of a railroad. The gradations will be easy, excepting at one point, namely, at Bacon's Hill summit, where, however, the rise will not exceed sixty feet per mile, and that for one mile only; and the curves will in no place be less than one thousand feet radius, and generally will far exceed that length.

NORTHERN ROUTE.

From Andover, which I designated at the commencement of the Northern or Magalloway Route, to the outlet of Richardsons' Lake, called the Narrows, I was not able to examine personally, owing to the necessity of getting our provisions and baggage to that place before the waters were closed with ice, but I gained very satisfactory information in regard to that part of the route, from men long familiar with it. And this distance was also traversed by Col. Long, in his reconnoisance in the summer of 1835, and I shall adopt his description of it, somewhat abridged.

Leaving Andover, the route passes up along the main west branch of Ellis River, crossing two of its tributaries, and on the westerly slopes of Boggy Brook, to the easterly slope of Round Hill, and then on the slope of this hill, until it enters the valley of Black Brook, which it pursues quite to its source, in the vicinity of Lake Welakennebacook, a distance of ten miles. The first two miles of this distance are over uneven ground, requiring much cutting and filling, together with two considerable bridges, the grades rising to forty or fifty feet per mile. The next five