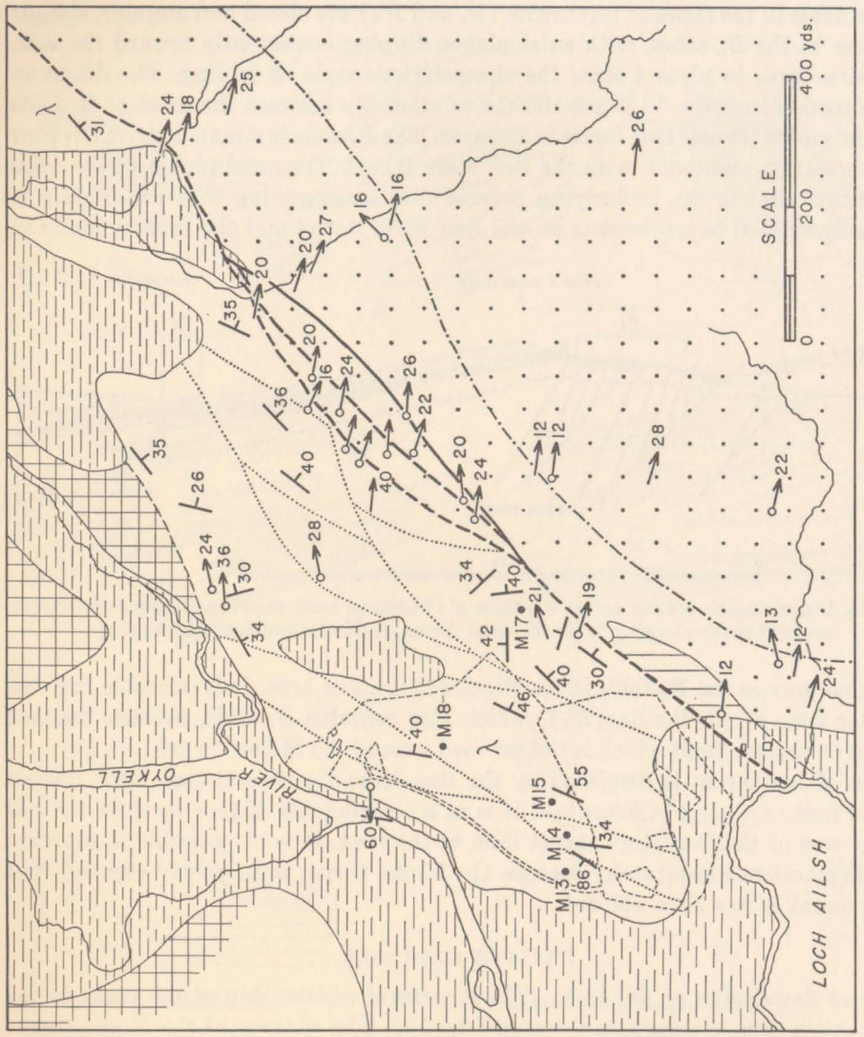

Fig. 15. Structural map of area around Benmore Lodge, northeast of Loch Ailsh. Localities of dolomite specimens are shown by spots and specimen numbers (e.g., M13). North is upward.

a number of ridges which are subparallel to the outcrop of the Moine thrust. These features seem to reflect the structure of the underlying rocks, and it is probable that the ridges represent large lenticles of dolomite separated by movement horizons in the intervening hollows.

Above the Moine thrust there is a zone of primary mylonitic rocks, chiefly quartz schists and blastomylonites, approximately 200 feet thick. The mylonitic rocks are dominantly quartzo-feldspathic, but slices and lenticles of more pelitic composition are locally present. Near Loch Ailsh, a large body of hornblende schist outcrops immediately above the thrust. Farther to the northeast, a thick lenticle, shown on the map (fig. 15), is represented on the Geological Survey maps as foliated acid and basic igneous rocks with Cambrian sediments. These rocks are texturally and structurally similar to other rocks in the zone of the primary mylonitic rocks, and are here considered a part of this zone. There is a gradual transition from the primary mylonitic rocks upward into the more typical "granulitic" Moine schists. The transition is marked by an increase in the grain size and a decrease in the fissility of the rocks; the "granulitic" schists are more slabby and lack the color layering which is a conspicuous feature of the mylonitic rocks.

There is no evidence of appreciable secondary deformation in the primary mylonitic rocks or the schists. Locally the "granulitic" schists have suffered slight crushing, but over most of the area the rocks are devoid of cataclastic structures.

Structural data.—Two types of planar structure are recognizable in the dolomite: one is sedimentary bedding and the other is a schistosity induced by deformation. The two types of *s*-surface are easily distinguished and do not occur together. The bedding foliation (S_b) is marked by thin, fine-grained, or cherty layers which are more resistant to solution than the more coarsely granular dolomite, and stand out on weathered surfaces. These layers may be closely spaced, several occurring in a thickness of 1 inch, but commonly the rock is massive, with no trace of this foliation. Figure 16, *a*, shows the attitude of S_b measured at twenty-two localities. The dip of the beds, though generally at low angles to the east and the southeast, is locally variable. The β-maximum indicates that S_b is folded about an eastward-plunging axis, but the β-intersections show a marked tendency to spread along a great circle, containing strong submaxima. This spread reflects the lack of diversity in the orientation of the foliation. In the western part of the area the dip becomes steeper until, in the river Oykell at the old footbridge, and to the south of this, the bedding dips steeply toward the west. Visible folding of S_b is not common, but at three localities medium-scale folds were recorded. The orientation of the folds and the only penetrative lineations observed in the dolomite are shown in figure 16, *b*. Most of the folds and lineations plunge to the east, parallel to the β-axis, but at the locality in the river Oykell mentioned above, there are folds that plunge steeply to the west. The folds are all closed and overturned to the north (fig. 17, *a–b*). The westward-plunging folds are of similar style to those at the other localities.

Close to the Moine thrust, S_b is obliterated and the second type of foliation is developed. The orientation of this foliation is very uniform, dipping at 20° to 30° toward the east-southeast, parallel to the Moine thrust. It is a very fine lamination