

of the typical cirque shape, and always strongly suggestive of glacial action [pl. 17]. Precipitous rock cliffs are always a feature on this side, while wholly absent on the gentle north slopes, on which rock outcrops of any sort are infrequent. The writer has often searched the north slope of such a ridge without finding a single satisfactory outcrop, while they are certain to be abundantly found when the summit and back slope are reached.

In the high Adirondacks, in the anorthosite region, these features are not found, the cirques excepted, and these are found along the flanks of the ridges as well as at the back. Stony Creek mountain [pl. 17] is an anorthosite mountain and on the edge of the high peak district, but it exhibits the general features just noted very imperfectly. They are better shown in many of the syenite peaks and in the main seem confined to the ridges of foliated rocks. The syenites always show more foliation than the anorthosites. Yet the writer has been unable to discover any connection between the strike and pitch of the foliation and the trend and pitch of the ridges; and, if any such does exist, it is obscure, though the facts noted above suggest some relationship.

That much of the shaping of the ridges has been done by glacial action seems clear. The northern hills are the ones mainly concerned, those so situated that they would feel the full force of the onset of the southwestwardly moving ice, after its advance, unimpeded by any obstacles, over the plain to the north. It must have impinged heavily on the north slopes of the hills, and the basal currents moving up the intervening valleys must have closely hugged the ridge sides. There would be at first a tendency to wear down all projections, and later to fill up depressions and blanket the slopes with till and moraine stuff. The lee side of the ridge, however, would not be closely enfolded by the ice, so that little smoothing would be done there. In the waning stages of the ice sheet a *bergschrund*, or *crevasse* between the ice and the back slope of the mountain, would be formed, in which a daily variation of the temperature from thawing to freezing would take place during a large part of the year, which would cause a rapid scaling off of the rock along the joints, producing rough, steep cliffs. During the wan-