target. I rode over to the Guards' camp very shortly after the accident took place, and advised the poor fellow to be removed at once to the Guards' hospital, where he was placed under the care of Surgeon-Major Wyatt, who subsequently performed an operation, but without restoring the sight. I considered that I was not justified in keeping the man in the camp and searching for the piece of lead (the anterior chamber being filled with blood, and the iris &c. wounded), and then sending him up to town in a more dangerous condition than before meddling with the eye; I therefore simply directed cold water with lint to be kept constantly applied till his arrival at the hospital.

The list of the other cases is as follows:—Private William Bailey, 2nd Batt. Coldstream Guards, wounded in right shoulder, breast, and thigh by a bullet splash off the target; Private Alfred Smith, 1st Batt. Coldstream Guards, wounded in right groin and thigh from the same cause; Private James Bilham, 1st Batt. Coldstream Guards, wounded in left forearm from the same cause; Private Frank Davis, 1st Batt. Scots Fusiliers, wounded in right forearm and cheek from same cause; John Irvine, musketry instructor, 27th Staffordshire, wounded in right thumb from same cause. Isaac Thomas, corporal, 3rd Lancashire, had his right thumb struck by the nipple of the rifle breaking. J. Ward, private, 6th East York, had his shoulder much swollen and bruised from the rifle recoiling. Mr. Steward, optician, ran the spike of a telescope stand into the top of his left foot. I extracted a piece of glass from the left thumb of Thomas Meggy, gunner, Hon. Artillery Company; it had been embedded for three years. C. S. Smith, 5th Leicestershire, had his shoulder and wrist much bruised from the rifle recoiling; and O. Haw, colour sergeant, 7th Sussex, had his finger badly cut by the lock of his rifle. These are all the accidents I could hear of, and all that were treated by me. The subjects of them got perfectly well before the camp broke up.

The remaining cases were—diarrhoea, 7; retention of urine, 2; relaxed sore-throat, 3; ophthalmia, 2; erysipelas of hand, 1; effusion in knee, 2; catarrh, 1; ulcerated tongue, 1; headache with fainting and debility (from the heat), 4. With the exception of the two knee cases, which improved, all the rest became convalescent.

On the evening of the day of the review (July 18th), my duty being with my own corps (London Scottish), Surgeon Wakley kindly offered me an assistant in my tent, with an additional supply of instruments &c., which happily were not required. Some of the diarrhoea cases were thought to proceed from the water, but I rather think that the ingredients added to the water, together with the damp at night after the scorching day, were the main causes. On the whole, the camp may be reported as tolerably healthy; and I have to thank the Association for their kind consideration in furnishing my tent comfortably, and providing necessary appliances in cases of need.

July, 1863.

ON THE TREATMENT OF MALARIOUS FEVER BY THE SUBCUTANEOUS INJECTION OF QUININE.

By W. J. MOORE, L.R.C.P. Ed.,
BOMBAY MEDICAL SERVICE.

SINCE the year 1858, when Dr. Wood brought forward the hypodermic method of administering morphia, the plan has been extensively tried. Moreover, the results following the injection of morphia into the subcutaneous areolar tissue have, on the whole, been satisfactory, and the use of the alkaloid in this manner has now become an established practice in various obstinate neuralgic disorders. Other agents, as atropia, have also been used hypodermically with varied success, and I have latterly employed a strong solution of quinine for the cure of intermittent and remittent fever by the method of subcutaneous injection.

The success which has attended the practice renders me desirous of calling attention to this novel mode of using quinine. I have so employed the remedy in upwards of thirty cases of intermittent fever, and in several cases of remittent, and with almost invariable success, the former class seldom requiring a second application, the latter generally subsiding after the fifth

or sixth injection. Since the period I commenced to use quinine in this manner I have been surprised and pleased to find in one of the medical periodicals that the same plan has been pursued by Dr. Chasseaud, of Smyrna, who reports 150 cures, and especially recommends the system in fever complicated with gastric symptoms, when the exhibition of quinine by the mouth is often "inefficient, difficult, and hazardous."

I use the strongest solution of quinine which can be prepared—viz., thirty grains of quinine, eight or ten drops of dilute sulphuric acid, and half an ounce of water. Of this I inject from half a drachm to a drachm, the former quantity containing some four grains of the active agent. With the exception of a little sulphate of soda if the bowels are confined, I use no other remedies whatever in uncomplicated cases of any type of malarious fever. When the spleen is enlarged, or if a leucocythemic condition is present, I prescribe, as an additional curative agent, one or other of the preparations of iron—very frequently the citrate of iron and quinine.

I generally inject beneath the skin over the outer belly of the triceps extensor muscle, and sometimes over the deltoid. I have, however, used the syringe with equal effect on the thigh and calf, and in cases of enlarged spleen have thought the action of the remedy increased by injecting over that organ. I use a small glass syringe with the screw action, and furnished with a sharp silver point some half an inch in length. The latter is introduced beneath the integument half an inch or less, and the pain is not greater than the prick of a pin. Indeed patients have frequently declared they would rather submit to this process than taste the bitter of quinine. I have never seen the slightest inflammation or irritation follow the operation except in two instances. In one of these this result was due to the instruments employed—namely, a small trocar and common glass syringe; in the other, to quinine in *suspension* being used instead of in *solution*. Indeed, I have reason to think that quinine in suspension is very irritating to the tissues, and this is what physiology would lead us to expect, as it is certain that when a fluid material is introduced into the areolar structure, it will be absorbed more directly than any solid mass could be. Therefore, to avoid irritation of the parts, and, also, to prevent "choking" of the syringe (and which instrument was procured from England), I insist upon a perfectly clear solution of the alkaloid.

The best time to inject is shortly before the expected cold fit, but it may be done during the first stage with the effect of lessening and sometimes stopping the whole paroxysm. Latterly when a patient presents at the morning visit, who expects an accession during the day, I have injected at the time, and nearly invariably the fever has stopped.

In cases of remittent I have endeavoured to inject during the remission, but do not wait for this period. In severe cases the injection should be repeated at intervals of six or eight hours.

I believe four or five grains of quinine injected beneath the integument are equal in their effects to five or six times that amount taken into the stomach; also, that the effects are more certain than when taken in the ordinary method; and, also, that relapsing attacks are less common than when the remedy is administered by the mouth.

Bombay, 1863.

SHORT NOTES OF A FATAL CASE OF POISONING BY OPIUM. WITH REMARKS.

By RICHARD C. ELLIS, L.R.C.P. Edin.

THE patient was a stout and healthy little girl four years and a half old. Her mother, thinking the child required some aperient medicine, went for that purpose to a small general shop kept by a female in the suburbs of this town, on the 7th of August, 1862, and asked for half an ounce of syrup of rhubarb; but she got, in mistake, half an ounce of laudanum, the whole of which was given to the child on the same day at ten o'clock A.M. In fifteen minutes afterwards she looked heavy, felt drowsy, and asked to be put to bed; but, as she was accustomed to sleep in the forenoon occasionally, no notice was taken of this circumstance by the mother, who, in the meantime, busied herself with her household duties, and paid little attention to the sleeping child until two o'clock P.M.,

when she was alarmed by the pallor and ghastly expression of her face, and found it impossible to arouse her; and then, for the first time, the fearful nature of the mistake was discovered, and medical aid was sought. The child was found in a state of profound coma, with dilated and insensible pupils; the pulse was very feeble; the breathing irregular, with stertor, while frothy mucus was ejected from the nares; the limbs were relaxed, and the body felt quite flaccid. The case was evidently hopeless; nevertheless, every exertion was made by Messrs. Gell, Scott, and myself to counteract the effect of the poison by stimulating emetics, sinapisms, terebinthinate enemata, warm baths, with galvanism, cold affusion, &c. The child never rallied from this state of collapse, but died at half-past six P.M. the same day, or in eight hours and a half after taking the poison.

Remarks.—This case, while presenting a sad commentary upon the evil effects of *free trade* in poisons, is interesting in a toxicological point of view as illustrating the effects of a very large dose of opium upon the young subject. For, in many of the recorded cases of poisoning by this drug, some doubts exist as to the exact quantity which had been taken and the exact period which had elapsed before its physiological effects were apparent. Dr. Taylor states "that the symptoms commence in from half an hour to an hour; but that sometimes they come on in a few minutes, especially in young children." In a case reported by Dr. Skae, "the individual was found totally insensible in fifteen minutes." That in a child of four years and a half old a dose of laudanum equivalent in amount to twelve grains of solid opium should produce poisonous symptoms in fifteen minutes is what we might expect from the known influence of this drug upon young children; and when we reflect that in the present case absorption had been allowed to progress unchecked for a period of four hours, it is surprising that the fatal termination had been protracted for eight hours and a half.

Hinde-street, Newcastle-on-Tyne, July, 1863.

A Mirror

OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum, et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proæmium.

ST. BARTHOLOMEW'S HOSPITAL.

INJURY OF THE SUPERIOR MAXILLARY BONE;
OPERATION; BAD RESULT.

(Under the care of Mr. LAWRENCE.)

SUSAN A.—, aged seventeen, was admitted in June last. Twelve months previously she had sustained a slight blow on the face from a slender switch or stick. On admission there was an open wound on the right cheek. Soon after it was observed that the right eye and eyebrow were raised upwards above the level of the other eye, but the sight was unaffected. As there was a prominence at the upper part of the cheek, it was concluded that some growth involved the upper maxillary bone.

Under these circumstances, on the 27th of June, the girl having been placed under chloroform, Mr. Lawrence performed the following operation:—He made an incision from the inner angle of the right eye down to the nostril, thence to the nasal septum, and through the centre of the upper lip into the mouth; he then made another incision from the malar bone to the angle of the mouth: the flap of integument thus formed was raised, and the upper maxilla completely exposed. The malar bone was now broken through by the cutting pliers, the bone being somewhat damaged. An effort was then unsuccessfully made to saw through the malar bone above the alveolar border. Some small portions of growth were scraped away from

the floor of the orbit; the integument was then replaced, the wounds were closed with silver sutures, and the girl sent to bed.

The deformity resulting from this operation was unusually great; for, independently of the incisions, there was the original wound running nearly across the flap from the middle of the lower eyelid outwards. The face altogether had a terribly gashed appearance, justifiable, it would appear, only for the removal of the whole or the greater part of the upper jaw. As it is, the disease seems to be in the same state as it was anterior to the operation. The wound had entirely cicatrized by the 25th of July, but the injured bone still suppurating caused the cheek to become bagged until the pus was squeezed out. The permanent disfigurement is something terrible.

The cheek is now (July 29th) greatly swollen and inflamed, and the bone is suppurating, matter being freely discharged from three or four sinuses. The bone is either becoming necrosed, or the disease is extending. The girl is feverish, and confined to bed.

At the time of the operation Mr. Lawrence remarked to those who were present "that he had removed as much of the tumour as he could from the floor of the orbit, and that he could not exactly state its nature." It seemed to be a sort of soft fibrous-looking substance, as far as the naked-eye appearances went—at least so it struck those who witnessed it.

This case is suggestive of many important inquiries, but we refrain from comment. Mr. Lawrence may possibly be in a position to explain the *rationale* of his operation. We confess we are at a loss to understand it. The proceeding is much talked of in the hospital, and will probably receive attention from the treasurer and governors. We wait with proper reserve for the result of that inquiry.

GUY'S HOSPITAL.

THREE CASES OF THORACIC ANEURISM, ILLUSTRATING
DIFFERENT MODES OF TERMINATION.

(Under the care of Dr. BARLOW and Dr. HABERSHON.)

THE five cases of aneurism of the thoracic aorta which are now detailed illustrate in a striking manner some of the modes in which this dire affection terminates. In the first and last, sudden death ensued from rupture of the sac into the œsophagus in the former, and into the trachea in the latter, whilst in the third it occurred from its bursting into the pleura. In the second case, death was slow, and the suffering most severe from the great erosion of the vertebræ, which had been worn away almost to the spinal cord. The vertebræ were also eroded in the first case, and the sternum in the third. In the fourth case (Dr. Pitman's), the large aneurism produced paroxysms of dyspnoea from pressure upon the trachea and respiratory nerves, and in one of these the patient expired. Wherever the tumours pressed upon the trachea or bronchial tubes, there was the peculiar characteristic hoarseness and laryngeal voice—a symptom of significance when conjoined with others. The left bronchus in the first case and the right bronchus in the third were flattened; in the former to some extent.

The notes of the three following cases we have extracted from the post-mortem records kept by Dr. Wilks:—

CASE I. *Aneurism of descending portion of Thoracic Aorta.*—John J.—, aged forty-five, was admitted March 4th, 1863, under Dr. Barlow. He had been a sailor, and came in with cough and difficulty of breathing. There was slight dulness over the left apex, and the air entered the left lung with difficulty. He was also hoarse, as if from a laryngeal affection. No bruit could be heard; but it was suspected that he had an aneurism. On the 17th of April he brought up a large quantity of blood, and soon after expired.

Autopsy, sixteen hours after death.—An opening was found in the œsophagus, admitting a large probe, the mucous membrane around being thinned and much blackened. On lifting up the left lung, an aneurismal pouch could be seen at the upper part