little tenderness, and no eruption: Ordered wine and beef-tea in small quantities every hour.

Vesp .- Was evidently sinking; pulse could not be counted; was very deaf, but answered questions rationally; had two large loose motions during the day, not changed in character; breathing was slow and oppressed, and breath coldish; tongue and mouth covered with sordes.

May 15th, Mane.-Had again profuse sweating during the night; hands and feet cold; no pulse at wrist; respiration very much oppressed; no delirium during the night; could answer questions, but was very deaf; one loose motion during the night, of the same colour and consistence as those formerly passed; no tenderness or swelling of abdomen, and no eruption.

Brandy and beef-tea given in small quantites every half hour. *Vesp.*—Gradually sinking; could still answer questions; bowels not moved during the day; hands and feet cold and clammy; breathing scarcely perceptible. Continued slowly sinking during the night, and died at 9 P.M. on the 16th May.

Body much emaciated ; skin of a dusky colour ; two abscesses, one on either side of neck, both open. Chest.—Lungs collapsed; healthy. Abdomen.—No signs of peritonitis; bowels distended with gas. Duodenum.—Mucous membrane congested, and discoloured in patches; no ulceration. Ilium .- Mucous membrane congested, and of a purple colour. There was no ulceration and no disease whatever of Peyer's patches or solitary glands. Large Bowel.—Mucous membrane of cœcum congested. On its surface was a triangular cicatrix, evidently of long standing from its pale hard texture. Mucous membrane of ascending colon congested; at its commencement was the cicatrix of another old ulcer of circular shape. Transverse colon of a purplish colour; very much congested, and the solitary glands filled with a greyish white deposit. There was no ulceration. The descending colon presented the same appearances, only that the glands contained more deposit, and were visible in greater numbers; low down close to the rectum, the mucous membrane had a dirty greyish colour. Spleen.-Enlarged and soft. Liver .--Normal.

Private J. Taylor, 92nd, a florid healthy looking man, admitted on the 9th May, 1868, with fever of an intermittent character. About the 14th May, typhoid symptoms made their appearance. On 16th May disease changed to typhoid fever; was in a low typhoid state; great prostration; quick weak pulse; foul tongue; great thirst; restlessness and general uneasiness.

May 17th.—Much worse; a few spots seen on abdomen. 18th.—Diarrhœa set in with abdominal tenderness; pulse 120, feeble, heavy, and listless. Ordered brandy and bark and ammonia.

19th .- Passed stools in bed; pulse very weak and small; wandering delirium during night; listless; not easily roused.

Brandy, &c., given. 24th—Passing large quantity of blood in his stools, which are passed involuntarily; great abdominal tenderness; low restless delirium; sedative enemata. Brandy and beef-tea, &c., ordered. 27th.—Stools less frequent; low and restless; stools only occa-

sionally passed involuntarily.

28th.-Passed a good night; still in a critical state; mouth and tongue covered with sordes.

31st.—Decided change for better; understands when spoken to, and replies feebly; stools, two in 24 hours.

June 1st .- Bowels not moved in 24 hours; no abdominal tenderness; expressed desire for food.

June 6th .- On the 4th June abdominal tenderness returned ; and on the 6th he is described as being in a very weak state, sinking down in bed; abdominal tenderness very great; stools, two in 42 hours, natural in colour. Beef tea and stimulants given.

7th.—Wandering in his mind all night; in a very weak state. 9th.—No improvement; great abdominal tenderness; blister

applied to abdomen. Beef tea enemata administered. Up to the 15th June he is described as being in a very unsatisfactory condition, but nothing is mentioned as to the state of his bowels.

15th .- Decidedly better ; slept during the night.

16th.—Only very slight abdominal tenderness remaining. 21st.—Very much better; pulse 78; tongue clean; skin cool and moist.

Throughout the remainder of June and during July he continued to improve, and pick up strength.

On the 4th August his disease was changed from febrile typhoid to asthenia; and on the 15th August he was discharged convalescent.

5091, Drummer R. Madden, 92nd, admitted on the 1st May, 1868, with fever of an intermittent type. About the 8th May the fever assumed the remittent form, and on the 14th typhoid symptoms appeared, and disease was returned as typhoid fever.

May 16th.—Symptoms: great prostration of strength; pulse 120, weak; tongue dry, red tip and edges; bowels loose, three or four stools a day, of a dark brown colour and foetid ; tenderness over the colon and coccum ; skin cool and dry ; eruption of rosecoloured spots over belly and chest; is sensible, but deaf; complains of no pain or uneasiness.

17th. In same state. To have brandy, bark, and ammonia, &c. 18th.—Three stools in 24 hours; deafness very great. 20th.—Eruption faded; sleeps a great deal; but easily roused and sensible.

21st .- Looks heavier ; stools two in 24 hours ; little or no tenderness in the abdomen, pulse 80, weak. Brandy and beef-tea every hour.

22nd.-Drowsy; pulse 76; skin cool and dry; slight tender-ness of abdomen; stools three in 24 hours.

26th.—Had improved a little; was livelier and more easily roused. Brandy, beef-tea, &c., continued. 28th.—Beginning to pull round; great difficulty in getting

him to take food.

31st .- Very much better; no pain or tenderness of abdomen; skin cool; pulse 78, stronger; hearing much improved. From this date he did well; was able to sit in a chair on the 16th June; the abdominal tenderness continued up to the 20th June.

During July he progressed slowly but steadily.

On the 4th August his disease was changed to asthenia; and he was discharged convalescent on the 10th August.

THREE CASES OF ICTUS FULMENIS WHICH OCCURRED DURING THE LATE HAZARA CAM-PAIGN.

BY SURGEON F. CARTER,

20th Punjab Infantry.

THESE cases appear to me of so unusual a character as to merit some special notice. On the night of the 18th of October, during a tremendous thunder and hail storm, at the pic-quet, in the village of Koongullee, which stands on an isolated eminence of the mountain, three men lay asleep parallel to each other just within the doorway of a hut, heads inwards and feet towards the door; each one had his musket alongside of him, and wore his side arms ; one flash of lightning struck the three. Though they all described the feeling on being struck, as a sudden shock, as if struck with a bullet, I am informed they were instantly insensible, and remained so for some two hours or more. The officer in command of the picquet, and all their comrades put them down for dead, and sent a sepoy to report the same to me, consequently I did not see them till the following morning about 6 o'clock. They were then perfectly sensible, did not complain of much pain, and had no alarming symptoms. As we had no shelter for the sick, and our movements were still uncertain, they were dressed and sent in dandees to the Field Hospital at Oghee, distant about seven or eight miles. On arrival there, I am informed they all showed considerable prostration of the system, and, in particular, Sunt Sing, whose life was despaired of. It was suggested by several people, that the extensive burns must have been caused by the burning of the clothes, but the condition of the clothes sufficiently disprove it. The rapidity with which the burns healed, except in the case of Jewant Singh, is remarkable.

CASE I.

Sunt Sing, sepoy, No. 8 Company, age 30, healthy. The entire back from the shoulders down to the loins was charred and bared of skin ; the burn then turned round to the front lower part of the abdomen, left side, and extended down the front and round to the back part of the thigh in a sort of spiral form. The burn was for the most part superficial, but there were several considerable-sized patches deeply burnt. His bayonet, which was in its leather case, was marked in several places. Chipped as if struck with a harder metal, and having the blue-black appearance as if burnt ; the leather of the case was torn, but shewed no signs of having been burnt; his leather cartridge case, tinlined, which he also wore, was torn in several places, but showed no signs of having been burnt. The clothes he wore were: 1st, regimental coat, which was rent up the back in several places; 2nd, two light under shirts also rent up the back; 3rd, pyjamas rent down the left thigh. None of these showed any signs of having been burnt, nor was any cloth deficient. The burns were dressed, and the man forwarded to the Field Hospital at Oghee.

October 23, Camp Oghee.—Re-admitted to regimental hospital tents much reduced in strength and weight, considerable foul discharge, as might be expected from so large a raw surface, and two large patches of rather deep sloughs in process of separation. No part of the burn has yet begun to heal. Ordered tonics, brandy, and morphia at night. To be dressed with calamine ointment. The burn now healed very rapidly, and under the influence of good food, &c., and scrupulous attention to cleanliness, his health rapidly improved.

November 17.—Perfectly well; with the exception of slight contraction of the left thigh; leave for three months.

CASE II.

Jewant Sing, sepoy, No. 1 Company, age 25, healthy. The whole length of the back of the left thigh was severely burnt; he was not insensible so long as the other two. Bayonet struck in three places, presenting the same appearance as in the former case; brass end of bayonet case struck in one place. The clothes he wore were: 1st, choga (cloak), which was spread over him, was rent and torn in several places up the back; 2nd, coat and shirts, neither of them touched; 3rd, pyjamas rent and torn in front and down the left thigh; 4th, puggree torn in several places. No signs of having been burnt were apparent in any of the clothes, nor was any cloth deficient. Dressed and sent to Field Hospital, Oghee.

October 23, Camp Oghee.—Re-admitted to regimental hospital tents; showed scarcely any constitutional disturbance; the burn was very painful, and a considerable slough was in process of separation; much foul discharge. Tonics and brandy; dress with carbolic acid, one part to seven of linseed oil. This however did not seem to suit it, and was afterwards changed for calamine ointment. After the separation of the slough the burn was slow of healing, and was not complete till the 10th of January, 1869.

January 12.—Leave to proceed to his home for three months; the burn is quite healed; there is slight contraction of the leg, but not more than will, I think, be easily overcome by time and gentle use.

CASE III.

Chanda Sing, sepoy, No. 1 Company, age 30, healthy. The burn extended all over the back from the shoulder to the loins and slightly down both thighs; it was mostly superficial, but here and there were deeply burnt. The leather of the cartridge box, which he wore, was rent in several places, chiefly down the stitching, and the tin-lining of the compartment containing the caps was struck and bent. Bayonet struck near the point, and a piece of the wooden stock of his musket was clipped off. There were no signs of burning. The clothes he wore were : 1st, choga (cloak), which was spread over him, rent up the back in several places; 2nd, regimental coat rent and torn in several places up the back, and showed no signs of having been burnt on the edges of the rents; 3rd, two under shirts rent completely up the back, no signs of burning; 5th, regimental trousers on which his head reclined were rent, and showed signs of burning over left thigh and right leg. Dressed and sent to Field Hospital at Oghee.

October 23, Camp Oghee.—Re-admitted to regimental hospital tents much reduced in strength and weight; considerable foul discharge, and over the back were three patches of sloughs in process of separation. Ordered tonics, brandy, and morphia at night. To be dressed with calamine ointment; sloughs soon separated, and the healing was very rapid. His health soon improved, and, on the 17th November being quite well, was allowed to proceed to his home on three months' leave.

CHRONIC ARSENICAL POISONING-COMPLETE RECOVERY.

BY A. S. G. JAYAKAR, L.R.C.P., F.R.M.S., LONDON.

IT rarely falls to the lot of the Indian practitioner to meet with cases of chronic poisoning by arsenic. This may be due principally to the large quantity of arsenic which is generally either administered or taken for homicidal or suicidal purposes in this country. Amongst the symptoms which make their appearance gradually after the administration of the poison, those in connexion with the nervous system are not very common. On the contrary, a medical man is often thrown off his guard while trying to discover the cause of such symptoms, as the notes of the present case will fully illustrate.

Foola Mona, a cultivator, aged 35, was admitted into the Hutteesing Hospital, Ahmedabad, on the 8th of February, 1869, with an extensive fungous disease of right foot, which presented a number of sinuses on its front aspect, discharging a copious quantity of black fungoid matter. On his admission, he complained of anæsthesia of both the hands, which was then supposed to be due to the commencing stage of lepra anæsthetica. The fungous disease itself was of 12 years' standing, having arisen in a local injury to the sole of the foot caused by a stone. His right leg was amputated the day after his admission, about three inches below the tubercle of the tibia. The stump progressed very satisfactorily, excepting an attack of secondary homorrhage which he had on the night following the operation. On the 14th of February, the anæsthesia in the hands having increased, I directed more attention to that the hands having increased, i uncreating paralysed, and the symptom. The hands were found partially paralysed, and the flexors of the fingers strongly contracted. On going more carefully into the history of the case, it was discovered that, two months before his admission into the hospital, he had applied to a Hakeem for the cure of his foot. The Hakeem had applied a poultice for about a week, containing nearly three ounces of arsenic and an incredible quantity of cayenne pepper (7 lbs). This having given rise to constant vomiting and purging, the arsenic was omitted after the second application. It was followed by a burning sensation all throughout the body, which continued to be present after the operation in the extremities, the stump not excepted. The symptoms in the extremities, the stump not excepted. The symptoms in the hands made their first appearance a fortnight after the last application. The patient was ordered to take potas. bromide, gr. xii, tinot. bellad. mxiv, sp. chloroform mxxx, aqua comph. 3iii, 3i. thrice daily. Under this treatment he went on gradually improving, the stump soon healed, but the nervous symptoms remaining, the treatment was continued till the 17th of April; when he was discharged cured.

CASE OF LOCOMOTOR ATAXY.

BY ASSISTANT SURGEON B. EVERS,

18th Native Infantry.

LOCOMOTOR ataxy is, in my opinion, a disease that is much more common in India than is generally suspected. In almost every case, the patient complains of "shooting pains" in the extremities, and the disease may be mistaken for rheumatism. This in the early stage of the disease, but when the symptoms have progressed so far as paralysis, the case again is returned as one of pure ordinary *motor* paralysis under the head of paraplegia.

The following are the particulars of a case, that was reported by me to the Deputy Inspector-General of Hospitals of the Allahabad Circle, in April last.

Anamada cherte, in April 1885. A., aged 28, a sepay in the 18th Native Infantry, was admitted into hospital on the 23rd March, 1869, complaining of slight difficulty in breathing, slight palpitation, and great weakness in the lower extremities, with a sense of tingling when the feet came in contact with the ground, that same kind of feeling which one experiences on attempting to walk, when the foot is known to be "asleep." The patient's legs trembled under him when he stood. I have seen cases of extreme tremor in the extremities induced by excessive tobacco-smoking; and thinking that the man might have indulged too much in that way, I took measures to prevent his doing so again. The dyspncea and palpitation disappeared in a few days, but the patient still complained of increasing weakness in the legs. The limbs were well developed, and the muscles all appeared quite healthy. He did not tremble so much now when he stood. On his attempting to walk, I observed that there was a certain amount of paresis only so far as *locomotion* was concerned, but that all *co-ordinating* power was lost. His gait, on attempting to walk with his eyes shut, (although attendants were by to support him in case of necessity) became very staggering indeed. He required to see his legs that he might *direct* them. Not the slightest anæsthesia present anywhere. Intellect quite clear.