still survive. My motive in giving publicity to these cases is, that it may lead ultimately to some check being put on the primitive lithotrity of the Jorehaut Gohain.

A MIRROR OF HOSPITAL PRACTICE.

DAGSHAI STATION HOSPITAL.

CEREBRO-SPINAL DISSEMINATED SCLEROSIS IN SOLDIERS.

BY SURGEON-MAJOR MACARTNEY, M.D.,

Army Medical Department.

Pte. J. W., æt. 24, lately admitted to hospital for "Paralysis agitans," presents marked symptoms of that rare affection —Disseminated sclerosis. The disease appears to have supervened on a prolonged attack of secondary syphilis two years ago. His medical history sheet records several recent admissions for "ague" and "simple continued fever" which, according to the man's own statement, were nothing more nor less than the trembling being mistaken for these aguish attacks. However this may be, his aspect is that of a man in the cold stage of ague. He stands by his bedside with pallid countenance and shrunken expression, his head and neck trembling. It is also to be remembered that severe rigors, chiefly affecting the lower jaw, do occur during the development of this disease, but are unaccompanied by any increase of temperature.

The disease appears to have been very insidious, and to have crept upon the patient without his having been fully aware himself of its development until quite recently. He now presents the following symptoms. As he stands, his head and neck are seen to tremble, and this increases in proportion as the patient is spoken to, until at length he becomes literally so agitated as to be unable any longer to stand. All this time his arms hang by his sides at rest, but tell him to extend one hand and then trembling at once begins, and increases in intensity as the effort is made to hold it out. So it is with the lower extremities, and with every portion of his body where voluntary muscular action is called forth. When voluntary action of the muscles of a part ceases the tremor likewise ceases. This alone is characteristic of disseminated sclerosis, and serves to distinguish that disease from "Paralysis agitans," in which the palsy is permanent, whether voluntary action be made or not. When the patient is told to put out his tongue tremor at once begins, but ceases if rested on his lip. He can walk steadily and turn rapidly, showing no indication of impaired co-ordination; nor does he feel giddy on standing or walking with his eyes shut. He is able to write, but rather illegibly, each letter being a series of fine tremors with occasional greater irregularities. The tendon reflexes are exaggerated. "Ankle clonus" immediately begins on making steady pressure backwards against the sole and toes of either foot. "Knee-jerk" is also abnormally pronounced. He complains of headache and a peculiar stiffening out of the limbs and back, as he lies in bed, and especially as he drops off to sleep, often starting up with a spasmodic pang similar to the sensation of awakening from a night-mare. Amblyopia of the right eye exists, with hemiopia affecting the field of vision to nearly two-thirds of its extent. If an object be held up in front of this eye, such as a diet-sheet board, he can only see one corner of it. Ophthalmoscopic examination reveals a degeneration of the optic disc to an extent corresponding with the loss of vision.

This paper is written with a view to this disease of the cord being recognised as occurring among soldiers and in the belief that hitherto it has figured in the statistics of the British Army as "Paralysis agitans." In support of this statement two cases, invalided in 1882-3 from the same station hospital under the heading Paralysis agitans, are transcribed from their invaliding documents, and since Paralysis agitans is a disease of old age, seldom occurring before the fortieth year, it is probable these were cases of disseminated sclerosis in some of its forms.

Pte. J. T., æt. 26, regular and temperate. His disease dates from 1878, immediately after Jowaki campaign, where he was a good deal exposed to climate and cold. The disease commenced with pain in the knees and slight trembling of the lower extremities, soon followed by inability to hold anything steadily with his hands. Has latterly been getting worse trembling of the limbs to an extreme degree, so that he cannot stand steadily nor hold things without shaking. No pain or uneasiness anywhere; *vision good*, and general health has not suffered. Has not been aggravated by vice or intemperance.

Case No. II.—"Pte. J. R., æt. 35, temperate and regular. About three years ago began to feel nervous and shaky. This condition has gone on to the present time, until he can now hardly hold his sword when drawn in the ranks. It is probably the results of climate, and has not been aggravated by vice or intemperance"

The disease came on in this case also after exposure and fatigue during the Afghan campaigns. No history of syphilis in either. Mr. Assistant Apothecary Butcher, who saw both the above cases, drew my attention to them, stating that they were like my case of disseminated sclerosis.

KASHMIR MISSION HOSPITAL.

NECROSIS OF FEMUR: OPERATION: SPONTANEOUS FRACTURE: AMPUTATION: RECOVERY.

BY DR. A. NEVE.

R., a Thibetan, suffering from necrosis of femur since 3 years, was admitted to the wards December 1883, and was shortly after operated on. Although the discharge was considerable from sinuses, in the whole length of the thigh no sequestrum could be found. At one part a sequestrum had apparently been previously extruded, the walls of the cavity in which it had lain, and the medullary canal above and below, was filled with solid bony formation of such density as to break the edges of massive chisels. The cavity was well scraped and a drainage tube inserted.

Progress.—The wound went on discharging much as before, but about three weeks later much pain being complained of, it was found that the femur had spontaneously fractured.

Operation.—After a delay of some weeks, owing to the unwillingness of the patient, the thigh was amputated at the middle about 3 inches above the seat of fracture.

The operation was performed under the spray, and subsequently the wound was stitched with silkworm gut, dressed with iodoform, and covered with a large muslin bag containing sawdust (carbolized).

The wound was dressed every second or third day; and in spite of an old sinus and some bare bone, it healed by first intention with but a few drops of pus; and the sinus itself shortly afterwards closed.

Remarks.—At the time of the first operation I thought that probably a sequestrum still remained enclosed by the massive callus. On examining the limit after its removal the cause of the prolonged suppuration and of the fracture was seen. As the result of prolonged ostitis the medullary canal had become plugged, and by the dense osseous formation the nutritive supply cut off from a portion of the bone; part of this necrosed and was extruded, but elsewhere merely rarifying ostitis or caries was developed. In the operation I cut away part of the solid tissue, and as the disease extended the rarified bone spontaneously fractured. An explanation of the way in which sclerosed osseous tissue may cause caries or necrosis may be found in Cornil and Ranvier's Pathological Histology. It seems to explain this case. I have met with a large number of cases of caries in the shaft of the tibia, but this is the only one of caries in the shaft of the femur which I have seen; and I think the above remarks suggest the only way in which it is likely to occur, *viz.*, as a sequel to, or in connection with, necrosis. The recognition of this, when it occurs, is very important as a guide with regard to operating.