Chapter 9

LARGER GLACIAL LAKES OF THE CHAMPLAIN AND HUDSON VALLEYS (continued)

LAKE VERMONT OR GLACIAL LAKE CHAMPLAIN

From the failure of the higher shore lines of the Lake Champlain district to pass around the northern spur of the Adirondacks at Covey hill and thus westward along the northern flank of the mountains it seems as before stated necessary to postulate an ice dam across the mouth of the Champlain valley acting as a barrier to retain the waters in it up to these higher levels. The waters thus confined in the Champlain valley already recognized by Baldwin, Upham and others, have been referred to as glacial Lake Champlain. As this body of water was of far greater extent than Lake Champlain and came into existence independently of this smaller lake and moreover was separated in time from Lake Champlain by a marine episode in the valley, it seems best to employ a distinctive name. As the glacial lake covered practically much of the state of Vermont west of the Green mountains and probably penetrated through that range at its highest stages to the basins on the east of the mountains, "Lake Vermont" is used here instead of the descriptive phrase heretofore employed.

This body of water was apparently at first as noted by Upham confluent on the south with what is in this paper denominated Lake Albany. Just how far north in the Champlain valley the ice had retreated at this early stage depends on the interpretation of the higher gravel ridges and beachlike deposits in the northern half of the Champlain valley. On the extent to which the ice had retreated depends in turn the extent at any time of the lake toward the north. The outlet of these ice-dammed waters at this early stage of confluence across the present divide of the Hudson and Champlain basins is a matter which concerns the interpretation of Lake Albany on the south and is considered in that connection. Lake Vermont may be said properly to have come into existence when in consequence of a local lowering of the waters south of Fort Edward a discharge began across a barrier into the Hudson valley on the south.