

4. The lines of trap on the map are usually curved, with the convexities to the west; or they consist of a series of similar curves. Some are bow-shaped with hooked ends. Saltonstall Ridge at S, on the east side of Saltonstall Lake, near the Sound, is a marked example of the bow-shaped outcrop. So also is the narrow line just east of it, and another broader and larger line to the northeast, the Totoket Ridge, T T. The Mount Tom Ridge has an eastward bend, hook-like, at its southern end, in the Meriden region, and another long one at its northern end, constituting Mount Holyoke. The distance between the two hooked ends is over 50 miles, so that it is a very long bow. West Rock Ridge has a hook at its southern extremity, and a series of curves in its course to the north; but it terminates northward near where the Mount Tom Ridge ends, as if a sequel to the latter in formation.

These features are so general that they seem to indicate some comprehensive method of origin.

5. The belts are for the most part approximately parallel to the axial line of the area, or nearly north-by-east in course. But there are many exceptions, especially in the southern part of the area.

The large *north-and-south* outcropping belts of trap usually have bold features over the landscapes. This prominence is owing to denudation since the time of the eruption of the trap, for originally the trap was probably all under the cover of the sandstone. The hard igneous rock generally makes the summits of ridges. The slope of the ridge in the direction of the dip of the sandstone (eastward in the Connecticut valley) is usually gradual, and along it the trap disappears beneath overlying sandstone; but in the opposite direction, the ridge has a bold front of columnar trap resting on the sandstone. At the contact with the trap, in a north-and-south ridge, the sandstone appears to be horizontal, because its dip is not northward or southward, but eastward. Only in a transverse section of such a ridge should the underlying sandstone show its true inclined position. These facts are illustrated in the figures on page 302. The general features of the bold trap front are better shown in the following view of West Rock; but the part exposed to view is an *east-and-west* section, so that here the dip of the sandstone is exhibited. Below the bold columnar front of such ridges there is usually a talus of broken blocks of trap; the removal of this talus (for road making) has exposed the sandstone to view. (The nearly horizontal line below the outcropping sandstone is the course of a road.)

The Palisades along the Hudson are another good example of a trap ridge. The bold front of the Palisades faces eastward, the dip of the sandstone being to the westward; and as the ridge has a northward course, the underlying sandstone, which makes about half the height above the river's level, presents a nearly horizontal line beneath the trap.

The *east-and-west* outcrops of trap are generally lines of simple *trap dikes*; that is, of trap within the fissure up which it flowed. On the contrary, each *north-and-south* outcrop in almost all cases is that of an *outflow* of trap from a supply fissure, which is situated somewhere to the eastward. Examples