Freemansburg prevents the opening of many other quarries. Lerch's quarry along Monocacy Creek just north of Bethlehem, recently worked by T. H. and C. H. Greman, has long been worked for crushed stone. The stone belongs to the Allentown formation and is a hard dolomite with some sericite along the bedding planes. Cryptozoon proliferum is abundant through the quarry and ripple marks, oolite and edgewise conglomerate are common. A fine anticlinal fold and a prominent fault are exposed.

The Beekmantown limestone has been crushed for road metal and for concrete along the Tatamy-Nazareth road, just west of Tatamy and about a mile east of Nazareth. The stone is interbedded high- and low-magnesian. Both varieties are suitable for crushed stone. The Trumbower Co., Inc. has been the principal operator in this area.

In the vicinity of Northampton and Catasauqua, quarries in the Beekmantown were once worked for fluxing stone for blast furnaces at Hokondanqua, Catasauqua, and Parryville. Later they were used for cement rock where the high-calcium beds could be separated. The only one still in operation is that of the Northampton Quarrying Co. about one mile southeast of Northampton. The quarry contains both low-magnesian stone that is at times separated and sold to the nearby cement companies, and hard, dark blue, dolomitic limestones that are suitable only for crushed stone but particularly adaptable for that use. In general the beds dip steeply to the south but folds and faults produce a complicated structure. The structure, however, is simple as compared with a quarry about half a mile to the west where the beds have been so intricately folded that it is extremely difficult to determine what has taken place. The quarry face is about 90 feet high. The clay overburden over part of the quarry is heavy. Some analyses of the stone sent to blast furnaces are given in the table of analyses at the close of this chapter. Some of the stone sent to cement plants contains over 89 percent CaCO₃ and 3.14 percent MgCO₃.

Limestones for cement.—Since the Jacksonburg formation in certain places contains too small an amount of CaCO₃ for the manufacture of portland cement, several companies have been compelled to bring in some high-grade stone from other sections. Naturally, they have searched for stone of similar quality in proximity to their operations. Some suitable stone has been obtained in the Beekmantown, which is in contact with the Jacksonburg, but interbedding of this high-grade stone with magnesian strata has made their separation difficult. In 1938 a quarry in Berks County is producing low-magnesian stone from beds thick enough to permit steam shovel operations. So far,