

into prominence as topographic features; reelevating anew the eastern region as contrasted with the Champlain valley, and reproducing the comparatively rapid, steplike drop from one to the other; and breaking up the old, comparatively even erosion surface into a jumble of disconnected blocks at various altitudes. Hence the present ridge and hilltops appear at all sorts of discordant elevations, instead of exhibiting the concordance in altitude which is such a characteristic feature on the south and west, where there was little or no faulting.

Not far to the west of the main axis of uplift lies a central depressed belt whose ridge summits fall far short of attaining the elevations along that axis, and much short of attaining those to the west. These differences are most accentuated through Franklin county, and the belt seems to have originated as a depressed, or dropped fault block, between the eastern and western uplifted areas. Whether it originated at this time, or dates back to a previous period of faulting, with renewal of its previous features at this date, can not be told.

The region remained at the new altitude given by the uplift for a sufficiently long time (the greater part of the Cenozoic) to permit of erosion giving it approximately its present relief. Stream valleys were cut down to the new base level and on the average sufficiently widened, so that one half of the region (at a rough approximation) was cut down well toward that level, the remainder forming interstream ridges and hills whose summits have been lowered little below the altitude given them by the uplift. The streams had become adjusted to the rock structure of the region during the previous cycles of erosion, so that they coincided with, and their attack was mainly felt on, the weaker belts. In the heart of the region, where Precambrian rocks are at the surface, the weaker rocks are the Grenville limestones and associated sedimentary gneisses. Wherever these rocks occurred in belts of any extent, they would locate the line of a stream valley, whose width would be rudely proportional to the breadth of the belt. The remaining common rocks of the region are much more resistant and with no great variation among themselves in this respect, so that they present little compara-