485

tons of pure iron per day, while in the early days, two or three tons were considered a good day's work.

Smelting iron consists merely of applying intense heat to the ore. This melts both the iron and the rock, but iron, being much heavier, runs to the bottom, while the liquid rock floats to the top. The molten iron is drawn off through holes in the bottom of the furnace and then the waste matter--rock and other impurities--is drawn off through another vent. Slag, the by-product of smelting, is used for making roads.



Oxford Furnace as it looks today. At the extreme left can be seen the remains of the old furnace. The building in the center was the stamping mill, and the church at the extreme right was once the gristmill.

During the first century of Oxford's existence, the air that was forced through the fire was cold, and the furnace was called a "cold blast" furnace. Later it was found that better results were obtained by using heat, and so a method was devised whereby the air was heated before it got to the fire. This process was called "hot blast."

The Oxford Furnace was located to take advantage of a vein of ore containing 60 percent of iron. Some of the shafts, at the outset, were sunk close to the furnace, but later much ore was taken from the Kisbaugh Mine, located several miles north near Great Meadows and the Pequest River.

There were other mines three-quarters of a mile south. Among these was Car Wheel Mine, named for an industry established in 1840 when railroads were being built. Its founders were the Scranton brothers, George and Selden, for