

Schuyler Copper Mine Chronology

Source: <http://northarlington.bccls.org/nahistory.html#History>

1668 - A patent is issued to Captain William Sandford for land between the Passaic and Hackensack rivers that becomes known as New Barbadoes Neck.

1712 - Part of this subsequently transferred by Sandford to his uncle, Major Nathaniel Kingsland, is deeded to Arent Schuyler.

1713 or 1714 - A large stone found near Schuyler's house proves to be copper ore.

1715 - Mining begins. Brigadier General Robert Hunter, governor of New York and New Jersey, writes to the Lords of Trade in London (November 12, 1715) that there is "a Copper Mine here brought to perfection [producing] about a ton in the month of July or August last, of which copper farthings may be coined."

1721 - Frank Harrison, surveyor of the port of New York, writes to the Lords of Trade that "Copper Ore now rises very rich and in great plenty in a new-discovered mine of one Mr. Schuyler in New Jersey."

1730 - Following the death of Arent Schuyler, the mine is inherited by his sons Peter, Adoniah, and John, the last of whom takes on management of the mine for himself and his brothers.

1731 - The mine, by now, has shipped 1,386 tons (roughly 100 tons a year), making the enterprise a highly profitable one. Most of the ore at this time is extracted by drift mining - digging into the side of the slope between meadows and high ground.

1734 - To ensure that the value of copper ore accrues to British interests, the New Jersey legislature imposes a substantial duty on all copper not sent directly to England for smelting.

1743 - By now, drift mining is no longer productive, and the facility has been converted to shaft mining. In this year a worker named Malachi Vanderpoel is reported killed in a fall down a 100-foot shaft. This is apparently what came to be known as the Victoria Shaft, sunk about 1735, "reputed to be the first shaft ever sunk in what is now the United States" (quoting the Annual Report of the [N.J.] State Geologist, 1900).

1748 - The mine has now been worked as deep as hand and horse power can keep it free of water. Colonel Schuyler, aware of the use of steam power in England, orders a steam (or "fire") engine sent from England.

1749 - The mine is visited in the fall by Benjamin Franklin, who writes (in a letter to Jared Eliot, February 13, 1750) that the mine is not being worked because of flooding and that "they [wait] for a fire-engine from England to drain their pits."

1753 - The engine arrives in New York in September in the company of a young engineer named Josiah Hornblower and is subsequently taken to the Schuyler property, to the mine's deepest shaft, later known as the Victoria Shaft.

1755 - Owing to various delays, it takes a year and a half to assemble the engine. Sometime early in 1755 (probably in March), it is set in operation, making this the first time steam power has been employed in the New World. The Victoria Shaft is about 100 feet deep but is made deeper as work progresses. As it becomes apparent that the engine cannot keep this shaft dry, other shafts are worked.

1760 - A new brass cylinder for the engine is shipped from London.

1761 - Hornblower and a partner named John Stearndall lease the mine from Schuyler, agreeing to pay one-seventh of the ore as rent.

1762 - The building housing the steam engine is burned to the ground by a fire "conjectured to be by the carelessness of one of the workmen" (New-York Mercury, March 22, 1762). The engine itself, however, may not have been seriously damaged.

1765 - Stearndall and Hornblower are joined by Philadelphia interests and continue the mine for two years. Then for two years it lies idle until operators from New York revive it.

1768 - A fire "on Monday Night last" (New York Gazette and Weekly Mercury, October 17, 1768, announces the sale of his estate including, presumably, his interest in the mine.

1793 - The mine, which lay idle during the Revolution, is leased from Arent Schuyler, John's son, by the New Jersey Copper Mining Association, whose principals are Nicholas Roosevelt, Jacob Mark, and Philip A. Schuyler. The lease required lessees to "erect and rebuild a sufficient steam engine." The company relies heavily on German miners who will work for low wages.

1801 - The Soho Company (Nicholas Roosevelt, Arent I. Schuyler, and others) is incorporated, apparently to succeed the New Jersey Copper Mining Association in working the Schuyler mine. But the mine is abandoned a few years later, and the old steam engine is dismantled and sold in pieces. The boiler (now of copper) is brought by interests in Philadelphia. The cylinder (iron) is believed to have been taken by a Mr. Crane, a foundry owner in Newark.

c. 1814 - The cylinder is purchased by A.W. Kinney, a Newark machinist and spring manufacturer. He cuts it into two pieces, each roughly four feet in length. One he uses as a pipe for a waterwheel at his establishment; the other he sets aside as a curiosity, apparently presuming it to be a relic of the first steam engine.

1822 -Parker Cleaveland's "An Elementary Treatise on Mineralogy and Geology," published in Boston, reports (Vol. 1, p. 557) that "Schuyler's mines have not been worked for several years, although the ore is considerably abundant; some shafts were sunk 300 feet deep."

1824 - The Schuyler Copper Mine Company is incorporated under the laws of New Jersey, but reports differ as to whether or not any mining takes place at this time.

1825 - The mine is leased to business interests that apparently invest a substantial sum installing a new steam engine and deepening the mine shafts. But the pump breaks down on opening day, and the company forfeits its lease.

1833 - The mine is taken over by a British company, with William Tregaskis as superintendent. As told by British author John Finch: "The mines are now reopened... it is the only copper mine worked in the United States."

1836...- Sometime after 1836, A.W. Kinney's shop is sold to David M. Meeker, an iron founder, and with it, the four-foot section of cylinder supposed to be a relic of the original engine.

1847 - The Passaic Mining Company begins operations in August 1847, clearing the old works, erecting new buildings, and installing new machinery including a 40-horsepower steam engine. Despite a substantial investment, the venture is not a success.

1855 - A Philadelphia company, of which one Theodore Moss is engineer, works the mine for two years, with little success.

1859 - The Brisk Company of Philadelphia acquires mining rights. A cleaning of the Victoria Shaft reveals a hoard of stolen loot, mostly silver, apparently taken from Newark residences. Sometime after this, rights are acquired by the Consolidated Mining Company, which operates the site as the Victoria Copper Mine, sinking no new shafts and using old machinery but employing as many as 200 workers at a time.

1862 - A cave-in deliberately caused by disgruntled workers.

1863 - A new company, the New York and New Jersey Mining Company, takes over. The Victoria Shaft is sunk to its maximum depth of 347 feet, and a long drain tunnel is dug from the shaft to the meadows. The company employs between 150 and 200 men. Ore worth more than \$10,000 is reported to be produced in one day.

1865 - The pump breaks suddenly (February 1865) and the Victoria Shaft fills with water. Workers flee, leaving their tools behind. The mine is abandoned and remains in disuse until 1892.

1866 -A cave-in engulfs a barn built over an old mine shaft.

1876 -The purported relic of the original Schuyler steam engine, the four-foot section of cast iron said to have been part of the cylinder, is displayed at the Centennial Exposition in Philadelphia by D.M. Meeker and Sons. With it is a letter from Joseph P. Bradley, Associate Justice of the U.S. Supreme Court, certifying it as part of "The first ever (steam engine)erected on this continent," (Bradley is the grandson-in-law of Josiah Hornblower.) Sometime after this, on David M. Meeker's death, the relic is given to Bradley's son, Charles, of Newark, who in turn presents it to the New Jersey Historical Society.

1889 - The purported relic now is presented to the Smithsonian Institution by the New Jersey Historical Society. In a letter to Samuel P. Langley, secretary of the Smithsonian, Justice Bradley confirms authenticity of the relic.

1892 - The New York and New Jersey Mining Company attempts to revive the mine. In an effort to economize, it tries to remove and reuse timber pillars. There is another cave-in (perhaps a number of them). Operations cease once again.

1899 - The mine property is acquired by the McKenzie family of Rutherford.

1900 - The Arlington Copper Mining Company is organized on February 3 by Charles L. Dignowity of Boston and William C. Eakins of Chicago, with William McKenzie of Passaic as president, Henry G. Bell of Rutherford as treasurer, Eakins as secretary, and Dignowity as general manager - McKenzie supplying a substantial part of the capitalization, reported to be \$2.5 million. The company, expecting that a new metallurgical process devised by Dr. N.S. Keith can make the old mine productive once again, installs a new refining plant to produce copper by electrolytic extraction. But the process does not prove commercially successful. Arlington Copper stock that has a par value of \$10 falls to half of that by the end of the year.

1901 - On February 19 Arlington Copper stock is reported on the New York Stock Exchange, apparently for the last time, at \$4 a share.

1901 - In November all mining operations are suspended. No copper has been produced.

1903 - The mine property, totalling 93 acres, is sold at auction September 30 for the benefit of creditors and bondholders. The buyer is James E. Pope of New York.

1906 - Arlington Copper stock is recorded as valueless.

c.1915 - With North Arlington in a period of relatively rapid development - and since no sewer system has yet been constructed - real estate developers propose using the old mine as a giant, ready-made cesspool. No one in authority takes the idea seriously.

1923 - James E. Pope leases the mine area to a mushroom grower. The project apparently fails.

1930 - Real estate developers Wilkinson and Solomon purchase the mine tract for some \$70,000 and begin building homes.

1936 - Romm's History of North Arlington reports that "many of the mine's shafts remain passable today."

1949 - The mine is sealed permanently after several North Arlington lads recount to their mothers tales of crawling through the old mine shafts and tunnels, and the mothers take their fear and dismay to the borough council.

1989 - Atop the old mine, where decades ago homes were built with no thought to the potential consequences of development, a series of cave-ins causes grave concern. But speedy action, beginning with the borough

government, prevents any widespread damage. All cave-in sites are eventually sealed. The only noticeable loss is a large tree that plunged into a gaping hole at what was once the Victoria Shaft.