to admit duly educated women to examination for this diploma.

THE USE OF LIQUOR BISMUTHI FOR HÆMORRHOIDS AND PROLAPSUS ANI.

BY JOHN CLELAND, M.D., F.R.S.

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While it may be freely admitted that in many instances hæmorrhoids cannot be treated successfully without surgical operation, and while, for my own part, in a considerable experience I have always had good reason to be satisfied with the results of the operation recommended by Mr. Syme, it is evident that in a large number of cases operative interference is unsuitable; in others the affection, however ameliorated by such interference, remains uncured; and it is desirable that whenever it is possible, a cure should be obtained without resort to so disagreeable a measure. With this end in view I venture to say a few words on the use of liquor bismuthi given as enema.

My attention was first drawn to this remedy by a rather peculiar case of prolapsus of the bowel. A middle-aged woman came for consultation in such a condition that she could with difficulty walk, inasmuch as whenever she parted her thighs, the bowels emerged and hung down for about six inches, in folds of such a character as made it evident that at least half-a-yard of intestine was extruded. The whole surface of the mucous membrane exposed was a deep raspberry red, like those cases of hæmorrhoids which some practitioners delight to treat with nitric acid. This condition was chronic; external supports had failed; the possibility of removal of the whole prolapsed mass suggested itself, but such an operation attended with enormous risk was not to be thought of in the case of a patient enjoying a certain measure of health. Astringents had been tried and failed, and it seemed questionable if astringents were suitable remedies in such a case. It appeared much more probable that an irritated and congested condition of the mucous membrane led to a derangement of the action of the muscular walls than that in a strong woman, a local relaxation, involving sphincters and intestinal walls, had produced a prolapsus, which led to congested mucous membrane, from exposure. I recollected the relief frequently obtainable in

cases of hæmorrhoids, by application of white bismuth or oxide of zinc. In this case, however, ointment or powder obviously could not be effectually applied. But the liquor bismuthi in stomach affections has a soothing influence far superior to white bismuth. I therefore directed my patient to mix a dessert spoonful of liquor bismuthi with half a wine glassful of starch, and after getting into bed and returning the bowel to its place, to introduce this enema and retain it. I was much pleased, a few weeks afterwards, by my patient calling to tell me that she was nearly well, and to ask if she might continue the remedy. This she was ordered to do; and I have every reason to believe that she has had no return of her malady. I have since frequently used the same remedy for the ordinary prolapsus in children, with invariable and rapid success.

In severe hæmorrhoids there are usually three parts affected, the integument, the mucous membrane, and the hæmorrhoidal veins. Plainly the veins cannot be reached by local medicaments, and those comparatively few cases in which they alone are involved must be treated in other ways. The integument, together with the edge of the mucous membrane up to the grasp of the sphincter, is within easy reach, and may be treated in various ways according to circumstances. Thus, when the congestion is superficial and produces a catarrhal oozing, bathing with whiskey or other alcoholic lotion, a small pad of dry cotton wool firmly applied to soak up the moisture, and also zinc or bismuth in powder or ointment are all exceedingly useful; and when a congested surface within easy reach is accompanied with venous engorgement, tincture of iodine sometimes produces surprising effects, although in other instances it is too painful to be borne. But when the mucous membrane is considerably involved, I know no application to compare with injection of liquor bismuthi, which has the advantage of being painless; and as in the case of prolapsus narrated above, the improvement of the mucous membrane has a wonderful influence on both the veins and integument. In instances in which the necessity for surgical interference appeared indubitable, I have had the gratification of defrauding myself of the

pleasure of operating, and of seeing the patient recover. This is the more gratifying, as the surgical treatment of hæmorrhoids labours under the disadvantage, that, no matter what be the particular operation adopted, it never removes the predisposing cause of the malady.

THE RELATION OF SOFT CHANCRE TO SYPHILIS.

Can a chancre which presented at one stage all the characters of a soft one subsequently become indurated? The soft sore results simply from pus contagion, this pus being more or less peculiar, and its peculiarities being due to its having originated in syphilitic inflammation. I have insisted that this pus may or may not contain the germ-matter of syphilis. Let me here insist upon the extreme importance to the reputation of the practitioner of the rule never to give an opinion as to the nature of a chancre until the incubation period is over. Patients will come to you with sores contracted a few days or a week or two before, and will expect you to be able to tell them whether or not they are likely to have syphilis. Now, there is never anything in the conditions which are either present or absent which will justify the most practised observer in giving an opinion at such a stage. It is very rare indeed that an infecting sore acquires any induration within three weeks of the date of contagion, and more commonly it is a month or five weeks. Until such induration takes place, nobody can tell whether it is coming or not. Let your rule be, I repeat, to give to your patient no opinion whatever as to his chance of escape until he can assure you that it is one month since his last exposure to risk. If the virus be introduced in a pure, or almost pure, state, then it is probable that in many cases the patient experiences nothing excepting, perhaps for a few days, a little red pimple, which disappears, and leaves him, as he thinks, quite well for another three weeks or a month. At the end of that time the part begins to itch a little, and again becomes red, and gradually within a week or so a well-characterised induration is developed. If, however, the contagion have been

effected by a mixture of contagious pus and specific virus, then you have a very different course of things. Within the first few days the contaminated part may inflame sharply, and an ulcer may result which will probably send the patient in great alarm to his surgeon. This sore is, of course, soft; it secretes freely, and its secretion may contaminate other parts, and you may have what are termed multiple soft chancres. You may inoculate it, if wished, on the patient's skin, and produce other similar sores, and thus prove that you have to do with a non-specific secretion. But all this does not prove that the specific poison is not there, and whatever may be the cause of these soft sores, whether easy to heal or obstinate, there remains the risk that the specific induration may ultimately be developed. Probably the worse the sore, the more inflammation, and the deeper the ulceration, the greater is the patient's chance that the specific virus may be thrown off; whilst if the sore heals in a few days the danger of true syphilis is considerable. We often, from patients who are the subjects of tertiary disease, hear the statement that the original sore healed in a week, and gave scarcely any trouble. Such cases are, I suspect, examples of the early healing of a conspicuous soft sore, which was followed some weeks later by an inconspicuous and unobserved hard one. It is becoming increasingly the rule of English practice to give mercury as soon as ever specific induration can be recognised; but it is quite possible that we may, in the future, go further than this, and think that it is best to prescribe this remedy for all sores occurring within a month of contagion. We should no longer do so under the impression which formerly prevailed, that it was necessary in order to make the sore heal, for we now know that the soft sore is not syphilis, and cannot be influenced by its specific. The reason for giving it would be the fear that the patient may be passing unnoticed through the incubation stage of a true chancre. The soft sore proves that he has been contaminated with venereal pus, and shows that it is not improbable that he may have received the syphilitic virus also. It is quite possible that the antidotal efficacy of mercury may be much greater in the early stage than in the

later ones. I wish, however, to have it distinctly understood for the present that I am merely suggesting, and not recommending. I am often pressed by patients to allow them to take mercury on speculation for soft sores, but hitherto for the most part declined to do it; my reason being, that until some proof has been afforded that we have to deal with true syphilis, we have no data by which to determine the requisite length of treatment.—Mr. J. Hutchinson, in *London Lancet*.

IMPROVEMENT ON SYME'S OPERATION.

This modification of Syme's employed by Mr. Bell for three or four years, and practised in ten cases, he states (*Brit. Med. Journ.*, Oct. 2. 1875) will, he believes, "be found to give the advantages promised by Pirogoff's method, and yet to avoid the risk of recurrence of disease of bone in the portion of os calcis left in Pirogoff's operation.

"It is a very simple and slight modification and consists in leaving attached to the flap the periosteum of the posterior part of the os calcis, and instead of dissecting the soft parts alone off the bone, stripping along with them the whole periosteum. In the case of amputation for disease of tarsus in children, this is done with the most perfect ease. It adds to the chance of vitality of flaps, diminishes the risk of sloughing and number of vessels to tie, and gives the most excellent results. Especially if the patient be encouraged early to move his flap by means of the tendons which soon take on new adhesions, we find that a considerable power of moving the heel flap over the end of tibia is saved, and, in some cases, a deal of new bone is formed from the periosteum. So much so is this the case, that in one patient on whom I operated in 1874, it was hardly possible to persuade those who saw the stump, that it was not a portion of astragalus which had been left with the integrity of the ankle-joint preserved. As all the cases in which I have practised this modification have survived and been successful, I have not found any objection to it, nor had the opportunity of making any *post-mortem* examination.

"One case had to be taken down about the fifth day for secondary hemorrhage from the posterior tibial, yet I did not find that the presence of the periosteum implicated in any way the subsequent secondary union of granulations which healed the wound."

TREATMENT OF NASAL CATARRH.

Dr. William Porter, after giving a brief description of the anatomical disposition of the parts implicated in nasal catarrh, the forms, symptoms, and etiology of the disease, proceeds to consider the treatment that should be adopted, and states that there are four points to be considered. The *first* has reference to the predisposing cause, the constitutional cause which must be rectified. In the asthenic type, iodide of iron, or iodoform and iron, with cod-liver oil are generally indicated. The treatment of catarrh from syphilis is obvious. If there be ulceration, iodide of potassium with ammonia, and some form of tonic are called for, but if no ulcers exist, the bichloride of mercury in small doses, if persevered with, has no equal. These cases are much more manageable than those of serofulous origin.

In the catarrhal diathesis which we have noted, the majority of cases seem to do well with some preparation of phosphorus. This, with the addition of nux vomica, has been useful in relieving obstinate constipation and nervous lassitude in patients of this kind.

In all these conditions, good food, rest and regular habits of life must be enjoined. The social enjoyment and happiness of the patient should not be neglected, but if possible improved, knowing as physicians must how great is the influence of the mind upon the nervous system, and of the nervous upon the nutrient.

Secondly.—The local cause of the catarrh must be removed. If there is a polypus it should be enclosed in a snare, or seized with the forceps, and be brought out. In the glandular hypertrophy mentioned, the part may be touched with nitrate of silver, by aid of the rhinoscope, and the more pendulous portions destroyed, whilst all that would irritate the nasal mucous membrane must be avoided or guarded against. But this alone will not suffice. The membrane is already hypertrophied and the secretion abnormal.

A *third* important item is to keep the part thoroughly cleansed, so as to remove all the adherent mucus and incrustations. Nothing does this better than a weak solution of common salt in tepid water. It is not enough that it

should be used through the nasal douche. He thinks that the nasal douche should only be used by the physician himself, and that the solution should never exceed a drachm of salt to the pint of water; that the salt should be well dissolved, and that the pressure should not exceed that of a column of water of twelve inches. These requirements, if carefully attended to, will obviate any danger. That so few cases have been recorded in which injury from the use of the douche has occurred, amongst the thousands who daily abuse it, sufficiently attests its harmlessness if properly applied. This means, while valuable, does not reach the upper and sometimes the most important part of the cavity. An easy way of affecting this is to attach to the douche a tube with an aperture on one side, which may be passed into the nostril, through which a stream of the solution may be directed upward toward the part, or the tube may be attached to a nasal syringe. Dr. Rumbold recommends a catheter with numerous small apertures, through which a spray of air and water is sent with good effect. If the disease has become ulcerative, a deodorising solution of permanganate of potassium or salicylic acid may be used in a spray, after the cleansing.

Fourthly and last, but most important, is the local medication. If there are ulcers they may be touched with iodine in glycerine and water, with the addition of a little iodide of potassium, or with weak solutions of nitrate of silver. The latter is most useful where there is thickening of the membrane. Hydrate of chloral directly applied answers a good purpose where the ulceration is sluggish. It may be used from five to fifteen grains to the ounce of the menstruum. Where the thickening is not marked iodine vapour does well. A few drops of a concentrated solution of iodine containing a little conium or lupulin may be placed in a Roosa's inhaler, and the vapour propelled by means of the double bulbs or a small bellows. This should be used for at least fifteen minutes each day. After a few applications of this vapour a free flow of serum is induced, which lessens the infiltration and its attendant symptoms. If there be deafness from narrowing of Eustachian tube, it may be sometimes much relieved if the vapour is passed along it by means of inflation by the Valsalvian method. In many cases the frequent use of a snuff composed of camphor, tannic, and salicylic acid is advantageous.—(*St. Louis Medical and Surgical Journal.*)

Midwifery.

DOUBLE OVARIOTOMY PERFORMED FOR THE REMOVAL OF SOLID OVARIAN TUMOURS. — TRANSFUSION OF MILK FOUR DAYS AFTER OPERATION.

Dr. Thomas, in the *American Journal of the Medical Sciences*, gives the history of an interesting case operated upon by him in October last.

As the patient was already greatly enfeebled, and was steadily becoming more and more exhausted, I readily assented to her own desire and that of her friends, and agreed to perform ovariotomy without much delay.

On the 14th of October, at 3½ o'clock p.m., I proceeded to operate in the presence of Dr. C. C. P. Clark, of Oswego, Drs. Mitchell and Skene, of Brooklyn, and Drs. Hunter, Walker, and Jones, of New York. The patient having been etherized by Dr. Skene, and placed upon her back upon a table, I made an incision through the peritoneum extending from a point two inches above the umbilicus to the symphysis pubis. Through this the tumour, which was unattached, was removed. The pedicle, consisting of the right ovarian ligament, Fallopian tube, and extension of the round ligament, was secured in a clamp, but upon subsequent examination it was found to be so tense that I ligated and returned it to the pelvis.

Upon examining the uterus it was found to be perfectly normal, but the left ovary was as large as a bullock's kidney and lay behind the uterus, distending and occupying Douglas's pouch. This was removed like the right, and the abdominal incision rapidly closed.

The whole operation occupied thirty-six minutes. At its conclusion the patient was removed to a warm bed, hot bricks put to her feet, the room darkened, and perfect quiet enjoined.

The patient was left under the care of Dr. S. B. Jones, who, on account of her very enfeebled condition, remained with her constantly for the next five days, and to his watchfulness and care, I cannot but feel that the subsequent recovery of the patient was in great part due.

She was kept entirely upon the milk diet, taking this in very small amounts, and at intervals of three or four hours, and was quieted by small doses of morphia.

During the next thirty-six hours all went well, the temperature did not rise above 102 degrees, and the only anxiety which was felt in reference to her during this period was created by the fact that she could take very little food without vomiting, and that her pulse, the rate of which was 130 to the minute, was exceedingly small, feeble, and flickering. On Friday I saw her in consultation with Drs. Mitchell and Jones. On Saturday morning, just thirty-six hours after the operation, I received a telegram stating that a rather profuse uterine hemorrhage had come on, and that the patient had lost ground decidedly in consequence. At ten that morning I saw her, and the condition of affairs looked decidedly unpromising. The pulse was so rapid and weak that at times it could scarcely be felt, and the patient began to vomit everything that was put into the stomach, even small pellets of ice. The foot of the bedstead was elevated twelve inches, cold was applied to the vulva, and the patient kept perfectly quiet. From this time nourishment was given by the rectum alone.

On the evening of that day I was forced to go to Rlinebeck, from whence I could not return before the evening of the following day. At eleven o'clock that night I received a telegram from Dr. Jones, stating that the uterine hemorrhage had recurred so violently that with the assent of Dr. Mitchell he had used a vaginal tampon, and that the patient was sinking so rapidly that she would die before morning. Reaching home late on Sunday night I found that death had not occurred, and early on Monday morning I went to Brooklyn to see her.

On this visit I found everything looking very badly. Both stomach and rectum rejected all nourishment; the temperature was only 102 degrees, but the pulse was small, flickering, and beating at 140 to the minute. It was agreed that very small amounts of fluid food should be cautiously tried by stomach and rectum, and, as the patient appeared to be dying from sheer exhaustion, the result of previous enfeeblement

by the disease, and more recent starvation and loss of blood, that, in case Drs. Mitchell and Jones should towards night feel convinced that death would occur, I should be summoned to perform transfusion.

At six that evening (Monday, four days after operation), I received a telegram urging my immediate attendance on Mrs. S., who appeared to be rapidly sinking. When I saw her I found her bathed in cold sweat, with a temperature of 101 degrees, a pulse of 150, and a facies expressive of approaching dissolution. It was decided at once to try the effect of transfusion.

Three experiments with the transfusion of blood rendered me very averse to the employment of this fluid, and with the consent of my colleagues I decided to employ instead perfectly pure, fresh milk. This idea suggested itself to my mind from the recollection of some cases in which it was employed twenty years ago by Dr. Edward M. Hodder, of Toronto, Canada. In 1850 Dr. Hodder injected this fluid into the veins of three patients moribund from Asiatic cholera, which was at that time epidemic in Canada. In a communication from him he informs me that he injected as much as fourteen ounces at one sitting; that no alarming symptoms occurred; that good results manifested themselves from the first; and that two recoveries had taken place in patients who appeared moribund when the operation was resorted to. He was encouraged to try the method from the fact that Donne had injected milk into the veins of dogs and rabbits without injury to them. Since the cases reported by Dr. Hodder, I know of no one who has repeated this experiment in the human being until a year ago, when Dr. Joseph W. Howe, of this city, injected six ounces of warm goat's milk into the cephalic vein of a patient suffering from tubercular disease, and who appeared to be dying from starvation in consequence of an inability to retain nutritious material by either stomach or rectum. Dr. Howe declares that—

“When nearly two ounces had been thrown into the circulation, he complained of pain in the head and vertigo. The eyes twitched from side to side (*nystagmus*), and he said he could not see. The same symptoms recurred when the next

ounce was thrown in, and ceased when the injection was suspended. The third repetition of the same quantity produced pain in the chest and dyspnoea, and no brain symptoms. His pulse seemed to be fuller after the operation, and he said he felt better. Death took place four days afterwards. A post-mortem examination showed that there were no clots in the veins of the arm or in the lungs. The brain was normal. I don't think the operation improved his condition, notwithstanding the fact that the patient himself and the house surgeon thought it did.”

Having decided to inject milk into the veins of my patient, a young and healthy cow was driven into the yard, a pitcher with gauze tied over its top was placed in a bucket of warm water, the vein was exposed and the cow milked at the moment the fluid was needed. By means of the very perfect and safe transfusion apparatus of M. Colin of Paris, I slowly injected eight and a half ounces into the median basilic vein. The first effect which evinced itself did so after about three ounces had been injected. Then the pulse became so rapid and weak that Dr. Mitchell, who kept it under his finger during the operation, could scarcely detect it. The patient declared that she felt as if her head would burst, and seemed greatly overcome. I went on slowly, however, transfusing the fluid until the amount mentioned had been reached; she was then left perfectly quiet.

In an hour from this time she had a decided rigor, the pulse was found beating between 150 and 160 to the minute, and the temperature arose to 104 degrees. This high rate of temperature, however, soon passed off, and towards midnight the patient fell into a quiet sleep, from which she did not awake until morning.

I saw her about ten the next day, when Drs. Mitchell and Jones gave me a very encouraging account of her. As I entered her room she said in a feeble voice, “I feel that I am going to get well.” This I was particularly glad to hear, as during the previous day she had given up all hope and was utterly despondent. The pulse was beating 116 to the minute, the temperature was 99½ degrees, the tendency to sweating had disappeared, and the facies had much improved.

During the day very small amounts of iced milk and lime-water were given by the mouth and retained. From this time onwards it would be needless to mark the daily changes which occurred. The patient steadily progressed to complete recovery, and on the twenty-first day after the operation, upon a visit made by Dr. Jones, she walked down stairs to meet him. The notes taken by him on this occasion declare that "the appetite is excellent, the patient growing stout, sleeping well, and gaining every day." Six weeks have now elapsed since the operation, and the patient is entirely well.

The general appearance of the tumours is as follows: The larger resembles closely in aspect a cirrhotic liver. It measures in its longer circumference 19 inches; in its shorter 16 inches; and weighs $4\frac{1}{2}$ pounds. The smaller tumour resembles a large fatty kidney; measures in its long circumference 12 inches; in its shorter $7\frac{1}{2}$ inches; and weighs $1\frac{1}{2}$ pounds.

Upon section a number of cysts were found in the larger tumour about the size of a chestnut, and filled with colloid material. In the smaller tumour no cysts appear except upon the circumference, where a few small ones, the largest about the size of a marble, exist.

ULCERATED NIPPLES.—M. Legroux advises the following treatment: Spread with a camel-hair brush a layer of elastic collodion around the nipple, in a radius of an inch or more; a piece of goldbeater's skin should then be placed over the nipple and collodion, taking care to make a few holes with a pin over the part of the goldbeater's skin which covers the nipple, so as to allow the milk to ooze through. No collodion should be spread on the nipple itself, as some pain might thereby be occasioned. By the rapid evaporation of the ether the collodion dries up, and the goldbeater's skin adheres. The nipple is then more or less pressed down by the latter, which in drying becomes tense. When the child is to be nursed, the end of the nipple should be wetted with a little water. The goldbeater's skin which covers it becomes soft and supple, allows the nipple to swell, and protects the ulcers and fissures from the strain of suction. The mother or wetnurse thus suffers no pain, and the ulcers heal in a few days.—*Annales de Gynécologie*.

ARTIFICIAL DIET OF INFANTS.

Dr. B. F. Dawson says:—"If artificial diet be judiciously selected, there is no reason why a child should not thrive as well upon this kind of nutriment as when its support is derived from the mother's breast. No food is capable of properly supporting an infant unless it possesses heat and fat-producing properties. Any nourishment which does not come up to the requirements of a liquid food having the proper quality will produce intestinal troubles. What nourishment are we to give? Is there any one kind of nourishment which uniformly and perfectly supplies the place of breast-milk? The article which most perfectly answers all the requirements, and can be trusted to furnish all the elements of nutrition in the most digestible form, is milk from some animal. The milk of various animals varies to a certain extent in the properties of its different constituents; but that from the cow is the one which should ordinarily be used, and when properly prepared may answer all purposes. In its natural state it is not a fit article of food, and some article must be added which will effect a proper dilution. Water is the article commonly added; but by far the greater number of cases suffer in consequence of its addition. The addition of water alone does not improve the digestibility of the casein, for it does not dilute it; and when milk is introduced into the stomach, diluted with water, the water is soon taken up and the casein is left as undiluted and unchanged as before the food was given. Nor does the addition of sugar make the coagula any more easy of digestion; nor does skinning the milk act beneficially, but, on the contrary, deprives it of one of its most important constituents. Inasmuch as the mother's milk contains proportionately more fat than other milk, may it not be true that the finer coagula which is formed, when the mother's milk is introduced into the stomach, is due to the presence of this fat? and would it not be better to use the milk as an article of food, from which casein has been removed, rather than use the milk which has been deprived of its cream? It had been his experience that this was the more proper course to pursue. The admixture of farinaceous

articles with the milk also leads to disastrous consequences. There is one article, however, which contains such small quantities of starch that it can be used with very great success for effecting a proper dilution of cow's milk, and that is barley-water. Good cow's milk diluted from one-third to one-half with barley-water forms one of the best articles of food that can be used for infants when it is necessary to bring them up artificially. If barley cannot be obtained, oatmeal may be substituted, and answers nearly as good purpose. This article produces a real dilution of casein, and renders the coagula much finer and more like the coagula which is found in milk from the mother's breast.—*Obstetrical Journal*.

PREVENTION AND MANAGEMENT OF MISCARRIAGES.

DR. A. W. EDIS states (*Brit. Med. Journal*) that it has been his lot to observe numberless instances where miscarriage after miscarriage has been allowed to take place without a vaginal examination ever having been resorted to, or any attempt made to ascertain the causal condition of this premature expulsion of the ovum; no instructions having been given to the patient as to what precautions should be taken to avoid similar catastrophes, no injunction as to resting in the horizontal position, or living *absque marito* until the process of involution has had time to be accomplished; in fact, the whole affair being treated as if it were not worthy of serious consideration by the practitioner, or of any moment to the patient.

In a series of nearly 2000 cases of his own hospital patients at all ages, where the facts had been carefully recorded, there were no fewer than 1147 miscarriages compared with 4588 children born at full time—a proportion of exactly one in four. This ratio Dr. Edis finds to be as nearly as possible the same among his private patients, the increased development of the nervous system among the upper and middle classes compensating for the diminished risk from the accidents which affect the poorer classes.

In the large majority of cases of miscarriage, they will be found to be due to some deranged

state of the mother's health, or to some morbid condition of the uterus or its appendages. There are also many what may be called accidental causes, such as blows, falls, sudden agitations from fright, &c., which disturb the equilibrium of the circulation or strongly affect the nervous system. These are self-evident, and will not be here further referred to, inasmuch as, beyond enjoining avoidance of all unnecessary risks when patients are in the early stage of pregnancy, we can scarcely regard these as preventable causes. Dr. Edis is anxious rather to direct attention to the unnecessary waste of life resulting from the frequent recurrence of miscarriage in the same patient where there is some deranged condition of the uterus or its appendages: causes that may be termed preventable.

The hope of preventing the recurrence of miscarriage depends upon our tracing out—what in every case exists—the efficient cause of it.

MANAGEMENT OF PREMATURE CHILDREN.—

Dr. Ahfield, in the *Archiv. für Gynäkologie*, Band viii., says that cases occurring in the practice of others and in his own have proved to him that premature infants ordinarily regarded as non-viable may, under favourable circumstances and assiduous care, live and thrive. He gives examples in which children born at the twenty-sixth week were preserved alive. Immediately after birth, the child must be wrapped in cotton and placed in a warm bath, so as to impart to it the heat which it is unable to produce in sufficient quantity. The baths, which should be somewhat warmer than usual, must be frequently repeated. Great importance is attached to awaking the child regularly every one or two hours in order to feed it. As long as it does not suck, milk (woman's is the best) must be given to it by a teaspoon. With a view to the better development of the lungs and the movement of the thoracic muscles, it should be excited to cry by slight irritation. It is dangerous to bring such children into the open air for several months after birth, as their air-passages are readily affected.—*Clinic*, Jan. 8, 1876.

THE COTTON PESSARY.

BY R. A. PAGE, M.D., WASHINGTON, D.C.

[Abbreviated from an original communication to the *New York Medical Journal*, January, 1876.]

At a time when uterine disease is becoming daily better understood, and more intelligently and successfully treated, the inability to obtain a form of uterine support which is of practical value is the source of a great deal of annoyance to those whose practice, like my own, is largely composed of cases of this class. Among the numerous inventions and improvements of pessaries to which the attention of the profession is constantly called, I have been unable to find one which could be used with comfort to the patient. My mind being constantly exercised upon the subject, I have at last hit upon one of form and material which, though extremely simple, seems, from the success I have had in the use of it, to unite all the qualities long sought in vain in these instruments. . . . It can be worn without discomfort, is elastic, retains its proper position while yielding to the motion of the body, is not an obstruction to the passages of the bladder or rectum, and being made of raw cotton, like the wads so much in favour at present, can, like them, be medicated to suit the requirements of various forms of uterine disease.

The form of the instrument is that of a tiny dumb-bell, *i.e.*, a shaft with a ball on each end. It is made in the following manner.—

For an instrument of the ordinary size required, take a piece of hard rubber rod, either hollow or solid, the thickness of a lead pencil, and about one inch and a-half long. This may be bent in any desired curve by running it through the flame of an alcohol-lamp and moulding with the fingers. The rod thus prepared is laid upon a piece of cotton batting, about ten inches long by eight wide; the long edge must be folded over about an inch and a-half on each side. The rod is then placed at the short edge of the cotton and firmly rolled the whole length of the piece, after which it is wrapped in the centre tightly with strong sewing silk for a space of about an inch and a-half, leaving a soft, compact and elastic ball at each end.

Over the wrapping I sew a piece of lint very smoothly, with the nap outside, and the pessary is complete.

In introducing the instrument with the Sims speculum, the uterine extremity is placed in the desired position, the other end is pushed up under the arch of the pubis, and held there while the speculum is removed. In this way it enables me to effectively apply local remedies, combining with them a gentle and unirritating pressure, which, in cases of capillary engorgement and enlargement of the cervix, is of great value. For the application of styptics in menorrhagia, or flooding, it is an excellent tampon.

This pessary can be retained two or three days, and after its removal can be cleaned if necessary. In cases of ante or retroversion, by placing one of the ends of the instrument, after it is anointed with glycerine carbolate, in the anterior or posterior *cul-de-sac*, the uterus is completely supported. In these cases it is best for the physician to apply the pessary himself, but one of its great advantages is, that in cases of prolapsus the patient can soon learn to apply it herself if she is properly instructed, thus saving much of the time and expense which a proper treatment of these cases generally involve.

ON THE ADVANTAGE OF MILK DIET IN ALBUMINURIA OF PREGNANT WOMEN, AND ITS INDICATION AS PREVENTIVE TREATMENT IN ECLAMPSIA.—Dr. Tarnier (in *Le Progrès Médical* No. 50, Dec. 11, 1875) recounts two instances where milk diet succeeded perfectly in relieving the œdema and albuminuria in two pregnant women, no other treatment being resorted to. The first day one litre of milk and two portions of food were given; the second day two litres and one portion; the third three litres and half a portion; the fourth and following days, four litres or as much as desired without any other food.

In one to two weeks after the commencement of this treatment, the albuminuria notably decreased, and at length ceased entirely; the patients being delivered of healthy living children, and convalescing rapidly and perfectly. —*Obstetric Journal Summary.*

Materia Medica.

WARBURG'S TINCTURE.

This anti-pyretic remedy, which has attained much celebrity, and the composition of which was kept secret, has just been made public, in a paper by Prof. Maclean, of the Netley Medical School, published in the *Medical Times and Gazette*, of Nov. 13, 1875.

"It will be seen," says Prof. Maclean, "that quinine is the most important ingredient in the formula, each ounce bottle containing nine grains and a half of the alkaloid. Its presence has been detected by every chemist who has attempted its analysis, and never doubted by any medical man of experience who has used the tincture. Many will say 'after all, this vaunted remedy is only quinine concealed in a farrago of inert substances for purposes of mystification.' To this objection my answer is: I have treated remittent fevers of every degree of severity, contracted in the jungles of the Deccan and Mysore, at the base of mountain ranges in India, on the Coromandel coast, in the pestilential highlands of the Northern Division of the Madras Presidency, on the malarial rivers of China, and in men brought to Netley Hospital from the swamps of the Gold Coast, and I affirm that I have never seen quinine, when given alone, act in the manner characteristic of this tincture. And, although I yield to no one in my high opinion of the inestimable value of quinine, I have never seen a single dose of it given alone, to the extent of nine grains and a half, suffice to arrest an exacerbation of remittent fever, much less prevent its recurrence; while nothing is more common than to see the same quantity of the alkaloid in Warburg's tincture bring about both results."

The following is the formula for its preparation:—

R. Aloes (Socotr.) libram; rad. rhei (East India); sem. angelicæ; * confect. fect. damocratis; ana uncias quatuor.

Rad. helenii (s. enulæ); croci sativi; sem. fœnicul.; † cret. præparat.; ana uncias duas.

* This confection, which consists of an immense variety of aromatic substances, was once official, and is to be found in the *London Pharmacopœia*, 1746.

† Dr. Warburg informs me that this ingredient was added to correct the otherwise extremely acrid taste of the Tincture. Many other substances were tried, but none answered so well as prepared chalk.

Rad. gentianæ; rad. zedoariæ; pip. cubeb.; myrrh. elect.; camphor; †bolet. laricis; ana unciam.

The above ingredients are to be digested with 500 oz. proof spirits in a water-bath for twelve hours; then expressed, and added ten ounces of disulphate of quinine; the mixture to be replaced into the water-bath till all quinine be dissolved. The liquor, when cool, is to be filtered, and is then fit for use.

The mode of administering it is as follows:—

"One half ounce (half a bottle) is given alone, without dilution, after the bowels have been evacuated by any convenient purgative, all drink being withheld. In three hours the other half of the bottle is administered in the same way. Soon afterwards, particularly in hot climates, profuse, but seldom exhausting perspiration is produced. This has a strong aromatic odour, which I have often detected about the patient and his room on the following day. With this there is a rapid decline of temperature, immediate abatement of frontal headache—in a word, complete deforescence—and it seldom happens that a second bottle is required; if so, the dose must be repeated as above. In very adynamic cases, if the sweating threatens to prove exhausting, nourishment in the shape of beef-tea, with the addition of Liebig's extract, and some wine or brandy of good quality, may be required."

TREATMENT OF CHRONIC ALBUMENURIA.—In the *American Journal of Medical Sciences* for January, Dr. T. S. Sharpe of Natchez, Mississippi, reports five cases of Chronic Albumenuria successfully treated with large doses of Iodide of Potassium. The doses ranged from 10 to 36 grains three times a day. The ages of the patients were 22, 28, 58, 65 and 80 years respectively. In all the albumen disappeared, and *apparently* the health restored. In none of the cases did the iodide produce the peculiar unpleasant results attributed to large doses of the remedy, but it invariably increased the appetite and flow of urine. No patient admitted a syphilitic taint. Dr. John C. Inge has also treated similar cases with similar results.

‡ This is the *Polyporus Laricis* (P. officinalis, Boletus purgans or Larch Agaric); "formerly," says Pereira, "used as a drastic purgative, and still kept by the herbalist."

THE CANADIAN
Journal of Medical Science,

A Monthly Journal of British and Foreign Medical
Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.*

TORONTO, MARCH, 1876.

Mr. R. Budenell Carter, in the *Lancet*, Aug. 7, 1875, contends "that ether is in all respects as available and as effectual as chloroform; secondly, that it is *absolutely safe*. I do not believe that it has ever destroyed life, nor do I believe it has any tendency to destroy it."

"I fully believe in the correctness of Dr. Joy Jeffries' assertion, that, as long as the patient receives air enough to prevent suffocation, you could not destroy life by ether if you tried."

Mal apropos of the above remarks comes the following report of death from ether.

Did the patient receive air enough to prevent suffocation?

DEATH FROM ETHER.—Dr. Finnel presented the larynx of a patient who recently died at the Homœopathic Hospital while being operated on for the removal of a necrosed portion of the superior maxilla. The only abnormality noticed in the specimen was œdema of the larynx. The history of the patient was, that he had suffered from necrosis of the maxilla, and it was determined to remove the sequestrum by operation. After having etherized the patient sufficiently, an incision was carried through the lip, and extended in a semicircular direction over the upper jaw. When the operation had proceeded thus far, the patient became cyanosed and died. It was suspected that blood had passed into the trachea, and to remedy this the patient was held up by his heels, but without effect. The time from commencing the administration of ether till death ensued was ten minutes. The amount of ether used was

two and a quarter ounces. At the autopsy, no trace of blood could be discovered in the trachea. The heart was fatty, and weighed six ounces. No lesions could be discovered in any of the other viscera. A strong smell of ether was discoverable in the brain. The anæsthetic employed was the purified ether manufactured by Dr. Squibb.

ALL who knew him will read with deep regret the announcement of the death of Dr. McArthur, which occurred in Toronto, on Feb. 11th. Dr. McArthur was an old U. C. College boy, and matriculated in Arts, at Toronto University, in 1864. He attended one year in Arts and then began his medical course at Toronto School of Medicine, distinguishing himself in honours at the annual University Examinations. He graduated in 1869 and settled in Stoney Creek, where he soon obtained a large practice.

IN another column will be found an instructive communication from Dr. Joseph Workman, on the Mills murder case. We wish to call especial attention to it, as all may read it with pleasure and profit.

WE are greatly obliged to Dr. Anson S. Fraser, of Sarnia, for a copy of the Minutes of the Western and St. Clair Medical Association, held at Chatham, on Feb. 4th. We regret that they arrived too late for insertion this month. They will appear in the April number.

PRESENTATION TO DR. O'RIELLY.—On Tuesday evening, Feb. 8th, Dr. O'Rielly was entertained by the Mayor and Aldermen of Hamilton at a dinner, and presented with an address and a valuable and handsome solid silver-plate service, on the occasion of his leaving the Hamilton Hospital to assume the position of Medical Superintendent to the Toronto General Hospital. Dr. O'Rielly's associates of the Hamilton Medical Surgical Society presented him with a handsome clock.

Communications.

To the Editor of the Canadian Journal of Medical Science.

LETTER FROM DR. WORKMAN ON THE MCCONNELL CASE.

SIR: I fear that in begging for insertion in your columns of the following observations on the deplorable and atrocious homicide, which has so recently shocked, not only the citizens of Hamilton, but our entire community, I may be trespassing alike on your polite forbearance and your valuable space. Never, perhaps, in this Dominion, granting that the culprit was a perfectly sane and responsible member of society, was a more deliberate and ferocious murder committed, than that of the lamented *James Nelson Mills*, by the hands of *Michael McConnell*. Universal abhorrence of the crime, and an intense popular desire for retaliative punishment of the perpetrator, were the natural and usual outbursts in every bosom in which the sacredness of human life, and detestation of inhuman butchery, find lodgment. But in the presence of an overbearing popular commotion, or, as I feel almost tempted in the present instance, *from my standpoint*, to designate it, an epidemic frenzy, what assurance can we have that the crime of Michael McConnell has been weighed in the balance of dispassionate, sound, and adequately cultivated judgment? In the very outset I affirm, unhesitatingly and deliberately, that neither the richly talented Judge (of whose legal acquirements and personal worth I have a very high opinion), nor the prosecuting and defending counsel, nor the twelve apparently respectable jurors before whom McConnell stood on trial, possessed that knowledge of mental disease which is essential to the formation of a just and safe conclusion, in any case in which the question of the prisoner's sanity or insanity of mind becomes the supreme difficulty. The truth is, the literature of insanity is, to the entire community, outside the list of alienistic specialists, and a portion of the profession of medicine, a sealed book. Judges and barristers have neither the time nor inclination to prosecute the study. Their knowledge of mental disease is derived from old musty volumes, exhibiting in due succession the conflicting deliverances of men who, devoid of all *practical* knowledge of insanity, have arrogated to themselves the prerogative of oracular intuition, and have bequeathed to their successors an incongruous mass of legal precedents and rulings, which have perplexed the most painstaking and intelligent students.

The great Lord Brougham said, in relation to the celebrated case of Bellingham, who assassinated Mr. Percival, "he could conceive a person whom Deity might not deem accountable, but who might be perfectly accountable to human laws." Was there a man on McConnell's jury who would have assented to the verdict of *guilty*, could he only have conceived, or believed, that *God* did not hold him accountable for the killing of Mr. Mills?

But Lord Brougham was not content with the above monstrous, if not semi-blasphemous, utterance. He states that had the trial of Bellingham, instead of being precipitated, been postponed, to allow time for hearing evidence, clear proof of the man's insanity, and the existence of insanity in his family would have been given; but he adds with ineffable coolness, "no man doubted the result of the trial would have been precisely the same, had the evidence been adduced." In other words, though the jury might have believed the prisoner to have been insane when he killed Mr. Percival, and that "Deity might not hold him accountable," yet, under the ruling of a British Draco, he should be promptly sent to the gallows.

The divine Shakespeare tells us, in the person of his honoured judge, Portia, that

"Earthly power doth then show likest God's,
When mercy seasons justice."

Lord Brougham's reasoning was not of this order. According to his Lordship's conception of human justice, not only should it never be tainted with mercy, but it should even be divested of all regard to facts. Bellingham killed Percival in the presence of many witnesses. Popular abhorrence was aroused. The culprit could not, did not deny the fact. When asked why he did it, he replied, "Oh, do it, that was perfectly inevitable; there was no wrong at all in it; I could not help it."

Could Michael McConnell help killing James Nelson Mills? That is the question of questions? Every peaceable, orderly Christian man, speaking from the promptings of his own self-consciousness, and in cognizance of the facts adduced by the prosecution, will, no doubt, say that he *might* have helped it if he *would*. But every man is, fortunately, not Michael McConnell, and before pronouncing rashly on the criminal's power of *willing*, every man should endeavour to comprehend exactly the condition of his mind at the time of committing the crime. A recent very celebrated writer, Dr. Mandesley, in a valuable treatise, entitled, "Responsibility in Mental Disease," when treating of "Erroneous popular and legal notions," uses the following language:—

"Were the observer, whether casual or skilled, to reside for some length of time in an asylum, and thus to make himself practically acquainted with the ways, thoughts, and feelings of its inmates, he would certainly discover how great a mistake it is to suppose, as is often done, that they are always so alienated from themselves and from their kind, as not to be influenced by the same motives as sane persons in what they do or forbear to do. When an insane person is on his trial for some criminal offence, it is commonly taken for granted by the lawyers that if an ordinary motive for the act, such as anger, revenge, jealousy, or any other passion, can be discovered, there is no ground to allege insanity, or, at any rate, no ground to allege exemption from responsibility by reason of insanity.

The ideal madman whom the law creates is supposed to act without motive, or from such motives as it enters not into the head of a sane person to conceive; and if some one who is plainly mad to all the world, acts from an ordinary motive in the perpetration of an offence, he is presumed to have acted sanely and with full capacity of responsibility. No greater mistake could well be made.

Such is the opinion of a man of very extended experience, and of superior capacity of observation.

In a subsequent part of his book Dr. Mandesley says: "There are few persons engaged in the study and treatment of insanity who have not like Esquirol, begun by doubting the existence of real impulsive insanity; there are none who, after having had a large enough experience, have not, like him, been compelled to abandon their doubts. To those who judge by the experience of a sane self-consciousness, and so *prejudge the facts*, it seems an inconceivable state of mind, or at any rate, it seems inconceivable that a person in such a state of mind should not have the power to control the insane impulse; to those who form their conclusion from observation and experience of the facts of the disease, and so interpret them fairly, no doubt of its existence is finally possible."

Dr. Mandesley next proceeds to detail some cases confirmative of his views.

A most instructive and able paper, on transitory mania, from the pen of Dr. Edward Jarvis, a gentleman who has devoted a long lifetime to the study and treatment of insanity, was published in the *American Journal of Insanity* for July, 1869. It happened that very shortly after my receipt of that number, I was called as an expert witness to a Country Assizes, in the case of the murder of a woman by her husband. I travelled in the same railway carriage with the legal gentleman who was engaged for the defence. I put the journal into his hands. He was struck with admiration of the force and clearness of Dr. Jarvis's production, and in his address to the jury, he ventured to read a passage which bore directly on the case then in hand. He was instantly stopped by the judge, who expressed his astonishment that so eminent a lawyer should attempt to quote to a jury from so worthless a publication. He might have quoted by the bushel the venerated and ever varying deliverances of the oracles of British jurisprudence, propounded from beneath the co-

lossal wigs; but to appeal to the matured knowledge of a man whose reputation as an experienced and deep-thinking alienist is of well-merited fame, wherever insanity and its human treatment have become subjects of national interest and Christian consideration, was an offence unendurable in a court of British justice; consequently the advocate was doomed to dumbness.

In my evidence, I ventured the expression of opinion, that the enormity of the crime, and its unnatural character, appeared to me suggestive of mental alienation in its perpetrator. For this frank ebullition of latent conviction, I was, as a matter of course, duly, though very tenderly, censured by his Lordship. The jury, however, declared the prisoner insane. He was afterwards committed, under proper legal warrant, to my charge. For more than a year after his entrance into the asylum, he was regarded as not insane by all my assistants, and I was myself often tempted to think that I had done a wrong act in saving him from the gallows—so troublesome and vexatious was his conduct. Time justified me—long before I retired from the asylum, all question of the man's mental unsoundness had vanished. Since the occurrence of his insanity and crime, a nephew has been known to me as a nefarious idiot, and two brothers as lunatics and drunkards. One of the latter died in the gaol at Guelph quite recently, in the night, after an apparently epileptic seizure.

Dr. Jarvis, in the paper mentioned, reproduces from the writings of numerous eminent alienists, details of flagrant acts of homicide committed by insane persons, in whose trials the question of their true mental condition was very keenly contested. It is utterly impossible to read these cases without indentifying in the details, several most important coincidences between the facts given and those which were established in the evidence furnished in McConnell's trial. It would, however, be too large an encroachment on the columns of a journal, to introduce them in this communication, I must, therefore, be content with a compressed statement of the general conclusions arrived at by Dr. Jarvis and the distinguished authorities quoted by him.

Dr. Ray, whose treatise on "the Medical Jurisprudence of Insanity," has commanded the high respect and approval of every experienced alienist in America and Europe, says: "Insane impulses often come on very suddenly, and appear to be uncontrollable." Again, "Cries are sometimes observed in insanity, where the force of the disorder seems to expand itself in a single moment, or upon some particular occasion."

"The calmness of the defendant after the homicidal act is in accordance with general experience."

Dr. Bell, (the late) an alienist of the very highest reputation and worth, in relation to the same case, said: "It is a well settled fact, that after proxysms of violence, the insane often appear calm and tranquil."

Dr. Woodward, another alienist of well established repute, said: "The calmness of the defendant after the act coincides with common experience."

Esquirol, whose treatise on insanity has immor-

talized his name, and shed an enduring lustre on the medical literature of France, has written thus :

"Some monomaniac homicides, after the act, appear to be relieved of all agitation and distress. They are calm, without regret. They contemplate their victims with coolness, and sometimes with a sort of satisfaction." I might go on in citations from the highest authorities sufficient to fill columns of your journal, but no reflecting or unprejudiced reader will be so exacting as to demand the trespass on your space, or the unnecessary infliction on your correspondent. If, however, I may, without exposure to the impeachment of egotism, adduce my own, almost *grave* experience in relation to homicidal purpose and violent perpetration of injury, I can state that twice during my asylum residence I was providentially saved from a fate similar to that of Mr. Mills, and from exactly the same sort of weapon. If, in your court-house I could have managed, on sight of the McConnel knife, to summon up so theatric a shiver as one of the female witnesses displayed, I might excusably have done so ; but it did not occur to me thus to justify Government for the bestowal on me of a dangerous retiring allowance. Twice more I escaped from serious, though not murderous attacks, but with bodily injuries which must painfully hang on, to the grave.

Did my intending assassins, or my actual assailants, ever express or feel regret for their premeditated or achieved inflictions? Not the slightest ; nor did I ever feel the slightest inclination or desire to retaliate, for I regarded their thoughts and deeds as the promptings of insanity—at least I so did in the cases of three. The fourth, however, having already been a murderer—a convict from the Penitentiary,—I never believed to be insane ; and I had, before her concealment of the knife, taken steps for her remand back to penal imprisonment. As to the other three. I took good care to have them well watched, and I watched them myself very circumspectly.

Now, I ask, with all seriousness, and with the most respectful consideration of outraged popular sentiment, did not the clearly established fact of McConnell's cool and brutal indifference after his butchery of Mr. Mills, most potently sway the minds, not only of the outside multitude, but of all within the court, not excluding the jury, nor even the judge on the bench? And yet that very "cool and brutal indifference," would, alone, had his jury consisted of such enlightened and experienced men as Esquirol, Ray, Bell, Woodward, Jarvis—men who have studied mental disease in the *living* book, walking daily and life-long among its unfortunate subjects—have hardly failed to determine their decision, and that decision would have been very different from the verdict rendered by McConnell's jury, and applauded by the judge. But it would be, if not wrong, perhaps very dangerous to society, and in my opinion very unjust to the convict, to rest the assumption of his mental disease on the preceding consideration solely. It is quite unnecessary to do so.

Two corroborative facts which I regard, and every medical alienist, as well as every thoroughly educated medical practitioner, unquestionably regard, as of overwhelming value in support of the

theory of the culprit's insanity, were established in evidence.

First, The infliction of a fracture of his skull two or three years before the murder.

Secondly, The existence of insanity, (or perhaps idiocy), in a blood relative—a cousin.

The prosecuting counsel, as no doubt he complacently felt in duty bound, affected to regard the first fact as utterly insignificant in the decision of McConnell's mental state. My evidence as I now read it in the newspapers, appears to me to have been imperfectly, and in some parts incorrectly reported ; but the prosecution asked me so many strange random questions, that it was almost impossible to frame rational or pertinent answers. For example, he demanded from me a *definition* of insanity, ignorant, doubtless, of the fact, that all the authors most competent to define the malady, have declared themselves unable to give one that will embrace the whole subject. Experienced alienists, and eminent writers on insanity have carefully avoided this perilous dogmatism. No mortal ever scanned the depths and shoals, the dark caves and deep labyrinths of the human mind so thoroughly as Shakspeare, nor has any writer ever depicted the workings of the disordered brain so truthfully ; and never spoke philosopher more wisely than he makes the babbling Polonius to do, when he tells the Queen that

"to define true madness,
What is't but to be nothing else but mad."

Definitions of insanity have indeed been vouchsafed by oracles of the long robe, whose knowledge of the disease has been learned, as at one time was that of anatomy by army surgeons, on the field of battle. Much blood has been fatally shed by both these orders of explorers.

The learned counsel also insisted on my furnishing a definition of a *lucid interval*, and looked daggers at me when I declined. He knew not that a *lucid interval*, as defined by his own highest authorities, is a perfect theoretic fiction, and is treated with contempt or ridicule by every able writer on insanity. And what in the name of the eighth wonder of the world had a *lucid interval* to do with McConnell's case? Was not the very entertainment of the notion a manifest abandonment of the theory of the prisoner's sanity? To return, however, to the subject of the skull fracture. This injury was clearly established by the evidence of Dr. Reid. I detected it on my very first glance at the prisoner's head, and every juror might, from the box, have perceived the prominent ridge above the left eyebrow, which now proclaims the seat of injury. Dr. Reid swore the skull was both fractured and depressed. Will any experienced surgeon allege that so serious a lesion would be unlikely to result, some time, near or remote, in formidable cerebral disturbance, or calamitous mental overthrow? If any such is to be found, I would strongly advise him to go back to the classrooms ; for he must either have much to learn, or to unlearn. Almost every writer on insanity dwells with strong emphasis on the causal relation of all sorts of injuries to the head, to insanity ; I have introduced the observations of only a few.

Dr. Rush, of Philadelphia, one of the brightest ornaments of medicine, writing 60 years ago, "On

the Diseases of the Mind," treats of lesions of the brain in the following terms: "Between lesions of the brain and the existence of madness, there is sometimes an interval of several years. A young man died in the Pennsylvania Hospital in the year 1809, who became deranged at twenty-one, in consequence of a contusion on his head by a fall from his horse in the fifteenth year of his age. A Mr. — died of madness in the same place, from an injury done to his brain by being thrown out of his chair between two and three years before he discovered any signs of derangement. It is remarkable that injuries show themselves more slowly in the brain than in any other parts of the body. Dr. Lettsom, of London, mentions a case in the memoirs of the London Medical Society, of a disease in the brain caused by a fall from a horse, which did not discover itself until two and twenty years after the occurrence. So much for Dr. Rush.

I now proceed to quote from letter writers. Dr. Pritchard, the author of a very valuable treatise on insanity, writing in 1837, makes the following observations on "Injuries of the Head":

"Injuries of the head are much more frequently causes of delirium than of insanity; but instances are well known in which they include the latter affection, generally as a remote consequence of delirium."

Several cases of this description have occurred within my own knowledge. In some instances madness has been observed to supervene to injuries of the head which appeared to be slight, and occasioned at first little or no apprehension. Mr. Esquirol is of opinion that insanity occasioned by this cause ensues sometimes after an interval of several years. This writer mentions the case of a child who fell on its head when three years old; *he complained from that time of pains in his head*; about the time of puberty these pains increased, and at seventy years of age he became maniacal.

There are instances in which a slight peculiarity of character, not amounting to insanity, has remained long, and perhaps through the life of the individual who has sustained a severe injury of the head. Sometimes this constitutes a kind of moral insanity; the temper is more irritable, the feelings are less under restraint than previously.

I have italicised the above words because they appear to me to bear directly on the case of McConnell, and because they exactly accord with my observance. During my service in the Asylum, I had in charge many cases of insanity consequent on injuries of the head, and I was consulted in many outside cases of similar character. One remarkable case in the asylum was that of a man whose skull was cleft with an axe ten years before his admission. This man's insanity crept on gradually. In the end it assumed a character of intense ferocity, on any unfortunate occasion of irritation, or crossing. After several years' asylum residence he died, not from brain disease, but tuberculous consumption. The *post mortem* showed that a bit of the axe had been buried in the brain down to the floor of one of the internal ventricles. We lived in constant dread of his furious outbursts. He would not suffer any one to touch his head, over the seat of the injury.

Forbes Winslow, whose celebrity as an acute

expert is well known, alluding to injuries of the head in connection with insanity, speaks thus: "Do we estimate in a manner commensurate with its grave and vital importance the necessity of watching, with the most scrupulous care, the cerebral symptoms that follow all mechanical injuries to the head? I am satisfied that a vast amount of organic, chronic, incurable disease of the brain, and disorder of the mind can be directly traced to this cause.

"In many cases positive and undoubted evidences of disease of the brain are present without exciting a suspicion as to the cerebral origin of the affection, or character of the symptoms. A man receives a blow on the head. He may suffer from partial concussion of the brain or be merely stunned. He recovers without any apparent inconveniences from the injury, but subsequently head symptoms exhibit themselves, clearly the consequence of the injury which the brain has sustained many years previously."

Dr. Blanford, a recent high authority, says: "It frequently happens that men who have received blows on the head are driven to a state of frenzy or mania, by slight causes, which would produce little or no effect on an uninjured and healthy brain, such as a very small amount of drink, or trivial matters exciting anger or grief. *From such transient attacks patients recover and return to their normal state of equipoise, to be thrown off their balance again by some other disturbing event.*"

Professor Schlagev, of Vienna, found on investigation of the causes of insanity in 500 lunatics, that "the disease was produced in 49 by injury of the brain. In 21 there had been complete consciousness after the accidents; in 16 some insensibility, and confusion of ideas; in 12 simple dull headache. In 19 cases the mental disorder came on in the course of a year after the injury, but not till much later in many others, and in 4 cases after more than ten years. In most of the cases the patients were disposed to congestion of the brain and emotional disturbance from the time of the injury, on taking a moderate quantity of spirituous liquor; frequently there was singing in the ears, or difficulty of hearing; and very commonly the disposition was changed, and the patient was prone to outbursts of anger, or excesses."

I might go on in quotations from additional authorities in support of the testimony given by me on McConnell's trial, but surely the labor is uncalled for. Those who will not be convinced by the selections here given, could not be reached by a pyramid of corroborations. The reporter for the *Globe* has represented me as saying, "the actions of the prisoner on the morning of the crime appear to me to be those of a person who was not in sound mind,"—so far quite correctly; but when he adds "I do not swear that," he surely was in error. I had just sworn that because I believed that. How then, or why, should I, in next breath, unswear it? Either he was in a cloud, or I was. I am quite unconscious of having so spoken.

And now after careful retrospection and calm deliberation, I reiterate my expression of belief, that Michael McConnell, on the morning of the murder of Mr. Mills, was in a state of unsound

mind, and I add to this, that for a considerable time before he was not truly sane.

Let us soberly analyse his whole case. Hereditary insane taint was, I think, established. The history of 125 cases of homicide committed by insane persons placed in the New York State Lunatic Asylum, from 1843 to 1875, shows a very considerable proportion of the number to have been of hereditary derivation.

The blow which fractured the skull must have been of great force. It was struck, there is sufficient reason to believe, by a burglar, or some person who intended to take McConnell's life. It is much to be regretted that Dr. Reid's evidence on the gravity of the case, the subsequent symptoms and his treatment, was not more extended. Dr. Reid swore that there was depression of bone with the fracture. The former must have been relieved or the patient would soon have died, unless the wound was open, and thus allowed free escape of blood, or other effused fluids. If the latter was the fact, the brain and its covering membranes must have been dangerously injured. But, whatever may have been the original facts, I think no one who reads the citations I have given from the writings of experienced and able alienists, can doubt that very serious mental derangement might at some future time be presented.

McConnell's addiction to the study of Phrenology might pass as undeserving of consideration, had it been evinced by any other man carrying an uninjured brain; yet, may we not fairly ask the question, whether such a study, or any other of a scientific character, is so usual among butchers as not to be regarded as a significant psychological manifestation? Whilst his trade associates were chaffing and sky-larking around their neighboring stalls, there sat, behind his counter, the man with the fractured skull, poring over phrenological journals and charts, and exulting in the discovery that his own head was the most perfect one ever formed. I might be persuaded that this divergence from the beaten track of butcher life, was but a normaleccentricity or a constitutional idiosyncrasy, would my questioner be so accommodating as to wipe out the skull fracture history, and obliterate that bone ridge in McConnell's forehead.

I have already, in my own social circle, and largely outside of it, had abundant proof, that to adduce, as even *suggestive* indication of McConnell's mental unsoundness, the shudder-compelling ferocity and sanguinary persistency, with which he assailed and followed up his helpless victim, is but to evoke an almost universal outburst of denunciation; but all such exhibitions of writhing human passion must be encountered with cultivated equanimity, and unswerving fortitude. Why should it be expected that homicide perpetrated by an insane man or woman, should not be characterized by unusual ferocity? They who allow this manifestation to overpower calm or considerate judgment, are but meagrely read in the histories of insane homicides. Dr. Ray, the eminent *alienistic* jurist whom I have already cited, contrastively, in this relation, thus expresses himself:

"The *criminal* never sheds more blood than is necessary for the attainment of his object; the *homicidal monomaniac* often sacrifices all within

his reach to the craving of his murderous propensity."

"The criminal lays plans for the execution of his designs; time, place, and weapons are all suited to his purpose; and when successful, he either flies from the scene of his enormity, or makes efforts to avoid discovery. The homicidal monomaniac, on the contrary, for the most part, consults none of the usual conveniences of crime; he falls upon the object of his fury, oftentimes without the most proper means for accomplishing his purpose; and perhaps *in the presence of a multitude*, as if expressly to court observation; and then voluntarily surrenders himself to the constituted authorities. When, as is sometimes the case, he does prepare the means, and calmly and deliberately executes his project, his subsequent conduct is still the same as in the former instance."

The preceding words are not the deliverances of a man who knew not whereof he spoke; they are the deliberate declarations of one of the most enlightened and largely experienced writers that has ever enriched the literature of insanity.

Did McConnell select the best time, place and weapon, for the consummation of his crime? He assailed Mr. Mills in broad daylight, before the eyes of numerous onlookers. He inflicted numerous stabs with a knife, whilst he had, at the very time, a seven-chambered revolver, fully loaded, in his pocket. He had carried that revolver constantly, ever since the murderous attack on himself, when his skull was broken. Would not a deliberate sane murderer have chosen the darkness of night, some secluded spot, and his sure-killing revolver? It can not be necessary to say here a word on McConnell's coolness and indifference after the homicide. These I regard, as I am sure every asylum physician, and every well-read cultivator of alienistic science would regard them convincingly corroborative of all the other evidences of insanity exhibited in the case.

Before closing this already too long communication, allow me to recall the attention of your readers to the case of Topping, who was last year convicted of the murder of his wife and four children. If I remember aright, nearly the whole of the evidence bearing on his mental condition, with the exception of that of Dr. Landor, Medical Superintendent of the London Asylum, negated the presence of insanity, at any time. I have this morning received a letter from Dr. Dickson, Medical Superintendent of the Rockwood Asylum, in which Topping is now lodged, in which he says, "I believe Topping to be insane without any manner of doubt." I know not whether the Judge before whom Topping was tried, expressed his approval of the verdict of the jury; but, I believe that only for the presence of Dr. Landor at the trial, the convicted wretch would have been hanged. I could adduce a few other instances, illustrative of the absence of infallibility, both on the bench and in the jury box, but I do not deem the present a propitious occasion for such observations. It has often been urged on me that for the benefit of medical students, a course of clinical instruction in our large insane asylums should be afforded. I concur in this opinion; but I am proud to be able to say, that however trivial may be the knowledge

of insanity possessed by the practitioners of medicine, I never knew, during my 22 years of service, a single instance of wrongful commitment of a patient, under the usual certificates of insanity, by duly qualified physicians.

It is not, believe me, the medical profession that pre-eminently stands in need of rational instruction on insanity. Many a victim of petrified legal ignorance might have been rescued from the gallows, had the gentlemen of the bar undergone a befitting practical training in the science of mental disease. I am, very respectfully, etc.,

JOSEPH WORKMAN, M.D.,

Late Medical Superintendent of the Toronto Asylum for Insane.

Toronto, Feb. 10, 1876.

P.S.—Within the past three days I have been consulted in two cases of mental disease consequent on injuries to the head, sustained in one case, that of a man 35 years old, very many years ago; and in the second four or five years ago, from the blow of a slung-shot on the forehead. My prognosis in both is most unpromising.

I have just cut from the Toronto *Globe* of the 5th inst., the following scrap:

“Gen. Thomas Benton Smith, of Nashville, who displayed great courage in the Confederate army, and received a sabre stroke on the head, has become hopelessly insane. A few days ago he grew thoroughly wild, and imagining himself to be the Indian emperor of America, mounted his horse, armed himself with bow and arrows, and rode around attacking every one he met. He sent a steel arrow-head into the leg of his cousin, and when pursued fled to the hills and was captured only with great difficulty.”—J. W.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

LACK OF PROFESSIONAL *ESPRIT-DE-CORPS*.

SIR.—It is a matter of surprise and regret to me to see Medical men writing to the *Globe* on Medical subjects. The action of the *Globe* towards the profession has been such that I and many others have written to the Manager withdrawing our names from its list of subscribers and stating our reasons. *A fortiori* I fail to understand how men can quietly pocket the insulting epithets and remarks lately made by the *Globe* and signify their friendly appreciation and support by discussing medical matters in its columns.

I am yours, &c.,

W. O.

Hospital Reports.

A CURIOUS CASE OF VESICAL CALCULUS.

Reported by Mr. Jessop.

Thomas D—, aged thirty-eight, was admitted to the Toronto General Hospital, under the care of Dr. Aikins, December 2nd, 1875, complaining of severe pain in the neck of the bladder, and in the perineal region. The pain was aggravated by riding over a rough road, or by doing anything which jarred the pelvis viscera. The pain was especially acute in the *glans penis* after urination. The patient gives the following account of the origin of his trouble.—

About the commencement of last March he was once in a state of deep intoxication, remaining in an almost unconscious condition for some hours. After recovering from the effects of the liquor, he felt a severe pain in the bladder and urethra, especially after passing water. About a week after, a friend, hearing him complain of pain, said he heard two men talking about passing the stem of a tobacco pipe into his (the patient's) penis when he was sleeping under the influence of liquor. Since April the pain has continually increased in severity, so much so that he could scarcely sit or lie down. He had frequent desire to micturate, passed mucus streaked with blood, also a large quantity of white sediment. He was under treatment during the summer but did not receive much benefit.

After admission into the Hospital a sound was introduced into the bladder, and a calculus discovered. Several attempts were made to crush the calculus by means of the lithotrite, but without success. It was then decided to perform the operation of lithotomy, which was successfully done by Dr. Aikins, January 22nd, 1876, when an oval-shaped calculus was removed, consisting of concentric layers of uric acid formed around a gutta-percha pipe stem, which latter acted as a nucleus for the deposition of urinary sediment. It was about three inches long, and over an inch in diameter in the thickest part, tapering towards its extremities.

After the operation, the patient made a rapid recovery, being able to pass his urine through the urethra in eight days. No bad symptoms followed, and at present (February 12) the patient is ready to be discharged, cured.

OBSCURE ABDOMINAL TUMOUR.

Reported by Mr. McDonnagh.

Francis K—, aged 27, born in Canada, was admitted into the Hospital February 10th, 1876, under the care of Dr. Cassidy. In May, 1874, the patient had his left hand injured by a circular saw, whereby he lost all his fingers and a part of the metacarpal bone of the little finger. After amputation the wounds never healed properly, and have not done so up to the present time. In February, 1875, previous to which time his general health had been good, he observed a slightly indurated swelling in the lower part of the abdomen, attended with some pain. After this period his general health became poor and he lost weight rapidly. The pain, which extended over the whole abdomen, was increased after taking food. However, in three or four months after the first symptoms appeared, that is in June, the pain went away and the general health improved. In August all the old symptoms returned with increased severity, and have so continued to the present. In the middle of September a small inflamed nodule appeared near the umbilicus, which broke, and pus in large quantities has since come away from it.

At present the swelling extends from the umbilicus downwards to Poupart's ligament on either side, but feels hard towards the right side. A probe can be passed in some directions five or six inches, between the walls of the abdomen. The patient experiences severe pain on taking food, but the tumour is not tender on pressure. He is considerably reduced, but does not show any particular cachexia. He has had diarrhoea constantly since the commencement of the disease.

On February 12th a consultation of the staff was held with regard to the case, when the diagnosis was made of abscess in the walls of the abdomen, but the question as to whether the induration is due to malignant disease or to simple inflammation was not determined.

MEETINGS OF MEDICAL SOCIETIES AND ASSOCIATIONS.

SAUGEEN AND BROCK MEDICAL ASSOCIATION.

—At a numerous attended meeting of medical men of the territorial division of Saugeen and Brock, held at the Queen's Hotel, Guelph, on the 27th inst., Dr. Clarke, the medical representative, in the chair, it was resolved that a medical association for this territorial division be formed; the representative, Dr. Clarke, being President; and Dr. L. Brock, General Secretary and Treasurer. After the transaction of other business it was moved by Dr. Orton, of Fergus, seconded by Dr. Cameron, of Owen Sound, that the tariff which has been under consideration be the tariff of fees for the Territorial Division of Saugeen and Brock, and that the following gentlemen are requested to obtain the signatures of all the medical men in this division: Drs. Orton and Wallace, for the Centre and North Ridings of Wellington; Dr. Brock, for the South; Dr. Cameron, for the county of Grey; Drs. Bingham and Walmsley, for Waterloo; and Drs. Morton and McConkey, for Simcoe; the Secretary to obtain the necessary copies for that purpose. Moved by Dr. Orton, seconded by Dr. Wallace, that Drs. Herod, Keating and McCullough, with the President and Secretary, be a committee to whom all questions relating to the necessary working of the Association be referred. It was also resolved that in all life insurance examinations in which the amount exceeds one thousand dollars the fee for Canadian Companies should be \$4, foreign \$5.

THE ANNUAL MEETING OF THE HAMILTON MEDICAL AND SURGICAL SOCIETY.—The annual meeting of the above Society was held last evening at the Royal Hotel; Dr. Isaac Ryall, the President of the Society, presided.

The Secretary of the Society, Dr. C. O'Reilly, being about to remove from this city to Toronto, after presenting his annual report for the year 1875, tendered his resignation of the office of Secretary-Treasurer, which he had held since the year 1870.

It was then moved by Dr. Case, seconded by Dr. Rosebrugh, and resolved, That the report of the Secretary-Treasurer, be adopted, and that

the cordial thanks of the Society are due to Dr. O'Reilly for his long and valuable services, and that the Society joins heartily in wishing the Doctor every success in his new sphere of labour.

The election of officers for the year 1876 was then held, and resulted as follows: Dr. Macdonald, President; Dr. Leslie, Vice-President; and Dr. Woolverton, Secretary-Treasurer.

Moved by Dr. Mullen, seconded by Dr. White, and carried unanimously, That the thanks of the Society be tendered to the retiring officers (Dr. Ryall, President; and Dr. George Macklean, Vice-President) for their services during the past year.

The meeting then adjourned.—*Hamilton Times.*

HALIFAX COUNTY MEDICAL SOCIETY.—The following scale of fees has been adopted by the Halifax County Medical Society:—

Ordinary Fees.—Fee for ordinary visit, from \$1 to \$5. Night visit—from 10 p.m. to 7 a.m.,—four times an ordinary visit.

Consultation.—Fee for consultation—first visit from \$5 to \$20; subsequent consultation to be charged as ordinary visits.

Office Consultations.—Office consultations to be charged the same as visits. Special consultation for an opinion, from \$2 to \$10.

Midwifery.—Minimum fee \$10 (payable when attendance ceases); maximum \$50. Instrumental and very tedious cases, additional.

Surgery.—Operations from \$5 to \$300. Venereal affections, from \$5 to \$20 for first office consultation. Subsequent consultations not less than \$1.

Miscellaneous.—Travelling, \$1 per mile—detention over night, not less than \$20. Vaccination, not less than \$1. Advice by letter, not less than \$5. Post-mortem examination—by request—from \$5 to \$20. Student's fee—in advance—not less than \$200. Evidence before a coroner's jury—by law. Post-mortem examination by order of coroner—by law.

Certificates.—By order of corporation, \$5; of lunacy, \$5; for life assurance, not less than \$2 50; for exemption from juries, \$2; for exemption from militia duty—by law.

Signed on behalf of the Society,

EDW. FARRELL, Pres. Hx. Med. Society.

GEORGE L. SINCLAIR, M.D., Secretary.

Miscellaneous.

COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.—To the Hon. Oliver Mowat, Attorney-General, Prime Minister of Ontario: Sir: At a meeting held this day of the Subcommittee of the Executive Committee of the College of Physicians and Surgeons of Ontario, I received instructions to express to you the deep disappointment felt by the Committee and probably by the whole Medical Profession in Ontario, that in the Bill which you have brought before the Legislature, entitled "An Act to Provide for the Payment of Witnesses for the Crown," more adequate provision is not made for the remuneration of Medical Witnesses for the important services which they perform for the public in criminal cases. Section 2 of the Bill provides, that the remuneration of any witnesses shall not exceed that payable to the like witnesses in civil cases before the Superior Courts. Upon referring to the "Common Law Procedure Act, Consol. Statutes U. C., cap xxii.," it appears that "Barristers and Attorneys, Physicians and Surgeons, when called upon to give evidence in consequence of any professional service rendered, or to give professional opinions, are allowed £1. 0s. 0d. per diem, and in the case of their being required to travel over ten miles, one shilling per mile, one way." I was directed to point out to you that in civil cases the remuneration of both Legal and Medical witnesses is generally a matter of special agreement, and even when it is not, the fees allowed are always very much higher than the rate mentioned in the Act quoted. The Committee hoped, therefore, that you would be kind enough so to modify your Bill as to admit the following as one of its sections:—"Every duly qualified Medical Practitioner in Ontario, if summoned to give professional evidence at any inquest, criminal trial, or investigation of a criminal nature, shall, upon the Coroner, Judge, Police Magistrate, Justice of the Peace, or other judicial officer presiding at such inquest, trial, or investigation, certifying that the evidence of such Medical Practitioner was important, or likely to have been impor-

tant, at such inquest, trial, or investigation, be entitled to demand and to receive from the Treasurer of the County, City, or Town where such inquest, trial, or investigation was held, out of the funds in his hands in the County, City, or Town Treasury, the sum of five dollars for giving such professional evidence, together with five dollars for each day's, or part of a day's necessary attendance or detention during the time such inquest, trial or investigation was held; including among such days, the time necessary for travelling from and to his usual place of residence, to and from the place where such inquest, trial or investigation was held; and twenty-five cents for each mile of distance so travelled." Provision, as you will perceive, is made in the above for compensating Medical men for giving evidence at investigations before Magistrates, which involve as serious a responsibility and loss of time, as attendance at the Superior Courts. I was further desired to say that by doing this act of justice, you would earn the thanks of the whole Medical Profession in Ontario. I have the honor to be, Sir, Your most obedient servant, THOMAS PYNE, Registrar, Secretary to Executive Committee College of Physicians and Surgeons, Ontario.

Executive Committee Room, Coll. Phys. and Surgeons, Ont. Toronto, 27th January, 1876.

ON A READY METHOD OF ADMINISTERING FLUIDS WHEN THE JAWS ARE FIRMLY CLOSED.—Dr. Burrall in the *New York Medical Record*, Feb. 1876, says: A simple examination, which any one can easily make of his own buccal cavity, will show that posterior to the last molar teeth, when the jaws are closed, is an opening bounded by the molars, the body of the superior and the ramus of the inferior maxilla. If on either side the cheek is held well out from the jaw, a pocket or gutter is formed, into which fluids may be poured, and they will pass into the mouth through the opening behind the molars, as well as through the interstices between the teeth. When in the mouth they tend to create a disposition to swallow, and by this method a considerable quantity of liquid may be promptly given.

THE NEW YORK ORTHOPÆDIC DISPENSARY AND HOSPITAL.—At the annual meeting of the Board of Trustees of the New York Orthopædic Dispensary and Hospital, No. 126 East Fifty-ninth Street, held on Monday evening, January 10th, the following Medical Board was elected for the ensuing year: Consulting Surgeons, Drs. F. H. Hamilton, T. M. Markoe, Henry B. Sands, Stephen Smith, and William H. Van Buren; Consulting Physicians, Drs. William H. Draper, A. Jacobi, and John T. Metcalfe; Consulting Orthopædic Surgeon, Dr. C. Fayette Taylor; Consulting Oculist, Dr. C. R. Agnew; Consultant on Nervous Diseases, Dr. E. C. Seguin; Attending Surgeons, Drs. John G. Curtis, George A. Peters, Thomas T. Sabine, and Newton M. Shaffer; Orthopædic Surgeon, Dr. Newton M. Shaffer; Assistant Surgeons, Drs. S. A. Foster, George B. Packard, and A. B. Judson.

LONDON CABS.—The inconveniences of London cabs are minor evils; a far more serious objection to the popular Hansom is the fact that the passenger is on a level with the horse's head. The secretions of the animal's nostrils are exceedingly apt to be blown directly into the passenger's face, and it is not at all improbable that many cases of intractable irritation of the more exposed mucous membranes originate in this manner. But a much more dangerous disease sometimes results. Only a few months ago a well-known member of the Stock Exchange took glanders in this way, and only survived a few days. The case was seen both by Dr. Munk and Sir William Jenner, and there was no doubt as to its nature. As diseased horses are often driven in hackney carriages, we would suggest that a screen should always be placed in Hansoms, just above the splash-board.—*Medical Examiner*.

CANADIANS IN LONDON.—The following gentlemen, graduates of Trinity College Medical School, Toronto, were admitted members of the Royal College of Surgeons, England, on January 24th: McLarty, Colin, M.B., of St. Thomas, Ontario; Millman, Thomas, M.D., Woodstock, Ontario.

REMOVAL OF A WOUNDED KIDNEY.—M. Marvaud, Surgeon-Major in an Algerian regiment, relates (*Rev. de Méd. Militaire*, October) the case of a young Arab woman who had been severely wounded in the right lumbar region by means of a long knife or yataghan. The instrument, cutting only on one edge, had a thick back, and on withdrawing it the right kidney was also drawn out of the wound, between the lips of which it remained strangulated. There was considerable hemorrhage, but this soon stopped. A silk ligature was passed around the pedicle of the extruded organ, and at the end of some weeks the kidney was separated—the patient continuing in good health the whole time, and the secretion of urine being normal. She was discharged perfectly well two months after admission.

MEDICO-LEGAL ASPECTS OF ABORTION.—Dr. Leblonde (in *Ann. de Gynécolog.*, August, 1875) has collected a series of eleven cases from which he endeavours to prove the medico-legal value of the integrity of the membranes in abortions in the early months of pregnancy.

His conclusions are thus stated:—

1st. When abortion occurs "en bloc"—*i.e.*, the embryo is contained in the sound membranes, which are unbroken—abortion is probably spontaneous, or at least has not been produced by agents which determine the expulsion of the ovum without implicating the membranes.

2d. When the membranes are ruptured, but healthy, in all probability abortion has been provoked.

3d. When the membranes present pathological alterations, we can form no conclusion from an examination of the expelled product, though probably the abortion results from disease of the ovum, and that it is due to spontaneous production.—*Obstetrical Journal of Great Britain.*

PERSONAL.—Dr. Buller, M.R.C.S.E., late Resident Surgeon, Royal London Ophthalmic Hospital, has located himself in Montreal, with the intention of practising as an oculist and aurist.

CERATUM CHLORALI.—Pavesi recommends as a substitute for emp. diachylon co., and as particularly appropriate for an antiseptic dressing, the following cerate:—Emp. diachyl. co., 100.0; glycerine pur., 10.0; chloral hydrate, 15.0 parts. The plaster is melted in a porcelain dish by a gentle heat, removed from the fire, and the glycerine and chloral hydrate mixed intimately with it. The cerate may be shaped into tablets or rolls. Spread upon linen it is of a yellowish white colour, has a faint odour of chloral, and is strongly adhesive. Pavesi recommends the introduction of this cerate into hospitals, in which, in consequence of overfilling, pyæmia and similar affections are common. The plaster develops ozone, by which the microscopic fungi which are to be considered the cause of the malacæies named are destroyed. How far this at present depends on experience or on theory is not evident. Pavesi is also of opinion that by reason of its anæsthetic properties the cerate merits trial in rheumatism.

RADICAL CURE FOR PILES.—Dr. A. B. Bowen, writes in a recent number of *The Record*: "My attention was directed to the treatment for nævus by hypodermic injection. From the similarity of the anatomical structure of nævus to hæmorrhoidal tumours, I was induced to try the remedy. In the latter I used carbolic acid and ergot (fl. ext.) in equal parts, injecting from ten to fifteen minims of the solution into the spongy, vascular hæmorrhoidal tumour. This was repeated about once a week for five or six times, when the tumour had entirely disappeared. I have tried this in several cases, and it acts like a specific."

It is generally understood in the insurance offices of the United States that the average length of life in that country is greater than in England, as shown by the English tables; and this accounts for what would be otherwise unexplainable—the immense profits realized by the life-insurance offices there—the rates of insurance being chiefly based upon the English tabular estimates of life—another proof of the smartness of our cousins across the Atlantic.—*Medical Times and Gazette.*

THE LOCALISATION OF ARSENIC IN THE TISSUES OF POISONED ANIMALS.—M. Scolosuboff, of Moscow, has made numerous examinations of the tissues of dogs, rabbits, and frogs, to which he has given known quantities of arsenic in their food. His experiments led him to the conclusion that arsenic, so far from being localised in the muscles, is specially taken up by the nervous tissue, and afterwards deposited, first in the liver, then in the muscular tissue. He therefore suggests that in cases of suspected poisoning by arsenic, especially if acute, the expert should first of all examine the brain and the liver.

AN unfortunate lunatic, who died in the Prebetwitch Asylum a short time back, seems (says the *Standard*) to have lived neither wisely nor well. A *post-mortem* examination led to the discovery of no fewer than 1841 articles in his stomach, viz, 1639 shoemaker's sparsables, 6 four-inch cut nails, 19 three-inch cut nails, 8 two and a half-inch cut nails, 18 two-inch cut nails, 39 tacks, 5 brass nails, 9 brass buttons, 20 pieces of buckles, 1 pin, 14 bits of glass, 10 small pebbles, 3 pieces of string, 1 piece of leather three inches long, 1 piece of lead four inches long, 1 American pegging awl—the total weighing 11 lbs. 10 oz.

The *Medical Press* gives an extract from the diary of the late Mr. Mewburn:—

“The following statement from the fee-book of Sir Astley Cooper is curious:—

“My receipt for the first year was 5*l.* 5*s.*; for the second, 26*l.*; the third, 64*l.*; the fourth 96*l.*; the fifth, 100*l.*; the sixth, 200*l.*; the seventh, 400*l.*; the eighth, 610*l.*; the ninth 1,100*l.*

“In 1815 Sir Astley made 21,000*l.*!! A Mr. Hyatt, an ancient merchant, gave him 1,000*l.* on recovery under his care; and Mr. Coles, of Mincing Lane, for a long course of time gave him 600*l.* every Christmas.”

ROTUNDA LYING-IN HOSPITAL, DUBLIN.—Dr. Lombe Atthill has been chosen Master of this famous institution, in place of Dr. George Johnson, whose term of office had expired.

SYPHILITIC URETHRAL DISCHARGES.—In “St. George's Hospital Reports,” Mr. Henry Lee publishes a paper on this subject, and states that urethral discharges may be due to syphilitic infection, and may be either primary or secondary. (Our experience fully confirms Mr. Lee's observation.) The following two cases will suffice as a description: 1. A patient some days after having exposed himself to infection noticed a greyish discharge from his urethra; it was thick and resembled a solution of arrow-root in water. There was little or no pain in micturition, little or no swelling of the meatus urinarius. After some days the mucous membrane of the glans and the prepuce became at some parts the seat of an adhesive infiltration, which left, after some days, some induration. The inguinal glands became affected, and some weeks later symptoms of constitutional syphilis showed themselves. 2. A syphilitic subject married; sexual excitement determined a slight discharge from the urethra, accompanied or not by an ulceration of the mucous membrane. This discharge, Mr. Lee thinks, is contagious, and can give syphilis. Hunter had, then, reason to think that a urethral discharge could give syphilis, although he was wrong in believing that ordinary gonorrhoea was of a syphilitic nature.

DIED, at Christiania, Norway, on the 10th of December last, Dr. Wilhelm Boeck, well known by his peculiar views in regard to the treatment of syphilis by syphilization. He had many friends, but made few, if any, converts to his practice.

FRANCIS SIMONDS SCOVIL, of St. John, New Brunswick, has been admitted Member of the Royal College of Surgeons, London, England.

Births, Marriages, and Deaths.

BIRTHS.

At Forest, on the 18th inst., the wife of Alexander Scott, M.D., of a son.

At Churchill, Co. Simcoe, on Saturday, the 29th of January, the wife of Dr. R. Lund of a son.

In Stratford, on the 14th inst., the wife of Mr. J. Hanavan, M.E., of a son.

DEATHS.

At his mother's residence, No. 32 Carlton Street, Feb. 11th, 1876, J. C. McArthur, M.D., aged 28.

HENRY J. ROSE,

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The following list of instruments includes, besides his own Stock, that of other houses in Toronto, which can be obtained if desired. It is advisable that the money should be sent with the order, a charge of twenty-five cents being made by the Express Company for collecting on delivery. Give full particulars of the instrument required, with a sketch, however rough, so as to avoid mistakes as annoying to the sender, as receiver.

ENGLISH OR AMERICAN INSTRUMENTS

Imported if required, at small commission. Write for full particulars if necessary.

Aspirator (Tiemann's)	\$13 00	Pessaries, Hewitt's.....	\$0 50
Amputating Case (10 instruments)	22 00	" Hoffman's.....	1 40
Bistouries, Probe and Sharp.....	0 75	" Inflating, Oval and Round.....	0 65
Blunt Hook	1 15	" Inflators for do	0 50
Bougies, G. E.	0 20	" Hodge's.....	0 70
Catheters, Plated	1 00	Pocket Cases	13 50, 19 80, and 27 30
" " Fem.....	0 75	Poroplastic Sheeting for Splints..... lb.	2 30
" " Combination	2 25	Physicians' Med. Cases, Leather.	
Caustic Holders, Ebony.....	0 50	16 2-drm. Vials	1 25
Cotton Bandaging, three inch, per yard	0 11	20 Vials, \$1 50; 24	1 75
Dissecting Cases, 6 knives.....	6 00	Spray Producers, Steam	6 00
" " 4	5 00	" Boston	2 50
Elastic Stockings, pair	3 00	Scissors, Curved, 80c.; Tonsil.....	2 50
Enemas, from	0 60	" Elbow	1 10
Forceps, Liston's Art'y	1 00	" Probing	0 90
" Bone, 8-inch	2 00	Speculum, Glass	0 75
" Bulldog.....	0 06	" Bivalve.....	6 20
" Midwifery, Barnes'		" Duckbill, improved	4 75
" " Clark's	3 00	Stomach Pump	7 00 and 9 25
" " Robertson's	4 00	Stethoscopes, Cedar	0 50
" " Elliot's		" Ebony	1 25
" " Simpson's	5 25	" Camman's Binaural	7 00
" " Churchill's	3 50	Suture Silk (Spool).....	0 60
" " Hodge's	7 00	Tenaculum	1 00
" " Robertson's		Tooth Keys	2 25
" Polypus.....		Sea Tangle Tents, doz	1 25
" Tooth.....	75c. and 1 75	Tongue Depressor, Codman's.....	1 50
Knives, 4 blades	} 2 50	Tourniquet	1 35
Gum Lancet, 2 straight and 1 curved			Tracheot. Tubes.....
Lancets—Abscess	0 60	Trocar, Hydrocele	1 35
" Bleeding	0 50	" Ascites.....	1 75
" Gum.....	0 75	" Abdom.....	2 20
Laryngoscope.....	6 30	" Curved	3 35
Lithotrite	22 00	Tonsil Guillotine	10 50
Magnet Machines	6 50, 7 80 and 10 75	Thermometers, self-register	2 50
Needles, Straight, Curved, or half-curved, doz	0 60	Vaccinator, Codman's.....	3 50
Perforator, Denman's.....	1 50		

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