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ART. XXVI.—*Sketches of the Endemic Fever of Upper Canada, and of the Effects of its Climate on European Constitutions, by* JOHN JARRON, *Surgeon, Dunnville.*

[CONTINUED FROM OUR LAST.]

The position and character of that part of the American continent constituting Upper Canada being an alluvial flat divided by ridges, and bordering on large fresh-water lakes, into which its waters flow, the levels of which they attain for miles before discharging themselves, and as a consequence, to which the rise and fall of the waters in the lakes greatly contribute, forming at their mouths swamps of greater or less extent, according to the size of the streams, as well as its natural state, covered with one immense forest, and exposed during the summer to the rays of a burning sun, become at almost every point a fertile source of malaria, the effects of which are most powerful on the constitutions of many thousand Europeans who annually settle there, coming, as they do, from localities in which the usual recognised effects of malaria are almost unknown. To these general sources of malaria may be added the much smaller one of the daily exposure to the sun, by clearing around the dwellings of the new comers of the surface of the ground, and the innumerable lesser swamps caused by the irregularity of the surface, and the confinement of the waters by fallen trees and other artificial barriers. The new habits of the settlers, the imperfect shelter, and unlooked-for discomfort incident to the character of their shanties or first houses, as well as the depressing influence on the spirits of such a change of life, become predisposing causes of the diseases to which such a state of country naturally gives rise.

The present sketches of disease are drawn from experience in a locality where all these causes were in full operation; and though well aware of the extent to which malarious diseases may vary with locality and circumstances, the writer has little doubt that they will apply generally to the fevers of the country.

A European family arriving in the country early in the season, and taking up their abode on a new farm, especially if near a sluggish stream, or the swamps caused by the discharge of the rivers into either of the lakes, will, for a time enjoy perfect health. In the month of July they will begin to complain of the heat, of disinclination for work, or even to move about, and loss of strength; their ruddy complexion will gradually disappear, and a sallow bilious look, pervading the whole body, takes its place; they will lose their appetites, and become restless at nights; the mouth will be insipid and food tasteless; the tongue moist and rather increased in size, perhaps slightly furred in the morning, but always of a whitish coat, as if painted over with milk; the bowels will be said to be regular, though in parties who notice their excretions and are directed to this point, the motions will be found to be irregular, and the color to vary. This state will continue for weeks, the un-

usual feelings increasing, and now and then accompanied by headache and pain in the back; the bilious shade of the body becoming of a darker hue, with great inclination to yawning and sleeping in the afternoon; an occasional fever will manifest itself, and the urine become darker and more bilious. In the month of August, or about the commencement of harvest, some members of the family may be laid up with fever: perhaps only one or two at a time, but often a whole family in the course of one week, or a child under a year old, ten days or a fortnight before the others. Some may even escape a regular fever for the first season; others have only an ague, but most frequently it prostrates all; whole neighbourhoods being laid up at the same time: scarcely an individual capable to assist another, or to carry on the operations of the fields.

The symptoms sometimes gradually pass into fever; but the commencement is usually marked by a rigor, frequently brought on by unusual fatigue or exposure to wet. The headache and pain in the back then become permanent and severe; exhaustion and pains of limbs are complained of, not in the joints, but in the vertebræ and shafts of the long bones, usually designated "pains in bones"; there is great prostration of strength, complete loss of appetite, much thirst and heat and dryness of skin; the pulse tolerably quick and full, but with little of the hard cordy feel; the tongue becomes coated, with a whitish or yellow fur up to the edges, and at particular times may be found hard, dry, and contracted. The bowels are usually sluggish, and motions of a brown colour, varying in shade until they ultimately become black, and exceedingly offensive from the first; the odour being peculiar and easily recognized by those accustomed to the disease; the shade of the urine also darkens, emitting when first passed something of the odour of the fæces, but becoming strongly ammoniacal on being kept.

There is always heat and some degree of uneasiness and tenderness on pressure at the epigastrium and angles of the right ribs, but scarcely approaching to that state so marked in the inflammatory fevers of the East; but it is a symptom that ought always to be noticed, and the effect of pressure tried. Sickness of stomach and vomiting of bilious matter are often but not always present, the complaint of load at the stomach and nausea being very common. The patients are incapable of exertion, and a species of syncope will frequently come on when they attempt to move.

These symptoms continue, and perhaps increase in violence for a few days; the yellow tinge of the eyes and of the whole body deepens in shade; the fæces become blacker, perhaps tarry and viscid; and the urine higher in colour. The fever, from being at first almost continued, will begin to remit; an occasional moisture to break out on the skin, when the patient is relieved and gets some sleep. The wasting of the body has been rapid; but at last the tongue begins to clean at the top and edges; the remissions to become more distinct and the intervals longer; the general symptoms less severe; improvement goes on gradually until we have a perfect intermission which will take place in the course of ten or fourteen days. At this period the patient will be found greatly reduced in flesh and strength; the tunica adnata deeply yellow, the whole body of a dirty yellow or even a brown colour, contrasting strongly with the hy-

pocratic countenance, the pale bloodless and often transparent state of the lips and cheeks. The state of the secretions have gradually changed; as the tongue loses its fur we find the mouth become insipid, and the milky appearance return; but the strength of the patient will increase, the appetite and some degree of flesh be regained, notwithstanding the continuance of an ague which will likely appear every second day, becoming gradually less protracted and severe as the secretions become more natural and the powers of digestion return. About ten days after a patient is first able to leave his bed we may find the diseased state of the secretions re-appear suddenly; perhaps on his taking improper food, too much exercise, or exposure to cold or damp, with this many of the former symptoms of the fever; the tongue becoming dry and coated, and the intermittent remittent. After a few days this will again go off, the symptoms improve with the state of the secretions, and the intermittent become once more established. Relapses of this kind will take place every two or three weeks, but as the weather gets cool they will be less frequent; his appetite will become less keen, flesh and strength regained, and the tinge of the body become less dark; after a time the intermittent itself will disappear, but to recur every three or four weeks, always preceded and attended by the diseased state of the secretions, just as had formerly been the case on its change from intermittent to remittent. We may even have a course of what is called "Dumb Ague," which is an irregular intermittent without the first stage, or that imperfectly developed, but attended by the unhealthy secretions and the bilious tinge of the skin, and often continuing, with slight intermission, for months or even years, depriving the patient of strength and flesh, depressing his spirits, and rendering him unable to work or even to take proper exercise.

Those who may escape the fever will gradually recover from the bilious attack, but not regain health until the natural state of the bowels and skin return with the cool weather; they may even have occasional attacks of ague, with all the phenomena mentioned above; but should they be entirely without these, the effects of the next season may be the same on them as had previously occurred to the others.

The character of the perspiration attending these fevers is peculiar, and deserving of particular notice. The skin is one of the principal emunctories of the body by which it can relieve itself of noxious matters, and most readily too, should these be contained in the blood. In these fevers that fluid evidently contains such a matter, the source of which will be obvious on looking at the state of the digestive function, the manner in which life is supported, and the rapid wasting of the body, that takes place in them. The improper nourishment of the body evidently commences with the bilious symptoms; the wasting and decay with the fever; but as the prostration of strength is instantaneous and removed with the phenomena of fever, it must depend on the same cause, and cannot be a consequence of it. We find appetite and digestion gone, and food, the natural source of chyle and the blood, not supplied; in place of chyme the stomach and small intestines filled with the most noxious secretions; the bile altered in quantity and appearance; that it began to enter the system at an early period when digestion was only

imperfect, but not entirely interrupted; and still doing so in an increased degree, when the very source from which it is derived must be changed by the different substances finding their way into the blood of the portal circle from which it is secreted.

Many substances taken into the stomach and mixing with the blood are capable of being detected in the perspiration. In yellow fevers it is proved to contain the colouring matter of the bile, and to stain a white handkerchief. In this fever, when the blood is evidently loaded with extraneous matter, and the colour of the body and the character of the secretions so much altered, it would rather be strange, or otherwise should we find this fluid, thrown off so directly from the blood, in a natural state; but the peculiar smell of aguish perspiration is notorious in marshy countries, quite sufficient to characterise the disease when most of its usual symptoms are absent, and the fact that it imparts a yellow colour to the clothes of the patients is just as well known.

In looking at malarious fevers as produced by altered secretions, we must see that, in a great measure, they act through the medium of the blood, the alteration of which becomes so obvious. Copious perspiration is the first effort of nature to restore health; the smell of this is peculiar, and often resembling that of the other excretions. When taking place naturally, the improvement of the symptoms is certain; while, even when forced, as I have often seen it, by sweating under blankets for days together, they will be ameliorated in the same manner as if the patient had taken a succession of calomel purges; and whenever this secretion is locked up and the skin dry for a length of time, we may look for serious results.

But, to return to our family:—During the winter they will get rid of the ague, and their flesh and strength become in a measure restored. As the spring opens, they will be most susceptible of changes in the weather, complaining of weakness, pains of the back and limbs, in the spine and long bones; their appetite will be capricious, the mouth insipid and often dry, the tongue milky white, the bowels irregular, the colour of the stools varied, and the urine more or less dark, and the bilious cast of their skins will return; an occasional fit of ague will follow exposure to wet or over-fatigue; but at this season the symptoms are usually evanescent, and easily removed.

About July the bilious symptoms will again become general, increasing towards harvest; and such as escape a second attack of fever will likely have ague, which will follow the course of the disease of the previous year; the symptoms generally being milder, and the attack less protracted from the parties getting seasoned, and their constitutions inured to the effects of the malaria; but they lose their European ruddiness, and get a sallow bilious appearance that never entirely leaves them. Their constitutions become decidedly changed. Causes, that in Europe would have produced an acute inflammatory attack, will now give rise to pains in the bones, depraved secretions, and other bilious symptoms, causing, if not attended to, a fit of ague, the premonitory symptoms of which become so well known, that many effectually prevent it, by having recourse to medicine on their first occurrence. It is impossible to say when seasoning will be completed, and parties cease to be liable to bilious attacks and agues. Much will depend on locality, the extent of the clearing in the neighbourhood, and the habits and comforts of

the family. In the month of August the effects of the climate will always be manifest on the settlers wherever placed. In marsh districts new comers will have fevers, the older residents severe bilious attacks or agues; and as you enter the cleared country and recede from waters you will find the native Canadians or seasoned Europeans looking bilious, languid, complaining of pains and slight fevers of a bilious character, indicative of the effects of malaria; and even among such people the fever will now and then break out at this season of the year in an aggravated form, without the cause being very evident.

This common fever, though severe and attended with such consequences, is seldom fatal. Acute inflammatory symptoms and congestions being absent, the relapses are not accompanied with organic disease. The abdomen, especially in children and young people, often becomes distended and rather hard, but without distinct local pains or partial tenderness, unless over the spleen. Notwithstanding the extent and long continuance of the functional derangement, change of structure, or even enlargement of the liver, is seldom met with: hepatic abscess I have scarcely ever seen. The spleen is often left permanently enlarged, but gives little uneasiness unless when a bilious attack of fever comes on, during the continuance of which it will still further increase in size, but return to its previous state as the symptoms disappear.

Although it is easy to define varieties of fever on paper, yet nature pays little attention to our limits. In practice, we will see any one variety running almost insensibly into others, and a majority of cases put on features intermediate between two, in either of which they might be classed according to the time when seen or to the caprice of the observer. Hence the value of general principles and not names to guide us; and the necessity of constant and minute attention to symptoms as they arise, to discover their real cause, and enable us to direct the mode of treatment likely to be most successful.

We may find extreme cases easily classed in our inflammatory or congestive variety, but the most important practical point will be to get a correct idea of common fever: to trace any alterations in its symptoms and accompanying affections, and their tendency to an inflammatory or congestive state, and to arrive if possible at the cause of such occurrences. The brain and its membranes, the liver, spleen, and stomach, are the organs most likely to show marks of inflammation in fevers. Headache is almost always present; the pain generally referred to the front part, over and back of the eyes, though sometimes becoming more general; it is often attended with giddiness, mists before the eyes, and imperfect vision; these will all be increased by motion or cough, if it be present, which is often described as "shaking the head to pieces"; they are all the effects of diseased secretions, and may continue for days without inflammation, and go and come with the paroxysms of the fever; but should they become more permanent,—the pulse full, hard, and cordy, the skin dry, the tongue red, dry and contracted,—inflammation may be suspected, and must be as instantly and decidedly counteracted as if no fever was present. A patient will then bear loss of blood; and if a decided impression be made on the symptoms by it, the state may at once be removed.

The liver and spleen more seldom show marks of inflammation. These,

when they do occur, may be known by their usual symptoms,—the dry skin and tongue, full and cordy pulse, remaining permanent and little affected by the motion of the patient or the intervals of the fever. But these varieties are exceedingly rare in our marsh fevers; I will frequently pass through a whole season without taking blood, either generally or locally on their account, especially as experience has convinced me of the violence to which head symptoms may proceed without inflammation being present. In 1838 I attended a detachment of Her Majesty's navy just sent up from the sea,—full plethoric active men, entirely unaccustomed to the climate.

The fever appeared late in August, and laid up half of them in a few days; the head affections and other symptoms were severe, but not of that decided inflammatory character I had often seen among the same class of men in the East. I bled to give instant relief, and as a precaution; syncope soon came on, the relief was only temporary, very like what is often seen in the sympathetic fever of confluent small pox. The fevers ran their usual course; there were no deaths, but the relapses and agues continued for years, gradually getting less and less as the men became accustomed to the climate.

Acute inflammation of the mucous lining of the stomach is very rare, but the depraved state of the secretions must produce on it, as well as on the lining of the small intestines, a degree of irritation and congestion the result of which, however, seldom extends to their peritoneal covering, but likely to be the cause of those changes in them, and that state of the smaller glands now looked on as the principal source of many fevers with typhus and typhoid symptoms.

These are not unfrequent; seldom to be detected in the first stage, though in some cases, and in peculiar situations, the tendency to such a state may be early seen. There may be more heat and uneasiness at the epigastrium than usual, the tongue dryer and more contracted, the skin less moist, the pulse less full and rather irritable, the secretions and colour of the skin may follow their usual course, but the looked-for remissions will not take place or be more undecided, and not followed by the usual perspiration and improvement, the disease being thus protracted for a longer or shorter time; but on the discharges from the bowels becoming feculent and of a more healthy appearance, these symptoms will subside, and remissions and intermissions follow, as if none such had been present.

In other cases they will show themselves at a later period after the remissions have been established, suppressing these and creating an apparent relapse, when the fever may follow the cause above related, but at other times they will be so prominent as to alter the type entirely. We may still have the bilious skin and depraved secretions of malarious fevers with the symptoms of the typhoid or typhus even in their most aggravated form; and I have seen cases of bilious remittent not only passing into this state, but attended by swellings of the glands, open buboes, and other distinguishing marks of the plague itself. Petechiæ are frequent in such cases, and I have now and then found the red spots and maculæ of the latter class of fevers. We will afterwards endeavour to show the effects of localities and situations in varying the form of malarious fevers; but will now relate a case where constitutional predisposition was evidently the cause, in a situation productive only of common fever.

[TO BE CONTINUED.]

ART. XXVII.—*Is Hydrophobia Epizootic in its origin, or not? By* S. C. SEWELL, M.D., *Edin., Lecturer on Forensic Medicine, M'Gill College.*

"The belief continues unabated, even among the majority of medical men, of the connection of Hydrophobia, in human beings, with the bite of a mad dog; and every year hundreds of persons bitten by dogs, allow their wounds to be cruelly cauterized with a view of extirpating the poison supposed to be communicated by the saliva of a dog—a poison abundantly proved by chemical analysis and experiment to have no existence."

(*Note.*) "We regret to see this popular error countenanced by so high an authority as that of the Registrar General. In his report for the 3rd quarter of the present year, it is stated—after alluding to the fact that there had been no death by Hydrophobia recorded in London during the last five summers—that 'Hydrophobia disappears when the dogs, which are liable to become mad, or to be bitten every summer, are removed.' This statement it would be very difficult to support by any evidence entitled to credit.

"I. There has been no such extraordinary vigilance of the police, but that unmuzzled dogs have been seen running about the streets in summer time, and especially on Mondays in Smithfield Market, whatever instructions may have been issued respecting them.

"II. In the cities of the East, as in Constantinople, when the heat of summer is greatest, and when dogs and pigs are the only scavengers, the inhabitants do not suffer more from Hydrophobia than in Europe.

"III. It has been proved by M. Trolliet, who published in a memoir the dates of all the cases of Hydrophobia of which any account had appeared; that the greatest number had occurred in January, the coldest month in the year; and the smallest number in August, which is the hottest.

"IV. It has been shewn by the records of Hospitals, that not more than one person in twenty-five, said to be bitten by mad dogs, ever suffers from Hydrophobia; and in that case the influence of fear upon weak nerves may have been as much a cause as the actual laceration.

"V. Although there are few persons who have not been bitten by dogs or cats, the disease has frequently occurred in human beings, where no possible connection could be traced between the malady and any previous bite or scratch."

The foregoing is extracted from an article on Epidemics in a late No. of the Westminster and Foreign Quarterly Review. The writer evidently assumes as an indisputable fact that the idea of the epizootic and contagious character of Hydrophobia is abandoned by every medical man of any information. It certainly would be a great relief to all persons bitten by dogs, in all futurity, if the idiopathic or intrinsic origin of Hydrophobia could be proved to be the unexceptionable rule. I do not think that the writer would expose his own hand to be snapt at by a mad dog, and I shall prove by one of his own expressions, that his mind is by no means made up on the subject, staunch sceptic as he would fain believe himself. If this mischievous assertion had been put forth with any reservation or qualification it might have been allowed to die a natural death, without eliciting any remark; but as it has been launched into the world as a settled question that is beyond dispute, and backed by all the influence of the publication in which it appears, I for one will not allow it to circulate without entering my protest. The writer is quite right: the majority of medical men believe in the canine origin of Hydrophobia; and if he live long enough he will find himself in the glorious minority of one, if he be not so already.

In the first place, the writer states that the poison of the saliva of a mad dog is "abundantly proved by chemical analysis and experiment to have no existence." I am afraid our author is

no chemist, or he would have known that the poisons of variola, syphilis, rubeola, scarletina, typhus, &c., have never been isolated, and yet no one doubts their existence. So that his chemical argument carries no weight with it. As to the experiments, we require many preliminaries to be established before we can be called upon to give up our belief to this intrepid writer, such as—Do we possess any certain diagnosis of rabies in the dog? We have none according to my belief, except the effect of the bite on other animals. Is *every* human being liable to suffer from the effects of rabietic inoculation? I believe not. Other proleptical investigations besides are very requisite to be fully established before we can acquiesce in the validity of the results said to have been arrived at. The writer, in the note, falls foul of Mr. Farr, because Mr. Farr, after observing that no case of Hydrophobia had occurred in London for the last five summers, goes on to make the very sensible remark that "Hydrophobia disappears when the dogs, which are liable to become mad, or to be bitten every summer, are removed." The writer puts forth five reasons why the Register General, according to him, has committed a deplorable mistake, in lending the sanction of his high authority to this "*popular error*," which I shall examine in detail.

"I. There has been no such extraordinary vigilance of the police but that unmuzzled dogs have been seen running about the streets in summer time, and especially on Mondays in Smithfield market, whatever instructions have been issued respecting them." It is to be remarked that this statement carries upon the face of it, that only a few odd dogs have been running about unmuzzled, which is all the most vigilant police could effect, a character that none can deny to the London police. It is a fact, that within the last twenty-five years the disease in question has been gradually becoming rarer, which is fairly attributable to the vigorous canine war that goes on periodically in most towns, and the far greater precautions that are taken with regard to the care and treatment of dogs.

"II. In the cities of the East, as in Constantinople, when the heat of summer is greatest, and where dogs and pigs are the only scavengers, the inhabitants do not suffer more from Hydrophobia than in Europe." I always thought that Constantinople was in Europe. *Mais n'importe,* the argument is worthless, for no man living, not even the Grand Vizier or Sultan himself, could obtain statistics of Hydrophobia of any single city in the East, nor is there any newspaper to chronicle such an event.

"III. It has been proved by M. Trolliet, who published in a memoir the dates of all the cases of Hydrophobia of which any account had been published, that the greatest number had occurred in January, the coldest month in the year, and the smallest number in August, the hottest." This argument is equally futile with the former, for we do not know how long the poison may remain latent in the system, nor what causes excite it into activity. The statistics of Hydrophobia in the human subject are not the statistics of rabies in the dog: the greatest number of each would necessarily occur in different months. At any rate the reason would only indicate that farther researches are necessary, more particularly as M. Trolliet's are by no means complete.

"IV. It has been shown by the records of Hospitals that not more than one person in twenty-five, *said* to be

bitten by mad dogs, ever suffer from Hydrophobia, and in that case the *influence of fear* upon weak nerves may have been as much a cause as the *actual* laceration." If this is not cutting his throat with a vengeance. He allows that one in twenty-five *said* to be bitten by mad dogs die of Hydrophobia. If the bite had nothing to do with the Hydrophobia, it follows that four per cent. of the human race die of this disease. Is this consonant with experience? On the contrary, it is so rare, that the chances of a given man dying of Hydrophobia are infinitely smaller than of his dying by lightning, of which the chances are infinitesimal. This argument would apply with a hundredfold greater weight to the question of the existence of tranmatic tetanus: not one person in a hundred thousand ever gets tetanus, but if this mode of reasoning be correct it is absurd to say that the wound had any effect in causing the tetanus, more especially as tetanus often occurs when there is no wound.

"V. Although there are few persons who have not been bitten by dogs or cats, the disease has frequently occurred in human beings where no possible connection could be traced between the malady and any previous bite or scratch." Although there are few persons who have not been wounded, tetanus has frequently occurred in human beings where no possible connection could be traced between the malady and any previous wound. There is this difference between the two diseases,—that we have plenty of cases of idiopathic tetanus well authenticated, whereas it is very difficult to find one of idiopathic Hydrophobia. I can only call to mind two.

Concluding Remarks.—The fourth reason suggests a few farther observations, which may assist in setting the question at rest. In a former part of this essay I promised to prove that the writer has by no means made up his own mind as to the fallacy of the old notion of the canine origin of Hydrophobia. Speaking of the occurrence of only one case in twenty-five among those said to be bitten by mad dogs, the author says "and in that case the influence of fear upon weak nerves may have been as much a cause as the actual laceration." This is admitting, if language means anything, that the actual laceration was the cause of Hydrophobia in one of twentv-five of those bitten. As to the influence of fear, he cannot have meant seriously that fear could produce Hydrophobia, or that it could operate in any other way than in ordinary contagious disorders, by lowering the vis vitæ, and so impairing the power of the constitution to throw off the morbific cause. We shall now examine into the reason why so small a portion of those bitten afterwards suffer. This is true of the human race, but not of the lower. In all the accounts that we read of a mad dog running a muck, we find that the horses, cows, pigs, who are bitten die, and this is because their hair is too loose and scanty to wipe off the venom from the dog's tooth; whereas sheep, for obvious reasons, generally escape. Women very rarely suffer, principally because their loose flowing dress attracts the animal, and he exhausts his listless snap upon it. Men and boys who affect dogs more than women do, are more exposed, and we find that the hand is the most usual seat of fatal injury, next the face, and then the leg. When the body is protected by clothing, the risk is proportionably diminished, as the texture is thicker and closer. In the majority of cases presented for cauter-

ization the dog is only supposed, suspected, or might possibly be mad. Rabies is in reality a very rare disease, which, added to the preceding reasons, will fully account for the rarity of Hydrophobia. When a mad dog runs a muck, human beings usually keep out of the way, and consequently the lower animals are the only sufferers. Ordinarily the disease is communicated to human beings while playing with a dog, or in passing his lair, before the disease is suspected. In the only three cases of Hydrophobia where I was cognisant of the facts, the connection between the bite of a dog and of the disease was incontestable. The reasoning from the circumstance of only one of twenty-five of those bitten being infected is particularly lame, for we find that in the most undoubtedly contagious diseases, contact or inoculation is by no means always followed by the development of the disease. Vaccine and variola are familiar examples; but to take a more forcible case, syphilis is allowed on all sides to be eminently a contagious disease, and it is notorious that an infected person by no means communicates it in every instance of contact. I knew of a woman who was extensively diseased having communication with five men in twenty-four hours, of this number only one contracted the malady. I have no doubt that if we possessed the means of following the history of a number of such cases, we should find that such is generally the fact. I know a man who is perfectly incapable of contracting syphilis or gonorrhœa, although he has been frequently exposed to them, and he is thoroughly convinced of his insusceptibility.

Following the example of the writer, I shall put down my reasons for believing in the canine origin of Hydrophobia.

I. The connection between the bite and the disease is distinctly traceable in *almost every* case.

II. Idiopathic Hydrophobia is excessively rare.

III. If one in twenty-five of those said to be bitten by a mad dog die of Hydrophobia, and if there be no connection between the bite and the disease, then four per cent. of the human race die of Hydrophobia—which is absurd.

IV. Every person that is exposed to a contagion does not contract the disease, and among the twenty-five the majority have not been bitten by a rabid dog, and the remainder have mostly been protected by constitution or clothing.

ART. XXVIII.—*Rupture of the Spleen. Communicated by* THEOPH. MACK, M.D., *St. Catherines, C. W.*

As the works ordinarily found upon the shelves of a medical practitioner's library afford no instance of the above pathological appearance, except resulting from external injury, I send the following case for publication, in the hope that it may prove of sufficient interest to reward the perusal.

Thomas Flynn, ætatis 48, blacksmith, of medium stature, constitution somewhat impaired. In earlier life he had served as a private soldier in an infantry regiment, and had been admitted to the regimental hospital a few times for some disorder of the chylopoietic viscera, for which local depletion and counter-irritation appear to have been prescribed, as marks of leech-bites and visicants are apparent over the epigastric region. Last summer I was called upon to prescribe for some abdominal affection from which he suffered; its precise nature I cannot now recall to mind,—probably cholera

morbus. During the last eight or nine months he has resided chiefly in a shanty on the margin of a stagnant pond, near the debouchement of the Welland Canal into Lake Ontario. For some weeks he had been labouring under Intermittent Fever of a tertian type. In the treatment of this disease he had employed a certain nostrum yeleped "Cholagogue," which, as his friends expressed it, "broke the chill," *i.e.*, interrupted the paroxysms, so that he had been enabled to work at his trade for the space of three or four days, still complaining of dizziness occasionally, and the secondary effects of mal-assimilation. Upon the day he was attacked with his last illness, viz., 22nd of June ult., he was engaged in the construction of some iron bands; after swallowing a moderate draught of cold water, he was suddenly seized with severe pain, and having been carried to bed a messenger was despatched for me. I found him writhing in great agony; he referred the seat of pain to the left side of his chest and abdomen. The skin was covered with a copious sudor, which trickled in streams from his face, and completely saturated the clothing; features sharpened, and face expressive of great anxiety; intellectual system not affected; tongue cool, of a leaden hue, slightly coated; bowels torpid; tenderness on pressure, in left hypochondriac region, extending to the umbilicus; the abdominal pain deep-seated, not of the acute character of peritonitis; respiration hurried; no abnormal resonance; no râle; heart's action extremely rapid, feeble, and accompanied with bruit de souffle; pulse 160, small and tense; urine suppressed. The group of symptoms rendered the diagnosis difficult. Calomel and tinct. opii. were exhibited, fomentations, followed by a large sinapism, were directed. No relief having ensued in six hours, Croton oil and enemata, with a long tube, were resorted to without producing any action of the bowels.

23rd. Pulse becoming indistinct; he appears moribund. As I had decided the previous evening that the symptoms were to be ascribed to some extensive extravasation within the cavity of the abdomen, all curative efforts were desisted from. He died about sixteen hours from the time of seizure.

Morbid Appearances.—Our examination was limited to the abdominal viscera, by request of his friends. The integuments of the abdomen were distended and tympanitic. The first incision through the linea alba was accompanied by the escape of a large quantity of flatus, and followed by bloody serum. Peritoneum slightly injected, peritoneal covering of the intestines of a pink colour. The liver of the usual size and weight, but softened in structure, and upon being incised the parenchyma appeared much more dark than natural. Pancreas small and hard. Stomach and intestines healthy. These being taken away, and having removed with a sponge about *five pints of sero-sanguinolent fluid*, we found upon the left side, extending from the diaphragmatic extremity of the spleen, and behind that organ to the commencement of the lumbar region, *a large clot of fibrin*, from blood which issued through a rent in the investing membrane in the spleen; this was easily peeled off from its contents, which were the substance of the spleen, of a light chocolate colour, and extending from a defined edge, a dark brown mass of effused blood, destitute of any traces of organization. The left kidney was enlarged and pale; the pelvis contained a small quantity of a dark grumous liquid. The remaining contents of the

abdomen presented no pathological appearances.

In this case, it is probable that a rupture of the splenic vessels, occurring during the congestion accompanying the cold stage of ague, first gave rise to an extravasation of blood within the splenic membrane. (This might have been increased at each subsequent congestion.) The afflux of blood following the reception of the cold water into the stomach at the time of the attack, ruptured the disturbed capsule and peritoneum, and a fatal effusion resulted.

ART. XXIX.—*On the Contractibility of the Iris, during the operation of Couching; by* HENRY HOWARD, M. R.C.S.L., *Surgeon to the Montreal Eye and Ear Institution.*

In the three last numbers of the Dublin Medical Press, I find a most interesting paper "On the Form, Construction and Use of the Cataract Needle employed by Dr. Jacob," and I must say that any one at all sceptical of the superiority of this mode of operating for cataract over all others, as a general rule, the article I allude to would at once convert to the views put forward by Dr. Jacob. My own experience has long since led me to the same conclusions.

My object in this communication is to draw Dr. Jacob's attention to a certain portion of his truly valuable and instructive paper, and in doing so, even while justifying myself, to disavow the idea of imputing anything intentionally wrong to him.

In the number of the Dublin Medical Press for August 28th, 1850, page 130, Dr. J. makes the following statement: "After the operation, however, the lids and brow should be painted with the extract, to dilate the pupil and keep it dilated; because it may not be desirable to cause any additional irritation by dropping the solution on the conjunctiva. This is a very necessary precaution, for the surgeon should know that, however perfectly the pupil may be dilated before the operation, it generally becomes contracted again during the revolutions of the needle; in fact, mechanical irritation, such as the pressure of the needle or the broken fragments on the iris, causes that organ to act, and the pupil to return to its original dimensions. This is a remarkable physiological fact, which I have not seen recorded, but which I have for many years demonstrated in the operation theatre."

If Dr. Jacob will take the trouble to refer to the third vol. of the B. A. Journal of Medical and Physical Science, page 198, No. 8, December 1847, he will find the following statement made by me:—"That pain does cause the pupil to contract is easily proved; as, for instance, when we couch for cataract. The pupil having been previously well dilated with Belladonna, no sooner does the operation commence to pierce the coats of the eye, than the pupil begins to contract, and before the operation is complete we find it much more contracted than we wish it to be."

I hope by this time that my publication on the Eye is in the hands of Dr. Jacob for review; and if Dr. Jacob will afford a little of his valuable time to look attentively to that part which treats of the physiology of the ophthalmic branch of the fifth pair of nerves, he will find the subject of contraction and dilatation of the pupil fully treated of.

Montreal, Sept. 15, 1850.

ART. XXX.—*Biographical Sketch of the late Daniel Arnoldi, M.D., President of the College of Physicians and Surgeons of Lower Canada Presented and read at the last Triennial Meeting of the College at Three Rivers, in July*, 1850.

Within the professional recollection of some of the younger members of this College, four epidemics have visited Canada:—the Cholera of 1832, that of 1834, the Ship Fever of 1847, similar in many of its features to the deadly plague; and, lastly, the Cholera of 1849. In these several years, with the exception of that of 1847, our profession suffered but little, and seemed indeed to enjoy an almost perfect immunity. The characters of maculated typhus, however, were such as none for any length of time could withstand; and that year we lost heavily, and this not only among the junior members, but among the older. In 1849 an immunity equal to that of the two preceding Cholera summers existed, with but one exception—that of the late Daniel Arnoldi, M.D., who, now nearly twelve months, has been removed from the scene of his labours—labours which in the one locality covered a period of nearly half a century.

Dr. Arnoldi was a native of this city, and of German descent: born in 1774. At the age of 21 years he obtained his license (in 1795), having passed some of his younger years in England for the purposes of education. He subsequently was apprenticed successively to Drs. Sims and Rowand, with the latter of whom his professional studies terminated. Perfectly familiar with the language and character of the population of the Lower Province, he first established himself at Rivière du Loup, and though he resided there for but a short time, there are yet living persons who gratefully speak of him. He evidently was not satisfied with the field, and he now *plunged* into what must have been a practice of which, at the present day, we can have but an inadequate idea: he settled at the Bay of Quinté, a settlement at that time almost a wilderness; for let it be remembered that we are speaking of the latter years of the eighteenth century. The practitioner at this period had not only to understand his profession, but had to acquire skill in the management of a canoe, strength—unaided, to convey it across portages, and at the same time carry his rifle and axe; and thus equipped—his rifle in hand, his birch canoe on his head, his instruments and medicines carefully distributed about his person, with an allowance of food sufficient for four-and-twenty hours—he daily left his home to visit his patients. This species of amphibious practice, perhaps at first pleasant enough for a young man, must soon have wearied the best powers of endurance of the most robust, and hence we find that after three years, he returned to the Lower Province, and for a season he pitched his tent at Laprairie. He did not, however, leave the Upper Province without bearing with him the pleasant remembrances of intimacies and friendships formed there; for in honor of one of these he named a son, now dead. At Laprairie he remained for but a few months, and ultimately settled—and for life—in this city, in 1802.

The beginning of 1800 must have been somewhat trying; but rapidly, however, he acquired a high reputation, and in fifteen or sixteen years his practice had reached its culminating point—at least in money value. In subsequent years the savings of these prosperous times were in a great measure swept away—in part by speculations, and in part by securities which

he was obliged to meet—so that, tho' he continued for upwards of 50 years in active, nay laborious, practice—tho' the city had increased an hundred fold—he left at his decease far from a large fortune, when the term of labour is considered. He formed no exception to the general rule that medical men seldom amass fortunes: indeed, the medical man who can sustain himself under reverses merits great commendation; for in him toil and labour are but too truly the equivalents of £. s. d., and by the sweat of his brow he pays for the follies or extravagances of relatives or friends.

Dr. Arnoldi's reputation was based, and justly so, we believe, on his skill as a surgeon and an accoucheur—a skill which, beyond doubt, was rendered, in numerous instances, more effective and striking from the mechanical "tact," if not really mechanical genius, which he possessed in an eminent degree. The simplicity and facility of application of his apparatus for fractures were in themselves worthy of all imitation. It must not, however, be supposed that as a physician he was not as efficient. Of firm character, quick perception, correct judgment, extensive experience, he could not, if he would, have been otherwise than successful; and of this the best evidence is to be found in the fact that several families, to the day of his death, had every confidence in him, and continued his patients, when it was well known that he, by far, now preferred the quietness of his home and the cheering occupations of his work-shop, to the cares of practice.

He married at an early age a French Canadian lady, by whom he had three sons and six daughters; of the former there is now but one surviving—a gentleman who will doubtless worthily replace the sire; of the latter, all are living—and, but one, unmarried—in comfortable, if not in affluent, circumstances. The partner of his many years of labour yet survives, active and in good health. In March, 1849, but three months before his demise, the anniversary of their 50th wedding-day was kept—a touching ceremony; for there stood not only the venerable pair, but the children of this pair, themselves fathers and mothers; and yet a third generation stood around as a crown of glory to the aged couple—the grandchildren, some stalwart as the grandsire had been, some yet tottering, and others springing into buoyant and joyous womanhood.

For several years previous to his death, the subject of our notice had suffered from occasional but dreadful attacks of neuralgia, affecting chiefly the nerves of the forehead and face. From these attacks he endured tortures, and on one occasion, we remember well the impression made on one of the members of your Committee, in witnessing the fortitude with which the excruciating pain was borne: in this paroxysm the neuralgia had extended to the nerves of deglutition, and the slightest movement of the tongue, either in speaking or swallowing, was accompanied by the most exquisite pain; and thus for several days, without food and without drink, he battled with the disease. We at that time apprehended that the affection was but symptomatic of some cerebral or meningeal chronic disease, and feared a result in accordance with these views. We were, however, mistaken.

On the night of the 17th July, we believe, there was a fire in the vicinity of his dwelling-house; and, though there was no danger of his own premises, yet the fire being in the rear of his

daughter's house, induced him to leave his bed. In slippers and thin night cap and loose morning dress, he made his appearance, on a chilly night; the streets in pools of running water; and thus, with symptoms of diarrhœa on him, he remained for upwards of an hour and a-half. Many of his friends remonstrated and urged his returning home; at last he was overheard to say, "My friends must take me for an old man, in thus forcing me away." That night and next day he became rapidly worse, but seemed not aware of his danger, till his son, on paying his visit, insisted on his going to bed and taking something for the diarrhœa, which had before breakfast called him ten times to the water-closet. With some hesitation he acquiesced; improved that evening, but the next morning again grew worse; the disease seemed now perfectly unequivocal—vomiting set in, cramps, and after a few rapid gushes of serum, collapse, utter and complete, followed. It was in this condition that we called to pay our last adieu to one for whom we had a real esteem, if not a quasi filial affection: there lay the clay-cold body within which the heart wearily and with increasing difficulty propelled the scarcely circulating blood —the breath cold and the chest heaving — the hand blue and damp — the eyes glazed; but from them there yet was the momentary expression of recognition—a recognition put beyond doubt by the pressure of the hand; and thus, with intellect unclouded, faculties clear to the last, he expired on the 21st July, in his 76th year.

It often occurs that men rise in character as well as position, as they increase in years; they are venerated for what they have acquired, and respected for the knowledge or experience which they can impart. Not only was this applicable to Dr. Arnoldi from conventional rules, but it was spontaneously yielded to him by the profession, who not only regarded him with sincere respect while living, but paid the last tribute to departed worth, by following to his last resting place the doyen of the profession.

Dr. Arnoldi discharged the duties of a magistrate for many years, with zeal, moderation, and judgment. Frequently to the detriment of his private affairs he sat on the bench of Quarter Sessions for hours, and, except by an intimate friend, it could not be perceived that the incessant talking, without arguing, of the counsel, caused the "upright" magistrate to be impatient. Twice he was named to the Presidency of the Medical Board under its organization immediately preceding that which now exists. About 1833 or 1834, we believe, on the death of Dr. Selby, he received the situation of Physician to the Gaol, an office which gave him some trouble, and the duties of which, with but very few intermissions, he continued to fulfil till his death. In 1837 or 1838, on the resignation of the office by the President of that time, the late Honorable James Gugy, he was unanimously elected President of the German Society, an honor which he continued to enjoy up to the day of his death. In 1848, at the Spring Convocation of M'Gill College, he received the honorary degree of M.D. from that University. In 1847, he was named by the Governor General, First President of the College of Physicians and Surgeons, which was but an admission of his standing and merits.

The delegation of political powers to any set of men has always been a matter of difficulty both in theory and practice. This remark, unquestionably true in the science of political govern-

ment, is nevertheless equally true and applicable to medical politics, or the politics of medical men,—who have alternately held the two extremes of conduct, of utter apathy as to their rights and privileges, or of an over weaning watchfulness equally unwise. The worst result coming from this, independently of the inevitable disappointment, was the mutual jealousy, if not temporary animosities, which it engendered—a state which was at its climax at the first meeting of the members of the College in July 1847, and over which Dr. Arnoldi presided. It is not our intention to pass our judgment on the transactions of that day: they resulted in a ballot which placed in the position of Governors the gentlemen who have since that day so frequently and so amicably met together; but we must be allowed to give it as our opinion, that to the moderate yet energetic, firm yet conciliatory conduct of the President, we owe, at this day, our existence as a well-established and useful association of men. For this alone, Dr. Arnoldi's memory should, by all who have an earnest and sincere desire for the welfare of the Profession, be revered. And who can foresee to what an extent our professional standing may be elevated by a systematic co-operation among educated men, who laying aside selfish and narrow considerations, bring their opinions, their information, their experience, into one common stock, and so render their results accessible and available to all. Or, if we do not produce any such great effect on the rising generation of young medical men, is it not something for which to be profoundly thankful, to be aware that the social qualities of men thus placed have not been left barren and desolate?—to feel that the more such benevolent impulses are cultivated the more will they diffuse their happy influences among us. These struggles should now be ended—buried—should now be our munitions of war: let there be a contest yet, however—one of generous emulation; a competition of minds of untrammelled, rational, educated men, and the triumph, on which ever side fortune smiles, will be for both, untarnished by any stain. Of such advantages—of such pleasurable reflections—the action of the day to which allusion has already been made has been the origin: can we do otherwise than gratefully remember him who successfully brought it to an issue?

Dr. Arnoldi was not only dexterous in midwifery and surgery, but successful. We alluded to this at an early part of our paper, as in our idea, in part at least, arising from a mechanical genius of surpassing excellence. His was truly the mathematical intellect. In works of mechanical contrivance he was without a rival, not only in the construction but in the adaptation to the end in view; he never was at a loss how to arrange, modify, or apply to use things the most dissimilar and to first sight inappropriate: he could with equal facility make a lock to open at once two separate drawers, an electrical machine with all its appurtenances complete, an air-pump, stomach-pump, and numberless articles of wood—all of the most exquisite workmanship and durability. In this kind of occupation for the last few years he found his chief delight.

In society he was cheerful to an extraordinary degree, taking an interest in the young, and entering into and comprehending their sympathies, he always was beloved by them: he could, in short, trifle without being undignified, or rendering himself absurd; and this youthfulness of spirits continued to the last as his great characteristic. In his

other social relations he was beyond suspicion. As a man, born and educated in a Colony, we may justly be proud of him. And it would be an injustice to his character, and to the Profession of the Province, now incorporated, if something, more than this passing tribute to his memory, was not placed on record in its archives, as the First President of the College of Physicians and Surgeons of Lower Canada—an honour to which he was entitled, and which it was his utmost ambition to sustain and see uninfringed.

Montreal, July 1, 1850.

PRACTICE OF PHYSIC.

On the Causes of the Heart's Sounds. —Mr. Brakyn, a student in the Dublin School of Medicine, has devised a series of experiments, the result of which he considers confirmatory of Dr. Billing's theory of the heart's sounds.

The experiments consisted in adapting certain mechanical contrivances to the heart of an ox, carefully dissected, and is thus described in a letter to Dr. Billing:—

"To this (the heart) I attached an apparatus, consisting of a flanged tube, attached to the middle of the left ventricle, and piercing its wall, introduced through the auriculo-ventricular opening, to which was screwed externally another tube, with a flange also, so as to grasp the wall of ventricle all round the tube, and render the junction air-tight; to the outer tube a bladder is tied. A free communication is thus established between the bladder externally and the cavity of the ventricle within. To the left auricle a similar apparatus, but without flanges, was then attached by one trunk of the pulmonary veins, the rest being tied. Then having tied all the offsetts of the aorta, I tied a tube and bladder to its abdominal extremity; to the distal end of this a small stop-cock was then tied, into which a brass pipe fastened to the end of an india-rubber one, can be wedged; the other extremity of the caoutchouc pipe is finally attached to the distal extremity of the auricular bladder. There is thus completed an apparatus permitting a mimic circulation through the left heart, (*it* being sufficient for illustration,) which may be conducted with great ease in the following mode. Let the system be inflated with air through the orifice of the elastic tube next stop-cock, when, having wedged back the stop-cock into the pipe and opened the cock, a rythmical circulation may be carried on by alternating manual pressure applied to each of the three bladders in succession (without removing *any* of the *three* hands applied)—thus *representing* the successive contractions of auricle, ventricle, and aorta, with the natural attempts at regurgitation, which close both sets of valves in succession. Hereby a complete imitation of the normal sounds may be produced on either a very magnified or diminished scale, according to the force used in propelling the air.

These sounds being produced without any muscular contraction, or rush of blood, &c., must evidently be *valvular*, which can be further demonstrated by removing part of the apparatus (the auricular) so as to show the mitral valves in action synchronously with the first sound; or by introducing a wire cage, to prevent them closing on regurgitation, when no sound follows: above all, the first sound is as perfect as the second, the valvular origin of which is, I believe, undisputed. In fine, the illustration, though conducted with air, ought to be conclusive, inasmuch as a suddenly-strained membrane, which gives a tympanitic sound in air, will do the same in water also, as I have tried, but not so loudly.

Dr. Stokes also, in subsequent conversations with me, mentioned a fact which he had noticed several times in typhus fever, and which he seemed to think likely to favour your doctrine—viz., that patients, after the fever had progressed some time, and great debility had supervened, ceased to have any sound of the heart, though circulation continued. Sometimes, however, the second continued, the first being absent; but it was to be remarked in these cases that the impulse of the heart was quite absent. This, no doubt, sir, the muscular theorists would endeavour to appropriate, as well as the supporters of your opinions. I imagine, however,

that this additional fact would not be so easy of digestion to the former gentlemen, which is, that as the patients improved, impulse was found to return, often with considerable energy, but unaccompanied for some days by any sounds, or, in some instances, by the second only. This state of things can be also imitated most accurately by the bladder apparatus.

I also endeavoured to try the experiment with water, but did not succeed, for want of a proper hydraulic apparatus of adequate power, which would have been too expensive and laborious an undertaking for me to have ventured on. I should have mentioned before a fact of some interest in connexion with the character of sound produced by the valves, namely, that when the mitrals were made to act whilst exposed to view, the sound could be produced by the sudden straining of the valves, when the ventricular bladder was pressed, even though the valves had been previously in contact, or with a very minute orifice existing by their partial patency. This fact would seem to me to disprove the statements made in several works of eminence, that the second sound is produced by a click of the sigmoid valves; the first being regarded by such authors as muscular, whilst the above fact must, I think, prove your assertion of both being "tympanitic."—*Lancet.*

Case of a Pulmonary Cavity opening externally. By Dr. POLLET.—The subject of the remarks was a girl of a very marked scrofulous constitution, about twenty years old. She has, as our author remarks, all the rational and physical symptoms of phthisis in an advanced degree. About three months before death a tumour, about the size of a pigeon's egg, appeared an inch beneath and exterior to the left breast: it increased gradually, and finally attained the size of the fist. From the commencement it fluctuated and subsided under gentle and uniform pressure, afterwards recovering its ordinary bulk; movement of elevation and of subsidence, obvious to the eye and corresponding with those of inspiration and expiration, were noticed in it. This accumulation burst in a paroxysm of coughing; and a considerable quantity of pus escaped from it. The patient was visited by M. Pollet the subsequent day, who ascertained that the opening from which the pus had issued was circular, and passed beyond the body of a rib. The opening was exactly like that made by the crown of the trepan. A style passed without any resistance being offered, three fingers breadth. The matter which escaped for several days afterwards by that opening resembled that which hectic patients expectorate; besides, a breath was very distinctly perceptible at each respiratory movement. The patient expired four days after the abscess had burst, but no autopsy was permitted.

Such is a narrative of the case. With regard to it, we feel the same difficulties as the worthy reporter of the case to the Medical Society of Emulation in Western Flanders, Dr. Joseph Ossieur. The defined form of the perforation, so completely circular, of a rib, without ulceration or perforation, leads to the belief that it arose from a tubercle seated in the centre of the bone, and that it was not formed by the escape of pus from a cavity of the lung. In the cases hitherto described, of cavities opening externally, it has not been by the ribs, but by the intercostal spaces that the pus appeared, the reason of which it is unnecessary to render. The author, it is true, asserts that the tumour was fluctuating from the beginning, and subsided on pressure. But these terms, "from the beginning," are actually merely equivalent to those "from the time when the tumour was perceived." And, indeed, the language in the narrative gives faith to that remark; for it had already the magnitude of an egg. What inference could then be drawn? That the tumour, at a certain period of its progress, had communicated with the pleura, but no more; and this circumstance does not point out to anything but a simple abscess in the walls of the thorax, by the tubercular destruction of a rib.

Nevertheless, did the fistulous communication with the internal organs extend beyond the sac of the pleura? Did it extend to the interior of the pulmonic tissue, which had become cavernous? On such a supposition, we must admit, with M. Ossieur, that a superficial vomica was present, exactly on the level with the osseous tubercle,

and that a communication had been formed between these two purulent caverns? One circumstance is undoubtedly in favour of such an hypothesis,—the statement, to wit, of the author, that the matter thrown off by the external aperture was similar to that of phthisical sputa. We willingly give him credit for this fact on his own observation, but not without regret at his not having entered into more specific details on the stethoscopic signs. It is the only way in which the deficiency of the autopsy could have been supplied. The only sign which he narrates, the *bruit de soufflet* ascertained after the opening of the abscess externally, is not of a very clear character, especially apart from other signs by which it ought to be disclosed, if there had existed a pulmonary cavity communicating outwards.—*Ann. de la Societe Medicale d'Emulation de la Flandre Occidentale, and Medical Times.*

The Urine in Cholera.—Dr. Beghie, in the *Edinburgh Monthly Journal*, gives the following as the results of his examination of the urine in cholera:—

1. The urine is altered in quality as well as in quantity.

2. This alteration consists in the small proportion or entire absence of urea, and in the presence of albumen or biliary coloring matter.

3. That on examination by the microscope there will be found uniformly associated and existing in amount commensurate with the albumen, epithelium assuming different forms, and derived from different parts of the urinary system.

4. That one or other of the following deposits will probably be present:—Amorphous urate of ammonia, uric acid, ammoniaco-magnesian phosphate, or oxalate of lime.

5. That the healthy condition of the urine, in so far as the increase of urea and disappearance of the albumen and bile are concerned, is generally restored in the course of a day or two, if the case go on favourably.

6. That as the association of albumen and bile in particular, as well as the other general characters of the urine which have been stated to exist, are by no means common occurrences, it follows that the examination of urine in cholera is important, both as to diagnosis and practice.—*Edinburgh Monthly Journal.*

Inflammation of the Thyroid Gland—Perforation of the Trachea.—[To the Editor of the Boston Medical and Surgical Journal.] Sir,—The following case of inflammation of the thyroid gland, with perforation of trachea, and terminating fatally, being somewhat singular in its progress and of unusual occurrence, I send it to you for insertion, if you deem it worthy a place in your Journal.

The subject, Mr. B., æt. 31, was a man of full habit and strong constitution. Having stood in the water for several hours, he got a severe cold, which was soon followed by inflammation and swelling of the thyroid gland. This increased rapidly, and to such a degree that it threatened suffocation before the abscess was opened. It discharged copiously at the time, and continued to do so for two weeks. It then healed, but in about a fortnight broke out again, and shortly after a piece of the trachea was discharged, followed in a few days by a second piece.

When I first saw the patient, about three months after the commencement of the case, there was a fistulous opening just below the thyroid cartilage, from which pus was constantly oozing. There was also a loss of voice, *i.e.*, he could only speak in a whisper. I injected a weak solution of nit. argent. into the external orifice, which was instantly followed by a spasmodic cough, and expulsion from the mouth of the solution, together with a considerable quantity of pus mixed with blood. The injections were continued daily for about eight days, during which time there appeared to be ssme improvement in the symptoms. He then left for home, and I did not see him again. Being somewhat impatient to be cured, he consulted other physicians, and, finally a Thomsonian. Returning home from the latter he took cold, and was seized on the way with difficulty of breathing, cough, &c., in short, an increase of the local inflammation. A physician in the vicinity was called, and remained through the night. He expressed a doubt of the perforation of the trachea, saying, as another practitioner had told the patient, that "the

injection of fluid into the trachea would occasion instant suffocation." In the morning the man died, with what the attending physician pronounced *a fit;* but, really, of asphyxia, produced by the closure of the larynx.

I obtained permission to make an examination 48 hours after death. This confirmed the opinion I had previously entertained, and showed a fistulous passage from the external orifice, through the thyroid gland into the trachea. The gland itself was not enlarged, but the anterior portions of two of the cartilaginous rings of the trachea were wanting. The mucous membrane of the upper part of the trachea was so much thickened that a tube, half an inch in diameter, could scarcely be passed into the larynx. It seemed quite evident that death was the result of the same condition of these parts that is met with in laryngitis, and that tracheotomy would have prolonged, if it had not saved, the patient's life.

C. W. Cowles, M.D.
Stanstead, Can. E., May, 1850.

On the Analogies of Gout and Rheumatism.—Dr. Garrod recently read a paper before the Medico-Chirurgical Society, of which the following is an abstract:—

He commenced by observing that many physicians consider gout and rheumatism as diseases so closely allied as to be merely varieties of the same; others, as differing essentially from each other; while a third set believe that, although well-marked attacks of acute gout differ widely from those of acute rheumatism, yet that the two diseases may, as it were, imperceptibly merge into each other, or that in a given case it may be impossible to diagnose between them. The object of his paper was to ascertain which of these different views was correct. Dr. Garrod first pointed out the differential diagnosis. Gout is a disease of advanced age; rheumatism of youth. Gout is more common among men; rheumatism affects both sexes alike. Gout, at first at least, attacks the plethoric, and those who live high; rheumatism generally the debilitated from any causes. Gout is frequently hereditary; rheumatism, if at all so, incomparably less so than gout. The exciting causes also differ. Gout is induced by high living, by certain indigestible food, or by local injury: in those strongly predisposed, cold is the principal exciting cause of rheumatism. The rich are more subject to gout; the poor to rheumatism. Gout frequently presents premonitory symptoms, affecting the digestive organs, which is not the case in rheumatism. Gout attacks the small joints; rheumatism the larger. In gout, one joint, generally, only is affected; in rheumatism, many. In gout of long standing the large joints may be attacked, and also more than one; sometimes again, in rheumatism the smaller joints are involved. In both diseases, the affection of the joints is accompanied by pain, redness, and swelling; but in gout the pain is generally more severe, and the redness and swelling greater than in rheumatism. In gout, we have œdema and subsequently desquamation, which do not occur in rheumatism. The fever in gout is proportioned to the local inflammation; but it greatly exceeds it in rheumatism, and there is frequently profuse sweating of an acid character. Metastasis rarely occurs in acute gout; and, when it does, the brain or stomach suffers, the heart seldom or never; in rheumatism, the heart is frequently inflamed, and the secondary affection becomes the most important. Chronic rheumatism is more frequent than chronic gout: the latter is frequently accompanied by the secretion of a milky fluid, which constitutes chalk-stones or tophaceous deposits. Their composition is peculiar, consisting almost entirely of urate of soda, and sometimes phosphate and carbonate of lime. In the fluid state, the needle-like crystals of the urate of soda can readily be detected under the microscope. They are met with on the joints of the hands and feet, which they distort and even dislocate; also in and around the sheaths of tendons, and even in the cancellous structure of the heads of the bones. Colchicum possesses an almost magic power in relieving the pain in gout, but is not attended with such marked benefit in the acute form of rheumatism.

There is, however, a class of cases, in which, even with the utmost care, the diagnosis cannot always be made. These are called rheumatic gout, and it would seem either that the patient suf-

fered from both diseases at once, or that the two merged into one. Dr. Garrod considers it a matter of great interest to ascertain the true nature of these cases, and to find out whether or not cases of true gout and those of rheumatism may not present similar, and almost identical, symptoms, and yet in their real nature be quite distinct. In a paper read before the Medico Chirurgical Society, Dr. Garrod proved the existence of uric acid in the blood; in the healthy fluid traces of it only could be found, but in pure gout it was greatly increased, so that from 1000 grains of serum it could be crystallized and weighed. It could also be procured in the form of urate of soda. This is not the case in acute rheumatism, as in that disease no more uric acid is found than in the healthy fluid. This, then, forms a marked difference between the two diseases. Uric acid, in Dr. Garrod's experiments, was abundant in the blood in cases presenting symptoms of true gout; deficient in those of well-marked rheumatism. This he used lately as a test of the two diseases. A labourer being admitted into the hospital with a complaint in one hand, which had been previously treated as rheumatism, but presenting characters of gout, as Dr. Garrod supposed, he directed a small quantity of blood to be drawn, and discovered uric acid abundantly in it. The man afterwards said he had had a similar attack in his toes, and that he could at any time bring on an attack by drinking beer freely. The plan for detecting uric acid in the blood, detailed in the paper read before the Medico-Chirurgical Society being very difficult, Dr. Garrod recommends the following as being more simple:—He takes a small quantity of blood, say from half an ounce to one ounce, in a wide tube or small glass, and allows it to remain for some hours to separate into clot and serum. The serum is then decanted, and half a drachm to a drachm put on a watch glass, then acidulated with five minums of acetic acid, and a fibre of hemp from a piece of linen or tow introduced. In about forty-eight hours, when the serum has become solid from evaporation, if uric acid be present, the fibre will be covered with its crystals in the form of rhombs; an idea of the amount of uric acid present may be obtained from the number of crystals. That these crystals are uric acid can be proved by adding a little water, when by care the fibre can be removed with a small pair of forceps, with the crystals adhering to it. Nitric acid and ammonia will at once determine their nature, by the production of the mureside or purpurate of ammonia. Dr. Garrod then mentioned, as an indication of gout, the presence of chalk deposits in the ear, a sign he has often observed. Sir C. Scudamore gives the tophaceous deposits as being only 10 per cent., but Dr. Garrod has met with them in the ear much more frequently, so much so as in chronic cases to form a valuable sign of diagnosis. He has himself often diagnosed the disease from this mark alone, and found his opinion confirmed afterwards by the discovery of uric acid in the blood. In many chronic cases of gout, the condition of the urine will aid the diagnosis, as when there are tophaceous deposits, the kidneys appear to have lost the power of excreting uric acid, so that the urine is at all times free from lithic deposits. When the chalk-stones are forming very freely, he has often found that not 1-100th of a grain of uric acid was eliminated in the urine in twenty-four hours. At the same time the urine may present an acid re-action.—*Medical Times.*

The Magnesian Origin of Goitre.—[To the Editor of the Prov. Med. and Surg. Journal.] Sir,—By a notice in one of the Journals, I observed that some weeks ago a paper had been read at the Institute of France, announcing that a *magnesian* impregnation of the water in goitrous districts was discovered to be the cause of goitre.

In the last number (April 3, 1850) of your Journal, under the "Foreign Department," I find that allusion is made from the *Gazette Medicale* for December, 1849, to this discovery, and it is stated that the origin of goitre has been traced by Mons. Grange "to the presence of magnesia in drinking water."

Whilst I am glad thus to have a confirmation of my own opinion, which was made public in 1838, in my "Treatise on English Bronchocele," it may be needful for me, in support of this observation, to show, by a few quotations, that such was the theory

which I then held and propounded, and that, therefore, the opinion of Mons. Grange, which is now brought forward, is not new, so far at least as this country is concerned; and I may here add, that I have only this very day been informed by Dr. Guggenbuhl, of Abendberg, that he was well aware of my opinion as to the magnesian origin of goitre several years since.

At page 15, when refuting the snow-water hypothesis, I state that dolomite—the double carbonate of magnesia and lime—exists in the goitrous Alpine districts of Switzerland in large quantities, generally in white masses of a loose granular texture, thereby being readily acted upon by the percolating water. Then at page 16 I add:—"In support of what has been advanced, I may state, that the *magnesian limestone* so profusely distributed in this part of Yorkshire, where goitre is prevalent, is an impure earthy variety of dolomite, and so far as my observation leads me, it appears that the *magnesian limestone* districts predispose to the disease in a much greater degree than those in which the pure limestone abounds."

Again, at page 23, when reviewing the simple lime theory, the following is written:—....."On the contrary, I know that goitre does not prevail in many places where the mountain limestone is abundant; nevertheless, I think that I am correct in supposing that the presence of the *magnesian limestone always predicts* the co-existence of the disease. Take for example that ridge of magnesian limestone running from north to south through the centre of Yorkshire, margining the shires of Derby and Nottingham."....

Page 49:—....."Going still further north, into the vicinity of the *magnesian limestone*, we find goitre prevailing to such an extent as to have received a name from that locality. From Nottingham the magnesian limestone ridge runs almost due north, and along this course we have found goitre to prevail. Upon it, under my own immediate observation, are the towns of Knaresborough, Boroughbridge, Ripon, Masham, and Bedale."....Page 51—"At Boroughbridge, where there are only a few hundred inhabitants, goitre considerably prevails."....."If we now pass off from the *influence of this ridge of magnesian limestone*, we shall find the disease to diminish. Thus to the east, *e.g.*, York, I am informed by Dr. Simpson that he scarcely recollects a case having been admitted on the books of the dispensary."....

Appendix, page 79—"In the greater part of Scotland, goitre, if not altogether, is almost, unknown."....."*Lime* to a considerable extent *exists* in these shires, *but*, as in other parts of Scotland, it is *not* the *magnesian limestone*."

Page 88—"On the south side of the Forth, between Stirling and Edinburgh, there are several large lime quarries, such as Queensferry, Lime-kilns, &c., but in none of these districts is goitre known to exist."....."Sufficient has now been said to show that Scotland is free from endemic bronchocele."....

Page 87—"From what has been stated one would have thought Alva the most likely locality for goitre, every thing being present to favour the disease *with the exception of the magnesian limestone*."

Having extracted these quotations* I beg to remit them without further comment; their insertion in your valuable journal will oblige,

Sir, yours most obediently,

April 12, 1850. JAMES INGLIS, M.D.

The Plea of Insanity.—Irresistible Impulses and Irresponsibility.—The facility with which the Plea of Insanity has been received in many criminal cases of late years, has naturally led to a closer examination of the legal and medical grounds upon which a person charged with an offence should be held irresponsible for his act. The case of a person named Pate, recently tried at the Old Bailey for an assault on the Queen, was well calculated to bring this question to a close issue. It was distinctly proved that the prisoner was odd and eccentric in his habits, and that on various occasions since 1842 he had been guilty of strange conduct in reference to mere trifles. His character, however, had undergone no marked change within a recent period: he had not been treated as an insane person, and had always managed his own affairs with average ability, and without

* Treatise on English Bronchocele, with a few Remarks on the Use of Iodine and its Compounds. By James Inglis, M.D. London, 1838.

rendering the interference of others necessary. Dr. Conolly, who had been consulted by his father respecting him about nine months since, admitted that Mr. Pate was labouring under no delusion, and that he knew the distinction between a right and a wrong action, but was subject to sudden impulses of passion. In committing the assault, Dr. Conolly considered that he had acted under some *strange sudden impulse, which he was quite unable to control.* Dr. Monro stated that the prisoner might have known what he was doing, and that the act of assaulting the Queen was very wrong, but he was satisfied the prisoner was of unsound mind.*

We have it on good authority that the prisoner himself admitted the wrongfulness of the act, and that he committed the assault under some momentary impulse at the sight of her Majesty, which he could not resist.

The defence of such a case on the plea of insanity was beset with difficulties. Supposing it to be successful, the result would be incarceration for life in a Criminal Lunatic Asylum,—in itself a dreadful punishment for a person labouring under no delusion, and manifesting no insanity, in the common acceptation of the term, but on the contrary, quite reasonable enough to appreciate the horrors of an imprisonment for life with lunatics. We cannot suppose that those who would sincerely urge such a defence would propose to allow liberty to a man whose impulses were so sudden and uncontrollable that no one could be regarded as safe from his violence; and it would be ridiculous to assume, in a case of this kind, that there could be any certainty of cure. In short, had the learned counsel succeeded in such a defence, the safety of the public, which is far above any private considerations, would have absolutely demanded nothing short of imprisonment for life. There could have been no proof of cure after any period of confinement greater than that which was deducible from the prisoner's condition even the day before the assault; and it is clear that he was not then a proper object of confinement or restraint, or his friends would not have allowed him to be at large. Even Dr. Conolly, when consulted about him nine months previously, advised that nothing should be done at that time. It is clear, therefore, he then thought so lightly of his condition that he apprehended no evil, and it is only *after* the act that we find an opinion expressed that the prisoner was of unsound mind.

We come, therefore, to the conclusion that, but for the assault on Her Majesty, there would have been no imputation of insanity against Mr. Pate. The acts relied on as indicating this weak mental condition may be paralleled any day within the circle of any man's acquaintance. We could enumerate acts of a much more strange and apparently unreasonable kind, perpetrated by men with whom no one would either have dared or have had a legal right to interfere; and the simple question is therefore—Shall such persons escape punishment *because* they commit breaches of the law, or shall a *momentary impulse* be a sufficient plea to ward off punishment from an offender, when the only evidence of a want of power of control consists in a medical inference derived from the extraordinary nature of the act, and the statements of the prisoner who is to benefit by the admission of the plea? Supposing that Mr. Pate had assaulted a mechanic in the open street, instead of Her Majesty—if the defence set up were good it would have been equally valid in this case. It cannot be assumed that the impulse was irresistible *because* the assault was upon Her Majesty, and that it would have been resistible had it been perpetrated upon one of her subjects! Such a mode of reasoning would be absurd. Wanton and unprovoked assaults are daily committed in the streets by persons who *could*, perhaps, produce good evidence

* This led to a somewhat indecent and uncalled-for reproof on the part of the judge. If there was any impropriety at all, it was in the counsel putting the question, and not on the part of the medical witness in answering it. The witness merely said, *in answer to the question*, "he was satisfied the prisoner was of unsound mind." Would the learned judge have wished him to remain silent, or to have returned an answer conflicting with the evidence which he had previously given? The witness, after having replied to the question, was rather uncivilly told by Mr. Baron Alderson not to take upon himself the functions of judge and jury. "While I am sitting upon the Bench," said the learned judge, "I will not permit any medical witness to usurp the functions of both judge and the jury." Dr. Monro very properly replied—"he considered he had only answered the question that was put to him." The judge should have interrupted the counsel, who was, no doubt, well able to justify his conduct, and not have reproved a medical witness, who, from his position in Court, could not defend himself from an attack of this kind, happily very rare, issuing from the judicial Bench.

of general eccentricity, if such a plea as an uncontrollable impulse were admissible; but, in spite of the motiveless character of these attacks, the offenders are properly punished, partly as a matter of retribution, and partly to prevent their example from being generally followed. The safety of society demands this, and the security of Her Majesty demands that she should be equally protected from the acts of individuals who, after having inflicted serious personal injury, may coolly plead that they could not avoid it: they had a sudden impulse to stab, to put out an eye, or to break a head, and they could not control themselves! The very object of law in a social state is to teach a person not to give way to the impulses of savage life.

Mr. Cockburn, counsel for the prisoner, put it to the jury that "the act itself was that of an insane man:" "it was motiveless—objectless." He asked "What motive could there be for the commission of the offence." Such a line of argument would either prove nothing, or it would prove too much. What motive that would satisfy Mr. Cockburn could any individual in the kingdom have for assaulting Her Majesty under any circumstances whatever? We say none. If, therefore, the view of the learned counsel be correct, and his reasoning in favour of the acquittal of Pate have the slightest force, an assault on the Queen, whatever might be the result, should be taken *ipso facto* as evidence of insanity. In Pate's case there was not even the pretence of a delusive motive existing in the prisoner's mind, or a want of knowledge of the wrongfulness of the act at the time of its perpetration; and yet because, as it must necessarily happen in an assault upon the Queen, there was no motive, it is contended there should be no conviction, and no punishment. The Sovereign of these realms is, therefore, to have a smaller degree of protection thrown around her than the meanest of her subjects. The learned gentleman who used this argument is now Solicitor General, and it would only be placing him in a fair position to have his argument turned against himself, and its validity tested, in the event of his being called upon to exercise his office on some future occasion for the protection of Her Majesty against a similar dastardly assault.

It is fortunate, however, that the law does not admit this fast and loose way of dealing with impulses—*i.e.*, of making them irresistible or not, according to the station of the person who is the victim of them.

Mr. Baron Alderson, in addressing the jury on the evidence, said—"In the first place, they must clearly understand that it was not because a man was insane that he was unpunishable; and he must say that upon this point there was generally a very *grievous delusion* in the minds of medical men. The only insanity which excused a man for his acts was that species of delusion which conduced to and drove a man to commit the act alleged against him..... They ought to have proof of a formed disease of the mind,—a disease existing before the act was committed, and which made the person accused incapable of knowing at the time he did the act that it was a wrong act for him to do."

Such a statement of the law may be, medically speaking, open to some objection; but, while it is the law of the land, we are bound to obey it: and to us it appears to afford a better and stronger protection for life and liberty than the doctrine of "irresistible impulses," when nothing but eccentricity of character can be proved. It is to be regretted, however, that the summing-up was marred by the undignified and flippant statement that "A man might say that he picked a pocket from some uncontrollable impulse, and in that case the law would have an uncontrollable impulse to punish him for it!" It is said that the law is a silent judge, and the judge a speaking law. We have however, a judicial joke more befitting the pages of Punch than the lips of an occupant of the judicial bench.

We conclude our remarks by observing that we do not remember to have met with a case in which the plea of insanity was advanced upon weaker grounds than in this. Admitting Dr. Conolly and Dr. Monro to be correct in their opinion that the prisoner was of unsound mind, it is clear from the present state of the law that his unsoundness or weakness of mind had not reached that degree to render him irresponsible for offences committed against others. Mr. Pate was not so mentally unsound as to be unsusceptible of correc-

tion by punishment; and the verdict returned against him will, we think, have the good effect of preventing others in the same weak mental condition from committing an assault upon Her Majesty. If the moral powers of such persons are not sufficient to control their criminal impulses, the recollection that a similar act was punished by seven years transportation, may suffice to restrain the arm thus wantonly raised against the Sovereign.—*London Medical Gazette.*

Glandular Inflammation of the Neck —Adenitus Cervicalis.—At a meeting of the Acadamy of Medicine, Paris, an essay, by M. H. Larrey, was read, entitled "On Cervical Adenitis or Adenopathia, observed in the Military Hospitals, and on the Extirpation of Glandular Tumours of the Neck."

M. Larrey observed, that inflammation of the cervical glands, occurring in young healthy men, is much more frequently met with in the military than in the civil hospitals: and, reasoning from the statements of his illustrious father, and of M. Moizin, it was much rarer among the soldiers of the Republic and of the Empire than it has been since the Restoration.

It is evident, observes M. Larrey, that the occurrence of *adenitis* in soldiers otherwise healthy and strong men, above twenty-one years of age, must be owing to some peculiar circumstance connected with their calling; all recruits who present glandular swellings being rejected on that account, and none being admitted into the army under twenty-one years of age.

The specific cause M. Larrey finds in the lateral apertures of the sentry-boxes, which, he remarks, expose the soldier on guard to the sudden suppression of the perspiration on the face and neck; excited perhaps by a sally or by their patrol duty. Ophthalmia, catarrh, cutaneous eruptions of the face, &c., are, from the same cause, of very frequent occurrence among this class of soldiers, while officers are comparatively exempt from these affections, and from *adenitis*.

Added to the preceding cause, M. Larrey mentions the peculiar character of that portion of the soldier's dress which encloses the throat. M. Larrey also states that a cold moist climate favours the production of *adenitis*.

With regard to prognosis, M. Larrey observes that it is unfavourable, on account of the liability to the recurrence of the disease under similar conditions.

The treatment must be conducted with regard to hygiene, to constitutional and local and to surgical treatment. The latter, consisting in the removal of the glands, M. Larrey has found the most certainly effectual, when previous treatment does not exert a decidedly beneficial influence.

M. Roux stated that he had observed, in civil hospitals, the same increased frequency in the occurrence of *adenitis* within the last twenty-five years, and attributed the fact to the abuse of tobacco.

M. Rochoux remarked that the Turks are robust men, although great smokers. He thought that too much was charged to the injurious effects of tobacco.—*London Medical Gazette.*

Treatment of Dysmenorrhea by Quinine and Prussiate of Iron. By H. A. Bignon, M. D., Augusta, Ga.—The frequent occurrence of dysmenorrhea, and its painful and intractable character, render it a subject of deep interest to the physician. As the most approved modes of treatment often effect little more than a slight palliation, I am induced to report a few cases treated with quinine and prussiate of iron, in the hope that others may be induced to test these remedies in similar cases.

Case I.—About the first of July, 1848, I was called to see Celia, a negro woman about 28 years of age, of delicate constitution: she was then laboring under dysmenorrhea, and on inquiry I found that she had been affected with it for some nine years, during which time she had been under the treatment of several physicians, and as far as I could learn, had been put on the use of purgatives, tinct. of guaiacum, and all the usual remedies, with only slight relief, if any. I immediately prescribed a warm hip bath with mustard, and ten grains of Dover's powder, under the influence of which she was not long in falling to sleep, and got a good night's rest. On my visit the next day, I found that the pains had returned, and she was suffering very much. I suspected

the existence of a clot, from the character of the pains (resembling those of labor) and immediately gave her a teaspoonful of the wine of ergot, and repeated the dose about every ten minutes, until she had taken three spoonsful, after which she passed a clot about the size and shape of an almond, to the entire relief of all her suffering. I prescribed another hip bath and ten grs. of Dover's powder for the night, and left her.

I did not see my patient again until about two weeks after, when she came to see if I could not give her something to prevent her suffering so much at the next approach of the catamenia. I put her on the use of pills, consisting of 3 grs. quin. and 3 of prussiate iron, of which she was to take one three times a day, and gave her a mixture of camphor (Dewees) to take in case she suffered much at the next period, and did not see her again until about one week after she had had a return of the discharge (making about three weeks since my last interview with her,) when she came to get more of the pills, saying that she thought they had helped her a good deal, but not cured her. I made another box of the pills, and kept her on the use of them for the space of about six months, when she came to me quite another looking woman, and entirely free from the disease. I have seen her frequently since, and she continues well.

Case II.—Maria, a negro woman, aged about 32 years, and of slight frame, applied to me in the month of September, 1848, for the relief of dysmenorrhea, which she had had since a cold caught after confinement seven years previous. As the case was very similar to the previous one, I will not go into a detail of it, but merely say that I put her upon the same treatment, and in the space of about seven months I had the gratification of seeing her quite well again.

Case III.—Ann, a negro woman, aged about 20 years, well made and of large stature, applied to me in the month of November, 1849, for the relief of dysmenorrhea. The case was similar to the others, excepting that Ann was then nursing a child of three years of age, and also complained more of pain in the back than did the others. I put her upon the same treatment as the other cases, with the addition of a blister to the sacrum, and made her wean the child. This case is under my care at the present time, and at the last period she says that the discharge was quite natural, and that the pain was scarcely to be felt.—*South. Med. & Surg. Jour.*

Tartar Emetic in Inflammation of the Cellular Tissue.—Mr. Milton reasoning that pneumonia is a diffuse inflammation of the pulmonary cellular tissue, and that tartar emetic is the best remedy, was induced to treat general cellulitis in the same manner, and his results are stated to have been highly satisfactory. Cases of bubo, whitlow, &c., are given in illustration. —*Lancet.*

SURGERY.

Stricture treated without operation. —In laying before our readers faithful reports of the surgical practice of the hospitals of London, we have had frequent opportunities of adverting to the treatment of stricture. We need not recapitulate the various methods which are in the present day advocated by different surgeons in obstinate cases of stricture of the uretna; the potassa fusa, internal section, perinœl section, &c., have by turns been so loudly extolled that the profession are fully acquainted with these plans of treatment. But the old and effectual method of gradually dilating the narrowed canal should likewise obtain a full share of attention, and we have no doubt, if we judge from the success which Mr. Holt has obtained by gentle and patient dilatation, that this mode of remedying stricture is of great value. We proceed at once to adduce an outline of the cases thus treated by Mr. Holt:—E. G., aged 59, a tall and formerly a very robust man, was admitted March 26, 1850, under the care of Mr. Holt. He has had three attacks of gonorrhœa: the two first averaging a period of two months, but the last of longer duration, attended with severe scalding and protracted discharge. Fifteen months after the last attack he noticed an appreciable difference in the size of the stream during micturition; he was also compelled to pass urine more frequently, and the evacuation of the

contents of the bladder occupied a longer period than formerly. He neglected these premonitory symptoms until they had existed for six months, when, after committing an excess, he was attacked with retention of urine, for which a No. 3 catheter was passed with considerable difficulty, but with immediate relief. Although cautioned of the necessity of undergoing the necessary treatment, he neglected himself, and found after a further lapse of nine months that he could only pass urine in the smallest possible stream, and occasionally by drops. The urine was loaded with mucus, and his health began to fail. He then placed himself under medical superintendence, but only continued for a limited period, the greatest size then attained being a No. 2 sound, which, from his account, it is extremely probable never entered the bladder at all. The stream became again of the smallest size, and for the last twelve years has passed guttatim; in fact, to use his own expression, *the water was continually running from him, saturating his clothes, filling his boots, and compelling him to give up his employment of attending to the steamboats at Hungerford pier.*

Upon admission, Mr. Holt desired that the bowels might be cleared with castor oil previous to the introduction of the catheter: this was attended to, and a No. 1 catheter was attempted, but it was found impossible to pass it more than half an inch from the meatus; it there entered a constricted portion, but was so firmly grasped as to defy all attempts at progression. The catheter was allowed to remain for half an hour. Three days afterwards the instrument was again introduced, but only proceeded as far as before; yet, by the most persevering efforts, at the expiration of one month, a No. 1 catheter entered the bladder, and was allowed to remain. The size of the catheters were gradually increased until No. 8 could be passed with facility; it was then withdrawn for an hour, and re-introduced on the next day. The instrument was allowed to remain out two hours, and on the third three hours, so that in a few days it was only necessary to pass the same size once a day. After a further expiration it was passed every other day, and at the end of a fortnight increased to No. 9. This was shortly exchanged for No. 10, and the man now passes his urine as freely as ever, is not compelled to get up in the night, or empty the bladder more than three or four times in the day. The sediment in the urine has entirely subsided, and he is rapidly gaining flesh and strength. Previous to his affection of the urethra he weighed fourteen stone six pounds, but on admission had decreased to ten stone four pounds.

Mr. Holt considers that in the treatment of this case no operative procedure would have been justifiable, the stricture being of a cartilaginous character, and extending from about half an inch from the meatus to the neck of the bladder. Mr. Holt has never had a case (although a great number come under his care) where it has been necessary to perform any other operation than the gradual introduction and increase in the size of the catheter or sound. He believes that when patience and the most gentle means are had recourse to in the treatment of stricture, no case is impassable, or will not yield to the treatment of dilatation; and that the disease will not recur any more frequently (if so frequently) as when operative procedure is employed. The most Mr. Holt considers it necessary to inculcate is the re-introduction of the catheter once or twice a year, and this is more as a precaution, and to satisfy the surgeon that the canal remains patulous.

The next case refers to a patient who suffered from a stricture of twenty-six years' duration. He is aged 52, and was admitted May 7, 1850. This man had three attacks of gonorrhœa, averaging two months' duration, and not attended with severe inflammatory symptoms; twelve months after the last attack he experienced difficulty in micturition, and his urine was propelled in a forked stream. His bladder became irritable, the efforts to relieve that viscus were very frequent, and the stream considerably diminished in size, yet he neglected to seek professional assistance until compelled by retention of urine. It was then found impossible, by the gentleman under whose care he was, to overcome the obstruction by the introduction of the catheter. Opium and the warm bath were had recourse to, and with apparent benefit, for he passed a small quantity of urine. The uretha,

however, gave way in the course of the next day, and the penis, perinæum, and scrotum became the recipients of the infiltrated urine. Free incisions were made for its escape, poultices applied, and a stimulating plan of treatment adopted; in the course of two months, the man's health, which had been materially interfered with, became improved, but all attempts to introduce the catheter were futile, and he was recommended to go into the country for a short time. Upon his return, finding himself but little improved, and having two fistulous openings in the perinæum, he was admitted under the care of Mr. Holt.

The same preparatory treatment was adopted in this case as in the former, and at the expiration of two days an attempt was made to introduce the No. 1 catheter. It entered the stricture, but could not be passed into the bladder, and Mr. Holt was content, upon a first trial, with having brought the point of the instrument within the orifice of the stricture, the uretha being of the most irritable kind. No further interference was had recourse to until the expiration of three days, when the same instrument was again introduced, and with somewhat better success. Upon a third trial it passed the first obstruction, but became entangled at a second. The latter was, however, after three weeks' perseverence, (only the most gentle means being used,) overcome and the instrument glided into the bladder. A sound, instead of a catheter, having been introduced, it was necessary that it should be withdrawn, and as it was not desirable to create too much irritation by a second passage of the instrument, no further attempt was made for three days, when, after considerable difficulty, a gum-elastic catheter was introduced, and secured in the usual manner.

The difficulty had principally arisen in consequence of the flexibility of the instrument employed, it not being sufficiently firm to be accurately guided along the canal. The catheter was allowed to remain two days, and having become perfectly loose, was removed, for the purpose of introducing a larger one; but in this, as happened in some other cases, the larger instrument would not pass, and sooner than create undue irritation, Mr. Holt preferred leaving the catheter out, and proceeding in the ordinary way, by gradual dilatation, and beginning at the lowest number. The same sized instrument was again introduced after a short interval; and about six weeks after the first introduction into the bladder, No. 8 passed with facility. The fistulous openings are rapidly-healing, the man's appearance and general health are materially improved, and he passes his urine in a good stream.

Mr. Holt, in some remarks which he made on these cases, stated, that with regard to Mr. Syme's advocacy of dividing a stricture, through which a catheter can be passed, he considered that in 999 cases out of 1000 this operation is not only unnecessary, but perfectly unjustifiable. Mr. Holt has never seen or had a case under his own care through which he could not get an instrument; and having passed it once fully through, he could proceed, with occasional interruptions, until a sound, the natural calibre of the uretha, was easily admitted into that canal. Mr. Holt thinks that if patients and surgeons will not have the *patience* to overcome the manifold difficulties in the treatment of stricture, the latter will of course operate; but as he considers the same end may be obtained by much less objectionable means, he never would advocate an operation that must necessarily be attended with considerable danger. Mr. Holt thinks Mr. Syme's statements quite correct, with regard to the case mentioned by that gentleman, where a catheter was retained in the bladder, until No. 8 could be passed with facility, and then withdrawn, the patient in a few days being as bad as he was before; but if Mr. Syme had gradually left off the introduction of the catheter, as Mr. Holt did in the first of the above-mentioned cases, he (Mr. Holt) would venture to assert that no such result would have taken place, but that the patient would, after three weeks or a month, have been enabled to have a larger size passed instead of recurring to his original condition.—*Lancet.*

Removal of the Head of the Femur.—Ann Sugg, æt. 13, fell over a skipping rope about three years ago, and received some slight contusions about her left hip; inflammation of the joint followed:

she was unable to use the limb, and suffered a great deal of pain in the knee. About a year after the accident she was able to limp about, but could only get the *toes* of her left foot to the ground, as she was unable to extend the knee or hip joints. In a few months abscesses formed around the hip, and burst; and for the last seven months some of them have remained open.

June 6th, 1850.—Admitted into St. Bartholomew's Hospital in an extremely emaciated condition, and nearly worn out with suffering. The left femur was dislocated on the dorsum ilii, the limb shortened, and the leg and thigh flexed: there was a large ulcerated surface over the trochanter major, through which the bone threatened to protrude, with burrowing sinuses in the neighborhood discharging pus freely. After being in the hospital a few weeks the child gained a little flesh, but she has lately fallen off again, not being able to stand the pain and continued discharge of matter from the wound. It was considered that removing the head of the bone would give the patient the best chance of recovery; and the operation was performed on August 17th, by Mr. Skey, the patient being under the influence of chloroform. As the end of the bone was only thinly covered with granulations, a very little cutting sufficed to expose it; this being accomplished, the limb was carried inwards, and the bone divided with the saw just below the great trochanter.—The granulations bled freely on being cut, but the hæmorrhage soon ceased, and no ligatures were required. The integuments were too firmly adherent to the parts beneath to admit of being drawn together; the wound was therefore left open.

The acetabulum was found to have been enlarged by absorption, and was extended in a direction upwards and backwards, as if an attempt had been made by nature to form a new joint in this direction. The head of the femur had been entirely absorbed; a portion of the neck remained, which, with the great trochanter, was the part removed: on dividing this with the saw it was found to be soft, and composed of vascular cancellous structure, with a very thin outer layer of compact bone.

Inguinal Aneurism: Suicide by Puncture of the Tumour.—Mr. Miller, of Edinburgh, narrates the case of Robert M'Kenzie, who was the subject of inguinal aneurism. When admitted into the hospital he expressed an urgent desire to be operated upon, seeming terrified lest the aneurism should burst. He was, however, in such a condition as precluded surgical interference at the time, and a sedative treatment was adopted for the time. Under this he improved, and a day was named for applying the ligature, but in the night preceding a hurried message was sent to the effect that the aneurism had burst. On Mr. Miller's arrival the man was dead, lying in a pool of blood. The tumour was collapsed, and near its centre a small aperture was seen. Enquiry elicited that the man had gone quietly to sleep at the usual time, but about one awoke up in a state of phrenzy, and dashing an eight ounce bottle against his head until blood flowed profusely from the wound. This was put an end to, and he again appeared calm. After remaining quiet for a short time he was heard to get out of bed and search his pockets. He got into bed and lay down. About half-past two a patient in a neighbouring bed awoke, and looking at the man, heard a noise of fluid trickling on the ground, and thinking that he was purposely wetting the bed, called the nurse. It was then ascertained that he was bleeding, and the house surgeon promptly checked the hæmorrhage by pressure. The patient continued violent, and at length fell into a fatal syncope. It was discovered that he had bored a hole into the aneurism with a corkscrew.—*Edinburgh Monthly Journal.*

Case of Spina Bifida treated by Ligature and Excision of the Sac. By J. B. Moxon, Esq., Surgeon.—A female infant, one of twins, was born with a tumour in the lumbar region, which presented all the appearance of spina bifida. It was about the size of a small egg, translucent, and evidently full of a clear fluid; its form was globular, and its base narrow. The infant was, in other respects, healthy and lively, and there were no symptoms of any lesion of the spinal cord.

The parents were desirous that the tumour should be removed, and after he had warned them of the probably unfavourable result of an operation, Mr.

Moxon acceded to their request. The operation was performed on the 21st of April, 1849, the infant being four months old.

A needle, armed with a strong double ligature, was passed through the neck of the tumour, on a level with the surrounding skin, and tied tightly each way. In this manner the operator hoped at once to close the passage which led into the cavity of the spinal arachnoid, and to glue its sides together by the inflammation caused by the pressure of the ligature. A stroke of the scalpel a little above the ligature was sufficient to remove the sac. There was little or no bleeding, and no oozing of the spinal fluid. Dry lint and strapping were applied.

The dressings were removed on the 24th, when it was found that there had been no oozing of the spinal fluid, but that the ligatures had not been sufficiently tight to cause the death of the remaining part of the sac. Mr. Moxon therefore cut it away, and dressed as before. The child appeared to be quite well.

At the next dressing a little clear fluid escaped from two almost invisible openings on the surface of the small sore, and the mother had noticed that the dressings and bandages had been wet during the two or three previous days. The child continued quite well. He touched the surface of the sore with the nitrate of silver, and dressed as before.

A further escape of fluid, in smaller quantity, took place for a few days, but another application of the caustic was sufficient to cause the complete cicatrization of the wound. Since that period the child has been in good health.—*Lancet.*

Inverted Toe-nail.—The idea, now almost established, that the fleshy part of the toe, not the nail, is in fault in this affection, was confirmed in our cases. Four were entirely cured without any operation on the nail, by the introduction of lint covered with cerate, and the use of rest and emollient poultices, or water-dressing, aided perhaps by adhesive straps, to draw the nail from the inflamed part.

One case presented of very obstinate disease at the root of the nail itself, which was extracted three times without more than temporary benefit.—*Notes of Hospital Cases, by Dr. Hartshorne, in American Journal of Med. Sciences.* Jan. 1850.

MIDWIFERY.

On the Entrance of Air by the Open Mouths of the Uterine Veins considered as a Cause of Danger and Death after Parturition.—At the meeting of the Westminster Medical Society, held on Saturday, March 25, Dr. Cormack read an elaborate paper illustrated by experiments and cases.

The paper consisted of three parts:—1. The various effects caused by the entrance of air into the veins, and the appearances found on dissection. 2. Statement of facts proving that the entrance of air by the open mouths of the uterine veins may cause dangerous symptoms, and even death. 3. Suggestions as to the prevention and treatment of such accidents after parturition; with remarks upon the precautions required in injecting the uterus after delivery for uterine hæmorrhage. The opinion that the entrance of air into the uterine veins might be a source of danger and death after parturition, had been enunciated by Legallois in 1829, and subsequently by Ollivier; it had likewise been supported by Dr. Cormack in his "Graduation Thesis," published at Edinburgh in 1837. Dr. Cormack had attended cases in which air had been drawn into the womb after delivery by the sudden relaxation of the organ, and occurrences of this kind he supposed must be frequent. Dr. Cormack quoted Dr. Meigs' very graphic description of the way in which air was often drawn in and then expelled with noise by the womb after delivery. Dr. Cormack wished to prove that if any impediment existed to prevent the exit of the air which had been drawn in, it must, when the uterus acted, be thrown into the large orifices of the uterine veins, provided they were not secured by coagula or by the apposition of their parietes from contraction of the organ. He also showed, by anatomical facts, and by referring to the experiments made by Dance, that the communication between the cavity of the womb and the current of blood in the vena cava inferior was

direct and easy, and that air once introduced into the uterine veins must soon be carried to the right auricle of the heart; there—if in sufficient quantity—to cause frothing of blood, aeriform distension of the right side of the heart, obstruction of the pulmonary artery, and congestion of the pulmonary capillaries. Cases of this kind had actually taken place. One had been published by Lionet, and another by Wintrich. A case had also been published by Dr. Bessems, in which air had been thrown accidentally into the uterine veins when injecting the uterus to arrest hæmorrhage. The woman died suddenly with symptoms of suffocation, and the right side of the heart was found distended by air. Dr. Cormack showed, by a detail of experiments which he had performed, and also by cases, that the entrance of air into veins, even in considerable quantity, was not necessarily fatal. A case communicated by Sir B. C. Brodie to Dr. Cormack illustrated this fact. The general treatment for uterine hæmorrhage, by inducing contraction of the uterus, also the plugging, would be the means by which the entrance of air into the uterine veins would be prevented. Should the accident occur, and the circulation and respiration become affected, and asphyxia be imminent, it would be necessary to unload the heart and pulmonary capillaries, by taking blood, following up the advantage so gained by aspersion of the face with cold water, the application of stimulating embrocations, sinapisms, &c., and the internal use of various stimuli. Dr. Cormack stated that in a case which he had watched for hours after the accidental entrance of a large quantity of air into one of the veins of the neck, no advantage was got from stimuli till the heart was somewhat relieved by venesection. This is the case which occurred at Barnes in 1848, and an account of the inquest on which appeared at the time in the Lancet. In some cases, little or no treatment might be required. If the air was in small quantity, it would be absorbed, if the patient survived a sufficient time, and no bad consequences might ensue. At the same time, in some animals experimented on, Dr. Cormack found that though they recovered from the immediate danger they ultimately died from pneumonia. The cases mentioned by Dr. Simpson, in a communication to the late Dr. John Reid, and published in his collected Memoirs, were examined, and stated to belong to a different class from those of Bessems, Lionet, and Wintrich.

Letters were read from Dr. Collins, of Dublin, and from Dr. Lever, of London, to Dr. Cormack. The former knew of no cases of death from air entering the uterine veins; the latter had seen three.

In the discussion which followed, several fellows took part.—*Prov. Med. & Surg. Journ.*

Intra-Uterine Crying.—[To the Editor of the Prov. Med. and Surg. Journ.] Sir,—It has often been doubted whether the fœtus can utter a cry in utero. So clear a case of the kind happened near your residence on Friday last, that it occurred to me you might choose to record it in your Journal: if so, my notes are at your service.

November 30, 1849.—I attended Mrs. Beck, of Lowesmoor, in her accouchement of her third child. Much of the liquor amnii had escaped some hours before I saw her. Her pains were very severe, owing to the large head of her male child. About half an hour prior to his birth, nurse Arrowsmith and myself, sitting by her bed side, distinctly heard (which, indeed, I have heard before) a sound produced by the overwrapping from pressure of the frontal and parietal bones. Shortly after this we heard a faint cry of the infant. This was repeated the louder in a few seconds; the mother and her mother-in-law distinctly heard the pining cries. The nurse remarked upon it first, saying she would not have believed such a thing had she not heard it herself. The head was then passing the superior aperture of the pelvis, and was extruded from the vagina in less than half an hour. As at her former labours, the placenta was retained, till, getting no uterine aid, and a frightful hæmorrhage taking place twice, I passed the hand, detached and withdrew the placenta. I remain, Sir, yours very truly,

E. A. Turley, M.D.

Ivy House, Worcester.

MATERIA MEDICA AND CHEMISTRY.

Iodine in Fresh-Water Plants.—The improvements of modern chemistry have thrown no inconsiderable light on therapeutics, by showing that many of our old and best popular remedies owe their value to certain substances, the action of which, in a simple state, is well determined. Thus it has long since been shown that the active properties of burned sponge are due to the iodine which it contains, and it seems probable that many other remedies of a similar kind derive their efficacy from the presence of the same substance in them.

Mr. Lindlay, I believe, was the first who pointed out the existence of iodine in water-cresses. A French botanist, M. Chatin, has confirmed this fact, and, moreover, shown that iodine, in greater or lesser quantity, forms an element of all fresh-water plants. M. Chatin has likewise ascertained,—

1. That plants growing in running streams, or in water agitated by the winds, contain more iodine than those which inhabit stagnant waters.

2. That the proportion of iodine is very small in those plants which are imperfectly, or for a short time, submerged.

3. The proportion of iodine in fresh-water plants does not appear to depend on the nature of the plant itself, or on the place it occupies, in the natural order of vegetable bodies.

From the quantity of iodine contained in water-cresses, the author concludes that the popular idea of their usefulness in cases of phthisis, scrofula, &c., is well founded. The plant which grows in running streams has ever been more esteemed than those which are produced in marshy situations; and here, again, the popular notion is confirmed by chemical research. Conium, also, is a plant which contains a considerable proportion of iodine, and its anti-scrofulous properties have been extolled by physicians of the old and modern school. Amongst the latter may be named M. Trousseau, who considers it a remedy little inferior to the cod-liver oil in scrofula.—*L'Union Médicale.*

On the employment of Ergotine in External and Internal Hæmorrhages. By M. J. Bonjean, *Pharmacien, Chambery.*—Ergotine when applied to wounds has the property, M. Bonjean states, of facilitating their cicatrization and moderating inflammation of the wounded tissues. Under its influence union takes place by the first intention, and cicatrization occurs without further assistance.

In certain cases ergotine may perform all the offices of the ligature. M. Bonjean enumerates the following circumstances attendant on a capital operation in which its employment is indicated:—

1. When, in order to arrest a hæmorrhage, it would be necessary to disturb the lips of a wound in which cicatrization is commencing.

2. When the patient manifests a tendency to gangrene of the cut surfaces.

3. When the source of the hæmorrhage is from vessels embedded in the inflamed and swollen tissues.

4. When the blood flows from many small arteries of which the orifices cannot be perceived.

5. When hæmorrhage occurs from the sloughing of an eschar, as in gunshot wounds, &c.

In these difficulties the application of ergotine is as often efficacious as the use of pressure is ineffectual. The application of ergotine supersedes ligature of the arteries, and effects cicatrization without interfering with the permeability of the artery.

The mode of employing ergotine is to dissolve it in five or six times its weight of water, for ordinary wounds; and in three or four parts, or even in a concentrated form, for more serious hæmorrhages. A portion of tow or lint is to be moistened with the fluid, and applied with gentle pressure to the surface previously wiped. When the hæmorrhage does not return on the pressure being removed, another pledget moistened with the solution is to be laid over the former, and the limb bandaged as usual. Perfect rest is to be observed.

Internal administration.—Ergot of rye has been successfully employed—

1. As an excitant of uterine contractions.

2. As a stimulant to the muscular system in general.

3. In hæmorrhages and certain fluxes.

4. In congestion of the uterus.

5. As a stimulant to the nervous system.

The latter poisonous effect of ergot of rye is due, according to M. Bonjean, entirely to its fixed oil. The preceding properties are due to the *ergotine* alone.

Simple extract, or ethereal tincture of ergot, both contain a portion of its poisonous principle. Pure ergotine is in the form of a solid extract of a deep brown colour. In thin laminæ it presents a blood-red colour. It has the odour of roast meat. Its taste is bitter. It is perfectly soluble in water, and this solution yields neither oil nor resin when heated with ether.—*Gazette Médicale.*

Kousso a New Remedy in Tape-worm.—Dr. Budd has been giving trial to this remedy in King's College Hospital, and reports two cases. The first was that of a woman aged 41. A week after admission she took kousso at ten A.M. The worm passed in the evening.

In the second case pomegranate bark, turpentine, &c., had been previously exhibited. She took the drug at nine A.M. and an immense tape-worm passed about two P.M. Its action is mild, without griping.—*Lancet.*

A third instance is recorded in the Lancet of June 1, by Mr. Armstrong, of Ware. The patient had tried numerous anthelmintics. but none succeeded. He took a single dose of kousso, for which he paid a high price, at seven A.M. In three hours the entire animal, fifteen feet long, was passed.—*Prov. Med. and Surg. Journal.*

Chloroform in a Case of Poisoning by Strychnine. By A. W. Munson.—Mr. G——, aged about 40, of intemperate habits, took, from among my medicines, on the 5th inst., a bottle of strychnine, and supposing it to be morphine, as he said, swallowed a dose supposed to be about one or two grains. In about twenty minutes afterwards I was requested to see him, as he was supposed to be in a "fit." I found him in the following condition. The whole muscular system rigid; the muscles of the back, and of the upper and lower extremities, rigidly contracted; the head drawn back; articulation difficult; sense of tightness about the chest, perspiration flowing profusely from the face and chest. A number of the physicians of the place came to his assistance. The usual remedies recommended in such cases were resorted to, but without any mitigation of the urgent symptoms. The patient was failing rapidly under the increasing spasmodic action of the whole muscular system. It was now determined to administer chloroform, as death was apparently certain without some relief. One drachm of chloroform was put upon a silk handkerchief, and the patient directed to inhale it. The effect was decisive. The patient (who was at this time in a sitting posture, held so by assistants, who could not move him in the least degree without exciting the most frightful and alarming spasms) requested to be placed in a recumbent position, which was done without exciting the least spasm. The chloroform was carefully administered for some hours, the patient holding the handkerchief most of the time himself, in order, as he said, "to keep off the dreadful spasms." From this time he recovered rapidly, and on the 7th inst. was able to leave for home, a distance of six or seven miles."

In the Western Lancet and Hospital Reporter for February, 1850, published at Cincinnatti, Ohio, there is a similar case reported, which is the only one that I know of in which chloroform has been given in case of poisoning by strychnine. Is it not possible that chloroform is the remedy in such cases?—*Boston Med. & Surg. Journal.*

MEDICAL JURISPRUDENCE.

A case of Poisoning by Corrosive Sublimate. By Beni. W. McCready, M.D., *of New York.*—I was called on Friday, Dec. 28, about 11 P.M., by my friend, Dr. G. O. Gunn, to see with him a young woman who had poisoned herself with corrosive sublimate. According to the account of the family, she had taken tea with her father and brother as usual, between six and seven o'clock in the evening, and immediately afterward had retired to her own room. Abont ten P.M. her brother going up stairs had his attention attracted by the noise she made in her room, and on entering it he found her vomiting and retching violently. On being questioned, she stated that immediately after tea she had poured out a cup full of an alcoholic solution of corrosive sublimate, which

was kept in the room as a bug poison, and had swallowed the whole of it. The solution was of the strength of a dram of the salt to half a pint of alcohol, and as she had swallowed about 3 oz. of it, she had consequently taken about 22½ grs. of the poison. Dr. George O. Gunn was immediately sent for. The vomiting was encouraged by draughts of warm water, and a bowl full of white of eggs was prepared and administered, though from the length of time that had elapsed since the poison had been taken, and the copious vomiting that had since occurred, Dr. G. did not hope for much good effect from their employment.

I found the patient exceedingly restless, with a cool skin, an anxious countenance, and a frequent feeble pulse. She made no complaint, but when questioned said that she had a burning pain in her stomach, and that she found a good deal of difficulty in swallowing. There was great thirst, with retching and vomiting. The tongue was pale, but there were some bright red spots, with a well defined margin, in the posterior fauces. A full opiate was ordered with ice and diluent drinks, together with hot fomentations to the abdomen.

On Saturday, to our surprise, Dr. G. and myself found her with a pale but tranquil countenance, the pulse about 90 and of good volume, the skin cool, and the thirst abated. She had two stools during the night, feculent, but containing a little blood. Simple diluents were continued, and it was agreed to administer opiates according to circumstances.

From this time (Saturday), I did not see the patient again until the following Friday, Jan. 4th. According to Dr. Gunn, she had slight dysentery during Sunday and Monday, having each day five or six mucous passages with a little blood. From this time she had but one stool a day. On Monday suppression of urine occurred, and from Monday till Friday the patient passed no urine at all. The catheter then having been introduced, Dr. G. drew off less than four ounces of somewhat turbid urine. Her skin remained during the whole time cool, and the pulse was never above 90. During Monday, Tuesday, and Wednesday the patient did not vomit, but on Wednesday evening she ate, through the injudicious indulgence of an attendant, two tea biscuits, and from this time vomiting recurred, consisting chiefly of the fluids drunk, mingled occasionally with a little dark grumous matter. The patient made no complaint, but appeared to become weaker. She slept a good deal, but was easily roused, and occasionally seemed to wander slightly in her mind. Her gums had become somewhat swollen and there was slight salivation. I found her with a dull and listless expression of countenance and a feeble pulse, about 90 in a minute. She made no complaint on firm pressure being made over the abdomen. There was frequent vomiting and great prostration of strength. On the following day she died.

A post-mortem examination was made twenty-four hours after death by Dr. Holmes, the assistant of the coroner. The abdomen alone was opened, and even of this the examination was very imperfect. Externally the stomach, the small and large intestines appeared very minutely injected with blood. The bladder was contracted and contained no urine. I obtained from Dr. H. the stomach, a portion of the ascending colon, and the kidneys. The stomach was much injected, the mucous membrane softened, and in spots slightly eroded. The portion of the colon was vividly injected, the mucous membrane thickened, and between the longitudinal bands there were a number of well-defined rounded ulcerations with elevated edges, about the third of an inch in diameter, and extending completely through the mucous membrane. One kidney was much enlarged, and presented evidences of slight congestion. On the surface of the other kidney several serous cysts had been developed, causing atrophy of its proper substance. One of these cysts had burst and had separated extensively its capsule from the kidney; turbid serum with a white curdy matter escaping when the capsule was cut into. The other cysts on being opened were found to be filled with a similar matter.

The case is note-worthy on several accounts.

1st. The general symptoms bore no relation to the amount of local disease. After the first few hours, the pulse was moderately full and not above ninety, and the temperature not unusual. This

might be connected with the state of the blood after the occurrence of the suppression of urine, but it was present previous to the coming on of the suppression.

2nd. The amount of inflammation and ulceration of the large intestines was such as occurs commonly with severe dysentery, and yet the dysenteric symptoms were slight, much slighter indeed than commonly occur in cases of poisoning by corrosive sublimate.

3rd. Suppression of urine continued from Monday until Saturday, the day of her death, and yet the patient retained her senses and was easily roused, exhibiting no sign of cerebral disturbance except slight drowsiness and some tendency to wandering.—*Transactions of the Medical Society of the State of New York.*

Death of a Child by Sinapisms applied in mistake.—Dr. Ameuille mentioned, at a late meeting of the Société Médico-pratique, of Paris, the case of a little girl, six years of age, who, after an attack of eruptive fever, had swollen glands on each side of the neck. On the right side resolution soon came on, but on the left the swelling increased, and became painful ; a linseed poultice was ordered, and a mustard one applied by mistake. The child screamed and complained bitterly, but was obliged to keep on the poultice for three hours; two successive sinapisms were applied after this, and the error was only discovered towards the evening. Frightful suppuration and gangrenous inflammation came on, reaching down to the sternum ; the muscles, nerves, and vessels of the part were laid bare ; and the child sunk in spite of the most active and appropriate treatment, after having rallied a little while just before it expired. This may serve as an additional warning even in cases where sinapisms are ordered, and knowingly applied. Some members said that mustard poultices should not be left on children more than ten or twelve minutes. We would say not more than five or six.—*Lancet.*

Arsenical Poisoning followed by Gangrene of the Lower Extremities.—The following case, reported by M. Forget, is extracted from the *Gazette Médicale* :—A man, aged 63, who had been accused of rape, attempted suicide by swallowing 60 grammes(15 drachms) of arsenic. This took place at ten P.M. In an hour he vomited and purged copiously. Finding death tardy in its approach, he threw himself into the Rhine, whence he was fished up and taken to the civil hospital at eight A.M. next day, nine hours after swallowing the poison. He was in a state of imminent collapse. Peroxyde of iron was given with stimulants, and in two hours some reaction took place. By noon he was feverish, vomiting and purging continued. The iron was now suspended, and leeches were applied to the epigastrium. The next day the effects of the poison were dissipated. Towards evening, however, the man complained of acute pain in the right leg, and in the course of a few hours the toes became cold. Leeches were applied in the course of the artery, followed by stimulating embrocations, but mortification ensued, and as it showed a tendency to a check below the knee, amputation was performed ten days subsequent to the poisoning. The operation did not prove successful, gangrene attacked the stump, and the man sunk ten days after amputation, and twenty after the attempt at suicide.

The Editor of the *Archives Générales* remarks upon this case, that it is deserving of notice as an instance of recovery after an enormous dose of arsenic, and wonders whether the gangrene was spontaneous or in any manner induced by the arsenic. It would be more feasible to consider it either entirely accidental or as induced by some injury received during the attempt at drowning. —*Prov. Med. & Surg. Journal.*

MISCELLANEOUS.

William R. Wilde, vs. *Messrs. Hodges and Smith.*—Mr. Drury opened the pleadings. This was an action of assumpsit upon an award bearing date the 30th of October, 1849, by the arbitrators, who awarded that the defendants were to pay £400. The defendants pleaded the general issue, and the damages were laid at £500.

Mr. Fitzgibbon, Q. C., (with whom was Mr. Whiteside, Q. C.,) stated the case. The plaintiff, Mr. Wm. Robert Wilde, was a gentleman well known by

the eminent position which he held both as a literary man and as a surgeon, and in the year 1845 Dr. Wilde was applied to on behalf of the defendants, by Dr. Stokes, to act as the editor of *The Dublin Medical Journal*, which had been up to 1845, conducted under the superintendence of Drs. Graves and Stokes, and afterwards by Drs. Hamilton and MacDonnell, but the latter in that year left the country. It was not necessary to trouble the jury with the negociations that led to the ultimate agreement, to the effect, that Dr. Wilde was to act as the editor, to be paid £100 a year, and if the profits admitted he was to get an additional £100 a year, to be applied, according to his discretion, in paying for contributions to the work. The agreement was reduced to writing, and the writing remained with Mr. Smith.—From the time the plaintiff entered upon his duties as editor, he was enabled to bring the journal into a position which reflected much credit upon the source from which it emanated, and upon the publishers; but Dr. Wilde never received a shilling, although he had spent upon the work a great deal of his valuable time and his money, and at last he thought it time to apply for payment. This was in 1849, and then a long correspondence took place with the particulars of which he need not trouble the jury, but would call attention to two or three letters to show the position in which the parties now stand. One of these was a letter from Mr. Smith, dated Wednesday. It had no further date, but the context showed the period at which it was written:—

"My Dear Wilde—Your note of last evening I received this morning, and take the earliest opportunity of answering it, although I hate letter writing; and those you wrote and require to be answered tend to no good, but, on the contrary, tend to create feelings that ought not to exist between friends.

"There can be no doubt at all but that McGlashan, (if he will undertake it) is perfectly competent to adjudicate on the matter; and I have no doubt at all but that he will decide with strict impartiality.

"I see no object in complicating the matter by a debtor and creditor account of the journal. That we are largely out of pocket by it is quite clear; and it seems to me that the principal thing to be inquired into is, have we been put to expenses that we ought not? This is, of course, assuming that there was nothing contingent on profits relative to the £100 per annum in the agreement, which I cannot but think must have got mixed amongst your papers; for surely if I agreed to give the cash, it is I who should write the agreement and you should have it; but Dr. Stokes says he is almost sure that it was you who wrote it. I cannot say one way or other.

"As you pass I wish you would look in. I want to ask you a question relative to illustrations, &c., that have been charged against us on account of the journal; but I will not ask the question on paper, as it would lead to another letter, and for both our sakes I am anxious to have done with letter writing.

Yours truly, George Smith."

The points of defence were adverted to in the letter, for the defendants say that they were put to unreasonable expense—that the manuscripts were not properly corrected in the first instance, and that there were illustrations inserted which ought not to be charged against them. As to the £100 a year, that was to be paid absolutely, whether the journal proved profitable or the reverse, and the contingency only applied to the second £100 a year, which was intended to recompense the editor for the expense incurred in procuring contributions. The jury would observe that this letter suggested to leave any matters in dispute to a gentleman perfectly competent to decide upon them, and described as perfectly impartial. Counsel then read another letter from Mr. Smith, in which he mentioned that Mr. Clibborn had consented to become an arbitrator, and expressed his belief that matters would be easily settled, as the two arbitrators would "do even-handed justice to both" parties. Counsel then read the written nomination of the arbitrators, and the consent to abide by their decision. The arbitrators proceeded with their inquiry—they gave ample opportunity to both parties to bring forward all matters which they desired to have investigated, and made the following award, drawn up in the handwriting of Mr. Clibborn:—

"We, the undersigned arbitrators, in the case submitted to our consideration by Mr. Wilde and Messrs. Hodges and

Smith, having taken into our consideration all the papers referred to us, and the explanations given by both the parties above-named, do make the following award:—

"That we consider Messrs. Hodges and Smith will be indebted to Mr. Wm. Wilde, on the publication of the 16th number of the *Dublin Medical Journal*, in the sum of £400 that being the amount claimed by Mr. Wilde as the editor of that publication for the four years ending on the publication of the 16th number.—We do not award any interest as due on any part of this sum, it not appearing to us that any claim was made for interest, nor does it appear that any offer was made to pay interest or any part of the principal sum stated above at any time, Mr. Wilde not having required a settlement from Hodges and Smith before his note of 10th October.

"As to Messrs Hodges and Smith's claim for deduction on the score of illustrations used in the journal, we award no deduction whatever from the above principal sum of £400. Though we are quite aware that both parties originally intended, and their arrangements were made that there should be no illustrations in the journal, yet it appears that there was repeated leave given to use illustrations, and generally a conceding on the part of Hodges and Smith to the wishes of the editor, so that the arbitrators find it impossible to say how much, if any, latitude was taken by the editor in the use of illustrations. As Hodges and Smith have not in any instance declared their intention to charge the illustrations in whole or in part on the editor, the arbitrators feel themselves forced to give the editor the full benefit of their omissions in this respect. As to Messrs Hodges and Smith's claim for corrections against the editor, on the score that he did not exercise judicious economy in this respect, the arbitrators find that no limit having been fixed by the publishers as to the amount to be allowed for alterations on each number, they cannot allow that any sum should be deducted from the editor on this account, though they consider the sum expended on alterations a large one.

"As to Messrs Hodges and Smith's claim for certain numbers of the journal distributed to different individuals by the editor, the arbitrators award no deduction from the sum specified as due to him—viz., £400 as it appears to them that the distribution of the greater number of them was for the purpose of promoting the sale of the journal; and, as to the remainder of the journals so distributed, it appears to them that the editor acted under the impression that he was advertising the journal by the said distribution, and otherwise advancing the interests of that publication.

JAMES MCGLASHAN.
EDWARD CLIBBORN."

30th Oct. 1849

And on the same day Mr. Clibborn furnished copies of the award, without, however, the original signiture of the arbitrators—that enclosed to the plaintiff was accompanied by the following note:—

"114, Grafton-Street,
30th Oct., 1849.

Mr. Clibborn forwards to Mr. Wm. Wilde a copy of the award made by himself and Mr. McGlashan in the matter referred to. He also sends the papers put in by Mr. W. as evidence."

It was impossible to conceive an award more clear and distinct in all its parts. He regretted to see the defendants in court, and that they should be struggling against the just demand of Dr. Wilde, who had been on terms of great intimacy with them. There was now a part of the case to be adverted to which he referred to with very considerable regret. The award having been made and signed, was left in the hands of Mr. Clibbborn, to be delivered by him to the party in whose favour it was made, but having consulted with Mr. Smith privately, he closed his hand upon the original award and refused to give it up after it was a complete and perfect award, as the property of Dr. Wilde. Mr. Clibborn was bound by every principle of law and honor to deliver up the award, but not having done so, Dr. Wilde was compelled to file a bill against him and the defendants, charging them with collusion and the suppression of the award, and after coming into a court of equity they were compelled to deliver up the document and pay the costs of the suit. It was impossible for any man living to excuse such conduct. What had the defendants done since? Had they said that the award was a manifestly unjust one, and that they ought not to

pay any money on foot of it. No. They lodged in court £235. They had themselves selected here a gentleman perfectly competent to decide all matters in dispute, and having done so, and the award being completed, they thought fit to take the place of judges in their own cause, and say that they should cut down the plaintiff's demand to £235. Dr. Wilde had given a considerable portion of his valuable time for four years to a literary and professional labour, involving great responsibility. A contract had been entered into with Dr. Wilde, which had not been kept, and he was entitled to a verdict of £165., the difference between £400, and the £235, actually lodged.

Mr. James M'Glashan was then examined to prove the statement of plaintiff's counsel respecting the arbitration and the award.

Mr. Martley, Q. C., for the defendants, was proceeding to cross examine the witness, but the Chief Justice objected to this course unless counsel impeached the conduct of the arbitrators. If the objections were that the award was bad on the face of it, the court suggested that the case should be opened. After some discussion between the counsels of both sides and the bench, Mr. Martley submitted that the award was bad, so far at least as that part which described the sum paid for corrections to have been large.

Chief Justice—I do not agree with you; the arbitrators have come to a certain conclusion, and have stated very good reasons for having done so.

Mr. Martley—If the plaintiff takes a verdict upon the award, we have nothing further to say.

Chief Justice—I never saw a document, the internal evidence afforded by which exhibited more care, caution, and circumspection, and one based upon sounder principles of justice, than the adjudication of the gentlemen who made this award.

Mr. Martley—Your Lordship will direct a verdict for the plaintiff on the award, leaving us to move for a nonsuit.

Chief Justice—Yes.

Verdict for the plaintiff—damages £165, and 6d. costs.

Mr. Whiteside, Q.C., applied to the court to certify that the case was a fit and proper one for a special jury, as it was a case involving questions of literary taste and judgment, and requiring the consideration of men of ability and science, as amongst the witnesses would be gentlemen distinguished for their acquirements.

Mr. Martley, Q.C., opposed the application, and after a brief discussion,

His lordship suspended his decision as to granting the certificate.

Method of making Transparent Preparatione of the Spinal Cord.—Mr. Swan details the following process, which deserves to be more known on account of its simplicity, as well as effectiveness:—

The spinal cord is to be cut into pieces of one or two inches long, so that each may include all the roots of one or more nerves in each quarter. The dura mater is to be removed, and the nerves preserved as far as the ganglia. Each portion of the cord is then to be divided through the median line, and each half again between the appearance of the anterior and posterior nerves, so that there will be four quarters separated. As the roots of the nerves enter rather obliquely, it is necessary to cut off close to the nerves a somewhat triangular portion of each side of the quarters, so as to make the preparation a flat piece, containing the nerves and their continuation through the medullary and grey matter. The piece thus cut is to be placed on a glass slide, and dried before the fire on a plate covered with paper. In two or three days it is to be raised from the slide with a thin scalpel, and the soft matter underneath is to be carefully removed; it is then to be placed on a fresh slide, and gently pressed on this with the finger, and there remain until it is dry. When dry it is to be raised again from the slide and turned over, that any matter preventing the transparency may be removed; this is known by holding it from time to time to the light. This process of clearing is facilitated by moistening it with spirits of turpentine now and then dropped on it. If it had become uneven on the surface in drying, another slide may be pressed on it gently so as to flatten it; it may then be examined by the microscope, and any matter still obscuring it be removed. When it has thus been made sufficiently transparent, a little thick Canada balsam is to be smeared

on the under surface, and by means of the ball of a finger moistened with spirits of turpentine, pressed on the side so as to remove any vacuity or air-bubbles, which otherwise make the preparation uneven under the microscope, and give the idea of a membrane or some different substance intervening amongst the rest. The next day a small drop of Canada balsam is to be smeared over the surface of the preparation with a finger, and immediately after two or three drops of spirits of turpentine; and this process of applying the balsam and spirits of turpentine may require to be repeated two or three times for giving sufficient clearness, and guarding it from mould and atmospheric changes. Although it wants to be transparent, it does not require to shine as if it were varnished, and therefore the balsam and spirits of turpentine are directed to be wiped off with the finger.

Another preparation may be made by cutting off a portion of the surface of the spinal cord, with very short ends of nerves attached to it, and very little of the medullary matter underneath. It is to be dried, and treated like the other preparations, and when finished it will show the nerves very beautifully, as they are collecting themselves into fasciculi; and some parts of it will be found only a coarser representation of the more internal roots. Another preparation of a similar kind may be made by leaving the medullary surface uppermost, when nearly the whole of the medullary matter has been removed.—*Medical Gazette.*

Incontinence of Urine in Children.—By J. Simon, Esq., F. R. S.—Irritability of the bladder in children usually takes, with more or less completeness, the form of *incontinence of urine*: the child wets its bed. Whenever this symptom is presented to you, if you proceed to examine the urine (as in every such case you should do,) you may pretty confidently expect to find copious crystals of lithic acid. This condition of the urine in children is very far from painless; and in severe cases the symptoms cannot at first sight be distinguished from those of calculate. The child makes water very often, and a little at a time, doubles itself up, and cries with the pain of each effort, and pinches and pulls its prepuce, just as it would with stone in the bladder. The pain experienced is a severe scalding in the urethra, and sometimes this passage will be so much irritated as to inflame and secrete pus. There was recently a case under my treatment which, though not one of incontinence of urine (for it was in an audult,) will yet serve to show the manner of dealing with such inconveniences, generally as depend on the passage of crystals of lithic acid in the urine. The patient, W. M., aged 22, had for two or three years suffered occasionally with symptoms, which made it probable that he had a calculus lodged in his left kidney; but the immediate cause of his admission to the hospital was the circumstance of his then habitually passing lithic acid gravel, occasionally mixed with blood.—His urination was frequent and painful; his pulse was feeble, and he was of little muscular power; his skin acted fairly; his tongue was white and coated; his bowels a little constipated. I ordered him five grains of Plummer's pill every night till his tongue was quite clean, and then changed the treatment; giving him quin. disulph. gr. ii. twice a day, and potass. bicarbon. half a drachm, five hours after his chief meal. He left the hospital after a month's stay, quite free from uneasiness in his urinary organs, and materially improved in general health.

This case will illustrate the sort of treatment which I generally pursue in similar instances of chemical derangement of the urine. If the tongue is coated, and if (as is usually the case with children) the intestinal secretions are unhealthy, I give hydrarg. c. creta, or some other preparation of mercury, till that evil is remedied; I then commence the exhibition of alkalies, giving usually a single large dose daily, after the completion of the digestion of the chief meal of the day; and almost invariably I find it highly advantageous to give quinine twice a day during the same period. In my hands it has answered far better than any preparation of iron, and especially so in the combination I have mentioned. I give it usually before breakfast and before dinner, and the alkali, in copious solution, five hours after the latter meal. Extreme attention to the quantity, quality, and simplicity of the diet, is essential.

With this treatment you will seldom, I think, have occasion to resort to blistering over the sacrum, and other measures of a similar nature, which have been recommended for the cure of incontinence of urine in children.—*Lancet.*

Artesian Salt Spring.—According to Dr. Granville, a new Artesian salt-spring has just been opened at Kissingen, in Bavaria. The well is 1878 feet depth; and the water, at the rate of 100 cubic feet per minute, is projected to the height of 52 feet above the surface. Its temperature is 66°: and it is said to contain 3·25 per cent, of pure chlorid of sodium separable by evaporation. It issues from a bed of rock-salt, which has been penetrated to the depth of 138 feet. The rock-salt stratum is supposed to be 1000 feet in thickness.

British American Journal.

MONTREAL, OCTOBER 1, 1850.

Quackery in Montreal.—The hand-bill of a woman calling herself Madame Young, has been lately placed in our hands, and a more impudent attempt at imposture we have rarely witnessed. The wonder is to us, that such a thing is tolerated under the very eyes of the College of Physicians and Surgeons, which is invested with ample powers to suppress all such nuisances. "Madame Young can discern *all* diseases in every individual who will call, without any information on their part." We pity the poor devil who, in his own person, is a martyr to "all diseases," and we cannot but admire that consummate penetration which can read them all off at a glance. Madame Young talks of "common sense:" can she suppose that we are so bereft of it as not to perceive the glaring humbug which shines so conspicuously in the quotation which we have made from the hand-bill? Yet so it is:—no humbug is so transparent as not to be admired: no imposture so glaring as not to demand victims. Persuaded that there will be many of the latter class, we call the attention of the College to the facts submitted, and hope that our call will not be made in vain.

While on this subject, we have to observe that there are two or three quacks of the male gender in this city, who are deserving the equally tender attention of the College.

School of Medicine, Montreal, and M'Gill College.—In consequence of the proceedings of this School, during the last session of the Legislature, the privileges enjoyed by the School at the University have been withdrawn.—These privileges will be apparent by a reference to the agreement entered into between the two bodies, published in our last issue. Intending graduates are now warned by this announcement, based as it is on circumstances within our knowledge.

Dr. MacDonnell.—The city has already had to regret the departure of Dr. Badgley, for Toronto, an event which we duly chronicled. It has now to regret the departure, for the same city, of Dr. MacDonnell, formerly co-editor of this Journal, and lately Clinical Lecturer on Medicine in the University of M'Gill College. Certain legal proceedings, on a previous page, will prove his intimate connection with one of the first medical periodicals of the day. While in both cases we cannot but regret the loss which our own fair city has suffered, we cannot but congratulate the inhabitants of Toronto on the acquisition of men so well adapted to enhance its medical reputation.

Cod Liver Oil.—We have received from Messrs. Urquhart & Co. and from S. Jones Lyman & Co., two fine sam-

ples of Cod Liver Oil; that of the former being from the house of Langton Brothers and Scott, of London; that of the latter having been obtained from the Newfoundland firm of Bain, Johnston & Co. Both of these oils are of fine quality, and have presented, by appropriate tests, the usual characteristics. We have pleasure in recommending them to the notice of the Profession.

CORRESPONDENCE.

To the Editor of the Brit. Amer. Journal.

Mr. Editor,—Please insert the following communication in your ensuing number if you think it will be acceptable to your numerous readers.

Dr. Bibaud, in his remarks to Dr. Davignon, M.P.P., has thought fit, with his usual politeness, to vaunt my urbanity and affability; for which, certes, I am exceedingly thankful to him, as I doubtless merit the compliment. But it grieves me to observe that he has made a very great miscalculation as to the object which he had in view by so doing. His remarks would lead one to suppose that among the members of the Medical Board there were some whose aim was corruption, and others who could be corrupted—*assertions which I most stoutly deny.* During the last three years I had the honour of being one of the thirty-six Governors of the College of Physicians and Surgeons of Lower Canada, which constituted the said Medical Board, and on no occasion during the whole of that period did I hear of one being capable of such baseness. On all occasions, the discussions were open, and conducted in a most respectful and courteous manner. If my memory serve me rightly, Dr. Bibaud must recollect that at a special meeting which was held about two or three years ago, in the Library of the School of Medicine, a discussion arose for the first time between the members of M'Gill College and those of the School of Medicine, on which occasion I strongly advocated a multiplicity of medical institutions as being a means of engendering more competition among teachers, which would lead to more zeal in communicating knowledge to students, and as affording to the latter more latitude in the choice of teachers. These sentiments I do still entertain.

If, at the meeting of the 14th June last, I refrained taking part in the discussion, it was certainly, as Dr. Bibaud remarks, through prudence and delicacy, being nonconversant with the wishes of one party and with the reasons for opposition of the other. Dr. B. says that had I remained he would have made me perfectly *au fait* with the subject of dispute—a fact which I cannot doubt; but when I observed quarrelling among the members of the same family, and that passion might be mixed up with it, I conceived it more prudent on my part to retire, rather than expose myself to take part with either side, without being conversant with the outs and ins of the subject matter in dispute. As to the part which Dr. Valois might or might not have taken, had he been at the meeting, I cannot answer; but this I know, that he did receive a notice to attend, and that in good and sufficient time; but his avocations would not permit him then to absent himself from home.

I have the honour to remain,
Mr. Editor,
Your obedt. servant,
T. Kimber.

Chambly, Sept. 7, 1850.

To the Editor of the Brit. Amer. Journal.

Sir,—A Country Practitioner may very well afford to drop the discussion with Verax, and leave the question of right or wrong—of truth or falsehood—to be decided by those who have taken the trouble to read the correspondence. In the letters of the former there is something like argument—something like proof; in the latter, nothing of the kind. The Practitioner has appealed, for instance, to Drs. Widmer, King and Hodder, in support of his assertion that the College party was the cause of the failure of the movement of 1846–7; and as the sympathies of these gentlemen must, from the circumstance of their connection with that institution, be strongly enlisted on the other side, their silence may fairly be construed into an admission of the truth of his statement. On that occasion, Messrs. Gwynn, Beaumont, Sullivan, and Dr. Herrick acted in unison, forming together a majority of the Medical Faculty of the College, and, notwithstanding the most extravagant concessions made in their favour by the delegates of the Medico-Chirurgical Society, they managed, after months of procrastination, to quash the proceedings in detail. Verax admits tardily that "one or

perhaps two" of the functionaries of the College "may have interfered with these endeavours"; let him disprove the foregoing statement by respectable authority if he can. The petition sent to the Legislature in 1845-6, in opposition to the bill brought forward by Mr. Sherwood (with the concurrence of the Medico-Chirurgical Society) was signed by Messrs. Beaumont, Gwynn and Sullivan, members of the Medical Faculty of the College; the movement originated with them, and the petition itself owed its paternity to Mr. Beaumont. Let Verax disprove this fact by respectable authority if he can. But the hostility of the University was not confined to the Medical Faculty: it is well known that other and higher functionaries regarded with dislike the idea of the incorporation of the Medical Profession; and if such exposure did not unfortunately involve a breach of confidence, I would name them. The fact that Mr. Beaumont's petition has been the cause of the humiliating position in which the profession in this part of Canada finds itself placed at present, does not admit of the shadow of a doubt. To Mr. Beaumont and his associates chiefly the members of that profession are indebted for the insults heaped upon them by the tag-rag and bob-tail of the House of Assembly—by such men as Billy Flint, Peter Perry—(Phœbus! what a name!)—Mr. M'Connell, Mr. Morrison, and last, not least, by Mr. Merritt—but for that interference we should now have been a corporate body of several years' standing.

A Country Practitioner has adduced, in support of his remarks upon the disorderly character of the convocation which formed part of the subject of his first letter, the newspaper reports of the proceedings and the notoriety of the fact. He supports his charge of artful manœuvring against the medical aspirants to the chair of anatomy by a reference to the fact that one or two of these gentlemen proposed, in convocation, that the offices of the College should be given in preference to members, &c. &c.—and how does Verax meet these arguments? Why by nothing more than his own stupid and sententious *ipse dixit*.

A trifling inadvertence of a Country Practitioner has proved a perfect God-send to Verax, and he triumphs gloriously. Let us examine the grounds of that triumph. The Senate, according to the statute, is composed at present of 24 members, six of whom are not members of the University, the other eighteen members have hitherto, I believe, formed a large majority of the convocation; and I think that most of your readers will agree with a Country Practitioner that the composition of both bodies "*may be regarded* as identical," inasmuch as three-fourths of the whole number of the Senate form very nearly three-fourths of the convocation, even by Verax's own showing: for he names only eight members of convocation who are not members of the Senate. The Practitioner's assertion, therefore, that an aspirant to office might be affected by the individuals composing the convocation, is perfectly true.

Verax challenges a Country Practitioner to show a shadow of proof of the inconsistency of the high church Tory party. I hold it inconsistent in Dr. M'Caul, Dr. Beavan, Dr. Lundy, Mr. Smith, Mr. Cruikshank, Dr. O'Brien, Mr. Stennet, Mr. Draper, Mr. Barron, and others who form part of the high church party, who have denounced so vehemently the Godlessness of the University, to take parts in the election of officers for that institution, and to elect one of their own number to fill the office of pro-Vice-Chancellor. A Country Practitioner, who is a member of the Church of England, condemns as loudly as any one the change in the character of the University; but he detests the spirit, and despises the inconsistency, of those members of the Church of England who have fought for its offices.

Verax, in his first epistle, admits that the Senate is scandalously corrupt. In his second letter he repels with indignation (and without any explanation of the "change that had come o'er the spirit of his dream") a charge of the Colonist newspaper to the same effect. Shall we imitate his mode of dealing with an opponent, and charge him roundly with ignorance of classical literature? I fear there is nothing else for it. The lines quoted by a Country Practitioner beginning with the words "fingit solennia campus," admit of but one construction—their meaning is unmistakeable; and Verax has admitted, in referring to these lines, that they "may be applicable to the Senate in the final choice of the professor of practical anatomy." This admission places him, to quote his own language, "on the horns of an awkward dilemma—he must either hold ignorance or falsehood."

I am, Sir,
Your most obdt. humble servant,
A FRIEND OF THE
COUNTRY PRACTITIONER.
Home District, C.W.
September 13, 1850.

Subscriptions received by Mr. J. C. Becket, for arrears of British American Jour. of Med. and Phys. Science.—Dr. Taché, St. Thomas, 15s.; C. N. Sims, Esq., Hamilton, 15s.; Dr. Murray, Waterdown, 7s. 6d.; Dr. Alcorn, Lennoxville, 11s. 3d.; Dr. Hewitt, Vittoria, 7s. 6d; Dr. Dallas, Wellington Square, 15s.; Dr. Hope, Belleville, 15s.; Dr. Widmer, Toronto, 15s.; Dr. Russell, do., 15s.; Rev. W. Jennings, do., 18s. 9d.; Dr. Carter, Nelson, 15s.; Dr. Dickson, 5s., Dr. Yates, 15s., Kingston; Toronto, Dr. Bettridge, Dr. Herrick, Dr. Hodder, Dr. Love, Dr. Parke, Dr. Rolph, Dr. Telfer, 15s. each; Dr. Primrose, 45s.; Dr. Pruyn, Picton. 15s.; Dr. Robertson, Chatham, 15s.; Dr. Jukes, Port Robinson, 15s.; Military Medical Library, Quebec, 8s. 9d.; Dr. M'Intyre, Williamstown, 15s.; Dr. Aberdeen, Chippawa, 7s. 6d.; Dr. Gauvreau, Rivière du Loup, 15s.; Dr. Going, London, 30s.; Dr. Ewing, Hawkesbury, 15s.; Dr. M'Mahon, St. Rose, 75s.; Dr. C. Boucherville, Henryville, 15s.; Jno. Duthie, Esq., Ayr, 10s.; Dr. Cartier, Vaudrieul, 45s.; Dr. Bowlby, Waterford, 7s. 6d.; Montreal, Dr. Elliott, Dr. Trudeau, Dr. Godfrey. F. Griffin, Esq., Dr. Badgley, 15s. each; Dr. Whitcomb, Granby, 5s.; Dr. Jones, Hornby, 15s.; Dr. Beatty, Cobourg, 15s.; Dr. Allan, Cornwall, 15s.; Dr. Wright, Montreal, 15s.; Dr. Gibb, Montreal, 15s.; Dr. Sewell, do., 30s.; Dr. Goldstone, Cobourg, 15s.; Dr. M'Kenzie, London, 15s.; Dr. De Celles, Hull, 30s.; Dr. Layton, Manatowaning, 15s.—(*To be continued in our next.*)

We have still to urge upon the subscribers indebted to the late series of the Journal the necessity of immediately remitting the amounts which may be due by them, as a heavy claim falls due early next month.

BOOKS RECEIVED.

Proceedings of the 5th Annual Meeting of the Association of Medical Superintendents of American Institutions for the Insane.

Third Annual Report of the Regents of the University, on the condition of the State Cabinet of Natural History, and the Historical and Antiquarian collection attached thereto. 1850.

METEOROLOGICAL REGISTER at MONTREAL, for the Month of AUGUST, 1850.

Date.	Thermometer.				Barometer.				Wind.			Weather.		
	7 A. M.	3 P. M.	10 P.M.	Mean.	7 A.M	3 P.M	10 PM	Mean	7 A. M	3 P.M.	10 P.M.	7 A.M.	3 P.M.	10 P.M.
1	+67	+77	+68	+72.-	29.72	29.70	29.69	29.70	W	W	S	Rain	Clo'dy	Fair
2	" 65	" 78	" 69	" 71.5	29.70	29.65	29.67	29.67	S W	E	E	Clo'dy	Fair	Fair
3	" 68	" 82	" 68	" 75.-	29.68	29.64	29.60	29.64	N W	S	S	Fair	Fair	Fair
4	" 64	" 80	" 73	" 72.-	29.62	29.56	29.59	29.59	N	N	N	Fair	Fair	Fair
5	" 70	" 83	" 76	" 76.5	29.67	29.66	29.69	29.67	N N E	N N E	E by N	Fair	Clo'dy	Fair
6	" 73	" 92	" 72	" 82.5	29.74	29.69	29.70	29.71	E by N	E by N	S	Fair	Fair	Fair
7	" 63	" 75	" 65	" 69.-	29.76	29.74	29.78	29.76	N	N	N	Fair	Fair	Fair
8	" 65	" 80	" 71	" 72.5	29.81	29.72	29.60	29.71	N E	N E	N E	Fair	Fair	Rain
9	" 67	" 84	" 70	" 75.5	29.55	29.45	29.45	29.48	N N E	N by E	N by E	Rain	Clo'dy	Clo'dy
10	" 63	" 74	" 64	" 68.5	29.58	29.58	29.61	29.59	N W	N N W	N N W	Fair	Fair	Fair
11	" 62	" 73	" 62	" 67.5	29.60	29.71	29.70	29.70	W N W	W N W	N W	Fair	Fair	Fair
12	" 59	" 76	" 79	" 67.5	29.65	29.53	29.60	29.56	S W	S W	N	Rain	Clo'dy	Clo'dy
13	" 61	" 67	" 56	" 64.-	29.66	29.59	29 52	29.59	N	W	N	O'res't	Rain	Fair
14	" 56	" 69	" 61	" 62.5	29.61	29.62	29.64	29.62	N E	N E	E	Fair	Fair	O'rc'st
15	" 58	" 74	" 63	" 66.-	29.71	29.71	29.70	29.71	W	N W	N W	Clo'dy	Fair	Fair
16	" 59	" 66	" 55	" 62.5	29.65	29.68	29.77	29.70	N W	N W	N W	Rain	Rain	Fair
17	" 57	" 68	" 58	" 62.5	29.86	29.90	29.94	29.90	N W	N	N N E	Fair	Fair	Fair
18	" 56	" 69	" 58	" 62.5	29.99	29.93	29.87	29.93	N N E	N N E	N by E	Fair	Fair	Fair
19	" 54	" 72	" 64	" 63.-	29.86	29.73	29.72	29.77	N N E	E N E	E	Fair	Fair	Clo'dy
20	" 58	" 74	" 60	" 66.-	29.73	29.75	29.79	29.76	E by S	E by S	N E	Clo'dy	Clo'dy	Fair
21	" 57	" 76	" 64	" 66.5	29.84	29.76	29.75	29.78	N E	N	N	Fair	Fair	Fair
22	" 60	" 78	" 65	" 69.-	29.69	29.54	29.51	29.58	N W	N W	W	Fair	Fair	Clo'dy
23	" 63	" 83	" 68	" 73.-	29.52	29.47	30.51	29.50	N	N	N	Clo'dy	Fair	Clo'dy
24	" 66	" 85	" 73	" 75.5	29.54	29.51	29.47	29.51	S W	S W	S W	Fair	Fair	Fair
25	" 70	" 76	" 69	" 73.-	29.43	29.36	29.31	29.37	E S E	E S E	E S E	O'rc'st	Shw's	Clo'dy
26	" 65	" 70	" 62	" 67.5	29.27	29.26	29.32	29.28	N W	N W	N W	Shw's	Shw's	Clo'dy
27	" 54	" 65	" 51	" 59.5	29.60	29.70	29.77	29.69	W S W	W S W	W S W	O'rc'st	Fair	Fair
28	" 56	" 73	" 63	" 64.5	29.80	29.82	29.85	29.82	W S W	W S W	S S W	Fair	Fair	Fair
29	" 61	" 80	" 70	" 70.5	29.90	29.88	29.87	29.88	S S E	S S E	S	Fair	Fair	Fair
30	" 68	" 86	" 69	" 77.-	29.83	29.78	29.72	29.78	S by W	S by W	S	Fair	Fair	Clo'dy
31	" 66	" 79	" 71	" 72.5	29.67	29.59	29.60	29.62	S	S	S	Clo'dy	Fair	Fair

Therm { Maximum, +92° on the 6th, at 7 A.M.
Minimum, +51° " 27th, at 10 P.M.
Mean of the Month, +69.3

Barom. { Maximum, 29.99 in, on the 18th, at 7 A.M.
Minimum, 29.26 " " 26th, at 3 P.M.
Mean of the Month, 29.663 inches

MONTHLY METEOROLOGICAL REGISTER, AT H. M. MAGNETICAL OBSERVATORY, TORONTO, C. W.—AUGUST, 1850.

Latitude 43°. 39'.4 N. Longitude, 79°. 21'.5 W. Elevation above Lake Ontario, 108 feet.—(For the British American Medical and Physical Journal.

Day.	Barometer at Temp. of 32°				Temperature of the Air.				Tension of Vapour.				Humidity of the Air.				Wind.			Ins. of	Weather.
	7 A.M.	3 P.M.	10 P.M.	MEAN.	7 A.M.	3 P.M.	10 P.M.	MEAN.	7 A.M.	3 P.M.	10 P.M.	MEAN.	7 A.M.	3 P.M.	10 P.M.	MEAN.	7 A.M.	3 P.M.	10 P.M	Rain.	
1	29.612	29 589	29.584	29.587	67.4	77.6	69.0	70.5	.598	.721	.645	.644	92	79	93	89	NW b N	S S E	NW bW	—	Gen overct ; th 6 pm ft aur at 9
2	29.600	29 595	29.584	29.580	68.0	71 8	66·4	70.6	.626	.655	.605	.672	94	86	92	92	N by W	N N E	Calm.	.040	Clded am ; clr night ; th stm pm
3	29.554	29.481	29.456	29.513	66.8	75 4	68.6	70.3	.615	.725	.654	.655	97	85	97	91	NE by N	E	E	—	Clded am ; foggy day ; clr 9 pm
4	29.486	29.468	—	—	73.7	81.2	—	—	.705	.835	—	—	87	81	—	—	NE by N	S E	NW bW	.120	Raining am ; very fine day
5	29.623	29.631	29.671	29.652	69.6	83.0	70.0	73.6	.604	.535	.582	.648	87	49	82	81	N W	N N W	N W	—	Generally clear ; very fine day
6	29.706	29.650	29.660	29.665	68.8	79.6	69.8	72.7	.592	.725	.624	.644	86	74	88	82	N W	S by W	W S W	—	Lt passing clds ; fine clear night
7	29.671	29.630	29.674	29.665	69.2	80 6	68.7	73 8	.606	.714	.626	.646	88	71	92	81	W by N	W S W	E by N	.235	Detach'd cl ; th & heavy rn noon
8	29.663	29.676	29.555	29.676	72.4	74.4	67.0	70.6	.684	.801	.592	.673	88	97	92	92		E	calm	Calm.	.550	Cloudy day ; clr night ; rn 1 to 8
9	29.517	29 462	29.460	29.493	67.0	76.6	68.4	71.4	.626	.743	.607	.661	97	84	90	88	W N W	E	E S E	.105	Detached clds ; th st 1 to 4 ; aur
10	29.576	29.575	29.641	29.607	66.3	75.2	61.0	67.4	.520	.400	.408	.433	83	47	78	68	N by W	NW b N	N N W	—	Few det clds ; gen clr ; aur 9 pm
11	29.735	29 671	—	—	69.6	73.6	—	—	.435	.512	—	—	63	64	—	—	N by W	S S W	S W	Inaple.	Lt clds dispersed ; mostly clear
12	29.623	29.537	29·552	29.553	62.4	82.6	70.4	73.6	.446	.646	.638	.602	81	69	88	76	W by S	W b N	calm	.070	Th stm 6 to 8 am ; day det clds
13	29.463	29.256	29.421	29.387	69.5	65.4	64.2	64.4	.655	.594	.517	.548	94	98	88	92		Calm.	NE by N	N by E	2.100	Gen clded ; rain fr 7 am to 3 pm
14	29.563	29.525	29.513	29 521	62 0	69.7	64 0	64.8	.459	.481	.543	.474	83	68	93	80	NE byN	S E by E	S E	Inaple.	Clr am ; day fine ; rn 10 to 11 pm
15	29.563	29.699	29.725	29.681	64.4	68.1	58.0	61.2	.529	.538	.414	.467	89	80	88	88	N W	S E	N W	.010	Sl rn 10 & 11 am ; lt det clds gen
16	29.736	29 738	29.808	29.763	58.0	69.4	55.6	60.8	.397	.449	.372	.386	84	64	86	74	NW bW	N by W	NW b N	—	Gen clr ; aur from 11 pm to 2
17	29.860	29.845	29.833	29.779	58 8	65.8	57.8	62.1	.306	.343	.318	.380	63	56	68	70	N N E	E S E	S E by E	—	Almost entirely clr ; beautiful nt
18	29.808	29.708	—	—	66.4	66.6	—	—	.384	.489	—	—	61	76	—	—	E S E	E	E	—	Unclouded ; very pleasant
19	29.539	29.508	29.500	29.520	65.4	64.2	63.0	64.3	.527	.548	.545	.537	86	94	98	92		E	E by N	NE by E	.390	Gloomy ; const slt rn noon to 10
20	29.506	29.612	29.726	29.646	63.6	65.0	62.3	63.6	.531	.563	.502	.516	93	92	91	93	N N E	N by E	NE by N	Inaple.	Foggy & damp day ; clr fr 10 pm
21	29.819	29.790	29.731	29.762	64.0	70.7	58.8	63.4	.523	.559	.453	.495	90	80	93	86	NE by N	E S E	N E	—	Light detached clouds ; fine day
22	29.671	29.547	29 605	29.548	62.0	72.4	58.8	64.5	.413	511	.462	.491	76	66	95	83	N N E	S S E	S E	—	Light passing clouds gen dispersd
23	29.462	29.413	29.459	29.463	61.8	77.3	62.2	67.1	.507	.677	.483	.555	94	74	88	85	Calm	SW by S	calm.	.055	Lt clds : sheet lightning at night
24	29.465	29.379	29.324	29.367	63.0	72.4	68.2	66.9	.535	.680	.635	.585	95	88	95	90	N by E	S E by E	E	.250	Rn 6 to 10 am ; th stm from 9 pm
25	29 323	29.301	—	—	68.3	72.4	—	—	.526	.618	—	—	78	80	—	—	Calm.	SW bW	NW bW	—	Partially clouded ; fine
26	29 313	29.368	29.498	29.435	60.7	66.2	56.0	61.3	.443	.425	.390	.403	85	68	89	76	W	W N W	NW b N	Inaplo.	Gen clouded ; slt spitting rn 2 pm
27	29.670	29.738	29.777	29.752	53.2	65.6	53.0	55.1	.295	.453	.310	.326	74	74	79	76	NW b N	NW b N	N N E	—	Unclouded ; very fine day
28	29.848	29.816	29.849	29.843	52.8	73.9	58.6	62.1	.332	.419	.394	.406	85	52	82	76	N N W	W	W	—	Almost ditto ; ditto
29	29.901	29.837	29.776	29.816	56.8	74.8	60.0	64.6	.382	.514	.440	.490	84	62	87	83	W N W	S E	E by S	—	Gen clear ; light clds round horzn
30	29.719	29.614	29.524	29.584	63.0	72.7	67.0	68.4	.536	.641	.602	'599	95	82	94	89	E by N	S	S E by E	.200	Gloomy morn ; slt rn 2 to 8 pm
31	29.428	2.36 6	29·405	29.467	68. 8	77.0	70.4	68.9	.573	.696	.671	'584	84	77	93	83	S by E	S	S	.230	Gen clouded ; slt rn 8 to 10½ pm
Re	29.617	29.584	29.600	29.6006	63 9	72.9	63 6	66 55	.513	.583	.520	.538	87	75	89	84	3.77miles	5.99miles	3 00 mls	4 355	Great number of Wild Pigeons on the morning of the 16th

Highest Barometer,.....29.907 at 9 a.m. on 29th } Monthly
Lowest do. .....29.238 at 1 p.m. on 13th } Range, 0.669.
Highest obs. Temperature...85.0 at 4 p.m. on 5th } Monthly
Lowest do. do. ...41.0 at 5 a.m. on 28th } Range, 44.0.
Mean Max. Therm.....74.81 } Mean Daily range,.....17.29
Mean Min. do. .....57.53 }
Greatest Daily range,.....31.2 from 3 p.m. on 28th to a.m. on 29th.
Warmest Day, 7th—Mean temperature, 73.80 } Difference, 18.74.
Coldest Day, 27th— Do. do. 55.06 }
Warmest hour, 3 p m.—Mean temperature, 75.87 } Mean Diurnal va-
Coldest hour, 5 a.m.— Do. do. 59.49 } riation, 13,38

Sum of the Atmospheric Currents in miles resolved into the fo r Cardinal directions.

North	West	South	East
1196.6,	974.9,	941.4,	1041.8.

Mean velocity of the wind, 4.46 miles per hour.
Greatest velocity, 17.2 miles from 11 to noon, on the 26th
Most Windy day, 31st: mean velocity per hour, 7.76 miles
Least do. 22nd, do. do. 2.16 miles
Most Windy hour, noon, mean velocity, 7.09 miles per hour
Least do., 8 p.m., do. 2.62 do. do.
Mean diurnal variation, 4.47 miles per hour.

Year	Temperature. Mean.	Max.	Min.	Range.	Rain. No of days	Inches	Snow. Days.	Inches
1840...	65.10	82.4	47.7	34.7	12	2.905	0	...
1841...	64 00	84.8	45.7	39.1	9	6.170	0	...
1842...	65 90	81.8	43.9	37.9	6	2.600	0	...
1843...	66.49	83.1	44.0	39.1	4	4.850	0	...
1844...	61.16	86.8	43.5	43.3	17	Impft	0	...
1845...	67.86	84.8	41.5	43.3	9	1.725	0	...
1846...	68.41	86.4	49.5	36.9	9	1.770	0	...
1847...	63.93	82.6	44.6	38.0	10	2.140	0	...
1848...	68.34	87.0	48.7	38.3	8	0 855	0	...
1849...	65.08	79.0	45.2	33.8	10	4.970	0	...
1850 †	66,55	85.0	41.0	44 0	13	4.355	0	...