

when the Hudson gorge from Fort Edward south to Albany was not so deeply excavated as it now is.

*Wood creek channel.* The valley of Wood creek, to which reference will be repeatedly made in this report, forms at present the lowest line of communication between the upper Hudson valley and that of Lake Champlain. The divide between these two valleys lies at an elevation of about 147 feet, near Dunham basin [see pl.13]. It will be noted from the map that the old gorge of the Hudson appears to be continued in this direction and that the Hudson river above Fort Edward falls into this broad open channel along a new path characterized by falls and a much less width. As will be noted in a later chapter the Wood creek channel appears to have been for a time the outlet of a glacial dammed lake extending from near Dunham basin northward over the site of Lake Champlain.

#### PHYSIOGRAPHY OF THE CHAMPLAIN VALLEY

Lake Champlain appears to occupy an irregular depression excavated mostly in the lower Silurian and Cambrian rocks corresponding in this respect to the Hudson in its gorge from Albany southward. The present depth of this erosion feature is at least 500 feet below sea level in the deeper part of the lake. The equivalent of the rock terraces of the Hudson, or the floor of the older, wider valley in which the newer and narrow channel has been excavated, is found along the shores of Lake Champlain in a dissected rock surface as in Essex, along the Vermont shore south of Burlington, and widely developed about the northern part of the lake. This ancient valley floor is about 300 feet above the present sea level. Both this surface and the newer valley excavated in it have suffered more from glacial erosion than has the analogous topography of the lower Hudson valley. The Wisconsin ice sheet pressed into the northern portal of the Champlain valley in a strong flowage coming from the northeast rather than from the north so that the maximum erosion line must have been thrown toward the base of the Adirondacks in the position of the lake basin. No facts are at hand, however, to show how much, if any, the lake basin was deepened by ice action. Many of the streams, such as the Ausable, which now enter the lake over high level rock