time, permitting each quantity, if desired, to pass into the stomach before another gulp is liberated.

I have also found this a very convenient apparatus for washing out the nasal cavities, as, for example, in chronic catarrh, fetid secretions, ozœna, syphilitic ulcers, certain cases of diphtheria, epistaxis, and when foreign bodies have been retained in the nostril. The tube is inserted in one nostril, as above, and held by the patient; the head is now inclined *forwards* over a basin; the fluid, which may be either water, carbolic water, black wash, or solution of perchloride of iron, &c., enters the one nostril and passes by the posterior nares into the other nostril, in a continuous gentle stream, without any of it falling into the pharynx, provided the head be inclined well forwards; the nostrils are thus well washed out, or in the case of epistaxis, an astringent being used, are plugged.

Rugby.

TETANUS FOLLOWING SUNSTROKE.

By JAMES MORE, M.D.

B—, a good-natured, placid-looking hind, while working in a turnip field during the intense heat of July, was seized with giddiness and great prostration. This occurred on the 22nd of July, and in spite of these symptoms and a general feeling of malaise, he kept to work, but had finally to give in on the 26th with decided symptoms of locked jaw.

It was on the morning of the 27th July he was first seen by my assistant, and the pre-clinical history given was such as just detailed, together with the fact that two days before (25th), while attending a prayer meeting, he was seized with a convulsive cough, clenching of the jaws, and a general contraction of the muscles of expression—so much so that he had the appearance as if he were weeping bitterly. He had likewise had a "convulsive fit" during the night, and the description given of this attack by his wife (a fairly intelligent woman) led to the belief that the attack must have been opisthotonos.

On the morning of the 29th I was hurriedly sent for to see him again, on account of a second terrible convulsion. This attack was over when I reached the house, and the appearance he presented to me was such as is partially indicated above. Naturally he had a round, full, placid face, a face more expressive of animal contentment than of human passion or feeling. But what a change! I should not have known him. His face was now deeply furrowed, and expressed the deepest misery and despair. His eyes were almost closed, the outer corners of the eyelids, ending in deep fan-shaped furrows, and furrows deep enough to hold one's finger extended from the malar prominences down each side of the mouth. The right pupil was partially dilated, and neither answered very freely to the stimulus of light. His jaws were almost completely locked, and now and then, more especially when falling asleep, went down with a tetanic snap, bruising and lacerating the tongue, which seemed to be forced between the teeth. He was quite conscious then, and, I may add, through all the attacks he had. He complained of no decided pain, but of a feeling of weight at the back of the head, and of great diaphragmatic uneasiness. He could swallow liquids only, and these in the smallest quantities and in the slowest manner. I saw him taking some milk, and ere he had one ounce down a hydrophobic kind of spasm seized him, his head went back with a jerk, his colour became livid, and he again appeared on the verge of a general tetanic convulsion. This train of symptoms almost invariably followed the attempt to drink, and I concluded there was tetanic spasm of the pharyngeal muscles, allowing fluids to get into the larynx, and irritating or causing spasm of the glottis. This idea was strengthened by the fact that it was only when he was standing bolt-upright on the floor that he could get down any fluid at all. The fluid was not then swallowed, but simply poured down the "tetanic" tube into the stomach. He had no rash, with the exception of about a dozen rose-coloured spots, slightly raised above the level of the skin, round each knee, and quite symmetrical in distribution. His skin was generally moist, and at times bathed in perspiration, but at no time of the attack was the temperature excessive, not being higher than 99° F. in the morning, nor 100° in the evening.

The pulse ranged from 90 to 100, was hard and full, and to the last quite regular. The bowels were constipated, indeed had not been opened for a week, but during the last and fatal attack of opisthotonos, which occurred on the 31st, he had a sudden evacuation, not only of fœcal matter, but of semen.

And so he died, just ten days after the attack of giddiness in the field, and I should say he died asphyxiated. Altogether, he had four attacks of opisthotonos, and, with the exception of the last and fatal one, which took place at nine A.M., they occurred between three and four in the morning. During the intervals of these attacks he was fairly comfortable, though the trismus continued with greater or less intensity. All through his illness the tetanic grin never for a moment left him, and his face had quite the appearance of a cast in bronze. I saw him half an hour after death, and found his face had assumed its wonted placid and unruffled expression; indeed, the body was still warm and perfectly flaccid.

The treatment adopted was one I had found eminently successful before* in treating cases both of traumatic and idiopathic tetanus, and consisted mainly in the administration of large doses of opium and belladonna, turpentine enemata, with chloroform liniments applied freely to the muscles or groups of muscles affected.

In an *outré* case of this kind, where the only and apparent cause of the disease is different from what it usually is, certain questions naturally suggest themselves to the mind of the practitioner before he can arrive at a satisfactory diagnosis. Thus the severity of the pharyngeal spasm and manifest distress in swallowing fluids might have led up to the diagnosis of hydrophobia; but in the latter we have no tetanic grin nor locked jaw, nor indeed could I make out any history of a bite or wound of any kind. There not being even a scratch on his body, the idea of traumatic tetanus was necessarily eliminated from the diagnosis. But, in these days of wholesale murder, might it not have been a case of poisoning by strychnine? But here, again, we are met with the fact that in poisoning by strychnine there is no decided locked jaw; and we should likewise expect the more severe tetanic convulsions to be well pronounced—if not from the first, at least very shortly after the administration of the poison. But here, though he had trismus and the tetanic grin on the 25th, it was not till the morning of the 27th that the general convulsions appeared. And, lastly, the whole surroundings of the case negatived the idea of poison. He was the head of a household and father of a large family, the latter looking up to and depending on him for their daily bread. Instead of a gain, his death was a dreadful loss and calamity, for it at once rendered them paupers and dependent on the parish.

Rothwell, Northamptonshire.

CASE OF ANEURISM OF THE ABDOMINAL AORTA.

By SURGEON JOHN C. LUCAS,

IN MEDICAL CHARGE OF H.M.'S 24TH REGIMENT, N.I., ETC.

THE patient, Private Nanoo Parub, aged thirty-nine, in service twenty years, gave the following account of his case: That he enjoyed excellent health until about eight years ago, when, serving with the regiment, then stationed at Dharwar, he first began to feel the sensation like the pricking of pins and needles in his stomach (pointing to the epigastric region). This was attended at the time with vomiting directly after meals. He has frequently been admitted and re-admitted under the care of the various medical officers who have since been in charge of the regiment. In July last he was admitted into hospital under my care, and after a stay of twenty days was discharged with the recommendation for light duty. He was re-admitted again on the 8th of August, complaining of pain in the belly, vomiting, &c.

On inquiry and careful cross-questioning, no sort of traumatic history could be elicited. The man, however, stated that his father died rather suddenly after ailing for some time from similar symptoms. The patient is an in-

* THE LANCET, Feb. 20, 1869.