is neither sold nor disposed of in such a manner as to damage other property.

The chief reason why the Lehigh Zinc Co. closed its mines, which consisted of the Ueberroth, Old Hartman, New Hartman, and Three Cornered Lot mines, in 1876, was its inability to compete with the New Jersey Zinc Co. in the manufacture of zinc oxide made from the zinc ores of Sterling Hill and Franklin Furnace, N. J. or with the companies operating in the Central States in the production of spelter. The Lehigh Zinc Co. owned the Wetherill patents for the manufacture of zinc oxide and had previously prevented the New Jersey Zinc Co. from producing zinc oxide from the New Jersey ores by bringing suit for infringement of patent. Wetherill patents having expired in 1876, the New Jersey Zinc Co. was about to enter the field with new oxide furnaces. As it was costing the Lehigh Zinc Co. from $4 to $6 for each ton of ore raised merely to pump the water from the mines, while the ore at Sterling Hill, according to the Engineering and Mining Journal of Sept. 30, 1876, could be loaded on the cars at a cost not exceeding 75 cents per ton, it was foreseen that competition would be ruinous to the Lehigh Zinc Co. An agreement was therefore made by which the Lehigh Zinc Co. closed its mines and contracted with the New Jersey Zinc Co. for 1,000 tons of ore a month from the New Jersey mines for a period of five years.

Description of Mines

Ueberroth mine. The Ueberroth mine was the largest of all the Friedensville mines (pls. 29, 30). It was worked continuously from 1853 to 1876 and for short periods in 1886 and 1891 and produced about 300,000 tons of calamine and smithsonite ore. Oxidized ores were found to a depth of 150 feet between loose blocks of limestone, some of enormous size. In no other mine in the region did the oxidized ore continue to such depths. At that depth, however, the limestone became solid and the ore veins, which were 12 to 40 feet in width, had well-defined walls. The limestone strata and the main ore beds which lie between them are practically vertical in the Ueberroth mine and strike about N.80°E.

Two very important veins in this mine, known as the Stadiger and Trotter, were worked continuously for a distance along the strike of about 1,000 feet. Another productive ore body was known as the Blende vein. This vein was not worked so extensively on account of the larger amount of sulphide ore which it contained. At the deepest level this vein was well-developed and yielded ore containing about 30 percent zinc. One-third of the ore was rich enough to be sent directly to the smelters; the remaining two-thirds, however, required concentration.

Several shafts were sunk at this mine but these have been destroyed by caving. At present the old open pit, which is approximately circular and measures about 480 feet in diameter, is filled with water to within about 30 feet of the surface. Nearly all the buildings which were formerly near the mine have been completely razed; the pump house and office, the only ones remaining, are in ruins. (See Pl. 27.)