

ing under acute rheumatism for about a fortnight. The pain was severe in the knees, shoulders, and knuckles. There were no heart symptoms. His general health seemed to be pretty good. He was put at once on the opium treatment; a pill containing one grain of opium with a small quantity of colocynt being given every hour. He took six pills that day, in the course of seven hours, with manifest relief to the pain, but without their procuring sleep. During the next three days the pills were continued regularly (he took fifty-two in this time); when, as he was becoming delirious, they were ordered every third hour, and then discontinued. He had thus taken sixty-two grains of opium altogether in five days. The principal effect appeared to be the relief of the pain, so that he could soon sit up easily in bed, whereas, on his admission, he could not bear to be raised. He did not sleep inordinately, and was always easily roused. The delirium noted above soon subsided on the omission of the narcotic. He was ordered to have an effervescing saline draught with ammonia.

On November 4th, however, cardiac symptoms supervened; a friction-sound and systolic murmur were heard. Leeches were applied; and the opium was again ordered as before, and again pushed till he began to show symptoms of delirium. This was on the 11th. In the interval, the symptoms of pleurisy had been added to those proceeding from the affection of the heart. He was now ordered to take the pills every three hours; and, in a few days, this was diminished to every four hours. This treatment (he had been taking the saline mixture at the same time) was continued till December 1st; when, as his pains had subsided, and he was well enough to walk, it was abandoned. The murmur had almost disappeared; the chest seemed free from fluid; and he was advancing rapidly to convalescence.

He left the house, in every respect well, on December 15th; thinking himself in no respect weaker or less healthy than before the attack.

CASE IV. George F., aged 26, a huckster, was admitted on Nov. 14th, and discharged on January 5th, with acute rheumatism (the second attack) of six days standing. The pains were seated principally in the wrists and ankles. There was no heart affection. The progress of this was very like that of the other cases. He was ordered four ounces of lemon juice a day, and the same pill as in the previous cases every hour. This was continued for twelve days, and during nine of them the doses were accurately noted; they amounted to a hundred and forty-one grains of opium. Murmur, both exo- and endocardiac, occurred on the fourth day of the opium treatment. The latter never produced any narcotism or delirium. There was effusion, also, in the pleura here, as in the last case; and he suffered from slight bronchitis. The pains were soon subdued; and the cuticular symptoms altogether subordinate to those affecting the chest, to which the treatment was afterwards directed.

CASE V. John W., was admitted on account of a slight accident, and transferred on account of rheumatic pain and stiffness of the wrists and ankles, and some pain in the chest, on November 10th. These symptoms had existed three days. A systolic murmur was heard. In this case the same treatment was at first employed, and he took a hundred and twenty-seven grains of opium in nine days; when, as he had been brought fully under the influence of the drug, and was slightly delirious, its further use was suspended. It did not seem to have produced any marked benefit.

GROSVENOR PLACE SCHOOL MEDICAL SOCIETY. The first meeting of this Society took place on Thursday evening, November 12th, W. Adams, Esq., in the chair. The President opened the proceedings with a brief and energetic address, complimenting the students on the success which has attended the formation of their society; pointing out to them the advantages, social, scientific, and professional, which arise from such *réunions*; and giving some general instructions as to the course which should be pursued in the preparation of papers for the society. Mr. T. A. F. Scott, surgeon, read a paper on Excision of the Knee-joint. In this paper he defended, from statistical evidence, the operation of resection; and showed, from an analysis of all the cases that had been performed, that the mortality from this operation was not greater than 20.95 per cent. He then contrasted this favourably with the mortality from amputation of the thigh; and concluded by answering the objections which have been brought forward against the operation. After the paper an interesting discussion took place, in which Drs. Richardson and Halford, Mr. W. Bloxam, the President, and others, took part.

## Original Communications.

### CASE OF TRAUMATIC TETANUS: RECOVERY.

By SAMUEL TAYLOR CHADWICK, M.D. Edin., M.R.C.S. Eng., Bolton-le-Moors.

G. ORRELL, a strong healthy youth, aged 14 years, employed in a cotton-mill, on August 3rd last accidentally got the index finger of the right hand caught in the machinery, whereby an extensive laceration of the integuments and tendinous structures of the whole palmar surface was produced. The case was treated in the usual way. On the tenth day succeeding the accident, the wound was suppurating, and filling up with granulations. The following day, his mother called to inform me that he was indisposed, which she attributed to his having taken cold.

When I visited him, on August 13th, I found him complaining of sore throat, pains about the neck and epigastrium, difficulty of swallowing, and inability to open his mouth; he had also great heat of skin, quick pulse, and pain in the loins, besides that peculiar but characteristic expression of features, known as the tetanic face, was well marked. On the preceding day, he had complained of great lassitude, shivering, and pain in the limbs; and the night had been passed in a restless manner. As there was constipation, I ordered one of the following powders to be taken every three hours, until a free action of the bowels was produced.

℞ Hydrargyri chloridi gr. ii; pulveris jalapæ gr. viii. M. Mitte tales iv.

Afterwards a pill, containing two grains of compound soap pill and three grains of camphor, was ordered to be taken every four hours, if the pains continued urgent.

August 14th. On visiting him this morning, I found him much worse. He opened his mouth with greater difficulty; the pains at the back part of the neck were more severe, and that of the epigastrium extended from the ensiform cartilage along the diaphragm through to the spine. The second powder had produced free purging; but, in consequence of the trouble he had in swallowing, not more than two or three of the pills had been administered; they were therefore directed to be omitted, and the following mixture to be given in their stead during the paroxysms.

℞ Tincturæ opii, ætheris chlorici, aa ʒii; misturæ camphoræ ad ʒi. M. Sumatur cochleare parvum tertiâ quâque horâ.

Turpentine stupes were ordered to be applied to the back and chest. He said he could eat if he dare, but the effort of speaking or swallowing brought on a violent paroxysm. He was directed to take tea, gruels, and broths *ad libitum*.

August 15th. There was no improvement. The muscles of the neck, masseters, and recti abdominis, were more rigid; the jaws completely fixed; the head and shoulders bent forcibly backwards. Both trismus and opisthotonos were fully developed. The pulse was 120; the breathing laborious and hurried; the skin moist. He had to be prevailed on to take both food and medicine. Last night, on their own accord, the attendants applied mustard cataplasms. The bowels were open; he had some thirst. The mental faculties had been undisturbed throughout. The mixture was continued, and he was ordered to have two grains of calomel three times a day.

August 16th. The symptoms, if possible, had increased in severity. His parents expected him, two or three times during the night, to die of suffocation. For two days past he had been much harassed by short cough and a tenacious kind of mucus, which he can scarcely eject from the mouth: the tongue had also several times got entangled between the teeth, from which position it had with great difficulty been liberated. Wedges of wood and thick pieces of leather had been used, to obviate or prevent its recurrence; but, notwithstanding these means, the tongue was severely lacerated. The anodyne, with antispasmodics, was ordered to be given more frequently. The mercury was omitted on the sixth day, as its action on the bowels was severe.

It was not before the eighth day from the accession of the tetanic symptoms that the boy had any amelioration of his sufferings; after this time the intermissions became gradually longer, and the paroxysms of less severity. On the fifteenth day they had altogether ceased, at which period the wound was nearly cicatrised. The painful parts have been fre-

quently rubbed with a powerfully stimulating embrocation containing opium.

Oct. 1st. He is now going about, rapidly regaining strength, though still complaining of extreme tenderness about the muscles, especially those which were principally subjected to spasm; and the features have not regained their wonted appearance, inasmuch as he presents a peculiar *grin*, which gives him a highly ludicrous appearance.

REMARKS. Although this case is to be considered a recovery, I by no means entertain the idea of its being a cure. There is nothing in the treatment but what has been practised over and over again. I must, however, confess my astonishment at the result, especially after my almost invariable ill success in these cases. The *vis vitæ* here was sufficient to sustain him until the violence of the morbid action was exhausted. In my practice, numerous cases of tetanus have come under observation, all of which, however, with the exception of this and another, have proved fatal. The other recovery to which I allude, occurred a considerable time ago to a girl who received a contused wound on the radial side of the forearm, near the elbow. In about three weeks after the receipt of the injury, a severe form of tetanus set in. After freely evacuating the bowels, I treated her on Dr. Elliotson's plan, viz., the administration of large doses of the sesquioxide of iron. On the fifth day, the malady had passed off.

A similar case occurred soon afterwards, and I adopted the same plan of treatment, but not with the same fortunate result: the case terminated fatally.

The cannabis Indica or Indian hemp, so highly extolled by Dr. O'Shaughnessy, I saw submitted to a fair trial in the year 1845, by the late Mr. Maurice Colles, at the Meath Hospital, Dublin. The patient was in the hospital for treatment of a lacerated wound of the leg, during which period tetanus came on; and, although the remedy had a careful trial, the case ran on rapidly to a fatal termination.

I have never used chloroform; and, from what I have seen of the practice of others, I feel no inclination to do so. In the Royal Infirmary of Edinburgh I witnessed its inhalation, but with no advantage further than a temporary alleviation of the spasms.

About two years ago, there was a vigorous young Irishman brought into the City of Dublin Hospital, in consequence of a severe injury of the hand, produced from the bursting of fire-arms. I was present at a clinical lecture given by Dr. Hargrave, Professor of Surgery to the Royal College of Surgeons, Dublin, also the author of a valuable manual on operative surgery, when he referred to this case, and spoke of its being a wound of that character in which lockjaw might supervene. In that institution, they have a remedy, which is designated their "anti-tetanic pill", the composition of which, if my memory serves me right, is colocynth, scammony, calomel, tartar emetic, and henbane: one of these pills is directed to be taken every six hours. Dr. Hargrave expressed his confidence in the prophylactic efficacy of the medicine, as it keeps up free intestinal action, besides correcting the secretions. The patient made a good recovery, without any tetanic manifestation.

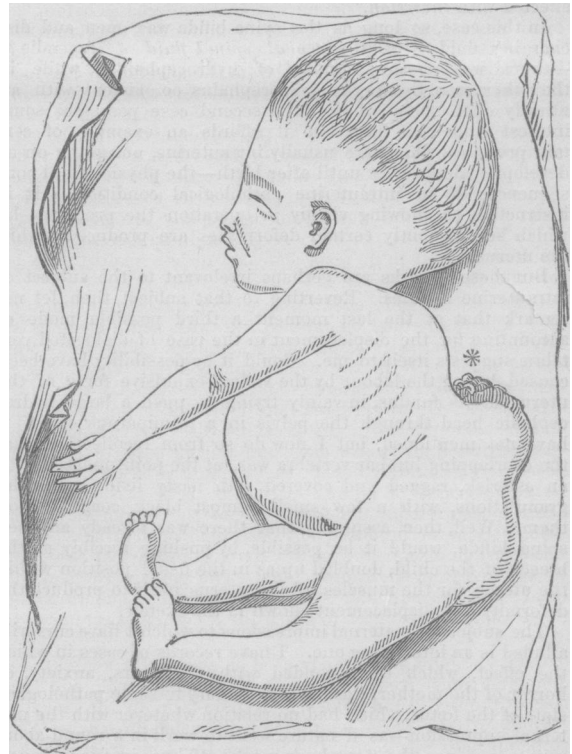
As to the inutility of attacking the spine with counterirritants, I may relate the following case:—A hale strong man, employed on the station of the London and North-Western Railway Company, got his hand jammed between the buffers of two waggons. The integuments of the hand were much bruised, and the muscles of the ball of the thumb considerably lacerated. When the poor fellow had almost recovered from the casualty, he became the subject of the severest attack of trismus and opisthotonos I had ever the painful opportunity of witnessing. I bled him to sixteen ounces, purged him freely, gave calomel, opium, and tartar emetic, with antispasmodics; turpentine dressings to the wound. On the day succeeding the attack (owing to the man being an old and trustworthy servant), his employers requested that I should take along with me a gentleman who at the time stood at the head of his profession in this town, but has since removed from among us. On being informed what means had been adopted, he concluded that he could only make one suggestion, viz., a free application of the actual cautery along the whole course of the spine. This was done about noon, and the formidable operation was borne with great fortitude. Immediately after the application of the cautery, the jaws could be more opened, and the extremities became more flexible. This state of matters, unfortunately, was but of short duration; the patient relapsed into his old state, and death put an end to his agonies about the following midnight.

## INTRAUTERINE INJURIES AND DEFORMITIES, WITH A CASE OF COMPOUND DISLOCATION OF VERTEBRÆ (?).

By R. U. WEST, M.D., Alford, Lincolnshire.

THE perusal of the accounts of some curious cases of intra-uterine fractures, recently published in the JOURNAL, and especially of Dr. Barker's elaborate paper on the subject, reminds me of a case of some singularity, which I met with in my practice some years ago, and concerning which I have the following brief note and rude sketch in my register:—

"No. 967. November 10, 1844. Primipara. Delivery with vectis. Fœtus hydrocephalic, at the full time. Spina bifida; vertebræ quite dislocated; club feet; left knee stiff, and bent forwards. There was a considerable quantity of fluid between the chorion and the amnios. The child lived three days, with inability to retain urine or fœces."



To the above extract from my note-book, I may add from my recollection that the women present at the labour at once attributed the miserable condition of the child to repeated injuries received by the mother from its father, who had frequently kicked her on the back and abdomen. No doubt the complication of hydrocephalus, distorted knee and club feet, were of the kind frequently seen either associated with, or caused by, spina bifida. How far the spina bifida could be the direct effect of an injury or blow inflicted on the mother's abdomen, in the manner so distinctly described by Mr. Davies, of Pershore, in the account of his case, or the indirect effect of the mother's imagination after having been kicked on the back, must remain doubtful. After Mr. Davies's very distinct statement, and other analogous accounts, it would seem that it is just possible that the child may be wounded by a stroke on its mother's abdomen; while, on the other hand, examples of the effects of the maternal imagination on the fœtus are so numerous and so well authenticated, that we may perhaps, to some extent, admit the latter supposition as accounting for the injury to the child's back. A spina bifida once in existence, the distorted knee and club-feet are easily accounted for, being the effects of spinal irritation. But the coincidence of a large hydrocephalus, which this was, with an open and discharging spina bifida, is not so intelligible to me when I reflect on the following case; I again copy from my register:—