

mended for the restoration of asphyxiated persons, have been long used by the medical assistants of the society. While the committee take leave to suggest the necessity of a reconsideration of that portion of your paper, recommending the transfusion of the blood of animals into the human subject;* such a proceeding, they are informed by the medical members, would be highly dangerous, if not fatal, since there is a great diversity in the sizes of the blood corpuscles of different animals." As this is a subject truly worthy of consideration, and to which I am incapable of offering any reply, I shall be much obliged to any of your correspondents affording the necessary information. I am, Sir, your very obedient servant,

C. SEARLE.

Bath, Feb. 5, 1841.

CASE OF POISONING BY ARSENIC.

To the Editor of THE LANCET.

SIR:—If you consider the following case sufficiently interesting it is at your service. I am, Sir, your obedient servant,

M. D. THOMPSON, M.R.C.S.L.

Stalybridge, Feb. 24, 1841.

On the 16th inst., about half-past eight o'clock, A.M., I visited Edward Higginbotham, of this town, a tall, slender youth, about 18 years old, and of a cachectic appearance. At the expiration of an hour and a half from this period, I again visited him. When I first saw him he was cold, pulseless, restless, and complaining of cramp of the upper and lower extremities; his countenance was sunken, and the anterior part of the neck and chest livid; his tongue deviating little from the natural appearance; his abdomen appeared to be fuller than usual, but he complained of no tenderness on pressure being applied to any part of it.

The youth is an orphan, and not residing with his own relatives. The female of the house, where he was residing, stated, that he was attacked with vomiting and purging about two o'clock this morning, and that the vomited and purged matter was of a dark colour: the patient himself then alluded to the contents of a vessel near to him, and

said, "This is what I have vomited." It was a thin fluid, of a dark green colour. None of his motions could be obtained for inspection: no cause for the disease was assigned; but, on the contrary, I was informed that he had taken nothing calculated to disorder him. After this investigation of the case, I prescribed what I considered to be necessary for him.

When I saw him the second time, he was much worse; the remedies previously prescribed for him had not been administered. Immediately after this the patient died.

During the period I visited him, he had symptoms of labouring under the collapsed stage of the English cholera; but from the great lividity of the anterior part of the neck and chest, the unseasonable period of the occurrence of the disease, and especially the rapid manner the patient was destroyed, I inferred that it was probably a case of poisoning by arsenic.

Application, relative to the case, by a constable of the town, was forthwith made to the coroner, whose order, authorising me to inspect the body, I received in the evening of the same day.

Mr. Barker, a surgeon of this town, and myself, executed the inspection twelve hours after the death of the patient.

The body was spare and emaciated; the integuments of the neck and anterior part of the chest, the arms, as far as each elbow; the lateral parts of the chest bounded on each side, anteriorly and inferiorly by the cartilages of the false ribs; the whole of the back part of the body, as far as the knee, except the nates, and opposite to the dorsum of each scapula, were copper-coloured. This colour was not in elevated spots, resembling those of secondary syphilis, but it was diffused, without any apparent elevation, over the whole surface of the parts alluded to.

Dissection.—The sinuses, membranes, and blood-vessels of the brain, and the brain itself, were gorged with black blood, generally coagulated. The brain itself was so much engorged, that when the upper part of each hemisphere was removed by a scalpel, and the cineritious and medullary parts exposed, the medullary parts presented a spotted surface, as if sprinkled over with black ink. The spots, on being removed by the blade of a scalpel, quickly returned.

The lungs were much engorged with black blood: the inferior lobe of the right lung was so much so, that it was completely consolidated. The stomach and small intestines contained a thin fluid, of a dark green colour; the cæcum and the ascending and transverse parts of the arch of the colon, a fluid resembling thick gruel. There was a bright redness, being deeper in some parts than others, of the whole of the villous coat of the stomach, duodenum, and rectum; upon which, with the minutest scrutiny, not

* The recent researches of Bischoff have shown that the poisonous effects of the blood of one genus or class of animals injected into the vessels of another, depends rather upon some peculiarity in its fibrine than upon the size of the blood corpuscles; and that if the former be removed, the blood may be harmlessly employed in transfusion. We should, however, nevertheless, be little disposed to hazard the injection of the blood of a quadruped into the veins of a human being even with this precaution.—ED. L.

a particle of any powdered substance was discernible.

The remaining viscera and other parts of the body were examined, but they presented no marks of disease; in fact, the soundness of all the viscera was remarkable.

Analysis.—The stomach and duodenum (except some parts of them, preserved in spirit, in readiness for further scrutiny, if necessary,) were cut into small pieces, and decocted, in an evaporating dish, for nearly half an hour, with the fluid contents found in the stomach, and small intestines; when cold, they were filtered through gauze, and subsequently through paper, and then acidulated with a little acetic acid.

A portion of this solution, tested with sulphuretted hydrogen, threw down a precipitate of a sulphur-yellow colour; another, with the ammoniacal nitrate of silver, a yellowish white precipitate, darkening on exposure. Each precipitate, after the necessary preparation, yielded, on being put, with a little black flux, in an arsenical tube, and subjected to heat, metallic arsenic.

A portion of this solution, with diluted sulphuric acid, and iron-filings, were put into a quart glass bottle. The gas generated therein was permitted to escape through a glass tube, having a small bore, and pointed at the upper extremity; when ignited, it burned with a white, yellowish green flame, and emitted a strong garlic odour. A tube, having a bore about half an inch in diameter, was placed over the flame, forming, with the other tube, an angle of about forty-five degrees. In this tube, for a period, the flame continued, and, consequently, metallic and the oxide of metallic arsenic were there deposited: the oxide was removed from the tube, then the metallic arsenic subjected to the heat of a spirit lamp until oxydated, when it was removed thence, mixed and put with the other oxide and a little black flux into an arsenical tube, subjected for a few minutes to the heat of a spirit lamp, the metallic arsenic was reproduced.

Other experiments with the fluid were tried; but considering these decisive and conclusive proofs of arsenic, I abstain from alluding to them. The tests made use of in these experiments were ascertained, previous to using them, to be free from impurities.

It may be necessary to state, that the day subsequent to the patient's death, a paper marked "arsenic poison" was found in one of the pockets, and a white powder loose in both of the pockets of his waistcoat. The powder was subsequently analysed, and detected to be the oxide of arsenic.

ON OPENING SCROFULOUS ABSCESES BY LEECH-BITES.

To the Editor of THE LANCET.

SIR:—The serious and lasting deformity usually resulting either from the lancing or bursting of scrofulous tumours during childhood, must necessarily be attended with considerable regret by the beautiful and interesting female, when so lamentably affected. Indeed, it is often painful to observe the attempts made to conceal that which is conceived to be the mark of stigma of some foul and loathsome disease; and probably this dread is not altogether without foundation, knowing the prejudice which exists against these unsightly scars, many persons refusing a matrimonial alliance in consequence of such appearances alone. I have bestowed some attention towards preventing so frightful a deformity, and happily with success. When the abscess is fully matured, I have two or three leeches applied on the most prominent and depending part. After the leeches are removed, I order a fomentation of warm water to be continued for some time; after which the heat is to be kept up, by means of a warm bread-and-water poultice, not too small, and to be changed frequently. The confined matter thus escapes from the leech-bites gradually and regularly; the wounds inflicted being of sufficient calibre for the purpose, the discharge always being thin in scrofulous swellings. After the perfect evacuation of the matter, nothing further remains to be done as a local remedy. Frequently, the running will not commence until the second or third day from the application; but it is necessary to persevere with the fomentations and poultices, the leeches being seldom required a second time. Of course, a proper and correct dietetic plan is pursued, during which I prescribe occasional doses of rhubarb, with magnesia, as a gentle aperient; and the iodide of potassium as a daily alterative, the quantity according to the age and constitution of the patient. So soon as the abscess indicates the necessity of giving exit to the matter collected, I invariably have the leeches applied; for by waiting longer, the tissues become so altered in structure, so unhealthy to act upon, that extension of the wounds and scars will be the consequence. This it is requisite to note; for much of the evil is here brought about by those who open the tumour with the lancet, having delayed the operation too long. In opening, or permitting these tumours to burst of themselves, the wounds become more or less extensive, spreading unequally in various directions; which the sudden deprivation of contents, by the usual means, only increases. Besides, they have a disposition not to heal kindly; and leave behind chronic, ugly, thick, elevated, callous