

are of the middle division. While the Chazy was being deposited, the remainder of the State seems to have been mostly above sea level, and either the same conditions obtained during Cassin deposition or else a barrier was developed between the Champlain and Mohawk basins at this time, preventing the Cassin fauna from reaching the latter area. While the writer is not a sufficiently competent paleontologist to appreciate or discuss the relationships or differences of the Cassin and Chazy faunas, it does seem to him that structurally the Cassin is related to the Chazy rather than to the Beekmantown. The uplift which shut off this basin from the waters of the remainder of the State, and then caused those waters to recede beyond the State's boundaries, took place prior to Cassin deposition, and these conditions persisted during the Chazy, followed by an uplift and then by the great depression which let in the waters of the Black River and Trenton seas over the whole region. It is true that in the Champlain region there is no natural lithologic boundary between the Beekmantown and Cassin, while the basal sandstone of the Chazy does indicate a physical change. But this is a slight one and not to be compared to the greater ones outlined above.

*Day Point, Crown Point and Valcour substages.* The three divisions of the Chazy are sharply marked off from one another lithologically and seem to the writer equally so paleontologically. Moreover, their thickness and importance over most of the Champlain region seem to warrant their separation in mapping, a matter easy of accomplishment on the scale of the 1 inch maps. They would seem therefore worthy of separate names. Brainard and Seeley's lines of division can not be improved on, as it seems to the writer, and the following names are suggested for them; for division A the Day Point limestone; for B the Crown Point limestone; and for C the Valcour limestone. These are not intended to replace the group name but simply as indicative of the three well marked substages of the group. Division A is well shown along the lake shore in the northern part of Peru township, is exceedingly fossiliferous there, and in the near vicinity both contacts are to be found, the upper at Bluff point, the lower on