by the Pennsylvania Cement Company, organized in 1889, which acquired all the property and assets of the American Improved Cements Co. A new mill, known as the Pennsylvania Mill, was built close to the crossing of Coplay Creek by the Ironton Railroad. In 1890 or 1891 the name was changed to the American Cement Company of Pennsylvania. This was the operating unit and a subsidiary company of the American Cement Company of New Jersey.

Several more mills were built. The first was the Columbia, located between the railroad and Coplay Creek about two-thirds of a mile south of Egypt. This was followed by Giant Mills Nos. 1 and 2, a short distance north of the Pennsylvania Mill.

So far as determined, the first portland cement was made in Giant Mill No. 2, although it is possible that some was produced in one or more of the earlier mills.

In 1903 the Central Mill was erected almost directly west of the old Columbia Mill. This was a much larger mill than the preceding ones and the adjacent quarry is of large size. It is now idle, but can be put into operation if needed.

In 1905 the Reliance Mill, at present the only operating unit, was built about half a mile southwest of Egypt. Some of the buildings of the other mills are still intact and used for storage.

In 1911 the American Cement Company of New Jersey and its subsidiary, the American Cement Company of Pennsylvania, went into receivership, but continued to operate on a reduced scale. A reorganization was effected in March 1913 under the name of the Giant Portland Cement Co. At present the company has 14 kilns, six of which are 7 1/2 feet in diameter and 125 feet long and eight that are 6 feet in diameter and 60 feet long. The dry process is in use and the annual capacity is 2,100,000 barrels. Types 1 and 2 of the recently established five types of cement are made but several varieties of each type are produced.

The sidehill quarry at mill level covers about 26 acres. The height of the quarry face ranges from 75 to 125 feet.

An average analysis of the quarry stone is as follows:
\[
\text{SiO}_2 15.60; \text{Fe}_2\text{O}_3 1.50; \text{Al}_2\text{O}_3 6.00; \text{CaCO}_3 72.70; \text{MgCO}_3 4.48; \text{SiO}_2 \text{ ratio } 2.01.
\]

For a while the company worked a property known as the Lobach quarry south of Ormrod to obtain high-grade limestone. Underground mining was not successful, largely on account of the badly folded and faulted strata and the presence of interbedded dolomitic beds.

**LEHIGH PORTLAND CEMENT CO.**

The Lehigh Portland Cement Co. was organized in 1897. It has developed into one of the largest cement companies in the United States with plants in Lehigh, Northampton, and Lawrence counties, Pennsylvania, and in New York, Maryland, Virginia, Alabama, Indiana, Illinois, Iowa, Kansas, and Washington. Five plants have been built in Lehigh County, of which three are located at Ormrod and the other two at West Coplay and Fogelsville.

The Ormrod A plant began operations in Aug. 1898 and continued until Sept. 1927. It was abandoned in 1930. West Coplay started in