

The age of the patient was unfavorable; the erysipelas, and especially the dropsical swelling of the limb alleged to be present, would forbid any considerable extent of pressure by bandages, or extension of the limb, without risking the loss of both limb and life. The Dictionary of Dr. Cooper, shown by him, was regarded as good surgical authority by the profession everywhere, and had been edited by himself, all the notes having been republished in London by the author in his last edition.

Dr. A. C. Post, one of the surgeons of the New York Hospital, stated that in such a fracture the injury to the soft parts would interfere with the extension of the limb; and has known two cases in which the attempt to make extension and counter-extension resulted in mortification, and the thighs had to be amputated. The age of the patient and diseased state of the limb increased these dangers. In all such cases, a very considerable shortening of the limb takes place under the best treatment and care, and the removal of the foot bandage by the patient, as in this case, would increase it. In half an hour after such an accident, he has known the swelling to be so great as to forbid any success in ascertaining definitely the nature of the injury.

Dr. Chessman, a physician and surgeon of long experience, saw this patient with Dr. Oatman, with great difficulty inspected the thigh, being opposed by both the patient and his friends. He found that it had been an oblique and comminuted fracture, now united. He found the limb shorter than the other, as it uniformly is in such cases. He never knew an exception, and concurs fully in the opinion that the age and morbid state of the limb in this case forbid any greater extension or pressure than was used, and was obstructed in his inquiries by the disturbance and resistance made to his examination.

Similar and corroborative testimony was given by Dr. Dickinson and Mr. McCord. Dr. Shepherd was then examined, who had attended the case throughout, and bore testimony that there was no want of attention or skill on the part of Dr. Oatman, who manifested throughout a becoming interest in the patient's welfare. He proved the morbid state of the limb, the disturbance of the bandage by the patient, and the adverse circumstances which had to be contended with in the management of the case.

Dr. Stoothoff testified that he accompanied Dr. Chessman and Dr. Oatman on their visit to the patient, and learned from the latter that Dr. Cockroft, junior, had been there, and the son confessed that he had denied it, to conceal this clandestine visit.

In the progress of the trial there was a display of surgical apparatus, thigh bones both sound and broken, together with a beautiful model of the thigh taken from the Anatomical Venus, now exhibiting at the American Museum, recently imported from France by P. T. Barnum, Esq., who kindly loaned it for the purpose of enlightening the court, bar and jury, as to the muscles concerned in fractured thigh.

The Jury returned a verdict for the defendant.

THE

**British American Journal.**

MONTREAL, SEPTEMBER 1, 1846.

### LAKE SUPERIOR COPPER MINES.

The public eye is directed with a good deal of attention, at the present moment, to the exploration for silver and copper ore which is now taking place in the mineral region on the Canadian or northern shore of Lake Superior. It is well known that three or four companies for mining purposes have been formed, who have located

themselves on Spar Island, Mamainse, Michipicoten, and St. Ignace. The Provincial Geologist is prosecuting his researches in that district at present; and, in anticipation of his report, which will be eagerly looked for, we furnish our readers with all the information which we have been enabled to collect on the subject.

For several years past, it is well known that the copper and silver region on the southern shore has been most successfully worked by several American companies. Mr. C. T. Jackson of Boston, who was employed two years ago by the Lake Superior Copper Mining Company, has furnished a valuable report in the American Journal of Science and Arts for July, 1845, on the copper and silver ores, and general geological features of Keweenaw Point in that Lake. The late Dr. Douglas Houghton, whose untimely death by drowning, in the prosecution of his labours, has caused deep regret, preceded Mr. Jackson in the survey of that region. The final report, however, of his labours has not yet been received; but, if to be completed, will contain a minute account of the geological formation of the whole of that district, and of the metalliferous rocks in particular. On Keweenaw Point, copper is largely diffused through the rocks, both native and in states of chemical combination. The conglomerate which abounds here, contains veins of calcareous spar, in which copper in a native state, as well as carbonated, exists. The hydrous silicate of copper or chrysocolla, which is also met with in this conglomerate, when free from rock, contains 25 to 30 per cent. of copper. Black and brown silicious oxides are also met with, which have yielded, by analysis, 51.08 per cent. of copper, and a very minute proportion of oxide of iron. In the conglomerate of Copper Harbour, a vein of black oxide of copper was discovered, yielding as much as 68 to 70 per cent., and is the most valuable ore met with in this locality.

At Keweenaw Point native copper is found abundantly. It is met with disseminated in trap, but is most abundant in the amygdaloidal variety. It is met with occasionally in masses, weighing many pounds. Nine veins of native copper have been discovered on the locations leased to the company, but of these only two or three have been worked as capable of furnishing any valuable return.

At Eagle River, copper is found in large quantities alloyed with silver. In an amygdaloid trap, this alloy is found to constitute from 10 to 30 per cent. of its weight. The crevices and veins of the rock are filled with thin sheets of it, and lumps of considerable magnitude are occasionally found.

The following results of the analysis of the Eagle iron, copper, and silver ore, are given. "The value of the rock per ton is as follows:—It yields in 50 lbs.,