## STORIES of New Jersey

whom the city of Scranton, Pa., was named. They found the Oxford pig iron well adapted to their needs and operated the furnace many years after 1839, when they bought the tract from the Robeson family.

Oxford ore was described as magnetic and black in color. Its iron in the Colonial period was recommended as the best for making steel, due largely to the presence of carbon in the ore. Britain, however, did not encourage the more finished forms of industry here, and the Governor reported only one steel plant in the Province in 1768. The making of crude pig iron which could be taken to England for making into hardware was not forbidden.

Oxford supplied cannon balls to the Province of New Jersey in the French and Indian Wars, 1754-1763. Some of these have been found among the cinder heaps. Another product of this period was the chimney firebacks in several patterns. These were cast in molds. One has a pattern of the British coat of arms with the lion and the unicorn and bears the date 1746. Another shows a Colonial couple preparing to dance. Some of these firebacks have been found in old houses in Northern New Jersey. Most of Oxford's iron, however, was in the shape of "pigs" or rough cast blocks that were pounded into other forms at New Jersey forges.

The furnace also shipped its pigs to Philadelphia, where some of them became ballast for ships that had unloaded their cargoes. For this shipment the iron was carried in oxcarts about four miles to the Delaware River below Belvidere. Here at Foul Rift, the iron was placed aboard Durham boats for the two-day voyage to Philadelphia.

The Durham boat was the invention of Robert Durham, and designed to carry Warren County goods through the Delaware River rapids. They were flat-bottomed with sharp ends, some of them 66 feet long, 6 feet wide and 3 feet deep, capable of carrying 15 tons. The first one was built in 1740 and so many others followed, that at one time there were several hundred on the river, employing over 2,000 men. A crew of six was required to propel, or steer, them by oars or poles, though they used sails at times.

Throughout the Revolution, Oxford was safely sheltered by Washington's line of defense along the Watchung Ridge, 30 miles to the southeast, and continued to supply the Continental Army with cannon balls.

Production at the Oxford Furnace declined about 1807, and two years later it was bought by Morris Robeson, grandson of Jonathan Robeson. Its production had risen to three tons of pig iron a day, requiring more than 1,000 bushels of charcoal to smelt it. The sides of Scott's Mountain and other hills around the works became bare of trees. Its 4,000 acres of woodland were exhausted. Soon the ironmaster had to close the furnace for lack of fuel, "go out of blast" as the workers sadly said. For 20 years it was idle or produced only chimney backs and stoves. Many of the forges that used its pig iron fell into ruins.

Building of canals brought about a change for the better in New Jersey industry, including iron. When the Horris Canal was opened in 1831 and the Pennsylvania canal system was completed, they brought the new fuel, Pennsylvania coal, to New Jersey. Oxford then sprang into new life. About this time the "hot blast" was invented by William Henry, manager of the works. Aided by larger bellows this increased production to four tons and more per day. It was necessary to enlarge the furnace, and soon the output reached 10 tons per day.