the case, if we except the not unfrequent excessive secretion of phosphate of lime as the result of disease of the mucous surface of the bladder. It is not uncommon to find both phosphates mixed in a deposit, which is thus readily fusible in the blow-pipe flame, unless too great an excess of either ingredient be present. These mixed deposits are not unfrequent in gouty people, and in such cases I have seen deposits of crystalline and amorphous phosphates alternate in the urine passed in the evening, whilst the morning secretion was loaded with urate of ammonia. So far as I have had an opportunity of watching the progress of cases where phosphate of lime is deposited (and they are by no means of frequent occurrence), I have generally fancied that they present more marked evidence of exhaustion, and of the previous existence of some drain on the nervous system, than where the triple salt alone existed.

Occasionally some curious cases are met with, in which phosphate of lime has come away in the urine for a long period without apparently doing much mischief. A very remarkable instance of this kind occurred in Guy's Hospital some years ago among the out-patients, in the person of an old man under the care of Dr. Hughes. This patient had for many years passed almost milky urine, which, by repose, deposited such an enormous quantity of phosphate of lime, that he brought to me at one time upwards of an ounce of this calcareous salt. He had been under the treatment of half the hospital physicians and surgeons in London during fourteen or fifteen years, but his urine remained unimproved. He afterwards came under my care, but I found all the remedial measures I adopted useless. At the same time I may remark, this man's health appeared so good that there was scarcely an excuse for submitting him to any course of treatment beyond the apprehension of the possible formation of calculus.

I cannot quit this part of my subject without pressing upon your notice the value derived in many of these cases from injecting the bladder with a very dilute mineral acid. I am confident that an irritable condition of the bladder, highly favorable to the secretion of earthy phosphates and excess of mucus from its mucous membrane, has been in some cases kept up by retention of phosphates in that viscus. Certainly, I have now seen many cases where viscid ropy mucus, mixed with abundance of phosphates, both magnesian and calcareous, have been secreted, and where the distress of the patient has been extremely increased by intense irritability of bladder. And in these all plans of treatment have been unavailing, until the bladder has been carefully washed out by means of warm water, and an injection, consisting of half a drachm of dilute hydrochloric acid, with a drachm of vinum opii in half a pint of warm barley-water, has been thrown in by means of a double catheter, in the manner described by Sir B. Brodie. I had a case under my care last year, in consultation with a most excellent and talented provincial physician, Dr. Baker, of Maldon, in which the irritability of bladder was so intense that there was almost constant desire to pass water, attended with horrible suffering. The urine often contained blood, and rapidly underwent decomposition; it presented a copious dense deposit of puriform mucus,

mixed with an enormous quantity of triple phosphate in very large crystals. The state of distress to which this lady was reduced by the disease rendered her life a complete burden. On examining the urine carefully, I could detect no true pus; it did not coagulate by heat, and much of the opacity presented by the mucus was owing to the presence of the triple phosphate. I suggested the use of a solvent injection analogous to the one just described. Great difficulty was experienced in the use of the catheter, in consequence of the excessive suffering it produced. Ultimately the injection was very effectually administered by Mr. May, of Maldon, and the effect was most remarkable; the irritability of bladder rapidly subsided, and, by repeating the injection, it was completely removed; and, on being called into Essex to a case in the neighbourhood some time after, I had the pleasure of seeing this lady apparently well.—*Abridged from the Medical Gazette.*

CASES
OF
TRAUMATIC TETANUS,
SUCCESSFULLY TREATED WITH TARTAR EMETIC.
By J. BROWN, Esq.

CASE I.—Ramjaun Oola, a poor villager, a man apparently about fifty years of age, and weakly constitution, was admitted into hospital on the 22nd of December, 1836, with a very slight wound over each parietal bone, inflicted, I believe, by a stick, and which originally were not above an inch in length each, and nearly healed when admitted. Some simple dressing was ordered to them.

On the morning of the 24th of December I observed that the man could speak but very indistinctly. The muscles of the neck and face were very rigid, and the lower jaw secured in close application to the upper; a heavy and anxious look about him; pulse feeble; skin natural; bowels regular. Ordered him half a grain of the tartarised antimony in solution, with thin sago every half hour; to be intermitted as occasion may require.

P.M. About one o'clock experienced a little nausea; no change. Continue medicine.

25. As yesterday; no evacuation by stool. Infusion of senna, two ounces; to continue the antimony.

26. Pretty much as yesterday. To continue his medicine, the antimony.

P.M. Evidently better this evening; muscles not so rigid.

27. Mouth still closed, otherwise as yesterday evening. To continue the medicine.

28. No further change. To continue the medicine.

29. Has experienced a good deal of nausea; bowels confined. Infusion of senna, two ounces; the antimony to be given every three hours.

30. Improving; muscles still more relaxed; able to work the lower jaw, and put out his tongue. Continue medicine.

The tartarised antimony continued for a few days longer beyond the date of last report; the man daily getting better, he was discharged on the 18th of January, 1837, quite well.

CASE II.—Jebun Sheik, a strong and stout man,

about thirty years of age, a villager, was sent to me on the 26th of December, 1837, with a severe wound from (I believe) a sword, on the outer side of the left leg, near the ankle joint, and penetrating to the bone. The wound was in bad condition, as it had been neglected for several days. About the beginning of February the wound was nearly healed, and the man became exceedingly anxious to return home. I persuaded him, however, to stay and wait till it should be quite healed. On the evening of the 9th of February the man was more anxious than ever to go away, and begged I would consent to his dismissal from hospital. I quieted him with the assurance he should go in a day or two. On the morning of the 19th, I observed he appeared in great anxiety, and I questioned him why he should be so. He then told me that for about six days he has experienced a stiffness about the muscles of the neck and face, and a difficulty in using the lower jaw, together with a sensation of stiffness from the wound upwards, and along the spine of the back, which symptoms, he took notice, were gradually on the increase; and, therefore, he was anxious to go home, for he thought they must have originated from confinement to the hospital. Had passed a very restless night. I thought it best to explain to the man that the symptoms which then appeared took their rise from the wound he had received; if he went home he would be out of the way of all help; these symptoms would increase, and most likely terminate in his death. He consented to stay, and I determined on giving the oil of turpentine a fair trial, as I had, in course of reading, met with a case where it seemed to have the effect of a specific. I prescribed, therefore, sixteen drops of the oil every two hours; sago diet.

Feb. 10, five, p.m. Said he thought he felt better; appeared less anxious; pulse full, and about 70; skin natural. Ordered the turpentine every four hours.

11. Slept a little; symptoms somewhat moderated. Medicine continued.

P.M. Much the same as in the morning; bowels rather confined. Ordered him three grains of calomel, with seven grains of aloes; castor oil.

12. No sleep last night; symptoms all aggravated; appears in great alarm; difficulty in opening his mouth and swallowing much increased; constriction about the fore part of the throat severe; complains of great pain and stiffness in back and along the left leg; pulse moderate; skin natural; anxious to go home. I considered it right now to drop the turpentine, and resort to the tartarised antimony, having found it to answer so well in a similar case under my care during the month of December, 1836. I, therefore, directed that a quarter of a grain of tartarised antimony should be given every quarter of an hour, till nausea be produced, and then that the frequency of its exhibition should be diminished a little.

P.M. Appears much better this morning; symptoms greatly moderated; neck not so stiff; can use his jaw better, but is not able to open his mouth beyond the extent of a quarter of an inch; still feels the stiffness in his back and leg; slept a little during the day; bowels opened four times; takes sago and milk for food; pulse 84, and pretty full. Has taken seven grains of the tartarised antimony; ordered it to be continued every half hour.

13. Slept a little during the night, and was pretty free from pain till towards morning; complains now of tightness across the chest, and pain shooting from the ensiform cartilage to the back bone; experiences occasionally pretty severe contractions of the muscles, situated along the back and on each side; throat not worse; pulse 88, and hard. Six grains of the antimony taken during the night; nausea was produced several times; water does not flow freely.

P.M. No pain at present about back or neck; the office of deglutition performed with more ease; occasionally a twitch of pain in the leg, and then it shoots upwards to the back and chest; three stools. Has taken six grains of the antimony.

14. Rested better last night; feels pretty comfortable now; pulse 100; passes water freely. Took five grains of the antimony during last night.

P.M. Has been easy all day; feels inclined to eat something more; says he took a little dholl and rice for dinner; pulse 102; two stools. Has taken six grains of the antimony.

15. Rested well, and was quite free from pain till towards morning, when he begun to experience a sense of tightness up the leg and side; no uneasiness about the chest; pulse as yesterday; no stool. Has taken six grains of the antimony.

P.M. Continues much as usual; one evacuation. Six grains of the antimony administered.

16. Rested well till the morning, when he experienced the same sensation as yesterday. Took six grains of the antimony during the night; a small sinus discovered with an opening into the sore, which was cut and laid open.

P.M. Has been quite easy all day; no unpleasant sensations from the sore; one stool. Has used six grains of the antimony.

17. Slept well till three this morning, when he had a couple of slight twitches of pain up the leg; one motion; water does not flow so freely. Has taken the usual quantity of antimony; castor oil, six drachms.

P.M. Four stools; has experienced rather more uneasiness about the leg to-day; water flows freely. Taken six grains of the antimony.

18. Rested well last night; experienced a little uneasiness from twitches of pain arising from the sore between the hours of twelve and two; pulse 80, rather small. Has taken his antimony.

P.M. Has been very comfortable all day. Taken the antimony as usual.

19. Rested well; feels much better. Continues the medicine.

P.M. Continues improving; able to open his mouth to considerably greater extent than heretofore. Has taken the same quantity of antimony.

20. Still better.

March 3. Has been quite free from all complaint since last report, taking his medicine as usual. The antimony omitted this morning.

Discharged on the 12th cured.—*Bengal Transactions.*