

existence ordinarily, as the northern limit of the retreat, of a more or less prominent belt or line of moraine.

The course of this moraine-line, as mapped chiefly by Chamberlin and Leverett, is shown on the map (Fig. 1548). It is the line lettered B, B, B, and is designated the moraine B, or moraine-line B. The belt of land laid bare by the retreat extended westward to the Continental Interior; no such retreat has yet been recognized west of the Rocky Mountain region. In Illinois, the moraine B includes the Shelbyville moraine of Chamberlin and Leverett, which passes near Shelbyville in central Illinois, and probably the Altamont, of Upham, in central Iowa, the southernmost of the series in that state.

The width of this belt varies from 10 miles and less to more than 300 miles. It is least along the islands south of New England, and through New Jersey and Pennsylvania, where the precipitation was greatest — so great that the annual accumulation of ice fell but little behind the amount lost by melting. But farther west, from western Ohio to the Continental Interior, the width increases with the decrease in the amount of precipitation. In western Ohio and Indiana, the mean width is 40 miles; from Illinois to northwestern Kansas, it increases from 150 to 275 miles; and the driftless area, lying chiefly in Wisconsin, is made part of a much larger iceless area.

From Kansas in a northwestward direction, the region of melting stretched northwestward over the district of Assiniboia to the Saskatchewan, or 1000 miles, if not beyond this; and as the dotted line (Fig. 1548) is the limit of transportation of drift from the eastward, and B B that of the morainic limit of the melting (along the Coteau du Missouri and the third Prairie level, in continuation of the Coteau des Prairies, as laid down by G. M. Dawson), the width of the area laid bare in British America is full 300 miles. The district of the Winnipeg region was still under ice.

Between Cape Cod and northeastern Kansas the retreat was from the south, northward, but in British America it was from the west, eastward, and east-northeastward; that is, it was from the borders of the great ice-sheet inward. Along the Coteau des Prairies, the retreat from west to east was small, because the region west of that part of the Missouri was bare through all the epoch of maximum ice owing to drought and heat.

South of New England the southernmost line, AA, from Nantucket to Perth Amboy is but a few miles from that of the moraine B situated along the inner range of islands, the coast west of Narragansett Bay, Fishers Island, Peconic Bay, and the north half of Long Island westward. At the head of Peconic Bay the moraines of the north and south sides of the bay blend with one another. It is not certain that the moraine of the southern limit, or that of maximum ice, was not outside of these islands, as it was probably outside the existing shore line to the east of New England, Georges Shoal being probably on or near the limit. The retreat from this eastern limit was probably to some line now under water; for the moraine on Cape Ann, north of the harbor of Boston, has been shown by Tarr to be part of the east-and-west moraine extending westward to the Connecticut.