to 1904 there appears to have been on the whole no permanent change of level. At the international boundary the rate must lie somewhere between 2 feet and 5 feet a century. On the Swedish coast elevation appears to be taking place at a rate of from 2 to 3 feet a century. Thus a rate of change of from 2 to 3 feet appears admissible for certain places on the earth's surface. Assuming that there has been constant uplift at Mt Royal, and that the rate has been that locally ascertained in the case of the Baltic coast and placing this at its maximum of 3 feet a century, it would have required 18,666 years to raise the highest shell bed on that mountain from sea level to its present hight above the sea. Again, if we assume that the rate of elevation has been faster at Mt Royal but not greater than 3 feet a century at the international boundary, where the upper limit of the Hochelagan marine invasion now stands at 450 feet, 15,000 years would be required to accomplish the result. This method of attacking the problem it will be seen is not likely to give definite results unless the actual rate of vertical movement at the point where the elevation of the ancient water level is taken be known. In this district the data have not been gathered.

Thanks to Mr Gilbert's studies of the changes of level now taking place in the Great Lake basins the assumption may be made that on one of the radial lines of the apparently dome-shaped uplift which has taken place in this northeastern part of the country the rate of tilting on a south-southwest direction is such as to displace the two ends of a line 100 miles long .42 of a foot in 100 years. The line of water level traceable through Lake Champlain and southward through the Hudson exhibits a displacement showing uplift on the north and depression on the south such as to make the assumption of a southward tilting in this direction at a rate comparable to that made out for the Great Lakes. Making this assumption with the additional postulate that the present rate has held during the past, the following data lead to the conclusion stated below.

At Covey hill on the international boundary the marine limit is 450 feet. Twenty-six miles north a littoral deposit of shells occurs on Mt Royal at the hight of 550 feet. The difference of level today between these two stations is at least 100 feet.