At one point in the south wall the underlying Beekmantown dolomite has been faulted upwards and extends about fifteen feet above the floor of the quarry.

The two divisions of the Jacksonburg are represented in the quarry. The cement limestone is exposed in the southeast part of the quarry and consists of the usual coarsely crystalline gray to black limestone. An unusual feature is the somewhat gnarly character of the limestone and its development into lenses separated by thin beds of calcareous shale that bend about them. Although the limestone itself contains over 90 percent CaCO$_3$, the presence of these thin interbedded shales reduces the average composition considerably.

The cement limestone extends across the quarry and the new 60-foot level to be developed will yield this type of stone over a considerable extent of the quarry. The cement limestone dipping to the northwest disappears beneath the cement-rock member of the Jacksonburg, which is considerably lower in CaCO$_3$. Much of it contains only about 71 percent CaCO$_3$.

It would be possible to work the quarry in such a way as to obtain a mix but in view of the fact that the cement limestone is limited in quantity, a plan has been adopted to push the face back regularly, even though it necessitates using a great amount of stone below the mix, and requires the addition of high-grade limestone that is brought from Annville, Pa. The amount of limestone added varies but runs in the neighborhood of 10 percent.

Although the quarry floor in 1938 is about twelve feet below the level of the water in the Delaware River nearby, there seems to be practically no seepage from the river. The water pumped, which is not great, appears to be ground water, probably coming from the hills to the north. The stone in the quarry seems to be almost everywhere very tight. There is comparatively little crumpling, and calcite and quartz vein matter is much less abundant than in most of the cement quarries of the county.

There are two mills on the property but only one is now in operation. It contains nine rotary kilns of different dimensions.

*National Portland Cement Company.*—The newest cement plant in the county, built by the National Portland Cement Co., began operations in 1935. It is about midway between Bethlehem and Nazareth along Monocacy Creek.

The quarry is in a down-faulted (possibly some down-folding as well) block of Jacksonburg limestone in an area of Beekmantown limestone. The known area of Jacksonburg is limited, as shown on the map. Some of the bounding lines at the present time are somewhat indefinite because outcrops are rare.