

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

Continuous pagination.

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

CANADA

# MEDICAL JOURNAL.

---

## ORIGINAL COMMUNICATIONS.

---

*Case of Aneurism of ascending portion of Arch of Aorta.* By JOSEPH M. DRAKE, M.D., House-surgeon, Montreal General Hospital; Curator of the Museum of McGill College.

Paul St. Jean, aged 26, was admitted into the Montreal General Hospital on the 12th July, 1864, under Dr Reddy, complaining of a tumour on the front of the chest. He is of medium height, somewhat emaciated, and of a sallow anemic complexion. He states that about eight months since, while lifting he felt something "crack" in his chest, shortly after which he was conscious of a "lump" inside his chest: he did not feel any pulsation at the time nor since, nor was there any very noticeable swelling on the surface. He did not suffer from the slightest inconvenience in swallowing, neither had he difficulty of breathing at any time. He had occasional pain in the part of a pricking, burning, aching character, but not very severe. In this state he remained till about Christmas, last, when he observed the swelling externally to rapidly increase in size—within the past six weeks it has enlarged with yet greater rapidity, and he suffers at times excruciating pain—he has slight cough, cannot continue in a reclining posture—great orthopnoea,—and cannot make the least exertion, but has still no difficulty connected with deglutition or respiration. His pulse is 108, weak but regular—tongue moist, slightly furred—bowels constipated—appetite gone. He complains much of want of rest, being obliged to remain in a sitting posture continually. The pupils are of equal size, and equally affected by light. There is nothing more in his family or personal history which throws any light on his case.

On examination an oblong tumour, soft, smooth and uniform, about six inches long by four and a half in width, the long axis directed trans-

versely across the sternal region, the shorter axis extending between the third and sixth ribs. It extends nearly an equal distance right and left of the mid-sternum. The integument covering it is healthy in appearance, though somewhat reddened, which he attributes to the application of poultices he used before his admission. The intercostal spaces between the second, third, fourth, fifth, and sixth ribs appear considerably widened at the margin of the tumour; neither ribs nor sternum can be felt over the tumour. The ensiform cartilage can be felt about two inches below the lower margin of the tumour. The apex of the heart is displaced about two inches to the left of its normal situation. Pulsation synchronous with the heart's action is very evident over the whole surface of the tumour. The impulse, however, is neither forcible nor jerking, but conveys the impression that it is communicated through a fluid or semi-fluid substance. There is no thrill, and on applying the stethoscope not the slightest trace of "bruit" can be detected in it. The heart sounds at the apex are perfectly normal, a slight bruit is heard with the first sound at the third left costal cartilage and also at the right second costal cartilage. At the back about the fifth or sixth dorsal vertebra a systolic bruit de souffle (quite single) is very distinctly heard.

The lungs appear healthy. There is no history of pleurisy. The tumour is very tender, and its contents appear to be fluid or semi-fluid to the touch.

14th July.—Complains of severe pain in left side, which was relieved by the application of sinapisms. Pulse 115. He continues the same in other respects, and is suffering so much that it is almost impossible to make any further examination. From this date his strength rapidly failed, and he died on the afternoon of the 22rd July. The immediate cause of death appeared to be syncope.

*Sectio cadaveris.*—On opening the pericardium the heart was found to be slightly adherent over its whole surface to the pericardium by a thin layer of recent lymph. The adhesions were very readily separated by the finger. All the valves were perfectly healthy and capable of performing their functions. The cavities were nearly empty. The right auricle and the ascending part of the aorta could not be separated from a large tumour which existed in the situation of the anterior mediastinum. The sac of the pericardium in this situation was therefore of course obliterated. On sitting up the aorta two large dilatations were observed in the situation of two of the sinuses of Valsalva, one of which had burst in to the anterior mediastinum by an opening about the size of a half crown. The edges of the opening were puckered but perfectly smooth. The other dilatation would have held a large walnut; its walls were thin and formed

of the whole of the coats of the artery; no fibrine was deposited within it. The sac of the tumour was now opened, and within was found a large and recent clot, somewhat laminated in its more external part, but all containing abundantly the colouring matter of the blood and of a soft consistence. It had the colour of black currant jelly. The anterior parietes of the sac were formed of the ribs which were extensively eroded, also part of the sternum and the external fascia and integuments. The remaining parts of the sac appeared to be formed wholly of the mediastinal pleuræ except at the point where the opening from the aorta existed, at which point the pericardium contributed to its formation. On carefully removing the soft dark clot, and washing out the sac with water, the ruptured sac, corresponding with the dilatation of the aorta, was seen much thickened by concentric deposition of fibrine of a light yellow colour.

It thus appeared that a true aneurismal dilatation of the aorta had existed in the first part of its course, that the sac of the pericardium had been obliterated by adhesive inflammation, and the ribs and sternum eroded, that the aneurismal sac had then burst into the anterior mediastium, which limited the flow of blood, and prevented it from proving instantly fatal. It was conjectured from the man's account of himself that the rupture of the true aneurismal sac dated from the period when he first observed it growing very rapidly larger, that is about six weeks.

The case will perhaps be thought interesting, as it illustrates the fact that we may have an immense aneurismal sac connected with the aorta even close to the heart, and yet, no thrill, no murmur, no signs of pressure even the pulsation not being at all so well marked as one would expect from its size and situation. A preparation of the parts is in the McGill College anatomical museum.

---

*Fibrinous Polypi in the Right Heart, accompanied with Tricuspid Regurgitation in a case of Double Pneumonia. Death, autopsy.* By D. M'GILLIVRAY, M.D., attending physician to the County of Carleton General Protestant Hospital, Ottawa.

Benjamin Isbester, aged 37, a native of Orkney, tall, well-proportioned, large muscular system, wasted, but cannot be said to be particularly thin. Complexion fair, features indicating Scandinavian origin, and by trade a tailor. During a period of ten months previous to his admission into the hospital, he experienced pain in the region of the heart, but was able to continue at his trade until lately, when he got so ill that he was obliged to give up work, and, being an emigrant without friends or home,

he sought refuge in the General Protestant Hospital, and was admitted on the 21st Feb., 1865, labouring under pneumonia. He complained of a severe cough, short and difficult breathing, and intense pain in both sides of the chest. Empl. cantharid. was applied over the right side of the chest anteriorly and afterwards dressed with ung. hyd. mit.; a sedative mixture composed of tart. emetic, tinct. opii, and syrupus scillæ was administered. The cough continued very troublesome, and the dyspnoea very severe. The expectoration was of a thick tenacious character, sometimes frothy and frequently tinged with blood. Counter-irritation was kept up on the blistered surface by the application of oleum tigllii, and oleum terebinth, followed by warm fomentations. On the 29th March, potass. cyanid. was substituted for the above mixture to the decided benefit of the patient, as it relieved the cough and pain in the right side.

Condition of patient when he came under my care on the 1st April.

*Physical signs.* Expansion movement decreased on right and increased on left side; dulness over the entire right side of chest, except the clavicular and scapular regions; in the latter the respiratory murmur was very obscure.

Left lung—in its lower portion there was discoverable slight dulness and minute crepitant ronchus; in its upper portion respiratory murmur harsh and hurried. Cardiac region—Dulness over the region of the heart, less intensified but over a larger space than natural. The sounds of the heart were very muffled, almost inaudible, but could with difficulty be analysed. A little above and to the left of the ensiform cartilage a peculiar systolic, blowing rushing sound was distinctly audible, and could be traced as high up as the third rib. It resembled somewhat the *bruit de diable* in character. There was manifest pulsation of the jugular veins as if the volume of blood were forced back into those vessels, and its retrograde motion was readily perceptible by gently pressing the finger on the veins. These pulsations were at times more distinct than at others, and varying in their intensity with the posture of the patient. His eyes were congested, lips and ears of a bluish colour, face very turgid, and sometimes pain about the cheeks; stooping the head caused headache. He is frequently troubled with epistaxis; pulse, 105, bowels costive, appetite poor, sleeps little, secretions scanty, slight œdema of feet and ankles. I continued the cyanid of potass. mixture with a pill conii co. at bedtime, and castor oil in the morning.

April 3. Coughs less frequently, pulse 100; sleeps better, appetite dull, bowels confined. Ordered pill hyd. j., pill rhei co. i.

6th. Cough severe and frequent, bowels relieved, sleep disturbed by

frightful dreams, pulse 102. Ordered croton oil liniment to be rubbed to the chest anteriorly.

9th. Says he passed the night tolerably well, feels very weak, bowels regular, pulse 100, complains of pain in left side. Ordered brandy.

12th. Coughs hard, sputa rust coloured, bled at the nose during the night, feels weaker, bowels costive, pulse 115, takes the brandy and beef tea very well.

14th. Complains of intense pain in the left side about the mammary region, is unable to keep the recumbent posture, pulse 102; dyspnoea very severe. Ordered hot fomentations to the left side.

16th. Relieved of the pain slightly, coughs less, appetite poor, very weak, pulse 95.

17th. Died.

Despite all that was done to abate the symptoms, he continued to linger on without any improvement until death relieved his sufferings. During three days previous to his death he could not lie in a recumbent posture, and was obliged to sit up in bed owing to severity of dyspnoea. His last few hours were marked by symptoms of great cardiac anguish, anxious and restless, struggling in violent agitation, frequently calling upon the attendants to change him from one position to another, and suddenly throwing up his arms as if to relieve his breathing.

*Autopsy.*—Body wasted, skin of a pale yellowish colour, œdema of legs and ankles slight, abdomen slightly distended, lips, gums and ears bluish,—dulness of right side of chest.

Pleura—right thickened and adherent to the wall of chest laterally, hepatization of right lung, only a small portion of upper lobe permeable by air, and that contained frothy mucus, cut surface of solid part shewed a dark red, in some places a variegated appearance, its lower portion was a gristly mass, shewing fibrinous white deposits, yellow spots, air cells filled with exudation matter and surrounded with congested capillaries, right bronchus and trachea of a rich cherry red colour. Left pleura natural, except at apex of lung where it was inflamed and thickened. Apex of lung engorged with dark blood, remaining portion healthy, crepitant and containing rust coloured frothy mucus; left bronchus natural.

Heart—the heart was very large, there was extreme flaccidity of the whole organ, its walls were thin, soft and flabby, like a bag of soft leather. The right side was enormously enlarged; this was especially true of the right auricle which was engorged with clotted blood. The right ventricle contained a large polypoid growth attached to the muscular wall at its apex by a number of rootlets branching among the columnæ

carinæ. It extended to the auriculo-ventricular orifice, where it divided into two branches, one proceeding up the pulmonary artery, becoming narrowed at the point, corresponding with the semilunar valves, it then widened and flattened and terminated in two caudate extremities; when measured it was found to be *nine inches* in length. The other branch passed through the tricuspid orifice (where, at the part in contact with the valves, it was very smooth and narrow) into the right auricle where it suddenly assumed the dimensions of a duck egg, flattened and firmly attached to the appendix auriculæ by looplets passing among the muscular pectinati. At the orifice of the inferior cava, it abruptly narrowed and proceeded down that vessel (of which there was compensatory dilatation), to a distance of fifteen inches; it terminated in a number of thready filaments.

The polypus was covered by a thin membrane, and adherent to it in some places fibrinous clots of blood. There were a number of small fibrinous concretions collected round the chordæ tendinæ of the tricuspid valves.

In referring to the particular bruit which was a double sound—one, the louder, was referable to the course of the pulmonary artery, and caused, no doubt, by the collision of the blood against the walls of the pulmonary artery and the surface of the contained polypus. The other sound was referable to the right side of the heart, and caused, in a measure, as I thought by the rushing of blood backwards through the tricuspid orifice, inasmuch as it was simultaneous with the pulsations of the vein of the neck; in addition to that, the point of the greatest intensity of the sound was at the ensiform cartilage. There was also obstruction to the nervous circulation as evidenced by the extreme turpidity of the face and lividity of the lips and ears, and œdema of feet, dilated condition of the right side of the heart, enlarged tricuspid orifice, corrugation of the valves and fibrinous deposits around the chordæ tendinæ, both states rendering them incapable of closing properly round the polypus which passed through the orifice. Then there was the pneumonic condition of both lungs, which disease may have been superinduced by the abnormal state of the right heart interfering with the free circulation of the blood through those organs. The above is interesting in so far as it is illustrative of circumstances under which tricuspid regurgitation may exist. Drs. Hope, Addison, and other eminent physicians were of opinion that tricuspid regurgitation was of very rare occurrence, and such murmurs as were referable to the right side of the heart were not of tricuspid origin but purely mitral. Dr. Todd says of a case in which disease of the right side of the heart existed, "The

bellows murmur so loud over the point of the heart, indicated imperfection of one or other of the auriculo-ventricular valves, probably of that of the left side, since it is more liable to a morbid state. It did not, however, escape my notice, that this sound was very distinct over the sternum, and that it possibly might be developed in the tricuspid orifice. But the rare occurrence of any lesion in that orifice sufficient to develop bellows murmur, rendered such a diagnosis improbable, while the enlargement of the right ventricle and probably of the left, and the extension of the former to the apex of the heart, would materially conduce to the propagation of sound generated in the mitral orifice, to the right side." The experience of physicians such as Drs. Gairdner, Wilkes, Barlow, Gull, and others, shows that tricuspid regurgitation does exist under certain circumstances, and that tricuspid murmurs are of more frequent occurrence than they were at one time supposed.

Carditic polypi are of very rare occurrence, and pathological investigation has as yet thrown but a doubtful light on their cause or origin. Rokitansky, Bouilland, and many others believe that they result from carditis. That opinion will not, however, hold true in this case, as there was no carditis present. Polypi have been found in connection with mitral and tricuspid disease where no inflammation of the containing cavity existed. Dr. Stokes mentions a case recorded by M. Hombert, of a lady who had been fifteen years afflicted with violent palpitations, asthma, nervous pulsations and pains in the thorax, in which polypi were found after death occupying the aorta and pulmonary artery; that in the aorta was two feet in length, firm, red and fleshy in appearance. There was no inflammation present at the time of death, but there was contracted mitral orifice. The presence, then, of carditic polypi with disease of the auriculo ventricular valves causing enlarged or contracted orifice leads me to infer that they may be caused by agitation or undue attrition of the blood while it is in an inflammatory or altered chemico-vital state, against the fleshy columns or against the diseased valves themselves, acting as mechanical obstacles to its free circulation, thereby favouring the deposition of fibrine in the same manner that fibrine is separated from the blood by agitating it with a wire. Fibrinous concretions or inotic coagula may, under similar circumstances, form in any part of the arterial or venous system, and are ante-mortem formations. The polypus in this case appeared to have its origin among the columnæ carinæ of the right ventricle, and was attached to them by a number of entwining processes or loopholes. The portions of it branching into the large vessels was covered by a thin membrane or pedicle of fibrine, floating loosely around it, and had not yet become firmly adhered to it. The presence



of this pedicle may explain the mode in which the polypus was formed. A deposit of fibrine having taken place among the fleshy columns, fresh layers of fibrine were successively deposited around it; thereby acquiring greater size, and floating in the current of blood it acquired greater length and was carried into the large vessels leading from the containing cavity. This process, it would appear, was going on at its distal extremity, and might have acquired greater length as in the case recorded by M. Hombert.

Drs. Walshe and Hope believe that the formation of these coagula is caused by retardation or sluggishness of circulation in connection with weakness of the organ or mechanical obstruction to the circulation, while hyperinosis of the blood is carried to a great extent.

---

## HOSPITAL REPORTS.

---

*Case of Stricture of the Urethra of four years standing, perineal section.*

Cure. Under the care of DR. FENWICK. Reported by Mr. R. S. Parker.

John Landrigan, a carter, aged 29 years, was admitted into the Montreal General Hospital on the 3rd January, 1865, suffering from stricture of the urethra. About four years since he contracted a gonorrhoea for the relief of which he never applied to a surgeon. The discharge continued for months, and at last ceased of itself, but since that time he has been unable to make water with a free stream. In June, 1861, bougies were passed, which afforded temporary relief.

The following year, he again applied for relief, and after the passage of instruments, he was enabled to make water with tolerable ease this after he dilated the stricture himself by the passage of a No. 6 gum-elastic catheter about once every week,

After admission into hospital, Holt's dilator was employed with satisfactory results, as a No. 7 bougie was passed with ease.

Towards the end of March or early in April the stricture appeared to gradually but steadily contract; from admitting a tolerably large sized instrument it was found that a No. 2 was passed with difficulty. This state of things continued, and in the following May he came under the care of Dr. Fenwick. That gentleman recommended perineal section, but the patient objected to any operative interference. After a careful perseverance in the treatment, by dilatation, which failed to afford relief, the patient at length consented to an operation, which was performed in the

usual way on the 6th June, and a No. 8 silver catheter passed and allowed to remain in the bladder. The strictures were several in number, and were situated in the spongy portion of the urethra, commencing about three inches from the meatus, which necessitated the scrotum to be well drawn forward before the strictured portion of the canal could be divided to its entire extent.

The extent of the wound was fully three inches in length. At the end of 54 hours the catheter was removed, and another instrument passed with ease; on this occasion a No. 12. size was employed.

June 11th. Catheter removed, and No. 9 introduced and left in the bladder; wound healthy in appearance and granulating nicely.

June 13th. All going on well; patient rests comfortably, complains of annoyance from pressure of the instrument, and in consequence it was removed and left out. Dr. Fenwick stated that several cases, had come under his observation, one on whom he had operated upon some years since, and in whom a fistulous opening had formed and permanently remained at the root of the penis in front of the scrotum. This unfortunate result had been noticed by Mr. Fergusson and other surgeons. He, Dr. F., in his own case attributed it to the pressure of the catheter, he did not see there was any necessity of retaining the instrument in the urethra up to the period of its closure, as there could be no danger now of infiltration into any of the tissues in the neighbourhood of the wound. The case progressed most favourably, the wound cicatrized rapidly, a No. 9 catheter was passed every second or third day, and allowed to remain in for several hours. On the 25th, all discharge of urine ceased from the wound, and a No. 10 catheter was passed with ease. He remained in hospital up to July 8th, when he was discharged, cured; a large sized instrument could be passed with ease, and the man experienced no difficulty in making water in a full stream.

---

## PERISCOPIC DEPARTMENT.

---

### Medicine.

#### A CASE OF POISONING BY ATROPINE.

By HARRY LEACH, M. R. C. S.

The following notes may be acceptable to your readers, as cases of poisoning by this drug are, happily, rare, and its effects, when taken in injurious doses, but little known:—

On the evening of the 3rd of June, at 10 o'clock, I was called to the

bedside of a patient, having been told that he had swallowed the contents of a draught phial, marked "Atropine, Poison," and which, upon subsequent inquiry, must have contained about one grain of the sulphate of atropine in solution. He had been under my care for some time, suffering from chronic rheumatism, the long duration of which appeared to have affected his spirits considerably. The draught must have been taken at least an hour before the discovery was made, and on examination the following symptoms existed:—Pupil enormously dilated, so that the irides were hardly visible, eyes moving restlessly from side to side, very refractory when any attempt was made to examine them closely; refusing obstinately to swallow anything, or to answer questions in any other way than by a grunt; pulse very quick, and at this time of good volume. He was immediately removed from bed, and with great difficulty a pint of warm water was pumped into the stomach, and almost immediately expelled, little altered in colour or general appearance. At this time his actions were those of a man profoundly intoxicated. Several energetic attempts were made to induce him to swallow strong coffee mixed with a small proportion of whisky, which only partially succeeded. An hour had passed, and his hands were now cold, with a very weak pulse, and continual dragging of the legs when assisted, or rather held up, in walking. During the next four hours he was kept nearly constantly on the move by relays of men, and a tolerably strong galvanic current was passed along the nape of the neck about four times in an hour, which latter operation roused and irritated him in a very great degree. At three a.m. he took a small draught of whisky and water spontaneously, began to quarrel incoherently with his supporters, to laugh in an idiotic manner, and when well roused by additional pushes would walk very well. The pulse improved greatly between four and five a.m., and at the latter hour he devoured ravenously a large slice of dry bread. At six o'clock he was undressed and sent to bed in the following condition: Thoroughly wakeful, incoherent in observations, great helplessness amounting to partial paralysis, of arms and legs, complete unconsciousness of all preceding events, and no change as to pupils. He continued wakeful and partially delirious all day, but took fluid food well, passed very little urine, with slight action of the bowels. During the succeeding night he was morbidly sensitive to sounds and objects, with symptoms akin to the early stage of meningitis, but was perfectly rational next morning with a pulse at 108, furred tongue, and dry, hot skin. During the next four days catheterism was required several times, partial paralysis of the bladder being evidently the cause of retention, and a week elapsed before the pupils regained their normal condition. A fortnight has now elapsed, and the patient is tolerably well, but much weaker than before.

This case affords an illustration, by way of contrast, of the difference between poisoning by opium and by belladonna:—(1.) The absence of that profound coma so constant as an effect of opium. (2.) The excessive irritability and obstinacy of the patient, who was easily aroused, and commenced immediate resistance to all remedial arrangements. (3.) The apparently idiotic and drunken state in which the patient remained for some time after. (4.) The great want of power manifested for a still longer period.

The treatment indicated appears to be that in cases of poisoning by opium. There is little doubt that the poison was altogether absorbed before the stomach-pump was used, as nothing in the way of food had been taken since 5 p.m. in the same afternoon. It is as clearly indicated that the system requires as much nourishment and stimulant as possible, for I cannot but conclude, from observation of this case, that the ulterior results produced by an overdose of belladonna are far more exhausting than those by opium poisoning.—*Med. Times.*

---

#### BACTERIDIA AND MALIGNANT PUSTULE.

TO THE EDITOR OF THE LANCET.—*Sir*,—The facts related in the following extract from a masterly article on Spontaneous Generation, by M. Jamin, in the *Revue des Deux Mondes*, are in all ways so interesting, that I make no apology for asking you to publish them. I ought to add that the italics, which occur in one or two places, are mine.

“Dr. Davaine has devoted himself for some years to the careful study of a terrible malady of the ‘charbon’ genus—the splenic apoplexy (*sang de rate*—anglicé, ‘blood’) which develops itself spontaneously in sheep, and is inevitably fatal to them. The blood of the diseased animals, examined under the microscope, has been found crowded with minute organisms allied to the *bacteria*, and which have been named *bacteridia*. This blood injected into the tissue of another animal carries these creatures with it, and death is certain. The malady is equally transmitted when a rabbit is made to swallow either the blood or part of an animal affected with splenic apoplexy. The infected blood may be dried and kept for an indefinite time without losing the germs of the infusoria which it contains; and whenever it comes to be injected or to be given as food, the disease is propagated. These facts being ascertained, as the symptoms of splenic apoplexy offer some affinity to those of another malignant malady known by the name of ‘charbon’ (or ‘malignant pustule’), inquiries were instituted as to whether there might not be a still closer bond between the two affections. ‘Charbon’ begins by

a 'malignant pustule' of blackish colour, surrounded by a ring of vesicles, which must be speedily destroyed by caustic, if a general infection is to be avoided. On the 14th of April, of the present year (1864), Dr. Raimbert was called to a carter, who had contracted a true malignant pustule on a farm where the sheep were suffering from splenic apoplexy. He removed the pustule, dried it at once, and handed it over to Dr. Davaine, who examined it under the microscope. It was a perfect *felt*, composed entirely of *bacteridia*. Rabbits fed with it contracted splenic apoplexy in consequence, and died with their blood crowded with *bacteridia*, and communicated 'charbon' to other animals. Here, then, is a disease transmitted from sheep to man, and appearing in him under the form of a pustule, which, in its turn, has the power of communicating to all animals the particular virus which it contains. And what is this virus? A brood of infusoria of a special and venomous species. *The smallest quantity suffices to kill because it suffices to sow and multiply the species.* The malady is transmitted by inoculation, because the animalcules pass from the infected to the inoculated subject; it is transmitted by the air, because the germs dry up and are wafted away, and become again sown; possibly, also, as many hold, by the bites of flies, which thus become the vehicle for the transmission of the *bacteridia*. Such is the explanation, not less simple than certain, of the effects of a particular virus. The future will decide how far it is possible to extend to all analogous cases so fertile a theory, but already it is easy to understand the hopes of physiologists and to predict their success; perhaps we are on the eve of knowing, avoiding and curing contagious scourges."

The facts here detailed are not altogether new. Virchow, and some earlier observers, whose names escape me for the moment, had already pointed out the occurrence, in countless numbers, of a kind of "vibrio" in the blood of *living* animals affected with charbon.

I have not been able to refer to Dr. Davaine's own account of these researches; but before the case which he wishes to make out for the minute organisms he describes can be considered as finally established, other data will be required beyond those adduced by his reviewer. Not only must the constant presence of this particular species of *bacteridia* in the disease in question be ascertained, but its absence in other putrefactive disorders. In all such cases there is a special danger, which those who have most studied the subject will best appreciate, of falling into the old error of taking for essential what may possibly be only an epi-phenomenon. The perfect way in which the facts seem to explain all the conditions, although a strong argument in favour of the interpretation set upon them, may, on the other hand, easily beguile us into a too ready acquiescence in it.

At the same time, the whole tendency of recent research, and of Pasteur's discoveries in particular, is to the effect that the tribe of minute organisms to which the *bacteridia* belong, in reality take the initiative in, and are the primary cause of, the zymotic changes with which they are found associated.

The uncontrollable *itching* which marks the first stage of malignant pustule, and is so characteristic of it, is, when considered as a phenomenon which betrays the presence of so many parasites in other parts, not undeserving of attention in connection with Dr. Davaine's view.

Should his discovery be confirmed by more extended researches, it is one of which it will be difficult to overrate the value.

As regards malignant pustule, its importance will be supreme. Diagnosis, pathology, origin, mode of propagation, and indications of cure will be all summed up in the conditions which attach to the growth and multiplication of a single parasitic organism.

In relation to diagnosis, the fact is one which might eventually become of the greatest possible use. For, if it be true that the first brood of *bacteridia* is developed in the part which is to be the seat of the future pustule, the practitioner, armed with the microscope, and with the little "harpoon," with which the Germans dip for trichina, might ascertain the characteristic presence of these minuter parasites by means of an operation not more formidable than the puncture of a grooved needle.

But, as M. Jamin rightly suggests, the interest of this discovery, should it be confirmed, culminates in its relation to the subject of contagion generally.

In a memorandum on the Investigation of Epidemic and Epizotic Disorders, which I drew up at the request of the British Medical Association, in March, 1863, there occurs the following passage:

"In order to render the inquiry on which the Association is about to enter really comprehensive, it would be necessary to associate with the study of epidemics that of the diseases caused in man and animals by living parasites, external and internal.

"A fuller knowledge of the phenomena attaching to the dissemination of the prolific and minute germs of these parasites could not fail to be of great use in helping to the true interpretation of the phenomena which attach to the strictly analogous dissemination of the equally prolific and equally minute germs of contagious poisons.

In particular, it would be of the highest value in showing by data that could not be gainsayed, what is the real worth of the negative evidence now so implicitly relied on, as an indication of spontaneous origin, and as opposed to the law of propagation by continuous succession.

“Additional reasons for putting the parasites and the contagions together in such an inquiry, are:—1, that at many points the two blend, insensibly, one into the other; 2, that, with the advance of knowledge, diseases are constantly being transferred from the group of common contagions to the group of parasites; and, 3, that there already exists amongst the most advanced thinkers on these topics, a shrewd suspicion that the two groups will eventually coalesce, and be found in their essence identical.”

Dr. Davaine's interesting discovery seems not unlikely to offer a striking illustration of more than one of the several positions here taken.

I am, Sir, your obedient servant,

WILLIAM BUDD, M.D.

### Surgery.

#### ON LACERATION OF THE INTERNAL LATERAL LIGAMENT OF THE KNEE-JOINT.

By W. B. PEBBLES, M.B., Ch. M.T.C.D.

Surgical writers have taken so little notice of the laceration of the internal lateral ligament of the knee-joint, that the accident must be looked upon as a rare one.

It is fortunate that it is so, for when it has occurred once it is very liable to recur, and the limb cannot be trusted on an emergency during the remainder of life.

Sir Charles Bell, I believe, was the first to describe the accident in his “System of Operative Surgery founded on the basis of Anatomy.” At page 317, vol. ii., he says, “This is an accident which I do not see noticed. I have seen it in various degrees, and have had an opportunity of ascertaining the state of the parts in dissection.” He then gives a sketch of the thigh bone and tibia, showing how the internal lateral ligament is put on the stretch when the thigh bone is removed from the perpendicular, and says, “the effect of a false step in which the whole weight of the body falls suddenly with a shock is to sprain or lacerate the ligament; so it happens that a person descending a stair, and thinking that he has come to the landing place when one step is still to take, falls with the weight of the body bearing on this ligament and sprains it.” He remarks that the accident is more liable to occur in women, “for the more removed the thigh bone is from the perpendicular the more apt is the inner ligament to be sprained.” “If the violence be great, we can readily conceive how the ligament is actually torn so as to produce a subluxation of the knee-joint.”

In May, 1859, I was sent for to visit a gentleman, aged 32, who, in stepping from a stone, used for mooring boats to, sprained his left knee and fell helplessly to the ground. I found the limb slightly flexed, the toe everted, and some swelling accompanied with pain over the site of the internal lateral ligament. On asking him if anything similar had occurred before, he said that ten years previous'y, when riding through a rabbit warren, the horse stepped into a hole and fell with him; that his left leg was held between the body of the horse and the ground in a state of eversion; that swelling and pain in the joint resulted; and that antiphlogistic treatment was adopted; but that no flexion or extension, as recommended by Hey for the internal derangement of the knee-joint, was resorted to. Subsequently the joint had received several twists.

After the swelling and pain had been removed by means of leeches, cold lotions, and rest, the joint was strengthened by sea-water douches, iodine, and bandages. In the following shooting season he was able to walk for seven hours on level ground; but upon going on hilly ground the limb at once felt weak.

In the following November, I was suddenly summoned to him again. He had been walking down a steep incline overhanging the sea, with a gun in his hand, when the joint "gave" under him and he rolled down till stopped by a bush. He might have remained there for an indefinite period, as the place was secluded, had not some people come within call. On this occasion the limb presented the former symptoms in a more marked degree. There was much eversion of the foot, a considerable amount of pain, and effusion into the bursa which lies over the ligament. On pressing with the tip of the finger deeply at this point, an interval could be felt between the femur and tibia. I told him that I was of opinion that the ligament had been torn across, and that after antiphlogistic treatment the limb should be kept in an immovable apparatus. I applied a starch bandage strengthened by layers of pasteboard, leaving an opening for leeching, &c., and recommended a laced knee-cap to be worn constantly in bed as well as when moving about after it was removed. Six months after, he went to Professor Fergusson, who, he told me, said that the limb had the signs resulting from Hey's displacement, "but that there had been something else." What he considered that to have been I believe he did not state. He recommended an elastic knee-cap and chloroform liniment. This opinion, coming from so high an authority, shows that the two accidents are closely allied, but they differ in some respects.

I do not mean to say that the cartilage may not have been out of its place and have slipped into it again, but there were points which made



me believe that such had not been the case. For instance, the joint had been made to assume the appearance of "in-knee" suddenly and violently (subluxation), but the patient was able to bring it into the slightly flexed position in which it lay when I first saw it. It was not, as Miller says, "immediately rendered stiff," nor was the accident produced as Hey's is said generally to be—viz., "When a person walking strikes his toe, with the foot everted, against any projection, after which he immediately feels severe sickening pain in the knee, and is unable to straighten the limb."—(Sir A. Cooper).

On each occasion the ligament was subjected to sudden direct violence, and the pain (sickening at first) referred to its centre. It is probable that on the first occasion complete rupture took place, followed by lengthened union (the remaining foot everted) that on the second ligament was only violently sprained, (I could not sink the tip of my finger between the bones) and that on the third, complete rupture took place.

The symptoms of this injury differed from those of Hey's derangement in the greater amount of motion (passive, of course, on account of the pain), which the joint was capable of, the small spot to which the pain was referred, the inconsiderable amount of swelling, and the mode of its occurrence. There was much obscurity still as to the true nature of the "internal derangement;" but from the position, direction, and connexions of the internal lateral ligament, from the eversion of the foot when it is injured, and from the permanence of the eversion after Hey's lesion, it is probable that it never escapes being more or less injured when the relative positions of the cartilage or condyle are suddenly altered, and that the closer the union which it is so desirable to bring about between the torn fibres is, the less liability there will be to recurrence of the accident. Hence the necessity of handling the joint as gently as possible, and of keeping it at perfect rest for a long time after the injury.

The treatment recommended by Sir C. Bell for this laceration is a stiff splint at first and then a jointed one. Locally, leeches followed by a succession of blisters. To this I would add, when walking is resumed, a boot with the sole increased in thickness on the inner edge. This occurred to me in consequence of my patient when walking on the slope of a hill finding it easiest to walk across the slope with the injured limb, the lower one, the weight being thus thrown on the outer edge of the foot. The reason of this appeared to be that it tended to throw the limb into the perpendicular, and ease the ligament. If a jointed splint should be objected to, a laced knee-cap fortified with straps and buckles should be used, and great caution in every movement observed. In bed especially the knee-cap will be necessary.

As recurrence of the accident in a greater or lesser degree may be looked upon almost as a certainty, it is worth considering whether incomplete ankylosis might not be advisable for those whose avocations place them in positions not otherwise dangerous.—*Dublin Med. Press.*

---

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JUNE 13.

CASE IN WHICH A SIXPENCE WAS LODGED IN THE LARYNX DURING TEN WEEKS.

On November 2, the patient was conversing in a public-house, having a sixpence in his mouth, when something in the conversation having excited his laughter, the sixpence disappeared, and immediately he fell to the ground suffocated. For about an hour there was excessive dyspnoea, which, however, subsequently disappeared so completely that on the following day he experienced no bad effect from the accident, excepting that he was unable to speak aloud, and had slight dysphagia. During the succeeding ten weeks he lost flesh and strength, but experienced no difficulty of breathing, either on exertion or otherwise; the voice remained as at first. On January 6th, his breathing again became embarrassed. After lasting for some hours, the dyspnoea suddenly ceased, apparently in consequence of his having tripped in going down stairs. On the following day he attended at Middlesex Hospital for laryngoscopic examination. The sixpence was seen without difficulty on the first introduction of the laryngeal mirror. It was horizontally placed in the glottis, below the false vocal cords, which covered a portion of its circumference at each side, being in such a position that a transversely oblong breathing space was left between its free edge and the arytenoid cartilages. Several attempts having been made without success to extract the coin through the upper opening of the larynx, by means of loops of wire specially contrived for the purpose, it was resolved to have recourse to laryngo-tracheotomy. An incision an inch and a-half long was made in the middle line from the thyroid cartilage downwards, the edges of which were held apart above and below with two pairs of Trousseau's dilators. The coin could be readily felt by forceps introduced through the wound. Several attempts were made to seize it, in one of which it was displaced upwards into the patient's mouth. At that instant the patient made a sudden gulp, the coin slipped out of reach, and the patient, who had become conscious, made signs that he had swallowed it; it was recovered on the following day. After the operation the patient progressed so favourably that he was able to leave the hospital on January 18th, feeling no effect from the accident,

excepting that the voice was still husky and feeble. By February 20th, it had regained its natural character.

The President said that several cases of this kind were on record, but none since the introduction of the laryngoscope. The case was one of great interest.

Dr. Webster referred to several cases on record, and especially the well-known case of the celebrated engineer. He adverted to a case which occurred in his own practice, in which a cherry-stone remained in the bronchus sixty-eight days, and was then expelled by coughing. Louis relates a case in which a small gold coin remained four years in the trachea, and Dupuytren one in which a coin remained ten years. John Stevenson, an old Covenanter, had a bit of mutton bone the size of half a hazel-nut in his trachea fourteen years and nine months, and then coughed it up, and got well. M. Sue met with the case of a girl who had had a piece of chicken bone in her bronchus seventeen years; she coughed it up and got well. Dr. Webster then asked the opinion of the surgeons present to the advisability of opening the trachea in such cases.

Mr. Birkett said the object of the operation in Brunel's case was to enable the patient to take in enough air to enable him to expel it in coughing. Mr. Birkett then referred to the importance of surgeons being provided with a fitting instrument to pass from the opening in the trachea, in order to dislodge a body from the larynx into the mouth. He related a case in which a child was brought to the hospital in *articulo mortis*, after having swallowed a piece of walnut shell. She recovered, but no foreign body could be detected in the larynx at the operation by a probe passed through the tracheal wound. Next day, by passing a larger instrument, an elastic catheter, a piece of walnut shell was dislodged into the mouth.

Mr. Henry Lee said that, in Brunel's case, Sir Benjamin Brodie's object in performing tracheotomy was really to enable him to seize the coin through the opening, but he (Mr. Lee), thought the advantage of opening the trachea was correctly explained by Mr. Birkett. Mr. Lee then related the case of a boy who had swallowed a four-penny-piece. It was supposed to have passed into the larynx, and every time the boy was reversed he was nearly suffocated. He was sent to St. Thomas' Hospital, and one day, while there, felt an inclination to vomit; he heard something clink against the water-closet, and was afterwards well. Mr. Lee repeated that he thought surgeons had an idea of putting forceps in to take out the coin, but he thought that Mr. Birkett's remarks showed that that was not the proper reason for performing tracheotomy in such cases.

## Medical Jurisprudence.

### THE TRIAL OF EDWARD WILLIAM PRITCHARD, M.D., FOR MURDER.

On Monday, July 3, this trial was commenced before the High Court of Justiciary of Edinburgh. The accused is a member of the Medical Profession, an M.D., of Erlangen, M.R.C.S. Eng., L.S.A. Lond. He was educated at King's College, London, was formerly an assistant-Surgeon in the Navy, and has many relatives in the combatant branch of that service. Before his apprehension he resided in Glasgow, where he had practised, it was said, with some success during a period of six years. He is charged with the murder of his wife and of her mother. The first portion of the indictment preferred against the prisoner states that the prisoner "did wickedly and feloniously administer to Jane Cowan or Taylor, now deceased," "in tapioca and in porter or beer, and in medicine called Battley's sedative solution, tartarised antimony, and aconite, and opium, or one or more of them, and that in consequence Jane Cowan or Taylor died on or about the 25th of February, 1865. The second part of the indictment charges the prisoner with having feloniously administered to his wife, Mary Jane Taylor, "in egg-flip and in cheese, in the porter or beer and in wine, tartarised antimony and aconite, or one or other of them, or some other poison or poisons to the prosecutor unknown," and that in consequence Mary Jane Taylor or Pritchard died on or about the 18th of March, 1865.

The counsel for the defence moved that the two charges made in the indictment should be separated and not go to trial at once. This motion was opposed by the prosecution, and was negatived by the presiding judges. The prisoner pleaded in a firm voice "Not guilty."

As it is impossible for us to publish the whole of the evidence in this remarkable trial, we give the following summary of the whole case, and we append the principal Medical evidence, together with an abstract of the chemical analyses.

Dr. Pritchard is a physician who some six years ago came to reside and practise in Glasgow. He brought with him his wife, to whom outwardly he seemed much attached, and two children. Considering the comparatively short time he had been in Glasgow, he had got together a very respectable practice, with every prospect of doing well. During the latter part of last year Mrs. Pritchard appeared to be in a bad state of health, suffering from almost constant sickness and great depression. As she got no better she went to Edinburgh for a change of air, and whilst there her health wonderfully improved. The sickness left her, and she

was rapidly getting well. She returned at the end of a few weeks to her husband at Glasgow, and almost immediately the old symptoms returned. At length she got so ill that her mother, an old lady of seventy-five, came to stay with her, and in a very short time she also was seized with similar symptoms, and, after a very short sickness died and was buried. The certificate given by Dr. Pritchard assigned her death to apoplexy." Three weeks afterwards Mrs. Pritchard also died, and was sent to Edinburgh for interment, the cause of her death given by her husband being "gastric fever." Dr. Pritchard expressed outwardly extreme grief, and would, before his wife's interment, insist upon having the lid of the coffin opened, that her countenance might be seen by her surviving friends, and that he might have the last and bitter consolation of kissing her now pale lips. Thus far all seemed fair and natural. But, unfortunately for Dr. Pritchard, ugly rumours had already spread abroad that his wife had not met her death by fair means; and these rumours attained such a tangible form that, on his arriving at Glasgow, before the last rites were to be performed over the remains of his wife he was taken into custody. Soon after the preliminary examination of the witnesses was commenced, grave suspicions were excited that Mrs. Taylor, the mother of Mrs. Pritchard, had not died from natural causes. Both bodies were exhumed, and portions of them, and the intestines, brain, heart, liver, &c., were subjected to a rigid chemical analysis. The results were conclusive that both Mrs. Pritchard and her mother had not died from natural causes, but had been poisoned, and by nearly the same kind of poison. After five days' trial the truth had been elicited, and Dr. Pritchard now lies under the sentence of death for the two murders. The evidence given at the trial proves that Dr. Pritchard must have been one of the most hardened monsters that this world has ever seen. Not only did he administer the poison day by day—frequently twice or thrice in the same day—but he lavished on his victim all sorts of endearments, and insisted upon sharing her couch that he might more carefully attend to her. His own counsel's words in endeavouring to show that no man could be guilty of such a crime are worth recording. He said: "If he has committed the crime with which he is charged, I say it was a cold-blooded, deliberate poisoning of those two trusting and loving women. If he be guilty, his cruelty knew no compassion; for, if it be true that he poisoned these women, he did not resort to the use of drugs that in a few minutes might have put them beyond the reach of pain, but chose rather to practise those devilish arts by slow degrees, so that the poison which he was administering should stop his wife's life gradually." Yet the jury without hesitation adopted it as emphatically true by bringing

in the prisoner guilty of those frightful crimes. The motives for such atrocious deeds appear to have been lust and avarice. In the year 1864 there entered into the service of Mrs. Pritchard a young girl of seventeen years of age in the capacity of nurse and housemaid. Dr. Pritchard appears to have been enamoured of her, and, on one occasion according to the girl's (Mary M'Leod) evidence, Mrs. Pritchard surprised her husband in the act of kissing her. Mary M'Leod, who gave her evidence with great reluctance, went on to say that she went to her mistress and asked her to be allowed to leave. Mrs. Pritchard, unfortunately for all parties refused her consent, said Dr. Pritchard was a nasty dirty brute, and that she would speak to him. As might have been expected, he succeeded in seducing this unfortunate girl, and it was drawn from her after a great deal of pressing, and by threatening her with imprisonment, that Dr. Pritchard had promised her that he would marry her if his wife should die before him. Soon after this the slow poisoning process was commenced. All the food which Mrs. Pritchard partook of was carried to her either by her husband or Mary M'Leod, and therefore it became evident that, if Mrs. Pritchard was poisoned, either her husband or the girl M'Leod was the guilty party. It was suggested by the counsel for the defence, that the girl had committed the poisonings in order that she might marry Dr. Pritchard at his wife's death, in fulfilment of his pledge. But this was too monstrous. No girl of seventeen, at all events in the position of Mary M'Leod, would have sufficiently understood the science of slow poisoning (for, unfortunately, of late in several cases it has been demonstrated to be a science) to have caused the death of Mrs. Pritchard in the manner described. The first motive, therefore, would seem to be that Dr. Pritchard was infatuated with this servant girl, and really did wish to marry her, or to carry on a *liaison* with her without any one to interfere. The second motive, as far as can be judged, was the desire of immediately becoming possessed of the property that would come to him in the event of his wife and Mrs. Taylor, her mother dying before him. He was in somewhat straightened circumstances. He had borrowed 500*l.* from Mrs. Taylor, and had overdrawn his account. He might have been pressed for money, although there was no actual evidence of the fact, and this may have induced him to poison Mrs. Taylor in a far more summary way than his wife. The old lady appears to have been, to a certain extent, an opium eater, or perhaps it is better to say that she was fond of Battley's sedative, and could, without inconvenience to herself, take daily sufficient to send half a dozen ordinary persons into the sleep of death. Tartarised antimony was not a sufficiently active poison to work speedily on her frame, and therefore,

although she had some of the same symptoms as Mrs. Pritchard, the quantity of opium she took to a certain extent neutralised the effect of the tartarised antimony, and therefore, the doctor had recourse to the tincture of aconite, which soon put his victim out of her misery. Dr. Pritchard, therefore, had a direct interest in his mother-in-law's death. The girl had none, although she might have in the death of Mrs. Pritchard. The accused murderer was proved to have bought the poisons which destroyed his wife and mother-in-law in most unusual quantities, even for a medical man in the largest practice, and no attempt was made to show how he disposed of them. Two or three servants who happened to partake in a slight degree of some of the food sent up to Mrs. Pritchard were at once seized with the same symptoms, and suffered severely from sickness; and on one occasion Dr. Pritchard said he would sweeten some egg-flip for his wife himself, and went to the dining room for some sugar, thence crossed to his consulting room, where he kept his poisons, and then returned to the kitchen and dropped two lumps of sugar into the mixture. One of the women tasted the egg-flip, and at once perceived an extraordinary flavour, and the effect upon Mrs. Pritchard was at once apparent. It is very rare in murder by poison that positive evidence can be obtained; but in this case there does not appear to have been a single link wanting to bring home the guilt to the accused. The poisons of the same kind, which it was proved he had bought and not accounted for, were found both in the bodies of his wife and mother-in-law sufficient to account for their deaths. There was thus the motives for the murders, the manner in which they were perpetrated, and the results.

Dr. William T. Gairdner, Professor of Medicine in the University of Glasgow, deposed:—"I know the prisoner, I got a message to call at his house between the night of the 8th and the morning of the 9th of February. I think it was between twelve and half-past one o'clock. I was told to come and see Mrs. Pritchard. I went immediately. I had never seen her before. I met Dr. Pritchard at the house, and he took me to his wife's bedroom. He told me in general terms what was the matter with her. He said she had been very sick, and her stomach was not able to bear any food, and she had been some weeks in that state. I found her in bed. She was lying on her back, with her face considerably flushed. She appeared to be in a state of considerable excitement, and she told me herself that she had been sick. Prisoner spoke about spasms; but I cannot remember if I got the first information of the spasms from him or from her. I recollect that, after the spasms were mentioned to me, then he said it was catalepsy. He mentioned to me

that Dr. Cowan had seen her, and ordered stimulants, and that his wife had had chloroform, but whether by Dr. Cowan's orders or not I don't know. I think he said she had had champagne. Mrs Pritchard began by apologising for not having sent for me sooner. Dr. Cowan, she said, was a friend of the family, and she had sent for him and he had come. She afterwards said that she was aware that I had been a class-fellow of her brother, Dr. Matthew Taylor, of Penrith. I had some other conversation with her, and spoke to her of her symptoms. I found that she had been sick, but was now in a state of extreme exhaustion. She had a pretty good pulse, and there was nothing in her symptoms indicating immediate danger. The most remarkable symptom was the violent state of excitement she was in and the spasms in the hands. She was holding up her arms in bed, and her wrists were turned in ; her thumbs were also turned in towards the wrists. Her hands were in a very peculiar state. The impression I formed as to the cause of the excitement was that she was intoxicated by the champagne and chloroform. I withdrew to the fire to warm my hands, with the view to make an examination, when I had no sooner moved towards the fire than she began to scream at the top pitch of her voice, ' Oh, you cruel man ! you unfeeling man ! don't leave me ! ' I returned to her bedside, and said I was not going to leave, but I was going to warm my hands. I did so. In the midst of this she was in a state of the most violent hysterical excitement. After various inquiries, and after feeling the state of her skin, I came to the conclusion that she was not in a state to give evidence of her own previous history that night, and I gave the orders that I thought necessary, and left. I ordered that the stimulants should be discontinued. I gave this order emphatically to Dr. Pritchard, and told him most decidedly that she was to get no stimulants whatever until I saw her again. I hardly know what catalepsy is. It is not a disease of ordinary medical experience at all. Almost all we know about it is from books, and what is written about it is to a great extent apocryphal. Therefore, I do not presume to be an authority about catalepsy. Mrs. Pritchard made use of a great deal of language while in the hysterical state, but I took no notice of it, and, in fact, intentionally ignored it. I have great difficulty in remembering whether any of the servants were present. I called again between one and two on the day of which this was the morning. I saw Dr. Pritchard, who said his wife was better and quite quiet. I cannot remember whether he said anything more. He gave me the impression that she was better. We went to Mrs. Pritchard's bedroom, and I found her quiet. She was free from fever. I had some conversation with her, and assured myself that she felt better, and that she



had not vomited since I last saw her; but she still had the remains of spasms in the hands. I directed that she was still to get no stimulants and no medicine. I instructed that when she wanted food she was to get a plain boiled egg and a bit of bread, and I told her that my object was to make her diet as simple as it could possibly be, in order that there could be no possibility of her taking anything which would disagree with her—that is, nothing that would produce sickness or irritation of the stomach. At my visit I was very much puzzled to know what was the matter with her. I thought she was intoxicated—drunk, in fact—and I thought she was hysterical. I thought it was a case which would require serious, constant attention. I never saw Mrs. Pritchard again. I had to leave town two days after for a distant engagement, and before doing so I wrote a note or sent a message to ascertain how Mrs. Pritchard was, and I received for answer that she was better. I returned on the Saturday afternoon, and on my return there was a patient waiting for me. While I was engaged, I believe Dr. Pritchard called and left word that Mrs. Pritchard was better, and that I need not call. I wrote to Dr. Taylor, the brother of Mrs. Pritchard. I did so, I think, on February 9, after my second visit. My reason for doing so was that I was puzzled, and I thought the practice bad, in so far as the stimulants were concerned at least, and I wished to be aided and backed by his assistance.

Cross-examined by Mr. Clark: “The word ‘catalepsy’ seemed to me to have no application to the case. I observed nothing peculiar in Dr. Pritchard’s nomenclature of disease except that perhaps it was occasionally a little at random. I mean by that that I don’t think he was a model of accuracy and wisdom, and cautious in applying names to things. When I wrote to her brother, the first night after I saw her, I did not indicate to him that there had been anything more than improper treatment—I did not indicate to him that there had been any foul play.”

Dr. James Paterson, formerly professor of midwifery in the Andersonian Medical School, was then examined by the Solicitor-General. He said:—I remember being called to Dr. Pritchard’s house on Friday, the 24th of February last. That was the first time I ever crossed his threshold. I was called between half-past ten and a quarter to eleven. Dr. Pritchard conducted me into his consulting-room on the first floor, and there he told me that his mother-in-law, while in the act of writing a letter, had suddenly been taken ill, and had fallen off her chair upon the floor. I think he said it would be about an hour or half an hour before I came that this happened. I asked if he could assign any reason or

cause for the suddenness of the attack. He said his mother-in-law and Mrs. Pritchard had been partaking of some bitter beer, as I understood, to supper, soon after which they both became sick and vomited, and both complained that the beer was much more bitter to the taste than usual. He said they could not have taken more than a third of the pint each, because there was still some remaining in the bottle. I said I could not think it possible that either Allsop's or Bass' beer would produce such an effect, and that the attack must depend on some other cause. I asked him with regard to the previous state of his mother-in-law's health, and particularly as to her social habits, when, by a particular insinuation, he led me to understand that she was in the habit of taking a drop occasionally. He stated also that Mrs. Pritchard had been very poorly a long time past with gastric fever, and that some days before he had telegraphed for his mother-in-law to come and attend her in her illness. I then went upstairs to the bedroom, and on entering I observed Mrs. Taylor lying on the edge of the bed next to me. She was lying on her right side. All her clothes were on, and she had all the appearance of a sudden seizure. Mrs. Pritchard, with her nightdress on, with nothing on her head, and with her hair much dishevelled, was in the same bed, underneath the clothes, and sitting up immediately beyond her mother. On examining Mrs. Taylor, my impression was that she had previously been in very good health. She seemed to me to be rather above the ordinary size, good-looking, well-formed, and altogether, I should say, a very superior, looking person. There was not the slightest appearance of her being in the use of spirits or intoxicating liquors. On examining her face it was rather pale, but the expression was calm and placid. The eye-lids were partially closed; the lips were rather livid; the breathing was slow and laborious. The skin was cool, and covered with a clammy perspiration. The pulse was almost imperceptible, and she seemed to be perfectly unconscious. On my opening up her eyelids I found both pupils very much contracted. From these symptoms, and judging from her general appearance, my conviction was that she was under the influence of opium or some other powerful narcotic, and I at once pronounced my opinion that she was dying. On my doing so, Dr. Pritchard, in an under tone, said something, apparently unwilling that the expression of my opinion should be heard by the ladies. We retired a little from the bedside, and I then said distinctly that she was dying. Dr. Pritchard said she had frequently had attacks before of a similar kind, but never one so severe. I said nothing we could do would have the slightest effect, but as a last resource we might try mustard poultices to the soles of the feet, the calves of the legs, and the inside of the thighs; and as quickly as possible administer a

strong turpentine injection. Dr. Pritchard at once proceeded to prepare an enema, and he said he had a little before given her one in which he had administered a glass of brandy. Mrs. Taylor lay apparently comatose or unconscious, but on her being roused a little, and the head and shoulders slightly elevated, a degree of consciousness came on, and the pulse became perceptible at the wrist. I directed Pritchard's attention to the pulse at the wrist as showing a slight reaction, and he clapped Mrs. Taylor on the shoulder and said, "You are getting better, darling." A slight fit of retching now came on, and she put up a small quantity of a frothy kind of mucus, immediately after which the coma returned. The breathing became more oppressed, more laboured, and evacuations were passed involuntarily. I then concluded that the case was utterly hopeless, but Pritchard administered the enema in my presence. I afterwards left the room and went downstairs, accompanied by Pritchard, and we entered the consulting-room. I repeated my opinion that she was in a state of narcotism. Pritchard then stated that the old lady was in the habit of regularly using Battley's sedative solution, that she had a few days before purchased not less than a half-pound bottle of the medicine, and that he had no doubt but that it was very likely she might have taken a good "swig" of it. That was his expression. There was little more said at the time. I know Battley's solution, but I very seldom have used it. While attending to Mrs. Taylor in the bedroom I was very much struck at the same time with the appearance of Mrs. Pritchard. I must say I could not banish from my mind the conviction that her symptoms betokened that she was under the depressing influence of antimony. I never put a single question to Mrs. Pritchard. The impression was created entirely by her appearance. A little before one o'clock next morning my door-bell was rung, and there was a girl asking for me to come directly to Mrs. Taylor. I refused to go, because I was certain that I could be of no service, and as I was very much fatigued with the previous day's work. But I sent my compliments to Dr. Pritchard, saying that if he really thought I could be of use he was to send back word, and I would then visit him. My house is only a short distance from his in the same street—195 yards. No message came back, and I did not rise. On the 3rd of March I received through the post-office a schedule from the registrar, in which I was requested to tell him the cause of Mrs. Taylor's death, and the duration of her disease. I refused to do so, and sent the schedule back to the registrar on the Saturday, with a note accompanying it, and directing his attention to the circumstance. I accidentally met the prisoner in Sauciehall street on the Wednesday after Mrs. Taylor's death. He said I had been very correct in my opinion with

regard to his mother-in-law; and added that he would feel obliged if I would visit Mrs. Pritchard next day. On Thursday, the 2nd March, about eleven in the forenoon, I saw Mrs. Pritchard in bed. She was still very weak and prostrate. In a very earnest manner she asked me if I really thought that her mother was dying when I saw her. I said, "Most decidedly," and that I had told Pritchard so. She then clasped her hands, looked up, and feebly exclaimed, "Good God, is it possible?" and burst into a flood of tears. I asked her with regard to the previous state of her mother's health. She told me her mother's health was generally very good, but she suffered occasionally from what she called neuralgic headache, and for the relief of these attacks she took a little of Battley's sedative solution. I understood that she was not in the habit of taking it. I then questioned her with regard to herself, and prescribed some stimulants to recruit her strength, and some cooling drink to relieve the heat and irritation. Dr. Pritchard called on me about eight o'clock on the evening of the 17th of March, and requested me to visit Mrs. Pritchard. When I saw her I was much struck by her terribly altered appearance. She seemed quite conscious, for she caught my hand, and I could see a half smile of recognition on her countenance. She began to mutter something about vomiting. Dr. Pritchard was standing behind, and he volunteered to say she had not been vomiting, and that she was only raving. She complained of great thirst. There was a peculiarly wild expression in her face. The eyes were of fiery red, sunk in the head; her cheeks were hollow, sharp and pinched, and still much flushed. Her pulse was very weak and exceedingly rapid. Her tongue was of a darkish brown colour, very foul—very foul. She immediately began to grasp as if to catch some imaginary object about the bed-clothes. Pritchard said she had not slept for four or five days and nights. I then said we must endeavour to do something to relieve her, and if possible procure some refreshing sleep. We left the bedroom, and went downstairs. I then prescribed. A dose was to be repeated in four hours if the first did not produce sleep. The prescription was written to my dictation by Dr. Pritchard. About one next morning my bell was loudly rung, and a young woman requested me to come to Mrs. Pritchard immediately, as she had become much worse. I proceeded to dress, but in less than three minutes my door bell was again rung, and the servant girl said I need not come, as Mrs. Pritchard was dead.

In cross-examination, witness stated that it was his impression on seeing Mrs. Pritchard that she was poisoned, or being poisoned with antimony. He did not go back to see her, because she was not his patient. He had nothing to do with her. It was not his duty to do so. You saw

a person being poisoned with antimony, and you did not think it was your duty to interfere? I did the best I could to prevent her being further injured by apprising the registrar of the fact. Did you tell Dr. Pritchard?—I did not. You were surely under an obligation to go back again when you saw a person being poisoned by antimony?—I took what steps I could to prevent any further administration of the drug. I refused to certify the death of Mrs. Taylor, and if there had been a post-mortem examination of Mrs. Taylor's body I believe that the drugging with antimony would have gone no further at that time. I observed that she was suffering under the same symptoms as those formerly observed when I was called in on the 2nd March. I still believed her to be suffering under antimony, and prescribed for her accordingly. I saw her alone, but did not mention antimony to her in the slightest. The treatment I prescribed for her, provided she got nothing else, was quite sufficient to have brought her very soon round, taking it for granted that my prescriptions were carefully walked up to, or rather my advice. It was Dr. Pritchard who asked me to visit his wife on the occasion. I did not mention to him what I thought. It would not have been a very safe matter to have done. I did not go back, because it was none of my business. I did not consider it my duty. She had her husband who was a Medical man. I had discharged my duty. By prescribing certain things, and not going to see that your prescription was followed—In the case of a consultation the consultant has no right to go back. The dignity of your profession, then, prevented you?—The etiquette of the profession. In re-examination, witness, being asked why it would not have been safe to communicate his suspicions to Dr. Pritchard, said he would rather not answer that question. The letter to the registrar had been destroyed, but he could give it *verbatim*, as he had paid great attention to it.

James Struthers, registrar of the Blytheswood district in Glasgow, was then examined, and stated that Mr. Taylor intimated the death of Mrs. Taylor to him. Dr. Paterson was said to have been the medical attendant, but he returned the schedule sent to him. Dr. Pritchard then sent a certificate. He also sent a certificate of his wife's death.

Dr. James Paterson was then recalled, and gave the following as the letter he had written to the registrar:—

“Dear Sir,—I am surprised that I am called on to certify the cause of death in this case. I only saw the person a few minutes, and a very short period before her death. She seemed to be under some narcotic; but Dr. Pritchard, who was present from the first moment of her illness till death occurred, and which had been in his own house, may certify the cause. The death was certainly sudden, unexpected, and to me mysterious.”

I rendered emphatic the words "the cause of death" by having them underlined.

The Lord Justice-Clerk.—In answer to a question from the prisoner's counsel, I think you said your impression when you first saw Mrs. Pritchard, and afterwards when you saw her on the 2nd of March, was that she was being poisoned with antimony. Do you mean you believe some person was engaged in administering antimony for the purpose of procuring her death?—Yes; but to me unknown. Was that your meaning? That was what I meant.

#### THE SCIENTIFIC EVIDENCE.

The Medical scientific witnesses in the case were then called. The reports to which they spoke were nine in number, and the following is a brief statement of their purport:—No. 1 was a Medical report by Dr. Douglas Maclagan, Professor of Medical Jurisprudence in Edinburgh University, and Dr. H. D. Littlejohn, Edinburgh, of the post-mortem examination of the body of Mrs. Pritchard. It was dated the 21st of March, and stated that the body appeared to be that of a healthy woman, of about the age stated on the coffin-plate, thirty-nine years. It concluded:—"We have to report that this body presented no appearances of recent morbid action, beyond a certain amount of irritation of the alimentary canal, and nothing at all capable of accounting for death. We have, therefore, secured the alimentary canal and its contents, the heart and some of the blood, the liver, the spleen, the left kidney, and the urine, in order that these may be submitted to chemical analysis." No. 2 was the chemical report of Dr. Maclagan on the death of Mrs. Pritchard. It stated that antimony had been found in the stomach, urine, liver-bile, blood, and liver. The following were the conclusions:—"1. That Mrs. Pritchard had taken a large quantity of antimony in the form of tartar emetic. 2. That, having regard to the absence in her case of any morbid appearances sufficient to cause death, and to the presence in it of a large quantity of a substance known to be capable of destroying life, her death must be ascribed to the action of antimony. 3. That it is most unlikely that this poison was taken in a single large dose. Had this been the case, I should have expected to have found some more decided evidence of irritant action in the mouth, throat, or alimentary canal. 4. That, from the extent to which the whole organs and fluids of the body were impregnated with it, it must have been taken in repeated doses, the aggregate of which must have amounted to a large quantity. 5. That, from the large amount found in the liver, from its ready detection in the blood, and from its being found passing so copiously out of the body by the bile

and urine, it is probable that some of the poison had been taken at no greater interval than a period of a few days previous to death. 6. That I am inclined to believe that it had not been administered, at all events in any great quantity, until within a few hours of her death. Had this been the case, I would have expected to have found at least some traces of it in the contents of the stomach, and more in the contents of the intestines; whereas none was found in the former, and the amount found in the latter seems to be amply accounted for by the bile impregnated with the poison discharged into them from the liver.

7. That the period over which the administration had extended cannot be determined by mere chemical investigation, but must be deduced from the history of the case, with which I am unacquainted." No. 3 was a report of analysis in the case of Mrs. Pritchard by Frederick Penny, Professor of Chemistry, Glasgow. His conclusions were:—"1. That all the parts of the body examined by me—namely, the stomach, liver, spleen, kidney, heart, brain, blood, and rectum—contained antimony. 2. That, in the dried contents of the intestines the antimony was partly in a form soluble in water, and most likely in the state of tartar emetic or tartarized antimony. In the liver, kidney, and the other viscera, the antimony was deposited in a state insoluble in water. 3. That the contents of the intestines contained the largest proportion of antimony next the heart, then the liver, kidney, and spleen, less in the stomach, and the smallest quantity in the rectum, brain, and blood. Not knowing the total weight either of the contents, the intestines, or of the several organs here enumerated, I was unable to calculate the total quantity of antimony in these matters, either separately or conjoined. 4. That the contents of the intestines, the spleen, the heart, the blood, and the kidney contained mercury; but that none of this metal was present in the liver, stomach, rectum, and brain; but in all these matters the mercury was in a state insoluble in water, and this result is quite consistent with the known property of mercury to form insoluble combinations with animal substances, even though it had been taken or administered in a soluble form during life. 5. That the largest quantity of mercury was contained in the contents of the intestines, next in the spleen and heart, and extremely minute traces in the blood and kidney. 6. That the presence of antimony and mercury in the contents of the intestines indicates that these metals were being passed from the deceased up to time of death. 7. That no other metallic poison was contained in the matters examined. 8. That no aconite, morphia, or other vegetable poison, discoverable by chemical processes, was contained either in the contents of the intestines or in the stomach. 9. Not having detected any organic poison, either in

the said contents of the intestines or in the stomach, it was not necessary to examine the other articles for such poison, and more especially as the quantities of these matters received for analysis were too small to hold out any prospect of a successful result. No. 4 was a report by Dr. MacLagan and Dr. Littlejohn, dated the 30th of March, on the post-mortem examination of Mrs. Taylor, whose body was exhumed at Grange Cemetery, Edinburgh, that day, and the coffin-plate bore, "Jane Taylor, died February 25, 1865, aged seventy-one years." The report concluded in similar terms to the report in the case of Mrs. Pritchard. No. 5 was the chemical report by Dr. MacLagan on the organs of Mrs. Taylor. The conclusions were:—"1. That Mrs. Taylor had taken a considerable quantity of antimony in the form of tartar emetic. 2. That, having regard to the absence of any morbid appearances sufficient to account for death, and to the presence in the body of a considerable quantity of a substance known to be capable of destroying life, her death must be ascribed to the action of antimony. 3. That it is most likely that this was not taken in a single large dose. Had this been the case, I should have expected to have found some morbid appearance indicative of the irritant action of the drug. It appears to me more probable, from the amount found in the body, that it must have been taken in a succession of doses, not great enough individually to produce local irritant effects, but amounting in the aggregate to a large quantity. It is right, however, to add, that a single copious dose, not large enough to produce marked local effects, might give rise to fatal depression of the system in a woman aged seventy-one, whose heart was enlarged and somewhat dilated. 4. That, from the fact that antimony was found copiously in the liver, was readily detected in the blood, and existed to the amount of a quarter of a grain in the stomach, some at least of the tartar emetic had been taken probably within a few hours before death. 5. That, from mere chemical investigations, I am unable to say over what length of time the administration of the antimony had extended supposing it, as I believe, to have been taken in a succession of doses. This can be learnt only from a consideration of the history of the case, with which I am unacquainted. No. 6 was Professor Penny's case in the report in the case of Mrs. Taylor. He certified as follows:—"1. That all the articles subjected to analysis contained antimony. 2. That the dried contents of the intestines contained the largest proportion of antimony, next, the liver and stomach, then the blood, and in less quantity the heart, kidney, and rectum. 3. That part of the antimony in the contents of the intestines is in a form soluble in water. 4. That the kidney was the only article in which mercury was detected. 5. That neither the stomach nor the contents of the intestines con-



tained aconite or morphia in quantity sufficient to be detected by known chemical processes. 6. That the articles subjected to analysis contained no other metallic poison than antimony and mercury, as reported above." Nos. 7 and 8 were reports by Professor Penny on the articles found in the house of the prisoner.

After the medical and chemical reports had been given in, Dr. Mac-lagan was cross-examined as to the processes used in his analysis, but nothing of importance was elicited. In re-examination, he stated that the quantity of antimony in the intestines, estimated by the portion submitted to analysis, was 5·712, or nearly six grains.

Dr. Frederick Penny was then examined on his reports and experiments. In addition to the antimony found in the bottle of Battley's solution, he had by further experiments discovered the presence of aconite. He detected it by applying an extract, obtained by evaporation, to his tongue, when it produced the tingling and benumbing sensation characteristic of aconite. A further portion was treated with ammonia and diluted hydrochloric acid, on the evaporation of which it produced the same sensations strongly and distinctly. He added ten per cent. of Fleming's tincture of aconite to Battley's solution, which produced the same sensations very much stronger. He concluded that the solution given to him for examination contained more than five and less than ten per cent. of tincture of aconite. Witness then described a series of experiments made by him on rabbits with Battley's solution, as purchased by him in various places in Glasgow and London, with the solution with tincture of aconite added by himself, and with the mixture under investigation. The preparations had been injected under the skin of the back of the rabbits, between the skin and the muscles. With the genuine Battley the rabbits assumed a prone position, resting on belly and chest, and the head invariably resting on the ground. The fore legs were either sprawling or gathered under the body, the hind legs lying extended sideways; the eyes remained open, and the pupils were natural and not contracted. The breathing was invariably gentle; no cries were uttered; no convulsions or spasms of the body were apparent. There was a complete condition of inanity, and, with the exception of the open state of the eyes, the animals seemed to be in a state of perfect sleep. In this state the animals remained for several hours, and then gradually recovered. The effects produced upon the animals by Battley's solution containing aconite presented a striking contrast to the symptoms resulting from pure Battley. Soon after the injection the animal became restless and uneasy, and then began to crouch, resting on its flank, the hind legs extended literally, and keeping its head erect. It next assumed the sitting posture.

in an attitude of watchful expectancy, and commenced to twitch its lips and move its jaws as if chewing. Suddenly it staggered and reeled over, quickly regaining its feet; saliva began to flow from the mouth, and soon after, piteous and peculiar choking cries were emitted. The head was retracted, and the breathing was painfully laborious. Convulsions now set in, followed by intervals, during which the limbs were quite relaxed, and the animal lay helpless on its side. Frantic leaps were now frequently taken. A state of utter prostration then occurred, variable in duration, and then a strong convulsion came on, during which, or immediately after, the animal expired, the limbs becoming instantly relaxed. The results produced by this bottle corresponded in every respect with the effects produced by the above mixture, and were so closely similar that it was impossible to detect any essential difference in them. In the case of the small rabbits, the experiments were made at the same time, and, without knowing beforehand, it would not have been possible to distinguish the animal under the influence of this Battley from the one under the influence of the mixture of Battley and the aconite. These results left no doubt on his mind, joined with the sensations, that that bottle contained aconite. All the other experiments, which were numerous and varied, confirmed these results.

In cross-examination, Dr. Penny stated that results similar to that produced by antimony under Reinsch's process might be produced by oily matters, but that he would never be satisfied to stop short with that process. In re-examination, he stated that the experiments with the rabbits had been repeated in Edinburgh, in presence of Drs. Maclaghan and Littlejohn, with precisely similar results. So far as he could say, the mixture under examination differed only from the genuine Battley in the presence of antimony and aconite.

He stated that the symptoms described as shown by Mrs. Taylor corresponded with the action of tartarized antimony as known to him from study. The powders stated by Dr. Paterson as prescribed by him, and which contained calomel, accounted for the traces of mercury found in the analysis. The symptoms shown by Mrs. Pritchard also corresponded with those arising from antimony.

Dr. Douglas Maclagan, recalled and shown his chemical report on Mrs. Pritchard's case, said his better acquaintance with the case confirmed the conclusions there stated. The symptoms suggested the administration of antimony at an early period of the illness. Most probably the administration of antimony had been going on the whole time, from the commencement of the illness in December. From the evidence given and the symptoms described, he was unable to suggest any other cause for

the death. He knew of no natural cause to which the death could be ascribed. Outward application of antimony for a sprain could not account for the death. He never saw anything rubbed on the skin producing any of the constitutional effects of antimony. The powders prescribed by Dr. Paterson would account for the presence of mercury in the body. The history of the case, as he had heard it in the evidence, decidedly confirmed the conclusions in his report. There was nothing to indicate that Mrs. Pritchard had been labouring under fever of any kind. Being referred to his chemical report in Mrs. Taylor's case, Dr. MacLagan said he was inclined now to think there had been something more than antimony at the last. The symptoms exhibited by her might be produced by aconite. He thought Mrs. Taylor, being found suddenly with her head falling, the breathing being hardly perceptible, the pulse almost, if not altogether, imperceptible, and the generally torpid condition of the brain and the lowered state of the circulation, were indications such as would have resulted from aconite; but aconite, like most poisons, varied a little in the effects it produced on different individuals. But these were symptoms likely to have been produced by aconite. He agreed with Dr. Penny in describing the results of the experiments with Battley's solution. Antimony passed pretty rapidly out of the system by vomiting and purging, weakening and ultimately destroying the patient. Opium might lessen tendency to vomit, but a pernicious effect on the muscular tissue would remain. He had never known a patient under the influence of aconite and antimony at the same time; but if opium, aconite, and antimony were administered, so as to be operating at the same time, the symptoms which Mrs. Taylor had exhibited were such as he would have anticipated, because the aconite being the most powerful, would predominate. There was nothing in her symptoms to indicate apoplexy. That idea was satisfactorily excluded in his judgment.

Cross-examined.—There were no traces of poisoning by opium in Mrs. Taylor. Her symptoms were not inconsistent with her having taken opium, but they did not indicate poisoning by opium. Aconite could not be detected by chemical analysis, and opium was another vegetable poison which was absorbed in the system. A person might be poisoned by opium without any remains in the stomach or the system being detected by chemical analysis. Mineral poisons were more easily detected, and the expectation was that if a person were poisoned by antimony it would be detected by chemical analysis. The contraction of Mrs. Taylor's eyes might arise from opium, but it was an indication of aconite also.

By the Court.—If Dr. Penny's estimate of the amount of aconite in

the mixture were correct, Mrs. Taylor might have taken 100 drops to produce the symptoms. A person accustomed to the use of Battley's solution might take 100 drops quite well.

Dr. Henry D. Littlejohn assisted in the post-mortem examination of Mrs. Taylor and Mrs. Pritchard, and concurred in the reports. He was of opinion that Mrs. Pritchard's death was caused by antimony administered in small quantities and continuously. In Mrs. Taylor's case he had no difficulty in arriving at the opinion that she died of poison, but he had difficulty in determining the particular poison that killed her. He thought the symptoms were mixed in her case, to some extent, like those of narcotic poison, and to some extent like those of antimony. Antimony in large quantities would produce a burning sensation in the throat. It could be readily administered in a liquid or beat up in egg-flip. It dissolves readily. Lump-sugar, being porous, would easily take up a sufficient quantity of antimony to cause vomiting.

In cross-examination, witness said he had made no special experiments to test this, but, from his knowledge of tartar emetic, he was entitled to make the statement he had done. It was impossible that opium alone could produce the symptoms exhibited by Mrs. Taylor.

Dr. James Paterson stated that the evidence he had heard had confirmed the conviction he held in regard to Mrs. Pritchard's case. He was well acquainted with the symptoms of poisoning by antimony, and those of Mrs. Pritchard indicated chronic poisoning by small and repeated doses. It was his decided impression that she was killed by chronic poisoning by antimony. He thought Mrs. Taylor might have died from opium, but there might be some other narcotic poison. He had made an experiment with aconite, by applying it to the tongue. It produced a strong tingling sensation, accompanied by numbness, which lasted at least four hours. He would never forget the taste while he lived. He had no suspicion of antimony in Mrs. Taylor's case, but he now believed her death had been caused by opium and antimony. A less dose of opium would have a greater effect, seeing the patient was previously under the influence of antimony. The effect would be much more rapid if aconite were also combined.

John M'Millan, assistant to Murdoch Brothers, deposed to having filled a bottle with Battley's solution for Mary M'Leod on the 28th of February. Cross-examined, he said he had previously filled the same bottle for an old lady, the circumstance being fixed on his memory because she told him to cork it well, as she had once lost a quantity of it. The purchase of the solution by Murdoch Brothers was proved by Mr. Barron, of Barron, Harveys, Becketts, and Simpson, wholesale druggists, London,

and by Mr. Watts, of Battley and Watts, proprietors of the recipe. The last-mentioned witness declined to state the exact composition of the solution, but said it was a watery solution of opium, and contained neither antimony nor aconite, nor any other poisonous ingredient except opium.

After some unimportant evidence, the prisoner's declarations were read. In the first, on his apprehension on the 22nd of March, the prisoner stated:—

“I have always attended my wife in all her ailments of every kind during the whole period of our married lives, now fifteen years, and some of these illnesses were very severe, but I never saw her so ill as she was on this occasion, which terminated fatally. As far as my judgment goes, her last illness was gastric fever, which commenced about the beginning of the present year. I gave my wife no medicines during her illness, except wine, champagne, and brandy, to support her strength; and I gave her no medicine myself at all. I trusted to nature to right itself with the assistance of these restoratives. During the last six weeks her power of sleeping entirely went away. In order to procure sleep I gave her at the commencement of her sleeplessness a small quantity of chloroform, but it entirely disagreed with her, and I discontinued it. I then called in Dr. Gairdner, professor of medicines in the University, and he visited and saw her several times, and he continued to attend her till her old medical friend, who had attended her before our marriage, Dr. James Moffat Cowan, returned, and he came from Edinburgh to see her. I then wrote to her mother to come to nurse her, and she arrived about the 11th of February last, and her arrival had a beneficial effect upon Mrs. Pritchard for some time, but still the sleeplessness continued, and shortly after her mother's death, which happened on the 25th of February, she relapsed and became much worse, and very apprehensive about herself, and she suggested to me the adoption of a medicine with which her mother was very familiar, Battley's solution of opium, but I declined to give any without first consulting with Dr. James Paterson, who lived close by. I saw him and consulted him, but he did not see Mrs. Pritchard on that occasion, and he did not approve of using the solution of opium. He prescribed granulated citrate of magnesia, calomel, mercury, and chalk, and I acted upon his advice and administered the medicine, and it seemed to have a beneficial effect. Some time after, finding her sleeplessness still continued, I, at her own suggestion, applied a solution of atropine to the external parts around the eye, and it had a little effect for some time, but the effects soon ceased. After her mother's death she became rapidly worse—indeed, I ascribed her decease to the agitation consequent on her mother's decease. At the time of the last event she was

strongly impressed with the idea that she herself would die at the same time as her mother, and in fact she did die on a subsequent day at exactly the same hour. On the night preceding her death, she was apprehensive that unless she got sleep she would not get through the night. I went for Dr. Paterson, who came immediately, and sat for a considerable time by the bedside, and afterwards dictated a prescription, which was made up at the Glasgow Apothecaries' Company's shop at Elmbank street. The prescription will be found in my desk at home. It was for two draughts, one to be given four hours after the first, if it did not succeed. She got the first draught, as prescribed by Dr. Paterson, about 10 o'clock, but she said, after drinking, that it was not strong enough, and asked if she might have some of her mother's medicine. I refused to give it to her, and said I dare not do it. I gave her a glass of port wine, and sat carefully watching for a short time. I then went down stairs and had supper, and after being absent some time returned to see whether she had got sleep. I found her awake, and she wished me to give her something to make her sleep. I refused, and she then asked me to come to bed, as I must be tired with the weary nights of watching. It was then about 12 o'clock. I tried to persuade her that I should remain up to watch her till past the time that her mother had died, but to please her I got into bed, and almost immediately I fell asleep from the state of exhaustion I was in. I was awoken by her pulling at my beard, and I found my wife struggling to get into bed. She appeared to have got out of bed. She said, 'Edward, I am faint.' I assisted her into bed, and asked her how long I had been asleep; but she answered, 'Don't speak—look! do you see my mother?' I said, 'No! it is only a vision—only imagination,' and asked if she had any pain. She said she felt cold, and that I need try no more skill; and that I had failed this time, and that she was going to her mother. I got alarmed, and rang the bell violently, and the youngest servant came. I desired her to make a mustard plaster as quickly as she could, and on that my wife turned round and said, 'Edward, I'm in my senses, mustard plasters will do no good,' and almost immediately she fell back in my arms and died. The servant came with a mustard plaster and found her in that position. I did not give her any other medicine at that time, except a little brandy applied to her lips. During the whole course of her illness I never gave her any antimony, nor any medicine in which there was any preparation of antimony. Antimony is a poison, but it is used occasionally to subdue inflammation, and I applied it to her neck in October last, when she was plagued with a swelling of a gland in her neck. I rubbed it in externally on that occasion, and I have never given her any antimony since. On that occasion

I recommended change of air, and gave her a little bottle of antimony for the same purpose of rubbing in behind the ear. She went to Edinburgh at that time, and she returned to Glasgow very much better; and I have never seen the bottle of antimony since she got it away with her. There was a considerable quantity of antimony in my repositories at the time of my wife's last illness, as I used it extensively in my practice; and the antimony was kept in a cupboard, of which I have the key, but which was not always locked. I did not see any of it brought out, or lying about during her illness. The cupboard where the antimony was is in the consulting-room on the ground flat, and she was so weak on the day of her death—Saturday—and on the Friday preceding, that I do not think she had strength to have gone to that cupboard herself. My wife took the antimony internally on one occasion when she had a tendency to inflammation of the eyelids. This was years ago, and I never knew her to use it internally except on this occasion. I never administered antimony internally to her on any occasion, nor any other substance calculated to injure or destroy life. All which I declare to be truth.

The second declaration, taken the 21st of April, in reference to the charge of the murder of Mrs. Taylor, was to the following effect:—

“I am entirely innocent of the charge referred to. ‘I elect to make a voluntary statement in reference to the said last-mentioned charge, and I now declare I was no way accessory to Mrs. Taylor's death; I never administered poison to her; I did and do believe that she died from paralysis and apoplexy; I have no further statement to make, and, by the advice of my agent, will make none, with the exception that I am entirely innocent of the charge preferred against me.’

The Judge having charged the jury, they retired to consider their verdict, and in about an hour came into court with a unanimous verdict of GUILTY of both charges.

The Lord Justice Clerk then sentenced the prisoner to be executed at Glasgow on the 28th ult., and in passing sentence said, that the verdict of the jury proceeded upon evidence which could leave no reasonable doubt on the minds of those by whom it was considered.

The prisoner, who had maintained great composure throughout the five days of the trial, seemed greatly affected when the verdict was pronounced, and leant slightly on the policeman sitting beside him; but while the sentence was being recorded he completely regained his composure, and after sentence was passed upon him he bowed to the judge and also to the jury before leaving the dock.

Since his conviction, the prisoner has confessed his guilt and acknowledged the justice of his sentence. His execution took place at Glasgow on the 28th July, in the presence of about 80,000 persons.

# Canada Medical Journal.

MONTREAL, AUGUST, 1865.

## THE BEAUPORT ASYLUM.

The boasted privilege of every Englishman is the most unbounded freedom of speech, hence the characteristic of our countrymen is to be honest and out-spoken. It was in the exercise of this acknowledged right, in the last number of our periodical, in reference to matters connected with the Beauport Lunatic Asylum, which has brought on us a storm of abuse from Dr. James Douglas, one of the proprietors of that institution. The Beauport Asylum occupies a somewhat anomalous position. It receives a large amount from Government each year, and is under Government inspection. The patients are nearly, if not altogether, pauper, or at least from that class who have to be supported in this institution at the public cost. Still the asylum is private property, a regular contract existing between the Government and the proprietors of the grounds and buildings, to receive all patients sent to them at so much a head per week. We should like to be informed as to the terms of that contract. Although it may be a contract between the Government and a private individual, we think, as we are called upon to contribute our quota of \$67,000, which annually goes into the pockets of the proprietors of that asylum, we ought to have the right of demanding the terms of that contract. We feel certain that had the Toronto Lunatic Asylum been a private speculation, with a contract binding the Government down to certain terms, there would not, at the present day, exist in Upper Canada four other institutions for the relief of those mentally deranged. In the letter of Dr. Douglas, which we publish, it will be seen that he is fully alive to the necessity of having an asylum in the district of Montreal. Coming from such a source, one whose opinion has been looked upon by the Executive as *the authority par excellence* in Lower Canada on the subject of insanity, we suppose we may reasonably hope the affair settled, and that in this district we will, before long, see an asylum in progress of erection—one which will not be considered by even the imperial authorities a miserable make-shift, an opinion expressed in the



Imperial paper on Colonial Hospitals and Lunatic Asylums, as applied to the asylum at St. Johns. See page 30: "And they represent that there is a pressing necessity for the erection of a new asylum, with proper grounds, in the western part of the Province, to replace the miserable make-shift at St. Johns."—*Despatch, Sept. 25th, 1863.* Will it be credited, that nearly two years have elapsed since this damning despatch was forwarded by our Government to the Imperial authorities. We say damning, for it is so to the credit, philanthropy, and Christianity of the country.

Two years since the Government of Canada acknowledged in a despatch to the Imperial authorities, who called for information with regard to the public charities of the country, that "at the present time 130 insane persons," in Lower Canada, "are improperly provided for, in gaols and otherwise, and sixty who cannot find any accommodation at all. And yet the same state of things is permitted to continue. No attempt is made at amelioration; the same miserable make-shift at St. Johns is allowed to remain.

The data of the article in our last number, to which Dr. Douglas takes exception, were from the *Toronto Leader*. There can be no doubt that the crowding in the Beauport Asylum must have been a most serious cause of complaint, when we find the following in the Return to an address of the Honorable the Legislative Council, for copies of all correspondence between the Commissioners for the management of the Beauport Lunatic Asylum and the Government, during the last three years.

"11th February, 1865.

"I have this day inspected the Asylum in all its parts, including the two cottages; the total number of inmates being 557 (not including 65 servants). While the asylum continues in its present terribly over-crowded condition, I refrain from any remark, except that such condition is, in my humble opinion, unfair to those who have the superintendence of it, and most unjust to the inmates; for those who might recover their sanity under favourable circumstances as to classification, &c., &c., have no chance here."

"ROBERT HAMILTON, *Commissioner.*"

And as to the cubic space, there can be no doubt of the fact attested by Mr. A. Lemoine, the Secretary to the Commissioners of the Asylums, as also by the Commissioners themselves, and which must be received by the public so long as it remains uncontradicted.

"Now, many of the single rooms before referred to do not contain one-half of 1,000 cubic feet—some of those contain under 300 feet, and they are occupied by dirty patients."

This is under date 6th July, 1864. We do not think that in this the proprietors are altogether blameable; they have no alternative, they are forced to receive lunatics, who are remaining in the prison houses, or who are at large. We desire to point out the suicidal policy of our Government, the gross wrong done not alone to the inmates of these institutions, but to the whole country. All authorities concur in the opinion, that insanity, to be treated with the hope of success, must be treated early in the attack. It is certainly more than a retrograde step for us in Canada to start a plan of our own, and ignore the experience and teaching of those who have made this subject a study in the mother country. We have before shewn that a poor man in Lower Canada, at least in the District of Montreal, requires from six weeks to six months' experience of prison life in the cells of our common gaol before he can be admitted even into the "miserable make-shift at St. Johns," or into the Beauport Lunatic Asylum. Six weeks' incarceration in these cells, is quite sufficient to drive any sane man mad; the care they receive, the "medical comforts," if any, are not calculated to relieve a patient suffering from an attack of acute mania. In writing this, we do not desire to say one word against the management of our gaol, which we are willing to believe is in every respect a model institution of its kind; we simply wish to intimate that it is not a Lunatic Asylum, and therefore is a place totally unfit to receive persons mentally deranged.

The consequence of this system of *laissez faire*, this do-nothing policy, on the principle as our friend Dr. Douglas suggests, "that he who wishes to sit easy should sit still," is in reality a policy which, laying aside the moral obligations to our fellow beings, is calculated, before many years, of throwing on the country for support a host of incurable cases of insanity: each pauper inmate of the Beauport Asylum costs the country some \$3 per week.

In a letter which appeared in the *Quebec Mercury*, under date, 15th July, 1865, Dr. Douglas says, in reference to the article in our last number, "The statements about cubic space are *utter bosh*, and are untrue. The statements about consequent sickness and deaths are equally so." The statements about the cubic space were, that the patients of the Beauport Lunatic Asylum were limited to 300 cubic feet. This is fully borne out by the Reports of the Commissioners; indeed they say some of the cells do not contain 300 cubic feet of space, and that "they are occupied by dirty patients."

In the July number of the *American Journal of Insanity*, at page 50, in the report of the proceedings of the Association of Medical Superin-

tendants,\* we find the following:—"Dr. James Douglas, of Quebec, said, in Quebec they had 566 patients, and 70 attendants, and during the year they consumed 300 tons of coal and 300 cords of wood. *They had 300 cubic feet space to each individual patient.*" If this statement be true, we have then the best evidence, viz. that of Dr. Douglas himself, that the Report of the Commissioners as to cubic space is strictly correct. Further comment is unnecessary. We will leave the facts as they are to be judged of by the impartial reader. We merely allude to this subject in our own justification, as Dr. Douglas has thought proper to give us the lie; adding, that we have suppressed the truth for a consideration.

With reference to the sickness and deaths, we desire to say a few words. The mortality of asylums, as of hospitals, has immediate relation to the character of the cases of diseases admitted, whether acute or chronic. The Provincial Lunatic Asylum at Toronto is in immediate connection with two branch asylums, University and Orillia, where incurable cases are sent from the main asylum, which latter is reserved for the treatment of acute cases. The following table is compiled from the report of the Inspectors for the year 1863:

Name of Asylum.	Total No. Inmates, 1863.	Discharged.	Died.	Ratio.
Toronto,	} 582	87	25 = 1	death to 23 $\frac{1}{2}$
University Branch,				
Orillia	" 139	3	4 = 1	" 34 $\frac{1}{2}$
Malden,	249	14	9 = 1	" 27 $\frac{2}{3}$
Rockwood,	110	8	4 = 1	" 27 $\frac{1}{2}$
Beauport,	574	30	42 = 1	" 13 $\frac{2}{3}$
St. Johns,	82	11	9 = 1	" 9 $\frac{1}{2}$

Thus we find that in the year 1863 the Provincial Lunatic Asylum, at Toronto, with its two branches, had under care and treatment 721 insane persons; of these, 90 were discharged and 29 died. The asylum at Beauport, with a total under treatment and care of 574, discharged 30 and there were 42 deaths. This certainly does appear a large average for an institution which is not devoted exclusively to the treatment of cases of acute mania. We put it in the very mildest way possible; we are not in any way desirous of doing the least injury to either the asylum or its proprietors; but not even for "a consideration" will we suppress truth, or remain silent, when the principles involved are of such moment to the whole country. We do not wish to go further in this matter; we do not

---

\* Ninteenth Annual Meeting of the Association of Medical Superintendents of American Institutions for the Insane, held at the Monongahela House, Pittsburg, Pa., on Tuesday morning, 13th June, 1865.

wish to reproduce the evidence given by Messrs Hamilton, Massue, Painchaud and Lemoine, as touching the cubic space of the Beauport Asylum. The paper is already before the country, and can be examined by all who take an interest in that institution. We go upon the broad principle of right or wrong; and if the Government continue the policy of allowing things to remain as at present, we with others cry out, shame—an opinion which has been expressed in the Imperial paper on Colonial Hospitals and Asylums before alluded to.

---

Quebec Lunatic Asylum, 20th July, 1865.

GENTLEMEN,—I do not complain that the Quebec Lunatic Asylum, like all other public institutions, should be subject to public comment; but I have reason to complain that any public print should be made a “*Ductus communis choledochus*.”

The object of your article, headed a “*A Lunatic Asylum*,” seems to urge the necessity of one in Montreal. Few who know anything of the Statistics of Insanity in this section of the Province will differ with you in this opinion.

You say, you have given this subject your attention for years. Now, are you aware that when in 1845, the Asylum in Quebec was first established, the Government endeavoured to have one established in Montreal on a similar plan? Dr. Mount, and some other medical gentlemen, accepted the proposal, but after considerable delay abandoned the scheme as attended with too great risk of loss, and the patients from Montreal were consequently sent down to Quebec.

“Are you aware, that when eight years ago the buildings of Quebec Lunatic Asylum were insufficient to meet the increasing demand for accommodation—the proprietors, instead of enlarging them, recommended to Government the erection of another asylum in Montreal? This being declined, (I suppose on the principle that he who sits easy, should sit still,) the proprietors enlarged their buildings. Are you aware that, two years ago, the demand for increased accommodation being urgent, application was again made to Government for an asylum in the District of Montreal? Government (in my opinion) very wisely declined to adopt the views of those who thought that private or college buildings could be turned into Lunatic Asylums, and induced the proprietors of Quebec Lunatic Asylum to erect a new separate building, capable of affording accommodation and ample cubic space to three hundred patients and their attendants. The two buildings will now afford room for seven hundred and fifty patients; even this, in a very few years, will be found insufficient for the wants of the Lower Province; and I think now, as I have always done, that an asylum should be erected in the district of Montreal. Besides the cubic space, there are many other matters connected with the Quebec Lunatic Asylum with which, notwithstanding your assertion to the contrary, you are profoundly ignorant, and of which you ought in my opinion to lose no time in obtaining reliable information; in this, however, you will do as you deem fit. There is one matter parti-

cularly personal to you and to me, and to which I can lose no time in calling your particular attention. You have thought fit to hold me up to the public as a wholesale murderer, for the basest and the most unworthy motives. I leave out of the question Drs. Morrin and Fremont, who are no more, and Dr. Landry who is at this time absent. Now, Gentlemen, you know as little of me and of my character as you do of the Quebec Lunatic Asylum, if you imagine for one moment that I will allow you or any one to charge either them or me with anything disgraceful or unworthy of gentlemen and Christian men. I therefore call upon you to give up the name of the person to whom you are indebted for your information, so that I may deal with him as is proper.

In other matters connected with Quebec Lunatic Asylum, permit me to urge you to visit it for the purpose of obtaining a personal knowledge of its conduct and management.

Yours truly,

Drs. Fenwick and Campbell,  
&c. &c.

J. DOUGLAS.

---

#### A HEALTH OFFICER.

Frequently since the commencement of our Journal, we have written strongly and urgently upon the necessity which has long existed for a thorough cleansing of our city, which, as a rule, is, we unhesitatingly affirm, in a condition of filth, which is simply disgraceful. We have also stated our opinion that the appointment of a health officer was emphatically demanded; and we proved to the satisfaction of every one who took the pains to *think*, that our mortality was far larger than it would be were that attention paid to sanitary arrangements which the appointment of a responsible health officer would, we believe, entail. But our words fell unheeded upon the ears of the authorities, especially the Health Committee, who have had the unenviable notoriety of not having a legal meeting for a time, which twelve months would not cover. Months have passed away, and now we hear that Cholera is travelling the course which it has in times past, and that ere a great while, in all probability, it will be in our midst spreading death and desolation on every side. At last the Health Committee, after great exertion by its energetic chairman—aroused by a sense of the impending danger—has met, and taken the advice of our medical men; but strange to say, we yet do not find anything like that activity which the position of affairs demand. On every side of us, filth and abomination abound; and not later than the 12th of this month, in one of our streets through which passes probably as much traffic as any in the city, in the midst of a dense population, there exists on one side of the street, a narrow pool of foul water covered with a thick yellow scum—a pool that would do credit to the finest

frog pond in the country. And we feel sure it will astonish our readers when we state, that it has existed for upwards of a week under the very nose of the authorities. Spasmodic fits of sanitary arrangement are useless. What we want is, the adoption of arrangements which in other cities have proved beneficial, and succeeded in reducing their mortality fully ten per cent. No time should be lost; Montreal cannot be cleansed in a week, and our City Council will occupy a most unenviable position if they neglect to do their duty—for their duty it certainly is. We would ask our readers in every section of Canada to bring under the notice of the proper authorities the sanitary condition of their localities—so that, when cholera does come, as come we believe it certainly will—Canada may be found in such a condition, that it will pass us by almost scathless.

---

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

THREE RIVERS, 12th July, 1865.

In conformity with a resolution, passed at the last triennial meeting, held at Melbourne, C. E., on the 9th July, 1862, the present triennial meeting was held this day, at the Court House, in the town of Three Rivers, when were present: Drs. Marsden, A. Fenwick, G. E. Fenwick, Blanchet, Russell, Howard, Boyer, Gilbert, Scott, Hingston, Jackson, Landry, Smallwood, Chamberlin, Tassé, Foster, Weillbrenner, Robillard, Wolff, Marmette, Munro, Dubé, Robitaille, Rinfret, Tétu, Dufresne, F. W. Campbell, Gibson, Ross, Garneau, O'Leary, Trestler, Brigham, Tessier, Lavoie, Badeau, Hamilton, Eskine, and Peltier. Dr. Marsden, the President of the College, took the chair.

Dr. Peltier, one of the secretaries, read the minutes of the last triennial meeting, which were, on motion of Dr. Jackson, seconded by Dr. A. Fenwick, approved.

Dr. Marsden read a minute, elaborate, and most interesting report of the proceedings of the College during the past three years, which, on motion by Dr. Smallwood, and seconded by Dr. Trestler, was unanimously adopted and recommended to be published.

A letter from Dr. Sewell, of Quebec, was read, bearing upon the licensing, without examination, of a Dr. Anderson, of Quebec, who presented to the Board simply a diploma of the College of Surgeons, Edinburgh. Dr. Sewell's object was only to call the attention of the College to the fact of its having done what it had no right to do, for otherwise he knew nobody more worthy of any professional honour than Dr. Anderson.

Before proceeding further with the general business of the College, all candidates for membership were severally called, balloted for, and the following gentlemen were unanimously elected members of the College:

Dr. T. Robitaille, M.P.P., of Bonaventure, proposed, by Drs. Russell and Landry, Dr. P. Beaubien, of Montreal, proposed by Drs. Peltier and Boyer; Dr. L. E. Landry, of Bancour, proposed by Drs. Smith and Badeau; Dr. J. Charbonneau, of St. Paul l'Ermite, proposed by Drs. Peltier and Boyer; Dr. J. P. Rottot, of Montreal, proposed by Drs.

Peltier and Bibaud; Dr. L. E. Bardy, of Quebec, proposed by Drs. Tessier and Blanchet; Dr. P. Cadieux, of Sorel, proposed by Drs. Robillard and Trestler; Dr. R. M. Mignault, of Yamaska, proposed by Drs. Robillard and Dufresne; Dr. P. Giroux, of Three Rivers, proposed by Drs. Badeau and O'Leary.

It was then moved by Dr. Russell, seconded by Dr. Smallwood, and carried, "That the question of the bearers of diplomas from British Colleges or Universities be referred to the October meeting of the Board, and to be then finally decided upon."

Drs. Chamberlin and Smallwood presented their report as auditors, named at a previous meeting of the Board:

"Supplementary report of the undersigned auditors, named to examine and report upon the treasurer's accounts of the College of Physicians and Surgeons of Lower Canada"—Beg leave to report that they have examined the whole of the accounts and vouchers, up to the present date, and have found them correct, and, in accordance with a former recommendation, would suggest that, for the future, two distinct books of accounts be kept, viz., an account of all moneys accruing from candidate's licenses, with the amount paid out for the travelling expenses of members, and another and distinct account showing the amount received from all other sources, with the actual items of expenditure for all purposes, and that these two accounts be kept in as a distinct and separate form as possible.

In furtherance of these views, your Committee have, up to the present time, separated these distinct items of amount, as found upon the treasurer's books, and find that there has been received during the past three years, from candidates' licenses alone, the sum of four hundred and twenty pounds (£420), and that there has been paid to members for travelling expenses, the sum of two hundred and twenty pounds (£220), leaving a balance of two hundred pounds (£200). This sum they recommend should now be entered upon a separate book kept for that purpose, as a distinct item destined by the law for a special purpose.

They further beg to report that the amount received from all other sources, and, having examined the various items of expenditure, as per vouchers, for a like period, leave a balance of two hundred and seventy-eight pounds, thirteen shillings and eight pence (£278,13,8). This amount your Committee would also recommend should be kept as a separate account, in a book for that purpose.

The bank book shows a sum total in deposit of four hundred and seventy-eight pounds, thirteen shillings, and eight pence (£478 13s, 8d), which your Committee, upon examination, find correct with the above report of the treasurer's accounts.

The whole of which is humbly submitted. (Signed) J. CHAMBERLIN, M.D., CH. SMALLWOOD, M.D., Auditors.

It was then moved by Dr. Brigham, seconded by Dr. G. Fenwick, and carried, "That said auditors report be received and adopted."

The Benevolent Fund question having been brought forward, it was decided that no action should be taken on it, that it should be left to the next Board, as Parliament was not in session.

Dr. Gilbert proposed, seconded by Dr. Brigham, "That Drs. Fenwick

and F. W. Campbell, editors of the 'Canada Medical Journal,' be requested to publish the report of the College in the journal, and that they also have 100 copies printed in pamphlet form, fifty being sent to each of the secretaries for distribution amongst the members of the College, and that they be requested to have it translated into French, and have 100 copies of it printed, the whole to be paid for by the College. This motion was carried.

Dr. Howard read, in English, the report of the commission for the formation of a class of Fellows in the College.

Dr. Robillard read it in French.

The question was discussed, clause by clause, many members taking part in the discussion, expressing their views, so as to come to a final understanding, Drs. Howard, Beaubien, Landry, Munro, Hingston, Gilbert, Trestler, Robillard, being the principal speakers. Some few alterations in the wording were proposed and made accordingly.

It was then moved by Dr. Smallwood, seconded by Dr. Howard, "That the report of the commission upon Fellows, with the amendments made thereto to-day, be received, and that its future consideration be postponed until the next semi-annual meeting of the governors. Motion carried.

The proposed amendments to the by-laws, published already in conformity to the Statutes, were then discussed.

It was proposed by Dr. Landry, seconded by Dr. Russell, and carried, "That the 4th clause in the chapter concerning 'members' be amended as follows: "That no member of the College can be eligible as governor or vote for the election of Board of Governors unless he shall have paid all his dues to the College.

On motion of Dr. Landry, seconded by Dr. Beaubien, it was proposed "That the future president and secretaries be requested to alter the evident contradiction existing between the statutes and by-laws of our college, and the fact of our exacting \$15 from candidates for license, when the law seems to fix the sum at \$10. After discussion on the matter, Dr. Landry consented to amend his motion so that \$5 for parchment be added to the \$10—which was carried unanimously.

The amendments to the by-laws, as amended, were then put to the vote, and were unanimously carried, and left to the president for the immediate sanction of His Excellency the Governor General.

On motion of Dr. Russell, seconded by Dr. Blanchet, it was resolved and unanimously carried, "That the next triennial meeting shall be held in the town of Three Rivers."

The general business of the College being gone through, the meeting then proceeded to the election of the new Board of Governors, composed of thirty-six members.

The President called for the proxies, of which a number of members were the bearers, and of which the following is a list:—Drs. G. W. Campbell, Sutherland, Craik, Taylor, Wright, McCallum, Fraser, all of Montreal, by Dr. W. E. Scott. Drs. Trudel, Coderre, of Montreal, Dr. Turcotte, St. Hyacinthe, by Dr. Peltier. Drs. Charest, Beauport, Dr. Michaud, Kamouraska, by Dr. Blanchet. Dr. Bibaud, Montreal, by



Dr. Dufresne. Drs. Goldstone, Moffatt, Reed, Forrest, of Quebec, by Dr. Marsden. Dr. Boudreau, Baie St. Paul, Dr. Bacon, Trois Pistoles, by Dr. Landry. Dr. J. Russell, Toronto, by Dr. R. H. Russell. Dr. Sewell, Quebec, by Dr. Jackson. Dr. Von Iffland, Grosse Isle, by Dr. Marmette. Dr. Bardy, Quebec, by Dr. Tessier. Dr. Ch. Brown Dunham, by Dr. Chamberlin. Dr. Somers, Lake Magog, Worthington, Sherbrooke, by Dr. Gilbert.

The President then named the following gentlemen to act as scrutineers: Drs. Jackson, Weillbrenner, R. H. Russell, A. Fenwick, Smallwood.

The meeting adjourned for some time to enable the scrutineers to discharge their task without interruption, and met again at 3 p. m., when the president declared the following gentlemen elected governors for the next three years, viz: For the city of Montreal, Drs. Peltier, Howard, Scott, G. E. Fenwick, Boyer, Rottot, Robillard, Smallwood.

District of Montreal: Drs. Weillbrenner, Dufresne, Tassé, Chamberlin, Gibson, Brigham, Charbonneau.

District of St. Francis: Drs. Gilbert, Worthington, Hamilton.

District of Three Rivers: Drs. A. Fenwick, Badeau, Ross.

City of Quebec: Drs. Landry, Blanchet, Russell, Jackson, Tessier, Robitaille, Marsden, Sewell.

District of Quebec: Drs. Michaud, Marmette, Dubé, Boudreau, Tétu, Lavoie, Von Iffland.

The result of the election being declared, the meeting adjourned and the newly elected governors met to elect their officers.

Dr. Marsden, whose term of office expired, addressed the meeting, and in a few and very appropriate remarks returned thanks to them for the cordial support which he always received from them whilst occupying the presidential chair, and hoped his successor would be similarly treated.

It was then moved by Dr. Smallwood, seconded by Dr. Chamberlin, and carried: "That the thanks of the College are due and are hereby tendered to Dr. Marsden for his able and assiduous conduct as president during the past three years." The meeting was then called upon to vote for a president, Dr. A. Fenwick acting as scrutineer, when Dr. Chamberlin, having a large majority of votes in his favour, was declared the president of the College, and of the Board of Governors.

The president newly elected, took the chair, and in a few words returned thanks for the honour conferred.

The voting for two vice-presidents took place, and Dr. Landry for the District of Quebec, and Scott, a second time, for the District of Montreal, were duly declared elected, there being a very large majority in their favour.

Drs. Peltier and Russell were unanimously re-elected secretaries for the Districts of Montreal and Quebec.

Dr. Boyer was elected by a large majority, registrar and treasurer of the College.

The meeting then adjourned to meet in Three Rivers on the second Wednesday in July, 1868.

HECTOR PELTIER, M.D., Sec. for the District of Montreal.