

surface is similar. The small fault blocks in the intervening strip have been updragged by the faulting, giving them a pronounced dip, in general  $10^{\circ}$  or more, away from the fault plane toward the southeast. Hence the faults that cross the strip are quite typical dip faults, and the lateral shifting of corresponding beds on the two sides of a fault is plainly brought out on the map. Owing to the steep dip, the more resistant rock layers involved appear as low, sharp backed ridges, and the lateral shifting of these, as a fault is crossed, is a prominent, minor feature of the topography. In the most northerly pair of these faults shown on the map, the north one throws to the north and the south one to the south, so that the middle block has been upthrown between the two others. Just the reverse is true with the pair just south of Chazy village, the middle block having been downthrown between the two adjoining blocks. On the east and west edges of the map faults are not indicated simply because outcrops are not sufficiently numerous, or sufficiently definite, to permit of their location. That they are there is quite certain.

Plate 13 shows the faults in a portion of Plattsburg and Peru townships, so far as the outcrops will admit their being located. One very extensive fault of the meridional class, the Plattsburg fault, runs across the map limits from north to south, exposing Beekmantown rocks constantly on the west side and either Chazy or Trenton on the other. The throw of the fault causes the disappearance of the major part of the Beekmantown formation and may be safely set down as at least 1000 feet. Toward the north the throw diminishes, and another great fault develops, the Beekmantown fault, the two coalescing at the north limits of the map and extending on beyond as a single fault of very large throw. Between the two a wedge of Chazy is brought up, with Beekmantown rocks on one side and high Trenton on the other. At the point of junction the Chazy is pinched out and the Beekmantown and Trenton rocks adjoin across the fault. There are two cross faults in this Chazy wedge, two on Valcour island, one on the mainland at Valcour and another just north of Bluff point, as well as several small ones in the shales on Cumberland head, and one on the south edge of the map at Lapham, which brings up the Potsdam against the Beekmantown. Lack of outcrops prevents the location of others.