different beds this variation in the amount of magnesia results in the formation of a banded structure that can be readily distinguished at a considerable distance. On weathering those beds with the greater amount of magnesia become much whiter than those with small percentages. These limestones have been quarried in many places for lime burning, for furnace flux, building stone, and crushed stone.

**Beekmantown limestone.**—The Beekmantown limestones generally occupy the greater portion of the northern half of the limestone valley. They consist of interbedded low- and high-magnesian limestones. Some beds are sufficiently low in magnesia to be used in portland cement manufacture, although the interbedded high magnesian stone renders it difficult to avoid a mixture. These limestones have been used mainly for lime burning, for flux, for crushed stone and for building purposes and to a minor extent for cement manufacture.

**Jacksonburg limestone.**—The most impure limestones of the county and yet the most valuable constitute the Jacksonburg formation. These are discussed under Cement.

**Uses**

The limestones of Lehigh County, exclusive of the argillaceous variety described under Cement, are widespread and have been quarried in scores of places. It is only a slight exaggeration to say that a quarry has been opened on every farm in the limestone areas.

The limestones of the county have been used for building purposes (described under Building Stones), for the manufacture of lime, for flux, and for crushed stone. The earliest use was for building stone and for lime. The first settlers opened small quarries where they got stone for their own use to burn lime for mortar or for fertilizing the soil. Those farmers without limestone on their own property sometimes hauled the stone from their neighbors’ farms and burned it in small kilns near their residences.

When the iron mines were opened in the region and furnaces were erected there was a demand for fluxing stone, and several quarries of considerable size were operated for this purpose. With the advent of portland cement and the construction of concrete roads, bridges, and buildings, the demand for crushed stone for aggregate developed. Each of these uses has followed more or less in the order named and at the present time crushed stone is the most important. Some quarries have at different times been worked for each of the uses mentioned but seldom for more than one at the same time.

**HIGH- AND LOW-MAGNESIAN LIMESTONES**

Inasmuch as the amount of magnesia present in the limestones renders them either fit or unfit for specific purposes it is useful to have a quick method of roughly determining the composition without a chemical analysis.