FOUR CASES OF ACUTE TETANUS TREATED BY CANNABIS INDICA AND PHYSOSTIGMA (CALABAR BEAN).

By G. Hogarth Pringle, M.D., Parramatta, N. S. W.

So much attention has during the last two years been directed in Great Britain to the use of the Calabar Bean in acute tetanus; while, on the other hand, many eminent authorities, especially on the Continent, including "Polli" of Milan, maintain the superiority, both as regards certainty and safety, of the Cannabis Indica; that it may not be amiss to record even so small a number as four cases. Not that any sufficient data can be obtained from so limited an experience, but because it is only by collating the independent experience of as many observers as possible that reliable statistics as to the actual results of these or any remedies can be received.

Every practitioner naturally relies, and very properly, on the remedy that has proved most efficacious in his hands; and we are all too apt to consider rather the "post" than the "propter hoc," and attribute to our treatment what really may have been nature's own method of arriving at a cure.

I therefore propose to relate, as briefly as may be, the four cases that have occurred in my hands in Parramatta, and conclude by any remarks that the details of these cases would seem to justify.

CASE I.—J. G., aet. 28, cabdriver, of temperate habits, had five days before I saw him run a splinter of ironbark beneath the right thumb nail; he thought little of it at first, and was a good deal exposed to cold and wet. On the fourth evening he felt some stiffness in his jaws and the back of the neck, followed by sudden and violent spasm at the epigastrium. For this he consulted his club doctor, who told him he had caught cold, and gave him a dose of castor oil. The following morning the doctor again saw him, ordered some placebo, and told him he would soon be all right. Not feeling satisfied, however, he sent for me, and on reaching the house I found as follows:—The patient, a man of great strength and determination, was lying down; his whole body every second minute drawn into violent spasms.
emprosthotonos; the pain attending this spasm must have been horrible, but he never uttered a groan. In the short intervals he suffered from a dull heavy pain at the epigastrium, his features wore the risus sardonicus and the jaws were firmly clenched; thirst intense, for which he sucked some milk and water through the stem of a tobacco pipe, placed in a vacancy in his teeth; pulse, 126; skin bedewed with perspiration; bowels had acted slightly after the oil. I applied a large blister along the whole length of spine, gave a Turpentine Enema and a drop of Croton Oil in mucilage, and fifteen drops of the Tincture of Cannabis Indica every twenty minutes, increasing the dose five minims each time. I also dressed and poulticed the thumb, which was greatly swollen and inflamed. After the first two doses of the Cannabis he expressed himself decidedly relieved; the pulse fell to 94, and the bowels acted freely; but in less than half an hour the paroxysm returned with intense severity, notwithstanding that the dose of the Cannabis had been increased to 3i. every fifteen minutes. The Calabar Bean had not then (eight years ago) been spoken of as a remedy in tetanus, and I therefore decided to administer Chloroform freely. When fully under the influence of the anaesthetic the spasm entirely ceased, and I kept him completely insensible for nearly twenty minutes; but as soon as the Chloroform was withdrawn, and sensibility began to return, the spasms returned with renewed violence. I then, still continuing the Cannabis, tried Morphia and Atropine, administered hypodermically, but still with no avail; and he died exhausted at 2 p.m., six hours after I first saw him, and twenty-three after the first sensation of pain at the epigastrium.

Case II.—F. P., wt. 32, a railway porter at the Campbelltown Station, fell on the rails before an engine, which completely severed his right arm from his body. As no medical aid was at hand he was placed on the engine and brought down to Parramatta, a distance of twenty-two miles. Owing to the laceration and torn condition of the soft tissues there was but little hemorrhage. I found that the humerus had been divided three inches below the shoulder; the brachial artery had been torn across just at the bifurcation of the elbow, and was hanging like a twisted cord from the wound; the soft parts were so much torn and bruised that I resolved to disarticulate the fragment of the humerus and form flaps as I best could, which I did, securing the axillary artery, which I exposed by extending the anterior incision just below the clavicle, so as to avoid the risk of secondary haemorrhage.

Antiseptic surgery being then unknown, simple warm water dressing was applied, and all went on well until the fourth morning, when he complained of pain and twitching at the back of the neck, stiffness of the jaws, and frequent and severe spasms at the scrobiculus cordis. The prime viae were well cleared by an enema and Jalap; a blister applied down the spine, and Tinctura Cannabis Indica ordered in ten minim doses every twenty minutes; the pulse being 118, soft but jerking. Patient not much alarmed, but extremely sensitive to the least draught; swallowing difficult and painful.
The first two doses delayed the supervention of the paroxysm, but after this they lost their effect and opisthotonos became strongly marked. Dose increased first to twenty minims and then to 3ss. every quarter of an hour, and blistered surface over spine covered with bladders containing ice and salt. The large doses decidedly controlled the violence of the attacks, and were persevered in all night, the pulse falling to 94. Beef tea given freely. The following morning, although the paroxysms continued, they were both less frequent and less severe. Pulse, 86. Deglutition easier, but still attended with a feeling of spasm. The dose of Cannabis was now reduced one-third, and subsequently two-thirds, and given only every two hours. Towards the afternoon he complained of giddiness and stupor, and I stopped the medicine for six hours. The following day he was nearly well, and made an excellent recovery, the stump being quite healed on the twenty-fourth day.

**Case III.**—Master Frank Smith, mt. 18, had the index-finger of left hand caught in a machine, severely injuring the first phalanx. He went to Mr. Sheedy, a druggist here, who dressed it on the antiseptic principle with Carbolic Acid, and directed him to be very careful and avoid cold. This was in the month of May, 1869, the weather very wet and cold; and the unfortunate young man, instead of attending to Mr. Sheedy’s directions, kept riding about, putting off the dressing and showing the wound to every friend he met. I saw him at Mr. Sheedy’s request, on the fourth day, when the wound on the finger had assumed a sloughy aspect, and he complained of stiffness of the jaws and muscles at nape of neck. As he was a nervous lad, I did not in any way direct his attention to the latter symptoms, but advised the immediate amputation of the distal phalanx of the injured finger. This, his parents and himself assenting, I performed under chloroform, dressed the stump with Carbolic Acid lotion, and administering a brisk cathartic ordered an anodyne draught to be taken at bedtime.

May 22nd.—The next day all the darting pain had left the arm; but the pulse was 124, jerking, the stiffness of the jaws increased, and more spasmodic, while every now and then he complained of a violent pain over the lower ribs on both sides; a feeling, as he described it, as if they were being violently crushed in, and almost arresting respirative movements. The bowels had acted freely, and I now commenced the Cannabis Indica in 15 minim doses every half hour, and applied the ether spray double along the whole spine. This at first gave marked, but only temporary, relief; and after four or five applications seemed to lose all effect; and I then applied a large blister, increasing the dose of the Cannabis Indica. Each increase of the dose appeared to afford more relief; but failed to maintain the relief beyond one dose unless further increased. The difficulty of breathing now becoming very great, while the severity of the general paroxysms amounted to emprosthotonos. I resolved to try the Calabar Bean, and administered it according to Dr. Eben Watson’s directions in doses of one-sixth of a grain. The first dose, he exclaimed, “That’s the stuff,” and for nearly half an
hour he remained quite free from pain or spasms, but then they returned, and a second dose failed to act as the first. I cautiously increased the dose all through the night, supporting the patient's strength by large and frequent enemata of beef tea, eggs beat up, &c., adding a few drops of Laudanum and some Pepsine to each injection. On the morning of the third day (May 23rd) the paroxysms were frightful, agony intense, although the dose of the Calabar Bean had been increased to one-half grain. I then tried two-thirds of a grain every hour. The patient refused to take Chloroform and to submit to the hypodermic injection of the bean. I therefore administered one grain per rectum; this gave slight relief, and I then repeated it but without effect in three hours. I then waited two hours and gave (about 7 p.m.) 1½ grain per annum. Shortly after this the paroxysms ceased, and he fell into a deep sleep, during which the respiratory movements grew gradually but perceptibly fainter, and about 11 p.m. he passed away calmly. I gave stimulants freely, and was sorely tempted to employ galvanism; but I dreaded the return of the tetanic spasms. The actual cause of death I believe to have been poisoning with the Calabar Bean.

**Case IV.**—Capt. Brett, aged 52, commanding one of the Parramatta river steamers, had occasion for several nights in succession to sleep on board his boat in very cold nights in June last. He noticed a good deal of stiffness about his jaws and down his back for two or three days until the 14th June, when he was seized with what he considered cramp or colic, violent spasms in the abdomen, in the back, and down the legs, with a terrible crushing sensation across the chest. I saw him at 6 p.m. Risus sardonicus, strongly marked, agony intense, pulse 136, hard and jerking. Bowels have not acted for three days. Gave a turpentine enema, and full dose of Croton Oil and Belladonna, applied two dozen leeches to nucha and blister all down the spine. T. Cannabis Indicum in 24 drop doses every half hour.


**June 16th.**—Much better, pulse 108, slept well for 4 hours; asked for nourishment, which however he took with great difficulty. Continued Cannabis in 3 ss doses vespere. Not so well; cramps in limbs, and along the ribs. Repeat enema as last night.

**June 17th.**—Doing very well, pulse 92, appetite good. From this date he steadily progressed, the dose of the Cannabis being gradually reduced; but it was not until the 26th June, or twelve days after his first seizure, that the spasms entirely ceased, and he remained very weak and exhausted for quite a month after.

As I have already stated, it would be absurd to attempt to deduce any positive theory or specific practice from so small a number of
cases. They are only recorded to be added along with the observations of others to the accumulation from which by-and-by more certain indications may be drawn. There are, however, one or two points of interest to which I purpose shortly to call attention; and first, as to the Cannabis: in my limited experience, where it fails nothing else succeeds. This, of course, may arise from the delay in putting the more potent remedy, the Physostigma, in action. Nevertheless, in cases Nos. II. and IV., the action of the Cannabis was most satisfactory; and although No. IV. was really a case of idiopathic tetanus, and consequently more amenable to treatment, yet the violence of the symptoms were amply sufficient to enable it to rank among the really acute cases. Now, while Drs. Eben, Watson, Ashdown, Frazer, &c., deserve the highest credit for their careful and scientific observations on the Calabar bean, yet not one of their successful cases can be fairly reckoned acute, Dr. Ashdown’s case having been under active treatment for ten days, and Dr. Watson's from nine to sixteen days. My great objection to the Physostigma would be its uncertainty and uncontrollable action.

I firmly believe my case No. III. died from the effects of the remedy, although he would no doubt have with equal certainty died from the disease; and in this view I am borne out by the observation and experiments of Dr. Jamieson, Warrnambool, who observes (Australian Medical Journal, February, 1870): “This at least is plain, that less than a poisonous dose of the Calabar Extract has no power in preventing the characteristic symptoms of a poisonous dose of Strychnine.” This would equally apply to tetanus; most writers including Dr. Fraser, insisting on the identity of the central cause of the clonic muscular contractions induced by Strychnine and traumatic tetanus. Dr. Fraser rightly describes the falling pulse, profuse diaphoresis and catharsis induced by the Calabar bean, but surely he is in error in attributing the last phenomena to “its inducing energetic contractions of the stomach and intestines.” Our last observers, as “*George Harley and Ogle,” have pointed out that the Calabar bean acts by paralyzing all muscular action, and I should rather attribute the catharsis to relaxation of spasm than to “energetic contraction.”

It is with this view that in such cases I combine Belladonna or Atropine with any purgative I may administer.

A CASE OF PUERPERAL EPILEPSY—TWIN BIRTHS. FATAL RESULT ON THE THIRD DAY.

By A. T. GUNNING, M.R.C.S.E.

I was called on the morning of the 20th July, 1869, to visit Mrs. C., a stout robust woman, generally healthy, but suffering some time past from an attack of chronic bronchitis previous to the present seizure. Her history, as far as I could learn, was as follows:—

* George Harley and John Ogle.
She expected to be confined of her first child in about a week or a fortnight. On the evening of the 19th July she complained of a severe headache, and thought she saw a great number of lighted candles in the tent, and also that a great many people were present, talking loudly; she then asked for a looking glass and viewed herself in it, and seemed satisfied that it was a delusion. Soon afterwards she complained of a very severe pain in her back, and shortly fell into what her husband thought was a fainting fit. She had several of these turns during the night, when her husband sent for a midwife, who ultimately advised him to send for a medical man. On my entering the tent, I found the woman quite insensible, and in about five minutes she had a strong epileptiform seizure, which lasted about two minutes. When this ceased, there was no return of consciousness. Her pupils were not unnatural; she had bitten her tongue. In about six minutes I saw another fit approaching, when I gave her Chloroform, which seemed to moderate it. When this terminated I made a vaginal examination, but did not find any sign of approaching labour. In about the same time as before a third fit began, and terminated as the others. This went on for some time; the anaesthetic was given only when the premonitory signs began to show themselves, but never when the convolution commenced. I then asked about her urine, and some was shown me as passed before she became ill. I passed the catheter, and took away about 12 oz. of dark port wine-coloured urine, identical in appearance with that first shown me. Both specimens had a specific gravity of 1.035, and filled the test-tube to nine-tenths of its capacity with albumen. The seizures still continuing, but with a fifteen-minute interval, the Chloroform was persisted in to a moderate extent. I then gave her two minims of Croton Oil, with Ext. Col. Co. and Ext. Hyoscyam. The bowels were acted on freely. The fits still continued, but with longer intervals. About 9 o'clock p.m. her body and extremities feeling rather cold, I had her lifted into a warm bath, and when put into bed hot water bottles were placed at her feet, to the calves of her legs, and under her armpits. Reaction soon set in, but still the convulsions returned. Her breathing being much impeded by the catarrh, I dreaded lung congestion, and I then took about five oz. of blood from her arm. By this time the fits had three-quarters of an hour intervals, and were very moderate in their force; still there was not the slightest sign of labour. They continued till about 3 a.m., then there seemed to be a quiescence, but no return to sensibility. About 5 a.m. uterine pains set in, and during the presence of a pain there seemed a sort of half-seizure. The os uteri dilated quickly and naturally in about an hour, the head descending in about half an hour. At the same time there was a prolapse of the funis, which came through the vulva. It was half putrid and without pulsation; I therefore performed craniotomy and delivered a male child, softened by commencing decomposition. On passing my hand along the funis to search for the placenta, I found the arm of another infant presenting. I then sought the feet and turned with great ease in the half-filled
utero. This child, a female, was also dead and partly decomposed. The placenta came away easily and the uterus contracted well. The labour was completely terminated in two hours from the setting in of the pains. I had no collateral aid, nor could I obtain any. The woman was still unconscious, but there was no return of the convulsions. I may here mention that I had taken a hypodermic syringe and a solution of Morphia, with the intention of trying it as an experiment, in case the Chloroform should not prove sufficient; but I did not read Mr. Bowstead's report in the Lancet till a fortnight afterwards, and I can say in truth that I had never heard of it; but should I ever meet such another case, I should try Morphia before Chloroform.

I saw the patient again at 2 p.m., and took away the urine with the catheter; it was much lighter in colour and contained much less albumen. She seemed easy, but was still unconscious. She swallowed some beef tea. The bowels acted with copious discharge of offensive stools, almost black. The chest was much oppressed with mucus: sinapism to chest and blister to nape of neck. Diaphoretic mixture, Ammoniac Acetatis.

21st.—Seemed better; answered yes or no to questions, but was half comatose. In the afternoon more conscious and took enough support. Knew her husband, spoke sensibly to him. Passed urine without the aid of the catheter. During the night she became more comatose, with slight twitches, and sank on the morning of the 22nd.

No post-mortem examination was allowed. I forward this case as there has been some discussion as to whether albumenuria is present in all cases of puerperal eclampsia. In this case it undoubtedly was present.

Penkyne, Narracoorte, Mosquito Plains, S.A.

ON A CASE OF SPASM OF THE BOWELS, SIMULATING IN MANY POINTS INTUSSUSCEPTION.

Treated successfully by Morphia and Atropine hypodermically administered.

BY JOHN WILKINS, F.R.C.S.

The subject of this case was a healthy man in the vigour of life, 35 years of age, and in good circumstances, and who had just returned from a trip to New Zealand. He had been many voyages between the colonies, and had always suffered more than the majority of voyagers from sea-sickness, but in this trip more than ordinarily, on account of the boisterous state of the weather. The ship was seven days doing the passage to Melbourne, and two days before her arrival in port he had been seized, during a violent fit of vomiting, with a severe spasm in the region of and just below the navel, accompanied by a sensation of fulness over the lower part of the abdomen. The pain gradually increased, and frequent paroxysms
came on for the first twelve hours, afterwards but a short time elapsed between the sharp accessions of pain. The bowels had been regularly moved, and the urine had passed in the ordinary quantity up to the time of his seizure with the (to use his own words) terrible spasm. He was carried from the ship to an hotel, during intense suffering, where he was seen by me on April 4th, 1870. The symptoms, upon a careful examination, were certainly alarming; he was very restless, rolling about the bed in great agony, his expression wore a pinched appearance, his groaning was piteous, and he ground his teeth together to an extent that I had never before witnessed. His breath was offensive, the tongue moist, and covered with a whitish fur; skin clammy, pulse 115 and regular, abdomen swollen and tympanitic, and painful to the touch over and immediately below the navel. Here, by palpation, was noticed a circumscribed hard swelling, about the size of a small cocoanut. This spot was evidently the point de départ of his suffering. At this time the paroxysms of pain were almost incessant, and very distressing to witness, and the pain was intensified by the straining, vomiting, and hiccups. The matter ejected by the stomach consisted chiefly of mixed bile and mucus, and the fluids he had swallowed to allay his thirst, and which had been freely given were soon rejected again. The liver was not painful; there was no rupture or swelling beyond that above mentioned. He informed me that several remedies had been tried on board (including injections per anum), to try to check the vomiting and ease the pain, but with no other result than to add to his discomfort.

The question presented itself, What was the cause of this great disturbance in the performance of the normal functions of his intestinal canal? From a general review of the history and symptoms there was undoubtedly a stoppage somewhere in the bowels. The case was not altogether unlike one of spasm caused by an accumulation of fecal matter or an intussusception, but, as already stated, the bowels, previous to the advent of the severe spasm and pain, had been several times moved, and his urine had passed quite freely. These facts were opposed to the assumption of there being impacted fecal accumulation, and the conclusion ventured upon by me was that the pain proceeded from the upper part of the small intestine, and that during the violent retching he had experienced on board, the muscular coat of the bowel had become strained or twisted. Congestion resulted there, the serous and mucus coats had become implicated, especially the latter, and effusion followed, with general thickening of the parts, this serving to narrow the passage. The irritation moreover was probably kept up by the constant vomiting which excited the spasm, and presently these were doubly increased by the inverted peristaltic action of the upper part of the bowel, most likely a very increased action downwards as well. Whatever the exact cause was, however, there could be no doubt that his condition was at that time a very critical one, and that some energetic measures had to be at once adopted. The treatment indicated that all fluids by the mouth should be at once stopped. Ice was allowed to be sucked, and the
mouth was ordered to be washed out frequently with the iced-water. No nourishment was given for two days, neither was it urged as the very mention of it seemed both to bring on the vomiting and pain, and the latter had almost prevented sleep for two days. I, therefore, at noon, injected through the skin of the upper right arm, half a grain, in solution, of the Hydrochlorate of Morphia. This quantity produced no abatement of the pain, and in the course of twenty-five minutes the dose was repeated near the same spot in the arm. The Morphia injection (of a grain) produced its characteristic phenomena upon the system in a few minutes, and almost immediately removed the pain. He slept soundly for upwards of two hours, and on awaking the pain seemed almost as bad as ever, the vomiting, however, had considerably lessened, and at 4 p.m. I injected another grain of Morphia in the arm. This kept the patient in a dosy state for about four hours. The effect the Morphia had on the pulse was very characteristic; it reduced it from 118 to 80 in about four hours. At 11 p.m., I found him wide awake. The paroxysms of pain were less often and less severe. The sickness had greatly diminished, and he had passed about half a pint of urine. I repeated the injection of a grain of Morphia in the arm of the same side of the body, and upon two very severe spasms of pain recurring in the course of twenty-five minutes afterwards, I was induced to give him in the opposite arm half a grain more. This had the effect of sending him off in a sound sleep for four hours. On awaking, the bowels were slightly moved and more urine passed.

April 5th, 7 a.m.—Abdomen less tympanitic, but very painful on slight pressure about the navel where the circumscribed lump was yet quite conspicuous. On this spot three dozen leeches were ordered. Pulse 80, tongue moist, sickness had nearly subsided, pain much less; no Morphia was injected at this visit. 11 a.m.—Leeches had taken well and the abdominal swelling had been much reduced. The spasms and pain caused by the frequent peristaltic action of the bowel were yet difficult to bear, and I repeated the Morphia injection in the left arm to the extent of a grain and a half. 4.30 p.m.—The bowels had acted, pain over abdomen less, stomach still very irritable, but quiet, providing nothing was taken by the mouth. Even a little cold jelly was immediately rejected and excited a severe spasm. The mere mention of food by those in attendance excited both vomiting and pain; in fact rest was food to him, and rest he craved for, and rest he got through the influence of the Morphia. Extract of Belladonna, softened by means of Glycerine, was ordered to be thickly applied over the swelling near the navel. I injected one grain of Morphia in the left arm. 11 p.m.—The case showing an improving aspect, from all the symptoms lessening in severity. I injected 1-40th of a grain of the Sulphate of Atropia into the left arm. The pulse in the course of twelve minutes jumped from 85 to 120. The patient felt warm and comfortable, and passed a tolerably easy night, with some short refreshing sleeps, disturbed only occasionally by some sharp twinges of his old enemy, "the spasms."
Next morning, April 6th, 8 a.m., the size of the circumscribed lump had been considerably reduced; water had passed freely. He still loathed food, and craved for a repetition of the Morphia injection, of which a grain was administered into the right arm. The Belladonna application was likewise renewed to the abdomen. At noon, the bowels had been twice relieved, the pain and swelling were much less, and the sickness had quite disappeared. He felt rather an inclination to swallow something, and a few spoonfuls of weak brandy and soda were ordered, which he retained. 11 p.m.: Doing well, but wakeful; injected one grain of Morphia into the cellular tissue of the thigh, and ordered a few spoonfuls of cold jelly to be given during the night, if he wished for anything.

April 7th.—Had passed a good night and had taken some jelly, which the stomach retained. Re-applied the Belladonna application, which exerted a soothing and warming effect, distinctly appreciable by the patient himself. Ordered some weak chicken-broth. At bed-time the Morphia injection of a grain was repeated, to ensure a good night. It had the desired effect. From this time the patient daily progressed to complete convalescence. A warming tonic was prescribed, to be left off at his own will, and a fortnight afterwards he called upon me in perfect health, firmly believing that the Morphia, hypodermically given, had saved his life. I venture to think so too.

Medicines here by the mouth were quite out of the question, for the blandest drinks were at once thrown up. Large doses of Opium, in the shape of enemata, might certainly have somewhat checked some of the pain, but not so effectually or speedily as Morphia given hypodermically. It would have had this disadvantage likewise, namely, that it invariably binds the bowels, and constipation would have been fatal in such a case. Morphia injected into the system through the skin, on the other hand, does not confine the bowels, as long experience has proved, nor does it derange the stomach so much as when given by the mouth, but on the contrary, it not only alleviates pain, but is most useful in arresting obstinate vomiting, arising from gastric irritation. It is likewise more certain in its action, for the exact amount introduced is known, and the whole of it speedily takes effect, which may not be the case when medicines are given by the stomach, as a portion may remain undisturbed, if not rejected altogether, by an irritable stomach. In the above case the patient was restored to perfect health by means of about half a dozen grains of Morphia, dissolved and put under the skin. This most effectually removed both the vomiting and inordinate muscular contraction of the bowel, so that congestion subsided, inflammatory effusion was absorbed, and the bowel in the course of four days after the first injection was restored to its normal action, and happily without resort to any purgative medicines.

121 Collins-street east, Melbourne.
HOSPITAL REPORTS.

MELBOURNE HOSPITAL.

Amputation of the Thigh. Operation by Dr. D. J. Thomas, F.R.C.S.,
Honorary Surgeon to the Hospital, May 19, 1870.

Dr. Thomas said that the young patient, E. Kelly, ætat. thirteen
was admitted under his care, on the 25th June, 1869, suffering from
inflammation of the knee joint of three years' standing. The limb
was at once placed in a state of complete rest by means of a long
splint, and appropriate remedies were employed, but to no purpose.
The inflammation went on to the destruction of the articulating
surface, when it was decided to excise the joint. This was done on
the 11th of November, 1869—six months ago. The limb was fixed
in the usual way. On the 14th (three days afterwards) erysipelas
broke out in the hospital, and the affected patients were removed to
tents on the grounds; but this patient suffered so severely that she
could not be removed, the disease extending from the foot all over
the leg and thigh, and up the side as far as the armpit. The disease
was most intense about the part operated upon, and in course of a
short time a great portion of the flap sloughed, and when separated
the joint became exposed, and on the ends of the bones, as far as
could be seen, were healthy granulations. Perfect recovery in health
took place, the denuded parts became cicatrised over, and strong
hopes were entertained of a successful result. Unfortunately, on
the 4th April, 1870, she had another similar attack, which again
produced sloughing. This was followed by copious suppuration
which reduced her very much, but in a short time she improved in
health, and had gradually done so up to the present time. There
was no hope whatever of her having a useful limb, the ends of the
bones being detached and probably carious, he therefore intended
amputating at the lower third of the thigh.

He said: "I prefer, in doing so, a long anterior flap brought over the
end of the bone, and joined behind to a short posterior one, but as it
is not practicable in this case, from there not being sufficient integument
unless the bone be sawn across high up; doing so would be objectionable, as it would lay open the medullary canal, instead of (as should
if possible be done) sawing through the cancellous portion, a no
small consideration. In making the posterior flap, the edge of the
knife should be kept close to the bone to avoid injury to the popliteal
artery. I have no choice in this case, but to adopt the mode by the
posterior flap. I would strongly recommend you to abolish from
your practice the circular operation, as it leaves, after healing, a
cicatrix across the end of the bone, and the patient cannot bear any
weight upon it; whereas, in the method by flap, the bone becomes
covered with a soft cushion, well able, as numerous cases testify, to
support the weight of the body. There may be exceptional cases, for instance below the knee, where the soft parts are so injured that the circular only can be performed."

The limb was removed, when it was observed that the tissues, through long-continued disease, were much changed from their normal state, being considerably thickened. They were composed principally of condensed, fibrous, cellular, and adipose tissues. The haemorrhage was stayed by acupressure, ligatures, and torsion. Considerable oozing of blood occurred from the whole surface of the flap, owing to its great vascularity. In such cases, Dr. Thomas said, he considered it advisable not to bring the edges of the wound together at once, but to apply wet lint, and on the following morning, when the bleeding had ceased and the cut surface glazed over, the flaps should be brought together and retained there by means of sutures; either the twisted, silver, horse-hair, or catgut; and supported by a few straps of adhesive plaster.

The patient was then removed to bed.

On examination the ends of the bones were found to be carious and very vascular.

ADELAIDE HOSPITAL.

Cases of Stone operated on during the year 1869. Reported by F. LOCKWOOD LOGAN, M.D., L.R.C.S.,E., Senior House Surgeon.

There have been eleven cases of lithotomy within twelve months in this hospital; the ages of the patients varying from two to fifty-seven years. Six of them were under ten years of age; one case was operated on three times, and there was one death.

LIST OF CASES.

H. T., aet. three years, admitted January 4th. Ferguson's operation was performed by Dr. Whittell, on January 27th. Discharged cured on March 17th. The stone weighed 124 grs.

T. M., aet. two years, admitted under Dr. Whittell's care, on January 8th. Discharged cured, on March 14th. This stone weighed 42 grs.


* R. B., aet. 40 years, admitted January 21st. Dr. Whittell performed lateral lithotomy on February 17th. Discharged, cured, 8th May. The stone weighed 127 grs.; the debris, 47 grs. This was a very tedious case, in a cachectic subject. The stone broke under the forceps.

Y. F., aet. 7 years, admitted March 13th. Dr. Phillips performed lateral lithotomy on March 31st. The patient made water by the natural passage on April 9th, and was discharged, cured, April 26th. The stone weighed 378 grs.

* This patient was re-admitted in March, 1870. Dr. Clindening operated a second time, and removed two large stones. The patient died a week after the operation.
R. B., aged 8 years, admitted April 9th. Under Dr. Wylde's care. Discharged, cured, June 6th. The stone weighed 190 grs.

B. H., aged 13 years, admitted July 29th. Dr. Phillips performed lateral lithotomy on August 4th. A little water came by the natural passage on the second day after the operation. August 22nd, the patient was up; the wound had healed; and he was discharged cured, August 30th. The stone weighed 86 grs.

J. McR., aged 3 years, admitted October 22nd. Dr. Phillips performed Ferguson's operation on November 18th. Discharged, cured, December 12th. The stone weighed 200 grs.

A. W., aged 3 years, admitted November 4th. Dr. Wylde operated on November 10th. Discharged, cured, December 16th. The stone weighed 150 grs.

G. A., aged 57 years, operated on three times; and W. B., aged 6 years, who died from haemorrhage. These two cases seem of sufficient interest to be given in detail.

G. A., aged 57 years, admitted under Dr. Gosse's care. In March, 1869, Dr. Gosse operated; performing lateral lithotomy, and removed two stones; one weighing 330 grs., the other 140 grs. The wound soon healed; but he was never quite free from pain, and there was generally a thick sediment in his urine. The symptoms of stone still continuing, he was examined, and another stone detected, and about ten weeks after the first operation Dr. Gosse again performed lateral lithotomy, and removed a stone weighing 230 grs. The bladder, this time as at the first, was carefully examined and washed out with warm water. He soon recovered from this operation, and was dismissed cured on July 21st.

Soon after his dismissal his water became thick again, and pain recurred, and he was re-admitted on September 21st, with all the symptoms of stone; and on sounding another stone was found. The third operation was performed on September 29th. The calculus broke down under the forceps, and it had to be scooped out piecemeal. The mucous coat of the bladder was found roughened, and the debris adherent to it, so that it was evident there was chronic inflammation of the lining membrane of the bladder. Dr. Gosse removed as much as possible of the deposit with the scoop, and then the bladder was carefully washed out by Dr. Harrison. Blood and matter came through the natural passage, and a little urine too, on the same evening, and next day he passed a good deal of water by the urethra. On the 3rd October, the patient was going on well, the wound healthy and healing. He recovered from this operation; but his water still continued thick with purulent deposit.*

W. B., aged 6 years, admitted September 6th, under Dr. Whittell's care. Was brought, first as an out-patient, to Dr. Harrison, who examined him, and found a stone in his bladder, and admitted him to the hospital.

* Dr. Wylde operated a fourth time on this patient, and removed a small calculus encysted, near the neck of the bladder, and a quantity of debris. The patient recovered, as far as the operation was concerned.
This case deserves its chief interest from the fact that the patient was of the haemorrhagic diathesis. He was of a pale, rather sallow complexion; well formed, but looked delicate. He was said to have suffered for about a year from symptoms of stone.

On admission he had a slight ecchymosis on the forehead, the result of a fall. No attention was paid to this, till in a day or two it began to bleed, and the bleeding was with difficulty arrested.

A few days afterwards (on a Sunday), his brother was brought to me with hemorrhage from the gums. He had had a tooth extracted on the Tuesday previous, and the gums had been bleeding more or less ever since. I used Perchloride of Iron with Glycerine and pressure, and the bleeding stopped. These two occurrences led us to suspect a hereditary tendency to hemorrhage, and on questioning the boy's mother, she said that she had always noticed that if they received the least scratch it bled profusely, and was with difficulty stopped. She knew of no other member of her own, or her husband's family, who was affected in the same way.

Dr. Whittell examined the boy, and easily detected a stone in his bladder. He was put upon Iron, nourishing diet, &c., and his general health improved under treatment. His water became clear, and he had less pain in making it than when admitted.

A consultation was then held as to the advisability of operating, and it was decided that lithotomy should be performed.

On 20th October, at noon, Dr. Whittell performed lateral lithotomy, and was very successful in seizing the stone at once. He was only two minutes over the operation.

There was no more hemorrhage than usual from the wound; but, as a precaution, a gum-elastic catheter was introduced into the bladder, and the wound plugged. I saw the patient at 3 o'clock, and there was no hemorrhage; but, shortly after, bleeding set in, and Dr. Harrison was called and removed the first plug, and put in another with Perchloride of Iron. This was left in till 9 o'clock next morning, when Dr. W. made his visit and removed the plug. There was no bleeding, and only a small clot came away. The patient was very pale, and his pulse was frequent and jerking in character. On the previous day Dr. Harrison had put the patient on small doses of Turpentine.

Haemorrhage did not recur till the morning of the 24th; when at 8 a.m., I was called, and found that some clots had come away, giving rise to great pain. Several clots came away during the day, but there was little or no oozing externally. In the afternoon, Dr. W. again plugged, putting a little turpentine on the lint. In the evening, more clots came away, at the same time his bowels were moved, and yet the plug seemed quite firm. I then began to suspect that the hemorrhage was from the bowel; but the stool passed was healthy in colour, and not mixed with blood. I removed the plug, and found very little blood on it. The urine came away
freely by the wound; it was of a dark colour from the iron which had been applied to the wound.

On the 25th, he rallied a little; but, on going into the ward in the forenoon, I found a pimple on his lip, which he had scratched, bleeding profusely.

On the 27th, he complained of pain about the region of the sacrum. There was no haemorrhage, the pulse was 180, weak and thready; temperature, 101.2. His mother and the nurse watched him carefully, and on the 28th, they reported that more clots had come away, and they asserted from the bowel. He was given stimulants: Gallic Acid by the mouth, and astringent injections.

There was not much bleeding after this, but he continued growing weaker and weaker, and died on the morning of the 3rd November, a fortnight after the operation.

Autopsy.—Twenty-four hours after death. Wound gaping, pale, and unhealthly-looking: no communication between the wound and the rectum. On opening the abdomen the peritoneum was found inflamed from the pelvis, up nearly to a level with the kidneys. The lower bowel was filled with scybala. There were no clots in the rectum. The bladder was empty and contracted, and its mucous coat pale. The kidneys were healthy.

Remarks.—Eleven cases of lithotomy occurring in one year in a comparatively small hospital, and from a limited population, seems to be a large number. It would be interesting to know if cases of stone are as common in the other colonies as in this. As far as I can make out, locality has little or nothing to do with the production of stone in this colony.

The case of G. A., now operated on four times within twelve months, is as far as I know quite an unique one in surgery.

Though Fergusson's operation has been performed several times, yet, as a rule, the surgeons of this hospital prefer the lateral method.

MEDICAL SOCIETY OF VICTORIA.

WEDNESDAY, MAY 4, 1870.

ORDINARY MONTHLY MEETING.

Present:—Dr. Jonasson (in the chair), Mr. Robertson, Dr. Bowen, Dr. P. Smith, Dr. Thomas, Mr. Lane, Mr. Gillbee, Dr. Nicholls, Dr. Black, Mr. Girdlestone, Dr. Neild, Dr. Cutts, Mr. Blair, Dr. McMillan.

NEW MEMBERS.

Dr. Pringle, of Parramatta, N.S.W., Mr. Casey, of Collins-street, and Mr. Penfold, of Richmond, were elected ordinary members of the Society.
The following paper was then read:

**ON A CASE OF CANCER IN A CHILD FOUR YEARS OF AGE.**

*By R. Robertson, M.R.C.S., Eng.*

Resident-Surgeon of the Melbourne Hospital.

Henry Blair, aet. 4, was an out-patient of the Melbourne Hospital. His mother states that fourteen months previous to his death her attention was called to a small lump in the child's left side, at the lower margin of the ribs, by his complaining of pain there. A poultice was applied, and relief given. Three months later he was brought to the Hospital. The lump was then about the size of one's fist, semi-elastic, and slightly moveable. It was situated over the spleen. No direct treatment was adopted, the general health, which had hitherto been good, being attended to.

On September 21st, 1869, i.e. about nine months after its first appearance, a consultation was held, and it being thought by the greater number of the gentlemen present to be a hydatid, it was punctured, but nothing save a little blood escaped. By this time the swelling had greatly increased in size and hardness, though at one point fluctuation was distinctly felt. A few weeks later a small swelling was noticed at the upper and outer angle of the right orbit, about the size of a pea. This, with the swelling in the abdomen, rapidly increased in size, and about the beginning of January his health began to suffer, the legs becoming oedematous, appetite bad, restless nights, and great emaciation of the upper extremities. The measurement of the abdomen was twenty-nine inches at the epigastrium, thirty-two at umbilicus, and twenty-five at pubes. There is resonance over the abdomen at upper two-thirds, and the tumour feels nodulated and perfectly hard. The swelling in the orbit has greatly increased in size, pushing the eyeball forwards and downwards upon the cheek, and entirely evert ing the upper lid. He was then ordered Morphia Hydrochlor., gr. \(\frac{1}{16}\) h. s.; but so soon as constitutional disturbance took place he rapidly sank, being unable to sleep, walk, or take his food, and died on February 28, 1870, without any pain.

The body was examined forty-eight hours after death. The skin and muscles of the abdomen were much attenuated. The intestines were found lying in front of the mass which occupied the whole of the abdominal cavity. The liver and spleen were quite healthy, but flattened and smaller than natural. The stomach pushed up. The right kidney healthy, flattened at its upper portion, and adherent to the mass; the left kidney was with some difficulty found pushed up against the diaphragm and lying upon the ribs, greatly altered in appearance, perfectly white, no signs of healthy structure remaining. The mass itself was firmly adherent to the walls of the abdomen, breaking down under the fingers on attempting its removal. It presented all the appearances of cancer, and on examining it by the microscope, kindly aided by Professor Halford, it was found to consist of soft cancer, the left kidney also containing similar cells. The orbit was
1870. MR. MACGILLIVRAY on two Cases of Acute Rheumatism. 145

not examined, nor the weight of the mass ascertained. The urine was examined during life, but nothing abnormal detected.

Mr. Robertson presented to the Society two excellent photographs, which very distinctly illustrated the magnitude and relations of the diseased structures.

On the motion of Dr. Neild, seconded by Mr. Girdlestone, the thanks of the meeting were given to Mr. Robertson.

The following paper was then read by Dr. Neild for the author:

ON TWO FATAL CASES OF ACUTE RHEUMATISM.

By P. H. MacGillivray, A.M.
Surgeon to the Bendigo Hospital.

The notes I have of the two following Cases are very brief, and in one the post-mortem examination was limited to the thorax; but from their exceptional nature they will probably be of interest to the members of the Society, some of whom may have met with similar instances.

Case I.—James P., aged 20, a jockey, was admitted on 28th January, suffering from acute rheumatism of nearly three weeks duration; he was said to have had two previous attacks.

Several of the joints were affected, and the pain was very great; worst in the left clavicle, shoulder and arm. There were well marked symptoms of pericarditis with considerable effusion. The expression was anxious and altogether the case was a very severe one. On the night of the 1st February, he was still worse and was slightly delirious. On the following morning there was no improvement. About mid-day he was suddenly seized with great difficulty of breathing. When I saw him about an hour afterwards, the respiration was very quick and superficial, the pulse was 130, equal at both wrists, the face was livid and swollen, and the skin was intensely hot. Brandy and Ammonia were given without any benefit. He soon became insensible, and died about four hours from the commencement of the dyspnœa.

Two hours after death, when the examination—which was limited to the thorax—was made, the skin was still intensely hot, and a thermometer in the axilla rose to 109° F.; when the bulb was placed inside the thorax it showed 110° F.

A considerable quantity of fluid was found in the pericardium, both surfaces of which were covered with a thick layer of lymph, adherent towards the base, and honey-combed in the rest of its extent. There were some small vegetations in the mitral valve. The left pulmonary artery was quite pervious; the right artery at its first bifurcation was closely plugged by a firm fibrinous clot, with a large quantity of soft clot.

Case II.—John P., aged 28, labourer, admitted February 9th, with acute rheumatism of about a week’s duration. There was nothing unusual about the case, which was not at all a severe one. He was treated with Bicarbonate of Potash and Opium. A day or two after admission, a slight bruit was audible, but otherwise there were no cardiac symptoms. On the 18th he was seen by Mr. Duke at two
o'clock, when he was in his usual state. At three I was called to him, as he was said to be dying. The respiration was then very quick. The skin was intensely hot and dry. Pulse 140. He was at first able to swallow a little brandy; in a few minutes he was unable to do this. The pupils were of the natural size, and equal. They very soon became quite insensible, and there was no movement on touching the eyes; in fact, the man was quite comatose. The respiration was now 100. The pulse was about 140, failing rapidly. The temperature in the axilla was 109°.4 F. I now injected into the right median-basilic vein twenty minims of Liquor Ammoniae, with forty minims of water. This having no effect, I injected into the corresponding vein of the left arm, fifteen minims of Liquor Ammoniae with the same quantity of water. No effect was produced. He died at twenty minutes past four, about an hour and a half after the first seizure.

The examination was made two hours after death. The temperature in the axilla was 106° F.

The brain and its membranes were slightly congested. There were a few slight recent pleuritic adhesions. The pericardium contained very little fluid, and the only evidence of pericarditis was a very thin almost imperceptible film of lymph, limited to a small portion. There were small deposits in the mitral and tricuspid valves. In the left lung, great part of the lower lobe was intensely congested, almost black; a portion of the upper lobe was in a similar state, as was also a small part of the right lung. On tracing out the pulmonary artery, the branches supplying the congested portions were found to contain soft clots at these parts. The kidneys were greatly congested; the other organs were normal.

Although a temperature reaching to 104° or 105° is not very uncommon in rheumatism, so rapid a rise to so great a height as shown in these two cases has very rarely been recorded. The only cases I am acquainted with are those published by Dr. Sydney Ringer,* and two by Dr. Weber,† all fatal. In Dr. Ringer’s cases the temperature rose at death 110°.8 in two, while in the third it is only marked at 105°. In Dr. Weber’s cases the temperature reached 108° and 107°.8. In Dr. Weber’s cases the chief post-mortem appearances are said to have been hyperemia of the brain and membranes, imperfect coagulation of blood, recent fibrinous deposits, on, and around the mitral valves, and hemorrhages beneath the serous membranes. In all Dr. Ringer’s cases, the brain and its membranes are said to have been quite healthy; in one there was extensive pericarditis, in the others pericarditis to a slight extent, and in all there were slight vegetations on the mitral valves. Many cases have been recorded of rheumatism, with delirium and other cerebral symptoms, proving rapidly fatal, in which the post-mortem examination has shown sometimes congestion of the brain, occasionally no particular appearances, but most frequently well marked pericarditis or other cardiac affection. In some of these

there is said to have been great heat, and probably if the thermometer
had been used, it might have been found to register as high as in
those here described.

In my first case, the occurrence of embolism with the great increase
of temperature is the most note-worthy fact, it being generally
believed that pulmonary embolism is accompanied by a diminution of
heat and collapse. It is most probable, however, that the pyrexia,
like the delirium, was dependent on the pericarditis, and that the
plugging of the pulmonary artery was an accident unconnected with
this. Its occurrence was marked, and the respiratory distress was so
sudden and urgent that I had no hesitation in diagnosing the em-
bolism which was subsequently found. Several years ago I saw
another case of acute rheumatism in a young man, fatal from
plugging of the pulmonary artery, where the distress in breathing
was equally urgent, but where the temperature did not strike me as
being remarkably high.

The pathology of the second case is much more obscure. The
attack was an ordinary one, of no great severity. The cardiac im-
plication was very slight, and although there certainly was congest-
tion of the brain, it was not sufficient to account for the rapid
accession of the coma and death. It was no metastasis, as the
inflammation of none of the affected joints had in the least abated.
It is difficult to understand how, in an otherwise ordinary case
the presence of the rheumatic poison circulating in the blood should
suddenly cause these symptoms in a man in whom there was no
reason to suspect any particular nervous susceptibility. He had
once previously however had a severe attack of acute rheumatism.

In cases of such extreme urgency, and when the chances of
recovery must evidently be infinitesimal, there is not much benefit
to be expected from any treatment. I do not see that blood-letting
is likely to do any good, and in one of Ringer's cases, where 12oz.
were abstracted, there was no relief. In such cases as my first, it
could only be injurious, and notwithstanding the heat, the
exhibition of stimulants as far as possible certainly seems the most
rational treatment. Dr. Weber has already pointed out the resem-
bliance of his cases to certain neuroses and especially sunstroke, and
recommends cold affusion. My second case certainly bears a striking
resemblance, both in symptoms and post-mortem appearances, to
certain forms of sunstroke as described by Indian surgeons, and a
similar mode of treatment seems at least as rational as any other.

The President drew attention to the importance of using the
thermometer as an auxiliary in prognosis. Beyond a certain mini-
mum of animal heat, in many diseases, a fatal result might always be
expected. The occurrence of thrombosis in acute rheumatism might
always be looked for, inasmuch as fibrin was so greatly in excess in
that lesion.

Dr. Cutts remarked that in some cases of brain disease which
had been referred to embolism, the embolism had been found to be
caused by a diseased condition of the artery, and he suggested
whether a similar explanation might not be given in cases of the kind reported by Mr. MacGillivray.

On the motion of Dr. Neild, seconded by Dr. Bowen, the thanks of the meeting were given to the author of the paper.

MEDICAL BILL.

The further consideration of the Medical Bill was then proceeded with, and the whole of the clauses having been gone through, the sub-committee was requested to embody the several amendments in a copy of the bill, and forward it to the Medical Board.

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**Australian Medical Journal,**

**MAY, 1870.**

**PROFESSOR HALFORD AND THE "LANCET."**

In the *Lancet* of March 26, there is an "annotation" upon the injection of Ammonia for Snake-bite, in which Professor Halford is accused of "gravely accepting a testimonial for having made two discoveries, one of which is no discovery at all, and the other of which ranks among the oldest, most outstanding, and universally received methods of therapeutics." and the Victorian people are accordingly told that they are very simple persons for accepting as a novelty something, which is as well-known as the circulation of the blood or vaccination. Says the *Lancet* further, "In everybody's hands, except Dr. Halford's, the treatment of snake-bite by Ammonia has utterly failed, and in India where a remedy of any kind would ensure its discoverer a monument, the search for it has been abandoned in despair."

It would have been difficult to compress in an article of thirty-five lines, a larger number of mis-statements. It is simply untrue, that, in everybody's hands save those of Professor Halford, the remedy has utterly failed. Among the fourteen cases given in this Journal for January, there was only one failure, and the thirteen successes were with one exception in other hands than Professor Halford's.

It is not true that Professor Halford has claimed for himself the merit of having discovered the possibility of injecting foreign substances into the blood, and it is completely untrue that he ever insisted upon Ammonia being regarded as an antidote in the ordinary meaning of the term. But it is undoubtedly true, that, by the most persevering experi-
ments, Professor Halford has demonstrated the facility and safety of introducing Liquor Ammonia and other powerful remedies directly into the circulation; and if facts are to go for anything, he has shown that the direct stimulation so communicated, has a surprising influence in restoring and maintaining the action of the heart, when this has been nearly destroyed by the toxic agency of snake virus. He has not performed his experiments in secret, but in the presence of several gentlemen of unquestioned reliability, and on the strength of the reports published of these very interesting trials, a number of medical practitioners throughout this colony, have used the remedy in cases of snake-poisoning of the human subject. Their unasked and unbiased testimony has been made universally known, and it is on the faith of their statements, which no one has ever attempted to discredit, that a large number of influential gentlemen in Melbourne, have determined to present Professor Halford with a substantial acknowledgment of his very useful labours. It is not encouraging either to scientific investigation, or to philanthropic endeavours generally, that an influential organ like the Lancet should throw the weight of its authority into the scale of that local opposition, which first denied the possibility of safely injecting Ammonia into the veins at all, and then, finding that this operation could be safely performed, attributed all the good done to other causes.

That Professor Halford's endeavours should be misrepresented, and that he should be personally disparaged by a small knot of ill-informed and foolishly envious persons in this colony, was to be expected. The impotent acrimony of their abuse is rather complimentary than injurious to him. From this baser sort of the profession, it would have been impossible for anything not very malignant and exceedingly foolish to come, but that the Lancet should lend its leading columns to further these bad ends, is a little difficult of explanation.

The whole subject, however, of Professor Halford's researches on snake-bite, and the remedy proposed by him, and successfully adopted by others, will be treated in a paper he intends reading at the next meeting of the Medical Society, and there is no doubt that a full and exhaustive discussion will result in a unanimous approval, by what we may correctly venture to term the reputable portion of the profession.
At the Annual Commencement on the 23rd ult., Dr. Joseph Curdie, M.D., of Glasgow, was admitted to the *ad eundem* degree.

Among the exhibitioners were the names of J. W. Philips (2nd year), medicine, 1st class; Walter Thomas (3rd year), medicine, 2nd class.

**AMERICAN QUALIFICATIONS.**

Dr. Potter, of St. Louis U.S., has kindly forwarded to us the subjoined list of sources from which medical qualifications are obtained in the United States:

St. Louis, February 10th, 1870.

There are the following regular Medical Colleges in the United States, whose graduates are, as a rule, entitled to recognition as professional brethren:

- Medical Department, Harvard University, Boston Mass.
- Medical Department of Yale College, New Haven, Connecticut.
- Medical Department, New York University.
- New York College of Physicians and Surgeons.
- Bellevue Hospital Medical College, New York City, N.Y.
- Long Island Hospital Medical College, Brooklyn City, N.Y.
- Albany Medical College, Albany, N.Y.
- Buffalo Medical College, Buffalo, N.Y.
- Medical Department, Pennsylvania University.
- Baltimore Medical College, Baltimore.
- Medical Department, Virginia University, Richmond, Va.
- Washington Medical College, Washington City, D.C.
- Rush Medical College, Chicago, Ills.
- Chicago Medical College.
- Cincinnati College of Medicine and Surgery.
- Medical College of Ohio.
- Miami Medical College, Cincinnati, Ohio.
- Cleaveland Hospital Medical College, Cleaveland, Ohio.
- Indiani Medical College, Indianapolis, Ind.
- Medical Department University, Louisville.
- Kentucky School of Medicine, Louisville, Ky.
- Medical Department, University of Nashville, Nashville, Tenn.
- Medical Department, University of Louisiana.
- New Orleans School of Medicine, New Orleans, La.
- Medical College of South Carolina, Charlestown, S.C.
- St. Louis Medical College.
- Missouri Medical College, St. Louis, Mo.
- Medical Department, Michigan University, Mich.
Toland Medical College, San Francisco, Cal.
Medical Department, Willamette University, Salem Oregon.
Mobile Medical College, Mobile, Ala.

The above comprise all the reliable Medical Schools we have. There are a number of homoeopathic, eclectic, and irregular schools, but as a matter of course their graduates are not recognised as honourable medical practitioners.

P.

MR. PALEY'S REPORT ON INSANITY.

The following is the substance of the report recently issued by the Inspector of Lunatic Asylums in Victoria:

I.—PROPORTION OF INSANE TO POPULATION.

In the decennial period from 1859 to 1869, the proportion of insane persons under care in the public asylums of Victoria has increased from one in 940 in the former, to one in 416 in the latter year, as shown in the following table:

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Total Lunatics on 31st Dec.</th>
<th>Proportion to Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1859</td>
<td>530,262</td>
<td>564</td>
<td>1 in 940</td>
</tr>
<tr>
<td>1860</td>
<td>537,847</td>
<td>596</td>
<td>902</td>
</tr>
<tr>
<td>1861</td>
<td>541,800</td>
<td>702</td>
<td>771</td>
</tr>
<tr>
<td>1862</td>
<td>555,744</td>
<td>750</td>
<td>740</td>
</tr>
<tr>
<td>1863</td>
<td>574,931</td>
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<td>595</td>
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<tr>
<td>1866</td>
<td>649,912</td>
<td>1,189</td>
<td>541</td>
</tr>
<tr>
<td>1867</td>
<td>659,887</td>
<td>1,280</td>
<td>515</td>
</tr>
<tr>
<td>1868</td>
<td>654,316</td>
<td>1,556</td>
<td>439</td>
</tr>
<tr>
<td>1869</td>
<td>710,317</td>
<td>1,705</td>
<td>416</td>
</tr>
</tbody>
</table>

This result is inevitable in a new colony, where the large majority of the population consists of healthy adult immigrants, in whom and whose families the natural amount of insanity cannot be developed until a complete generation has elapsed from the time of their arrival and settlement. In my report last year an opinion was expressed that a further increase was to be naturally expected, and that the proportion of insane would gradually approximate to that in England. During the past year the number of insane in Victoria has increased by 149, and the proportion is now 1 in 416. Still the home ratio, 1 in 411 (Lunacy Commissioners' Report, No. 23, page 4), has not yet been reached; and in the neighbouring colony of New South Wales, with a longer settled population and a larger number of native-born, the ratio is much higher than in Victoria, viz., 1 in 387—(Dr. Manning's Report on Lunatic Asylums, 1868, page 110). There seems, therefore,
to be reason for congratulation that, in spite of the many causes which might be expected to produce a more than ordinary amount of insanity, such as the solitary life of shepherds, habits of intemperance and sudden reverses of fortune, especially among the mining population, the ratio of lunacy still remains lower than in Great Britain or Ireland. During the present year some increase must undoubtedly be anticipated, but it may be less than that which accrued during the past year, since the increase between 1868-69 has been of smaller amount than that between 1867-68.

**II.—PROPORTION OF RECOVERIES AND DEATHS.**

The ratio of recoveries to the admissions in the Victorian asylums during the past year was 42.05 per cent., and of cases recovered and relieved 47.47 per cent. In England, it appears from the twenty-third Report of the Commissioners in Lunacy, page 8, that the ratio of recoveries averaged, during the ten years ending 1868, 33.93 per cent. The per centage of deaths on the daily average number of inmates in the Victorian asylums during 1869 was 7.87, as shown in the same table. In England the average rate of mortality for the ten years ending 1868, calculated in the same manner, was 10.31 per cent.—(Commissioners’ Report, No. 23, page 9). It is most satisfactory to find that the asylums of this colony, in their results for 1869, again compare favourably with those of England, in obtaining a larger proportion of cures and having a smaller proportion of deaths.

**MELBOURNE ASYLUM AT YARRA BEND.**

During the year 1869 there were under care in the Melbourne Asylum at Yarra Bend, 1209 patients; the daily average was 920; 308 were admitted for the first time; 23 were re-admitted; 15 were transferred from other asylums; and one, who had escaped in a previous year, was re-taken. The numbers discharged, recovered and relieved were 129, or 38.97 per cent. on the admissions, against 34.43 per cent. in 1868. There were 71 deaths, or 7.71 per cent. on the daily average number resident. The mortality was due to ordinary causes, except in two instances, one of which was a suicide by hanging, and the other a case of accidental drowning. On these, as on all deaths in the asylum, coroner’s inquests were held, and the verdicts of the juries attributed no blame to any of the officials of the institution. The usual periodical visitations and statutory inspections have been made by the official visitors of asylums in the Melbourne district.

**RECEIVING HOUSE FOR THE INSANE, CARLTON.**

During the past year there were admitted, for the first time, 63 patients, one was re-admitted, and 16 were transferred from other asylums. The number discharged recovered and relieved was 65.62 per cent. on the admissions, and the total number of deaths was 8.83 per cent. on the daily average. Since last September no new cases have been received into this asylum, which is now reserved as
much as possible for the care of harmless imbeciles, for which purpose it is better adapted than for the treatment and management of persons suffering from insanity of an acute and curable character. The official visitors of the Melbourne district have made regular visitations to this institution, as also the Inspector of Asylums, and the visiting medical officer attends daily, or more frequently if needed, to direct the medical and general arrangement of the inmates.

HOSPITAL FOR THE INSANE, ARARAT.

One the 1st of January, 1869, there were under care in this asylum 270 patients, and on the 31st of December in the same year the total number of inmates was 281. The daily average number resident was 271. The number admitted during the year was 109, and the total number discharged recovered and relieved was 63, being in the proportion of 57.79 per cent. on the admissions. The deaths numbered 34, or 12.54 per cent. on the daily average. This mortality is due to the occurrence of an unusually large proportion of cases of general paresis and of inflammation and other fatal diseases of the brain, and not to any disorder of a preventible or curable kind. Four inspector's visits were made during the year, and the reports as to the condition and management of the asylum were, on each occasion, of a satisfactory character. The original design of the building is still, however, far from being completed, and there is great need for improving the quantity and quality of the water supply.

HOSPITAL FOR THE INSANE, BEECHWORTH.

On the 1st of January, 1869, there were 295 patients in this asylum. The total number on the 31st December in the same year was 298. Thirty-one patients were admitted during the year, and twenty were discharged recovered and relieved, or a per centage of 64.51. The rate of mortality, as in 1868, was unusually low, being 3.66 per cent. on the daily average number. Four statutory visits of inspection were made during the year, and it was found necessary to remark on the need for increased water supply, and on the great desirability of carrying on the original plan of the building to completion with the least possible delay. Some useful works have been executed in the past year; but a great deal yet remains to be done, especially in the erection of farm buildings, workshops, &c., that the medical superintendent may possess the means of employing the patients in such various pursuits as will tend to promote their re-recovery, and also assist very materially in lessening the expense of managing the institution. The general results of farm and garden operations have been very satisfactory.

LICENSED ASYLUM AT CREMORNE.

On the 1st of January, 1869, there were 11 patients in this asylum, and on the 31st of December in the same year the number resident was 15. There were admitted during the year 53 patients, and 40
were discharged cured and improved, giving a ratio of 75.4 per cent. The deaths were five in number, or in the proportion of 35.71 to the daily average number resident. Four of those whose cases ended fatally were in the asylum less than a month, having been in such a weakened condition when admitted as to preclude the possibility of their recovery. One of the deaths was from suicide. A coroner's inquest was held, and the verdict of the jury attributed no blame to any one connected with the institution. Four inspector's visits were paid during the year, at each of which the patients were found to be well cared for and the house in a satisfactory state.

EXTRACTS FROM FOREIGN MEDICAL LITERATURE.

CHLORIDE OF ZINC PASTE.

Dr. Mayet ("Bull. de Therap," lxxi. p. 501, 1869) states that he has found a great advantage from adding Oxide of Zinc to the ordinary mixture of Chloride and flour. By using 8 parts of Chloride, 2 of Oxide, and 6 of flour, a paste is got which does not deliquesce after it is dried, and yet acts as a caustic with undiminished efficacy.

USE OF CARBOLIC ACID.

The medical journals of Germany are largely occupied with reports and discussions on Lister's method of treating abscesses and compound fracture, the balance of opinion being strongly in favour of it. A case is mentioned by Dr. J. Steinitz ("Inaug. Dissert. Breslau," 1869), of poisonous symptoms being caused by the application of the acid to a large abscess of the thigh. After two days, severe vomiting came on; the urine was almost black, and showed distinct traces of the acid. After being omitted for four days, the same treatment was again resorted to with a good result.

In the report of the General Hospital in Vienna, for 1868, Prof. Hebra gives his experience of the use of Carbolic Acid internally in various skin diseases. He found the remedy generally well borne, even in large doses. In cases of psoriasis a cure is often attained in as short a time as three weeks. In prurigo the tormenting itching is mitigated in an astonishingly short time.

TREATMENT OF HÆMOPHTYSIS.

In the same report the inhalation of pulverised astringent solutions is recommended, a very weak solution of Perchloride of Iron being the best. The bleeding, even when very considerable, rapidly ceases. [I have several times used solution of gallic acid in the same way, apparently with good effect. J. J.]

TREATMENT OF HÆMATEMESIS.

In the same report it is stated that alum whey is very effectual in hæmatemesis in cases of perforating ulcer of the stomach.

JAMES JAMIESON, M.D.

Warrnambool, 10th May, 1870.
DEAR SIR,—Will you allow me the favour of making a few remarks on the allusions to my paper Dr. Martin did me the honour of making in his paper on "Puerperal Convulsions," reported in a late number of your journal. While thanking him for noticing it in the way he did, I should like to point out where he has not, I think, clearly understood the import of my remarks. 1st. The paper was not to prove that albumen does not exist prior to the convulsions generally, but to show that in a certain proportion it was absent prior to the first convulsion. Now the proportion in which it has been absent is the point—not in four cases out of a number, but in four cases out of eight, where opportunity was afforded of examining the urine before the convulsion, after which there was abundant evidence of its presence; and further, that in those cases where it did exist before, the urine showed the rapid increase of nephritic symptoms. In those that had no albumen before the convulsion, their health was so perfect up to within a day before, that it would be a simple assumption to say there were latent kidney disease, unless other proof could be given. I may add that researches in the same direction since the paper was read confirm the observations I have made.

In those cases where no albumen existed, it disappeared generally in ten days, and in those where it was increased it went off largely, sometimes wholly, in from ten days to three weeks. But there was not simply albumen in any—always there were casts of the tubes, blood corpuscles, &c., as seen in acute desquamative nephritis. So that, as remarked in my paper in a certain proportion of cases of puerperal convulsions (say half) we have albumen present beforehand, but in the remainder we have none, only after the first fit, but then in these it almost invariably does make its appearance. That where it has existed before, it becomes increased, and the symptoms of acute disease upon old make their appearance. I then ask, Why is this? but I do not insist upon any explanation. I say we want more information, but that one thing is clear—if the albumen be the sign of uremia, then it is clear the uremia is not a precursor of the fit. The albumen must, in the half of the cases, be owing either to the fit, or the fit and albumen to some third cause. I then discuss the assertion that albumen is present as a frequent thing in pregnant women; I give what information I have on the matter, but ask for more aid on this subject. I then ask for aid, to show whether albumen succeeds to ordinary epilepsy: the cases in which I have information show the negative. As to the pressure theory, it is easy to show that—1st, large ovarian cysts do not give albumen; 2nd, the uterus has not reached to the renal veins before albumen appears, and
Correspondence.

May,

convulsions also; and 3rd, albumen and convulsions occur some days after labour. I am inclined to think that puerperal convulsions result from the coincidence of two or three circumstances, and is a more complicated process than generally believed. But Dr. Martin, I think, has hardly comprehended my paper when he says that my paper was to prove a point, rather than show what I had noticed and the inference that was necessarily to be drawn from it.

I am, yours faithfully,

J. BRAXTON HICKS, M.D., F.R.S.
Physician, Accoucheur, and Lecturer on Midwifery at Guy's Hospital. Examiner in Midwifery at University of London.

9 St. Thomas-st., S.E. London, March 14, 1870.

CLIMATE AND CONSUMPTION.

To the Editor of the Australian Medical Journal.

Sir,—I regret that I was out of town when Dr. Bird's paper on "Climate and Consumption" was read before the Medical Society, as I intended to adduce some facts touching the favourable influence of Australian climate in cases of phthisis. Perhaps you will allow me as a Member of the Medical Society a little space in your journal for that purpose.

Some six years ago, when I had all but finished my curriculum in medicine in the University of Edinburgh, Professors Bennet and Henderson, and Dr. Warburton Begbie, all agreed that tubercle was deposited in my right lung, and that a small cavity was then being formed at its apex.

I did not attend the Summer Session then commencing, but spent the summer in the Aberdeenshire Highlands, intending when Winter approached, to seek, as I had been advised, the South of France or Algiers. While in the Highlands, a free kirk minister put into my hands a copy of Dr. Bird's book on Australian climate, &c. On reading it, I determined that if on enquiry I found that half of it was true, I should at all hazards go to Australia.

I returned to Edinburgh slightly improved, determined to complete my curriculum; but very soon urgent chest symptoms appeared. My medical advisers hurried me off, bidding me go to Queensland or New South Wales, but not to Victoria, which was in their opinion too cold and variable.

I sailed for Queensland accordingly. I was very much improved in health by the voyage; but a residence of some months first in Queensland, then in New South Wales, convinced me that the climate of both colonies was too relaxing for me.

I came then to Victoria, and on being examined by Dr. Bird, was found by him to be in much the same state as when I left Edinburgh. My residence in the other colonies had undone the good effects of the voyage.
After a few months' residence in Victoria, I began to improve, and though I had several relapses during my first year's residence, yet these had nothing to do with the climate. I have gone on improving. For nearly three years I have had no chest symptoms. I have gained flesh, am fit for a considerable amount of work, and though not so robust as once, I consider myself in good health.

If asked to explain how I have got well in a climate so variable and at times so relaxing, I reply that though I do consider sudden changes of temperature, hot winds, &c., the reverse of beneficial, yet, I believe that the inducements to be in the open air, the stimulating and tonic atmosphere, and the cheerful sunlight more than counterbalance these drawbacks.

I could adduce other cases which have come under my observation, of recovery from incipient phthisis under the influence of Victorian climate, but time forbids.

I remain, Sir, yours, &c. 

MEDICUS.

CONSUMPTION IN THE MELBOURNE HOSPITAL.

To the Editor of the Australian Medical Journal.

Dear Sir,—I wish to correct in your next number the report of the few remarks I made at the last meeting of the Medical Society on the paper read by Dr. Bird, on Consumption. I alluded of course only to the cases that came under my own observation, and not to the whole number treated in the hospital, and I said that the majority of those treated by me have come to this country with symptoms of the disease, which were more or less aggravated by exposure and privation, and many of them were "recently arrived immigrants;" in a word, that nine-tenths had brought the seeds of the disease with them, not that nine-tenths were recently arrived immigrants.

I am, dear Sir,  
Your obedient servant,  
J. BLACK, M.D.

Honorary Physician to the Melbourne Hospital.

LOCAL TOPICS.

The following gentlemen registered their qualifications at the last meeting but one of the Medical Board:—John Wesley Allin, Fitzroy, M.B.C.S.E., 1867; Harris Carr Brakyn, Melbourne, M.B.C.S.E., 1851; William Margrave Lyttleton, Melbourne, M.B.C.S.E., 1868; L. et L. Midwif., R.C.P., Edin., 1869; Joseph Bell Marr, Koroit, L. et L. Midwif. F.P.S., Glas., 1860; L.R.C.P., 1864. The following names were erased from the Medical Register:—John Betham, deceased; C. J. Kenworthy, deceased; H. R. Hunt, deceased.
John William Yorke Fishbourne, M.B., has been appointed public vaccinator for the districts of Learmonth and The Springs, vice Dr. Lawrie, deceased, and for the districts of Windermere and Miners'-rest, vice Dr. Hooper, resigned.

An inquest was held at Stony Creek, near Daylesford, on the 6th inst., on the body of an infant, seven days old, who had died from haemorrhage, resulting from the cutting of the ranine artery by a pair of scissors, the operator being an old woman, who had decided that the child was “tongue-tied.” As a matter of course the jury, after the manner of juries who always sympathise with quacks of all kinds, returned a verdict of accidental death, and expressed their belief that the woman had “erred through ignorance, and with the best intentions.”

In a daily newspaper of the 28th ult. we find the following:—"The Homœopathic Dispensary Committee has been in a little flutter. They have taken a house in Collins-street, but don’t want the upper floors. A fashionable dressmaker has offered to hire these, for show rooms, and the offer came before the committee yesterday. They were willing enough—but for Mrs. Grundy. The question was seriously debated, What will the Allopaths, in a nest of whom we are placed, say? What a laughing-stock to Dr. Allopath! Physic and finery! However, the committee are determined to brave ridicule on satisfactory terms, with Mrs. Poplin.”

A correspondent of the Argus, signing himself "Medicus," has been informing the world, through the columns of that journal, that carbolic acid is “antiseptic, caustic, and stimulating,” and that, therefore, it may be used in some forms of diphtheria. His next letter will probably make known the remarkable fact, that sugar is sweet and nutritious, and forms an agreeable article of diet. The letter of "Medicus" has been extensively copied into the country papers as if it were a great discovery.

At the meeting of the committee of the Melbourne Hospital on the 10th instant, the following letter from Mr. W. Thomson was read:—"Allow me to return you my best thanks for permission to search the records. The assertion that nine-tenths of the deaths from phthisis are of recently-arrived immigrants is wholly incorrect. Not one-tenth is so. The reports for two years show about one case in fifteen to be of phthisis, that fully one-half of phthisis cases are fatal, that these fatal cases give a fourth of the whole mortality, that of 234 deaths from phthisis during these two years, nearly 7 per cent. were native-born Australians, that one was an aboriginal, that 8 per cent. had been one year in the colony, and that the large majority of 85 per cent. had been on an average twelve years in Australian colonies. The duration of illness can be learned only by reference to the case-books, and this important element of a fair conclusion is being thus examined. The large proportion of phthisis has a marked effect in the relative statistics, and suggests many considerations that cannot now be mentioned. The incautious statement referred to had great weight when it went before the public, and proves the necessity of extreme care, and even minute inquiry, before hazarding general opinions. Errors of the kind are often injurious in a way not dreamt of when fallen into.”

The Australasian of the 14th remarks:—"A striking testimony is borne to the salubrity of the Tasmanian climate by Dr. E. S. Hall, who has been for nearly 40 years a medical practitioner in that island. He points out that
the death rate—which from 1857 to 1868, inclusive, was only 14 per 1000 annually, as against 22 per 1000, the average in England and Wales—is undergoing a still further diminution in proportion as the native-born population become numerically greater than the imported inhabitants. As regards infant mortality, it appears that about nine out of every ten children born, survive the first year of life, and the mortality, from that age up to about 14 years old decreases at a wonderful rate. The deaths in 1000 children between 3 and 14 years old only average about 5 per 1000 annually. Dr. Hall adds that intermittent and allied fevers are almost unknown, and other fevers are of rare occurrence. Small-pox has never yet existed in this island. Emigrants from Europe with the consumptive tendency, if not too far gone, soon have the germs of this disease eradicated from the system, if they observe the necessary laws of health. We perceive from recent Indian papers that the advantages presented by Tasmania, both as a sanatorium for invalided officers and as a place of retirement for those who have quitted active service, are engaging increased attention and that Colonel Crawford's settlement at Castra is likely to attract many half-pay officers to the 'garden island of Australia.'

The Hon. Mr. Grant lately gave notice of the following question; "To ask the hon. the Chief Secretary whether he will take into his consideration the desirability of placing himself in communication with the governments of the other Australian colonies, with the view of ascertaining the feasibility of establishing railway communication between the capitals of the Australian colonies and Europe via the Gulf of Carpentaria, the Dutch and English Straits settlements, and India—there being only 750 miles of ocean navigation on this route." Considering the serious lesions of the nervous system shown to be due to excessive railway travelling, one may fairly ask, what would be the condition of a person travelling between London and Melbourne in a railway train?

A curious defect has been found in the new Lunacy Act. In defining the scale of fees to be paid to medical men for examining lunatics, the clause is so worded that payment can be ordered only in the case of those examinations where the person examined is stated to be insane. If the examination results in a certificate of sanity, the fee is not payable. A case has lately occurred at the Police Court, in which this defect has been unpleasantly made manifest.

Dr. William Smith (M. B. Lond.) has been appointed Demonstrator of Anatomy at the University of Melbourne.

Dr. Moffitt, of Sydney, has been seriously injured by the upsetting of his buggy.

The death of Mr. James McNicoll (M.R.C.S., Eng.), of Daylesford, took place on the 11th instant. Mr. McNicoll is believed to have died of cancer of the stomach, but he had not been incapacitated from his duties for any length of time before his death. Mr. McNicoll arrived in the colony by the "Great Britain" on her first voyage to Victoria. He practised for some time near Melbourne, and was at one period in partnership with the late Dr. Eades, but he left this city for Castlemaine, and thence for the neighbourhood of Daylesford, where he resided for some years, and had held the office of coroner for that district. He leaves a widow and eight children.
A married woman named M'Coll died lately at Laanecoorie, in the Dunolly district, in consequence, it is believed, of her husband’s neglect to procure medical assistance. The coroner, at the inquest on the body, told the husband that he feared the real cause of a doctor not being sent for was his (M'Coll's) love of money.

The first intimation made by King Jerry, the aboriginal, on being admitted to the Geelong Hospital was—“Dr. Williams says I am to have brandy.”

Sickness on the Bet Bet and Loddon is said to be alarmingly on the increase. It is described as typhoid fever, with pains all over the body. One farmer on the Loddon has lost his four children within the last month. There are many families at present suffering from the same malady. We shall be glad to have the particulars of any of the cases from the gentlemen practising in that locality.

DEATH.

M'Nicom—On the 11th May, at his residence, Bridport-street, Daylesford, James M'Nicol, M.R.C.S. Eng., coroner of the district, aged 44 years.

NOTICES TO CORRESPONDENTS.

Communications have been received from the following gentlemen: Dr. P. Smith, Dr. Logan (Adelaide), Dr. Jamieson, Dr. Braxton Hicks (London), Dr. Jos. Black, Dr. Potter (U.S.), Mr. Robertson, Mr. Wilkins, Mr. Trimmer (Sec. R.C.S.) Mr. Chatto (Librarian, R.C.S.), Mr. Archer (Registrar Gen.).
