

tion to the purpose, as well as its military and general advantages.

After completing the plans and sections of the lines explored, the party, in September, 1848, returned to England and rejoined the survey department.

The personal services of sergeant Calder on this duty are sufficiently interesting to receive notice in this place; and, with some little difference in points of duty and incident, may be taken as an average type of the individual adventures of the rest of the party. From Halifax to Folly Village, he surveyed a line of seventy-five miles with the barometer, and from thence, for twenty-five miles, measured the roads from the high-water mark of the Bay of Fundy, by taking the heights with the theodolite, using the angle of elevation and depression, and checking the same simultaneously, by barometrical observation. He afterwards traversed a varied country for about sixty miles to Amherst, from whence he carried on the survey, barometrically, to Mirimichi. The completion of another rough road of ten miles now took him fully into the wilderness, where he continued his work till the winter set in. During his labours in the woods he ran short of provisions. He was then in charge of twelve men, carrying with them 3 lbs. of pork, 1 lb. of oatmeal, and a small bag of ginger. Upon this scanty fare the party subsisted for three days; and, harassed as they were by hard travelling through a mountainous country, entangled with a tissue of bush and branches covered with deep snow, their fatigues and privations were considerably increased. Heavy loads also they carried, and so closely were the trees packed together, in the exuberant vegetation of the forest, that the adventurers not only had to tear themselves through the thicket, but were continually impeded by logs of fallen trees and tufts of stubborn underwood. On the evening of the third day the hunger of the men began to show its effects in emaciation and despondency. At this moment sergeant Calder found it necessary to relieve the party of the stores and abandon them in the woods. The theodolite and barometers he attached in a safe position to a tree. He then directed the men to use their