dack mass to the westward thrust of the Atlantic and the subsequent piling up against this mass of the ridges of palæozoic sediments. Southward of this the Atlantic thrust has driven these ridges back in a great bend to the westward.

My present purpose is not to give a general geographical or geological sketch of the White Mountains, but to direct attention to the vegetation which clothes their summits, and its relation to the history of the mountains themselves. For this purpose I may first shortly describe the appearances presented in ascending the highest of them, Mount Washington, and then turn to the special points to which these notes relate.

In approaching Mount Washington by the Grand Trunk Railway, the traveller has ascended from the valley of the St. Lawrence to a height of  $80_2$  feet at the Alpine House at Gorham. Thence, in a distance of about eight miles along the bank of the Peabody River, to the Glen House, he ascends to the elevation of 1,632 feet above the sea; and it is here, or immediately opposite the Glen House, that the actual ascent begins. The distance from the Peabody River, opposite the hotel, to the summit is nine miles, and in this distance we ascend 4,656 feet, the total height being 6,288 feet above the sea.<sup>1</sup> Formerly only a bridle path led up this ascent; but now access can be had to the summit by carriage roads and by rail.

These royal roads to the summit are, however, too democratic for the taste of some visitors, who mourn the olden days of ponies, guides and adventures; and though they give an excellent view of the geological structure of the mountain, they do not afford a good opportunity for the study of the alpine flora, which is one of the chief attractions of Mount Washington. For this reason, though I availed myself of the new road for gaining a general idea of the features of the group, I determined to ascend by Tuckerman's Ravine, a great chasm in the mountain side, named in honour of the indefatigable botanist of the

<sup>1</sup> According to Guyot, but some recent surveys make it a little higher.

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