given minute doses of brandy, for fear of giving too much, which I have often seen done; in fact, the time wasted would in all probability have lost the patient. The temperature, too, must be regarded as very low (although doubtless it was high during the paroxysms, as already stated), for, after repeated experiments upon myself and others, I find that the temperature of the body here in perfect health often obtains considerably above that found in temperate latitudes.

Idiopathic tetanus is a common disease here, several cases having recently occurred in the practice of my colleagues, with, I believe, fatal results. The cause is always difficult to determine. It occurs perhaps oftenest in young children, and in them is very apt, if care be not taken, to be mistaken for sunstroke or convulsions, or, in fact, anything but what it really is, through the symptoms not being sufficiently watched. This remark does not apply to the well-known trismus nascentium, which must be regarded in a very different light, occurring as it does merely in the youngest infants. In such cases it is pretty uniformly fatal, and indeed very speedily so.

I am, Sir, your obedient servant,

JAS. DENHAM BRADBURN,

Grenada.

Surgeon to H.M. Government in Grenada, W. Indies.

ANTISEPTIC INHALATION IN PHTHISIS.

To the Editor of THE LANCET.

SIR,—The communication of Dr. Thornley in your last week's issue is a valuable and practical one, and I shall be glad if it helps to enforce professional attention to what is undoubtedly a distinct advantage in the treatment of phthisis. Experience now shows that the inhalation of the vapour of carbolic acid does markedly diminish the secretion of purulent mucus in this disease, and in the same degree relieve the cough and general distress of the patient. At the present moment I have in the Norwich Hospital at least three patients suffering from phthisis in its softening stage, all of whom have been materially benefited by its use. I have also advised the inhalation of carbolic vapour in a great many cases in private practice, and in nearly all some advantage has been obtained. But I have observed that it has been of most benefit in those cases in which the purulent character of the sputum has been most developed, and I have been led to think that the explanation of its influence is not merely that it "temporarily cleanses" or "washes away the decomposing discharges of a foul ulcer," but that its action is another illustration of Lister's antiseptic practice, and that the carbolic vapour is a veritable antiseptic, destroying atmospheric germs which may be living and thriving in the pulmonary mucus, as well as doubtless exercising a deterrent influence upon the rapid development of muco-epithelial particles, themselves also endowed with a power of quasi-independent life. If such germ particles as I suggest are present in the mucus of the vomica, they doubtless increase its irritating quality, and so tease the pulmonary secreting surface into greater and greater activity. It is on this theory that I have tried to explain to myself and others the undoubted efficacy of the carbolic vapour.

Dr. Thornley has used Dr. Siegle's vaporiser. Doubtless any form of inhaler answers the purpose, for the vapour of carbolic acid is singularly harmless; but I have found a very simple arrangement to answer admirably. I have commonly told the patient to take an ordinary narrow-mouthed pint jug (a tapering shaving jug is about the best form), to place in it half a pint of medium hot water, to stir up ten grains of carbolic acid in this, and to inhale the vapour of it for ten minutes; and this I order to be repeated three, four, or five times in twenty-four hours. No objection is made to the frequency of its repetition, but rather from the relief experienced it is gladly so used, often voluntarily, in the middle of the night. Occasionally I have thought the addition of a little conium to be useful, but I have scarcely satisfied myself of the fact. I have also found the vapour thus applied of singular advantage in a case of mechanical bronchitis, which has recently been under my care. In this case also there was much puriform expectoration.

Yours &c.,

Norwich, Oct. 1st, 1877.

PETER EADE, M.D., F.R.C.P.

NOTE ON GUNSHOT FRACTURE OF THE SKULL.

To the Editor of THE LANCET.

SIR,—In a riot during the late railroad difficulties a bay-window of plate-glass received several bullet holes. These were supposed to have been produced by conical bullets, somewhat smaller than the regulation minié ball, and fired from a breech-loading rifle. On examining this glass, which was a quarter of an inch in thickness, I noticed that upon one side the holes were perfectly smooth, while upon the other a peculiar bevelling off, with a much greater loss of substance, was encountered. The latter, I thought, must be the side of exit. If this was the case, did it not throw some light upon the greater amount of destruction of the inner table of the skull found in the majority of cases of fracture of the skull, most notably in gunshot fractures?

Acting upon this suspicion I have made some experiments upon dried calvariae. Firing at a certain distance (a conical ball out of a revolver), I was able to drive the bullet through the skull when struck fairly, but if the least bit to the side of one of the cranial curves the bullet glanced. In these attempts, when the ball passed entirely through, whether the wound of entrance was either upon the inner or outer table, the opening of exit was always splintered widely. If the concavity of the skull was turned towards the pistol the outer table was splintered off to nearly, if not quite, as great an extent as was the inner table when the convexity first received the missile.

This was conclusive to my mind that the greater splintering of the inner table, which we are taught in all works upon surgery (at least in all I have ever seen) depends upon a greater brittleness of that table, is something of a myth. Why this inner table should be more brittle I cannot see, as they both consist of similar compact bony tissue.

My explanation of the fact that we do have a greater loss of substance inside the skull in fracture is this. A bullet, in life, must first impinge upon the outer table; this table is well supported by the cancellous structure beneath, while the inner layer receives little, if any, support from the brain and its coverings, and, just as we find in the plate-glass, a greater loss of substance occurs upon the unsupported side.

These experiments can be verified by anyone.

Very respectfully,

OSCAR J. COSKERY, M.D.,

Prof. Surg. Coll. Phys. and Surgeons.

Baltimore, U.S.A., Sept. 13th, 1877.

MAGGOTS, THE LARVÆ OF THE BLUE-BOTTLE FLY, IN SYPHILITIC ULCERATION OF THE THROAT.

To the Editor of THE LANCET.

SIR,—I forward to you the notes of a case which might possibly prove sufficiently interesting for publication.

Private W. A—presented himself for admission to Regimental Hospital on the 4th April, 1877. He had suffered from secondary syphilis, and his nose was disfigured and flattened from that disease. The patient complained, on admission, of soreness and feeling of great irritation in the throat, and on looking into his mouth the soft palate had almost ulcerated away, and a large ulcer was visible on the back of the pharynx; this ulcer was one moving mass of maggots. Attempts were at first made to remove these maggots with a syringe and a strong solution of salt and water, but this proving ineffectual they were removed one by one with a bullet forceps, and the part washed with a solution of carbolic acid in water. A strong solution of salt was ordered to be injected through the nose three times a day; the few maggots that were out of sight, and consequently escaped removal with the forceps, were thus got rid of in a few days.

One of the most serious aspects of the case was the terrible mental distress which the patient suffered from on finding the cause of his disease, and at first we were afraid that he would become insane, but he was in a measure quieted by the frequent assurances of Dr. M— that a

few days would complete his cure. Some of the maggots that were removed alive with the forceps were placed in a bottle, and after a few days developed themselves into bluebottle flies.

I have no doubt that the history of the case was this, that a syphilitic ulcer existed in the patient's throat, and that during sleep a fly gained access through his open mouth, and deposited its eggs on the ulcer.

Yours obediently,

MAURICE KNOX, Surgeon, A.M.D.

Mooltan, Sept. 1st, 1877.

PROVIDENT DISPENSARIES.

To the Editor of THE LANCET.

SIR,—In your editorial annotation on Dr. Monckton's paper, you honour me by observing—"In Birmingham, as our readers know, a very able paper was read by Mr. Sampson Gamgee, in support of provident dispensaries." As that support was very materially qualified, I rely on your proved courtesy for permission to quote a passage from my address on "Our Medical Charities" (p. 26):—"In principle, I believe that the provident dispensary system has in it the elements of the remedy required; very much, if not all, depends upon how it is prepared and used. A too hasty and too wide application of the provident dispensary system in its crude form, or alloyed with the evils which have crept into it, would only lead the public and us into fresh difficulties."

I am, Sir, your obedient servant,

Birmingham, Sept. 29th.

SAMPSON GAMGEE.

BIRMINGHAM.

(From our own Correspondent.)

THE Local Government Board have, after holding an inquiry by one of their inspectors, Mr. Thornhill Harrison, C.E., sanctioned a loan of £400,000 to enable the corporation to complete their sewerage works, and to erect public baths, mortuaries, &c.

Dr. Ogle, the medical officer of health for Hertfordshire, in giving a free public lecture on "Food" to the Laws of Health class of the Midland Institute, called attention to the fact that the death-rate of infants in Birmingham was 187 per 1000, while in London it was only 159, and he attributed the high mortality to the use of improper or insufficient food. The numerous deaths from diarrhoea at this season are, no doubt, mainly due to this cause.

Mr. Councillor Lawson Tait has recently pointed out that scarlatina recurs regularly every five years in certain localities of the town, and he rightly urged the importance of making health questions a subject of study by those who aspire to a seat in the Town Council. He says that as in 1874 nearly 800 persons died from zymotic disease, and each life was worth £75, and as 800 deaths probably represented 20,000 cases of sickness, the loss to the borough in one year would not be less than £50,000. He properly adds that it is better, as well as cheaper, to pay extra rates to secure efficient sanitary measures and prevent the evil, than to allow all this suffering and loss to continue.

Your satirical contemporary, the *Hornet*, calls attention to the case of a little child suffering from a severe burn, who was most improperly refused admission to the West Bromwich Hospital, on the ground that it is against the rule of that institution to take in children under seven years of age, and who subsequently died in the Birmingham General Hospital. The refusing admission to such a case, under the circumstances, cannot be too strongly condemned, and it is time that the committee of that institution at once altered so barbarous a rule. The writer in the *Hornet* is, however, rather at sea in his geography, and it may be as well to inform him that West Bromwich is not a part of Birmingham, as he seems to think it is, but an independent borough some miles off, returning its own representative to Parliament, and further to remind him that his sneer about "Brummagem compassion" is singularly ill-timed, as it was at the Birmingham

General Hospital that the poor little sufferer was at once promptly received and kindly attended to.

Another case, showing the importance of early attention to accidents and the painful results that ensue from their neglect, has just been made public. A man engaged in making a new line at Waterorton, a village on the Midland Railway, some eight miles from Birmingham, was run over by some waggon, and his right leg crushed. The railway officials, instead of putting him in a special train and at once removing him to one of the Birmingham hospitals, sent him in a heavy cart without springs, by road; and as he was bleeding badly all the way, and three hours elapsed before he reached the General Hospital, he died in a few days. The coroner very properly condemned the conduct of the railway officials as wanting in humanity.

The resignation of Dr. Bell Fletcher of the post of senior physician to the General Hospital has been taken as a fitting opportunity of giving him a testimonial. His portrait is to be hung in the board room, and some appropriate gift is to be offered to Dr. Fletcher as a further mark of the esteem in which he is held. Dr. Russell, Mr. Alfred Baker, and Mr. G. Heaton are appointed honorary secretaries of the testimonial fund, the subscriptions to which are limited to three guineas.

Dr. Fletcher's resignation of the chairmanship of the Birmingham Clinical Board has also been accepted, and Mr. West, senior surgeon of the Queen's Hospital, has been appointed in his place.

Birmingham, Sept. 29th, 1877.

THE BATHS OF AUVERGNE.

(By our Roaming Correspondent.)

ONE of the not unimportant indirect effects of the Franco-Prussian war is the impetus which the anti-German feeling of the French has given to the improvement of French bathing-places. Time was when Carlsbad, Homburg, Wiesbaden, and Kissingen received each their quota of French visitors; but now French invalids prefer to go where international bitterness is not known, and consequently the fortunes of Vichy have revived, the stream towards Aix les Bains has increased, and the baths of the Pyrenees and Auvergne are showing signs of renewed and redoubled popularity.

The baths of Auvergne, which we propose describing in this letter, have certain characteristics which are peculiarly their own, and being, for the most part, situated at a distance from the railway, there is, to some extent, a simplicity and a primitiveness which, though it proves an attraction to many, keeps away the crowd of the merely luxurious, or the merely fashionable, who, while they increase the expense of residence, import ideas of living which often militate against the recovery of the patients who seek relief at natural springs. He who travels to Auvergne leisurely, and avoids the express train, and stops a night or two at some of the less frequented French towns in the Nivernois or Bourbonnais, will be able to see what is the state of hygienic advancement in which the French at present are, and while he cannot but be charmed with the courteous reception which is everywhere accorded to travellers who have the enterprise to leave for a while the main lines of the tourists, he will be surprised to find how far behind the English in the art of wholesome living are the provincial citizens of the *grande nation* which has taught the world so much. If the traveller leaves Paris from the Gare de Lyon in the evening he will not fail to notice the introduction of the electric light, which has here almost replaced gas. It is not unlikely that the year 1877 will constitute an era in the art of illuminating, and that the time is not far distant when we shall have all the luxury of brilliant light without the annoyance of proportionate heat and products of combustion. This is an hygienic advance, and we have to thank a French railway company for this practical demonstration of the service which electricity is capable of rendering us. The towns through which the railway passes are all, more or less, interesting, and the tra-