

ISAAC NEWTON BARTRAM

The first notation concerning kaolin deposits in the land records documents that Jesse Stanton leased land on his Pine Swamp farm to Isaac Newton Bartram for the purpose of digging fire clay and fire sand.¹ The entry, dated January 8, 1868, also stated Bartram had the right to erect buildings and sell sand to manufacturers. Under the terms of the lease, Stanton retained the right to work his farm and Bartram was to pay two dollars per ton for clay and one dollar per ton for fire sand.

In the Sharon Land Records entry, two statements “digging fire clay and fire sand” and “sell sand to manufacturers” clearly indicate Bartram’s interest in the kaolin deposits. Suitable sand for the formation of casting molds at local blast furnaces was a critical ingredient in the iron making process. Despite the abundance of sand in local glacial deposits, the product was unsuitable for casting pig iron. The grade of sand used for molding required several qualities. It had to be infusible, essentially dry and yet of a consistency to hold its form under high temperatures. The sand could not contain much clay since the iron oxides caused it to fuse too easily. Any sands that produced gases while heating were also unsatisfactory because of their tendency to destroy the castings. With the dearth of suitable molding materials in the region, sand used for molding was transported by horse and wagon from the Hudson River area. This transportation resulted in additional cost for the manufacture of pig iron and foundry products. In later years sand from the Pine Swamp region on Sharon’s Mine Mountain was used at some furnaces, particularly at Lime Rock Furnace #2.

Isaac Newton Bartram (1838-1913) would prove to be the foremost craftsman, industrialist, manufacturer, politician, public servant and business entrepreneur of nineteenth century Sharon. Born in Redding, Connecticut to Isaac Hamilton (1785-1873) and Lydia Platt Bartram (1795-1873) of Sharon on March 25, 1838, I. N. Bartram was the twelfth of thirteen children. Eleven female siblings, Betsy M. 1812, Mary J. 1814, Urilla A. 1816, Sally H. 1818, Lydia (died in infancy), Lydia B. 1822, Abby 1824, Adaline 1826, Lucy M. 1829, Huldah 1831 and Laura in 1833 preceded him in birth. Bartram’s only brother was Ezra Albert Bartram, born in 1843. (1843-1928). He also had a cousin Ezra Harris Bartram (1820-1892) who became a resident of Calkinstown, owner of the Calkinstown Store and a holder of properties used for charcoal production.²

Moving to Sharon in 1856, I.N. Bartram worked as a mason. He married Helen Dalphine Winens (1842-1924) on March 3, 1861, the union resulting in four offspring, Phebe M. in 1867, twins not surviving in 1872 and Blanche W. in 1875.

Known variously as “I.N.,” “Newt” and “Newton,” Bartram became a premier entrepreneur in Sharon and the entire Tri-State region. Between 1868 and 1896, he was elected representative to the Connecticut General Assembly on six occasions and served one term as state senator. He also served as Sharon Magistrate.

In addition to serving as the contractor, engineer and mason in the building of the Sharon Town Hall³, Bartram was involved with the first electric generating plant in town, a developer of

¹ Sharon Land Records, V33-102.

² I. N. Bartram’s descendants living today in Sharon include, Kenneth Bartram of Low Road a great nephew, Barbara Bartram of Millerton Road a great niece, Thomas Bartram of Rolling Hills Road a great-great nephew and his daughters great-great-nieces Erin and Emily Bartram.

³ The original cornerstone of the town hall showing “1875 - I. N. Bartram – Builder” is displayed on the second floor of the building.

the Sharon Water Company and an active stockholder in the Sharon Valley Iron Company, the Sharon Telephone Company and the Sharon Drainage Company. Bartram also converted and moved a large residence on Upper Main Street establishing the Bartram Inn that he operated with Helen for years. Today the former inn building and associated structures serves as the Bartram Apartments. Isaac Newton Bartram was also contracted to engineer and supervise the construction of iron works including the Roxbury Furnace (restored), Sharparoon Furnace in Dover, New York (standing to this day) and East Canaan Furnace #3 in 1872. While documentation has not been found, it is believed that Bartram also rebuilt the Sharon Valley Iron Company blast furnace in 1873 and constructed the Chauncey Morehouse Sharon Valley Lime Kiln during the same period. In the 1880s, he also was the builder of the Israel Putnam Memorial Park in Redding, Connecticut.

I.N. Bartram's diverse and expert capabilities were well-acknowledged in advertisements and newspapers of the day. The F. W. Beers Atlas of Litchfield County, 1874, carried a number of industrial and manufacturing advertisements including the following:

Bartram, I.N., Furnace Architect and Builder.

Also, furnisher of First class Fire Stone for furnace hearths, round and square. Competent Foreman and Workmen furnished for all kinds of furnace work and masonry in general. References: Barnum Richardson Co., Lime Rock, Conn. Richmond Iron Works, West Stockbridge, Mass.

Two articles in *The Harlem Valley Times* extol the efforts of Bartram and his partner Charles E. Squires in Chatham, New York:⁴

Saturday, September 12, 1885

Messrs. Bartram and Squires,⁵ who have the contract for repairing the furnace of the Chatham Furnace Company, have also secured the contract for building a majestic arch-bridge over the Chatham Creek in the village of Chatham Four Corners, Columbia County, N. Y. They are expert furnace, bridge and mason builders, and their name and fame as such is spreading fast and wide.

Saturday October 17, 1885

I. N. Bartram, Esq., is quarrying out stone with his gang of men in the quarry at Sharon Valley⁶ for the great arch bridge which is to be built by Bartram & Squires, our masons and bridge builders, at Chatham, Columbia County, N.Y.

⁴ Waldow, Neil C. ("Cliff"); Kents Store, VA, 7/8/2002.

⁵ Charles E. Squires of Bartram & Squires (or Squires & Bartram, Sharon Land Records) lived in Norwalk, Fairfield County, Connecticut, V39-359; Squires appears to have been a business partner of I. N. Bartram only on occasion such as the large bridge building project in Chatham, N. Y.

⁶ This quarry appears to be that of Chauncey Morehouse, located immediately southwest of the Morehouse Lime Kiln, extant on Sharon Station Road. Though yet to be documented, Cliff Waldow and this writer suggest the kiln was likely constructed under the supervision of I. N. Bartram.

In addition to his leadership roles and varied activities, Bartram was one of the largest property owners in Sharon. While he owned and leased land for his various industrial ventures he was also involved in land speculation. Under his own name, in partnership with Helen, as Squires and Bartram, and other combinations, the Sharon Land Records list sixty-two entries as a grantee and eighty-six as a grantor.

On Mine Mountain and Mount Easter, I.N. Bartram was involved in the production of “firestone,” the rock type used to construct the foundation and outer casing of the hearths used in blast furnaces. The importance of a quality hearthstone was well known to ironmasters. In 1841 Massachusetts State Geologist Edward Hitchcock wrote⁷:

“a good firestone requires a union of qualities which is not very common ... a rock must be not only infusible, but not liable to crack and exfoliate ... although pure quartz resists fusion well, it is liable to crack. The rock that has been most extensively used in the furnaces, and with most success, is a finely granular quartz, in which a small quantity of mica exists in layers ... “

Hitchcock’s reference here was to the bedrock most suitable for firestone in the region, the Dalton formation. This formation included a schistose quartzite that could withstand extreme temperatures without cracking. Formed in late Precambrian and lower Cambrian times, the Dalton was originally composed of thick beds of sand, gravel, mud and silt, deposited along ancient beaches unconformably over the Precambrian basement gneiss. As eons passed the Dalton sediments were changed by heat and pressure to sandstone, sandstone conglomerate and sandy shale. During the Taconic orogeny beginning some 435 million YBP, the formation was further altered to metamorphic rock. By the end of the Acadian orogeny, 360 million YBP, the formation had reached its present level of metamorphism, including quartzite, metaconglomerate and schistose quartzite.

I.N. Bartram’s expertise in the production of hearthstones for blast furnaces was almost legendary. A review of the forty-four blast furnaces in the Upper Housatonic Watershed, from Lanesborough, Massachusetts south to Kent, Connecticut and Dover Plains (NY), indicates the exclusive use of schistose quartzite for hearthstones. The quartzite hearths were lined with refractory brick made from special clay mined in the Hudson River Valley. Large blocks of quartzite were used in the foundation under the hearthstone at the interior bottom of the furnace. In the study of other blast furnaces in the Upper Housatonic Watershed, it has been noted that some Dalton rock was also in evidence in the stacks, especially in corner construction.

Since blast furnace hearths required rebuilding every four to six years, and even more frequently where there were problems, the hearthstone business of I.N. Bartram required large amounts of quartzite.⁸ To meet the demand, at one time or another, quarrying took place at three locations on the mountain. Two were on the east slope of Mount Easter, one north and the other south of present Clay Beds Road. The third was on the west side of Mine Mountain above White Hollow, east of Gavel Cabin Road. Quartzite from Mine Mountain proved to be less satisfactory for firestone since the stone was not as good quality, being too hard to withstand the intense heat.⁹

⁷ Hitchcock, Edward; ; Final Report on the Geology of Massachusetts, J. H. Butler, Northampton, 1841.

⁸ Bartram’s business of providing furnace hearths at one point extended as far west as Michigan.

⁹ Wilbur, James B.; Personal Papers, c1930; Myers, Helen; Interview with Joseph J. Marcy, Sunday New Yorker, 1958.

Even before the first digging of kaolin, Bartram's firestone business on the mountain was very successful. One entry in the Barnum and Richardson notes included:¹⁰

Newton Bartram agrees this 8th of May, 1865, five hearths as stated below, price to be \$551 each when put in by Bartram and furnishing board and help

For Barnum and Richardson Co. Canaan	2
“ Forbes Iron Co.	1
“ Lime Rock Iron Co.	1
“ Cornwall Bridge Iron Co. Cornwall	1
“ Millerton Iron Co. Millerton	1

Bartram's order amounting to \$2,755 (worth \$304,623 in purchasing power in the year 2001) is indeed impressive when at the time the average quarry man and ironworker typically earned one dollar for a ten-hour day. At the time of the agreement with Jesse Stanton, Bartram had about twenty-five men working at the quarry south of present day Clay Beds Road, the nearest one to the kaolin deposits (about 0.7 miles distant). These earlier kaolin diggings were about 1,000 feet east of the water-filled open pit mine visible from Clay Beds Road today. Location in close proximity allowed Bartram to use his men to work with both the quartzite and kaolinite operations.

Mining at the quarry, extending east and west on the slope for about three hundred feet was primarily surficial. While very hard and difficult to work, quartzite could be broken along even planes. Drilling by hand chisel in winter, the drill holes were filled with water and the night freezing fractured the rock along flat surfaces. In the summer black powder ignited in the drill holes was used to break the rock. The quartzite was then roughly dressed before being hauled by oxen pulling stone boats down the mountain to the railroad to be shipped to various ironworks.

From quartzite quarries on Mt. Easter and adjoining Mine Mountain, I.N. Bartram at age thirty was already producing hearthstones for blast furnaces throughout the Salisbury Iron District in Connecticut, Massachusetts and New York State.¹¹ But locally, the cost of shipment of casting sand from the Hudson River area was still a problem for blast furnace and foundry owners. While sands along the west side of the Housatonic River in Sharon had been experimented with, none had been proven satisfactory in the pig iron casting process. Bartram had undoubtedly considered the mixtures of the clays and fire sands of Mt. Easter as the answer to the casting sand problems of the region. In addition, Bartram was a stockholder in one or more of the Barnum Richardson Company's holdings and the BRC was his best customer.

While details have not been found concerning the success of I.N. Bartram's use of casting sand from Stanton's property, former collier Joseph J. Marcy confirmed the use in the following statement:

“A special kind of sand taken from Pine Swamp near Lime Rock, Connecticut, covered the floor of the casting house. This sand was gray and especially fine. When it was wet the grains stuck together. Water was pumped from the swamp to make it possible to get this sand.”¹²

¹⁰ Barnum & Richardson Files, Dodd Library, University of Connecticut, Storrs, CT.

¹¹ Later Bartram's hearth business would extend as far west as Michigan.

¹² Myers, Helen; Interview with Joseph J. Marcy, Sunday New Yorker, 1958.

On January 25, 1869, with the original Stanton/Bartram agreement still in force, a new partnership concerning the same general property was registered.¹³ The opening paragraph of the agreement read as follows:

This agreement made and entered into this 25 day of January, AD 1869 between Jesse Stanton of Sharon County of Litchfield and State of Connecticut party of the first part, and John Q. Adams of Cornwall in said county, Isaac N. Bartram and Edwin M. Winchester Both of Sharon Partners in Company by the name and firm of Adams, Bartram and Winchester of the second part.

The entry, totaling over four full pages in length, included specifications stating the parties of the second part agree to the purpose of mining, raising, manufacturing, washing, selling and taking away clay and for no other purpose. The parties of the second part were also granted the rights to construct dams on Pine Swamp Brook (not to exceed eight feet in height), and the right to erect buildings as needed for the operation. Stanton again retained the right to maintain his farm (at that point known as Orange Lake Farm) and cut wood and timber. For this lease, additional land was added east of Pine Swamp Brook and north of the road past Stanton's house.

Under the agreement mining was to commence where previous digging had been conducted. While one might assume this was by I.N. Bartram under the 1868 agreement, no other reference is made to the Stanton/Bartram lease for the removal of clay and sand for casting. It wasn't until 1870 that the records show the original lease terminated.¹⁴ At that time Edwin Winchester's name appears suggesting at some point he had joined Bartram as a partner in the search for suitable casting sand.

At the time of the 1869 agreement, Edwin M. Winchester then forty-eight years of age, operated a farm southwest of Stanton's on the west side of Pine Swamp Brook. Since Winchester's wife Linda was the daughter of Jesse Stanton, the agreement provided a bit of a family flavor on the mountain. The newcomer to the group, John Quincy Adams, was from West Cornwall and a member of the Litchfield County Bar. A review of the Cornwall grantor/grantee land records illustrates that in addition to his vocation as an attorney, Adams was a land speculator. Formerly a resident of Marquette County, Michigan,¹⁵ John Q. Adams is shown as a grantee in twenty-two entries from 1861 through 1881. Unlike Stanton, Winchester and Bartram who performed work at the clay beds site, Adams appears to have approached the mountain project strictly as an investor.

Under the terms of the 1869 agreement, Bartram, Winchester and Adams were required to raise, manufacture or dispose of at least one thousand tons of clay on or before November 1. In addition, for the term of ten years, it was required that at least two thousand tons¹⁶ be raised on or by November 1 of each succeeding year. For each ton of clay removed and weighed, Jesse Stanton was to be paid two dollars.

¹³ Sharon Land Records, V33-104.

¹⁴ Sharon Land Records, V33-103, May 13, 1870.

¹⁵ Cornwall Land Records, V21-752.

¹⁶ A substantial amount. Using the long ton of 2240 pounds, the common ton of that industrial period, the agreed minimum would amount to 4.48 million pounds.

Looking back to the times and conditions of 1869, the agreement to meet the terms of the lease with only about nine months time remaining in the first year seems almost impossible. With two months of winter or more remaining on the mountain, erection of buildings, installation of equipment and mining one thousand tons of kaolin posed a formidable task. It was likely the work could only be accomplished if Bartram was in a position to use equipment installed from his original works established for the mining of clay sands for casting. Since the area to be mined was generally at the same location, this appears to have been a strong possibility.

With the focus directed toward the mining of high quality kaolin, the investors faced significant foreign competition from Cornwall, England, central Europe and China. To make matters even more complex, different industries – such as papermaking, ceramics, and that of manufacturing refractory materials – required different grades of kaolin.

Seemingly undaunted, the partners set about employing workers, erecting buildings, constructing long troughs for washing the clay and generally preparing the site for production. Since Bartram was already employing twenty-five men at his nearby firestone quarry, and others procuring casting clay and sand, he was in a position to shift some to this new venture to accelerate the process.

In his diary, Sharon resident and long-term town clerk, James Wilbur¹⁷ noted that the money didn't come to Mr. Stanton very fast. Jesse Stanton, obviously not one to conceal his opinions and feelings for long, soon let it be known he was not satisfied with the way operations were progressing. While no record has been found concerning the payment due November 1, 1869, on August 31, 1870 a new agreement was created. This agreement fashioned a co-partnership between Stanton and Bartram¹⁸ for the purpose of digging, washing, marketing, preparing and selling clay. Winchester's name appears once in the entry, not as a co-partner but possibly as a minor stockholder.

Business was clearly not going well. As evidenced by Jesse Stanton's mortgaging of the land to the Salisbury Savings Society for \$1,500 in September of 1871¹⁹ it was obvious there were problems. In 1876, a mortgage of \$375 was taken by Edward Gillette²⁰ of Sharon. Though it is not clear how long the business survived, activities had probably ceased well before the second mortgage. In his diary, commenting on the failure of the business, several men left unemployed and the buildings torn down, James Wilbur quoted Jesse Stanton as not hesitating to say he had "been skinned right and left." Wilbur went on to state that Stanton's remarks were delivered with hands and eyes lifted toward the heavens. "God deliver me from a singer, a fiddler and a drunken lawyer."²¹ Newton Bartram was the singer, Edwin Winchester the fiddler and John Adams the lawyer.

With his failed kaolin business gone, Jesse Stanton again concentrated on his farming with sons Charles, Rexford and David (Jesse's wife had died earlier). Isaac Newton Bartram went on to

¹⁷ Wilbur, James B.; Personal Papers, c1930 (courtesy of William Wilbur of Sharon).

¹⁸ Sharon Land Records, V33-250, 8/31/, 1870.

¹⁹ Sharon Land Records, V33-291, 9/29/1871.

²⁰ Sharon Land Records, V36-588, 7/29/1876.

²¹ Wilbur, James B.; Personal Papers, c1930.

his many more successful ventures up and down the Housatonic Valley and considerable distances beyond.

While he continued his dabbling in Cornwall land transactions, information has not been found concerning the later activities of John Quincy Adams.

As for Edwin M. Winchester (1820-1901), after an ill-fated venture into the business of producing high quality kaolin clay, he appears to have renewed concentration on his farm. Winchester lived out his life on the mountain, dying in 1901. Along the way he passed his love and skills for the violin to his son Edwin J. Winchester (1878-1916). Moving from the mountain to Sharon village, the younger Winchester took a great interest in the political and practical affairs of the town. He became a miller, operating Deming's Mill off West Woods Road #1 until it closed in 1916.²² Ironically, Edwin J. had a longer stint in grinding grain than his father did in the kaolin business. Later, while employed as the trusted custodian of the town hall, he became known affectionately as "Uncle Ed Winchester," a fine violin player and a man of "exceptionally kind and obliging spirit."²³

Following the cessation of activities on his kaolin deposits, life was not kind to Jesse Stanton. Gradually becoming blind, he left the farm, land and deposits to son Rexford who had removed to North Canaan in the late 1870s. Portions of Stanton's mortgages had been paid off at that point. While on the mountain Rexford had become known as an outstanding hunter killing several wildcats one winter when the snow was very deep. In his diary, James Wilbur wrote that he remembered Rexford once bringing seventy-seven cotton tail rabbit pelts to town to have them shipped to New York.

Charles Stanton moved to the western slope of Mine Mountain where he lived until he was found dead in his cabin in 1919. Charles was seventy-three. David Stanton moved down the valley south of Cornwall Bridge where he lived the remainder of his life.²⁴ By the late 1920s, Rexford was the only living member of Jesse Stanton's immediate family.

The Stantons and Winchesters were not the only ones living in School District 9 during the latter nineteenth century. During the period, a school was in operation close to the present day junction of Swaller Hill Road and Pine Swamp Road. From the papers of James Wilbur, and information from Beer's 1874 Map of Sharon, the names and locations of residents can be at least roughly determined. Driving from Sharon to West Cornwall, 0.2 miles east of Eggleston Road, the original road to Mine Mountain exited on the left. Within a few hundred feet Walter Wilson's place once stood but only scattered foundation rocks remains there today. At the top of the steep hill, Foster's Hill, a road leading northerly extends to White's Hollow. Daniel Foster once operated a farm about one mile down this road. On the top of the mountain various families including Roberts, Dykeman, Ackerman, Stone, Doty, Coons, Barley and Owens resided at one time or another.

²² Prindle, Stuart; Personal conversations, 1999

²³ Mackey papers, Hotchkiss Library, Sharon, CT.

²⁴ Wilbur, James B.; Personal Papers, c1930.

Beer's Sharon Map of 1874 shows homes of M. Doty, W. Koons and H. J. Koons northeast of Stanton's farm. The map showing the name Koons was the Coons referenced by James Wilbur who used the correct spelling. Sharon Land Records also confirm the Coons spelling. As a youngster I remember the ruins of those homes. Today only the foundations remain. Numerous axe heads and scattered oxen shoes can be found in the vicinity of the foundations, suggesting the occupants worked as colliers or teamsters pulling the heavy firestone down the east side of the mountain.

I also remember a gentleman later living in the Stanton house, remembering him only as "Mr. Man," the Mr. Man who gave me my first sled in 1932.

The two story Stanton house collapsed in 1950.

The Passing of Isaac Newton Bartram (p.90 STT#1)

Although long disassociated from the kaolin and casting sand business, one-year after the closing of the Kaolin Company operation, Sharon's premier industrial entrepreneur Isaac Newton Bartram died. On November 29, 1913, the Harlem Valley Times of Amenia carried this story:

The village of Sharon as well as the community at large, was shocked at the news of the very sudden and unexpected death of Mr. I.N. Bartram which occurred a little after midnight on the morning of Wednesday, November 19.

Mr. Bartram was born in the town of Redding, Conn., on the twenty-fifth of March, 1838. He was a stone mason by trade, but was the type of man that can, in an emergency, turn the hand to almost any variety.

He came to live in Sharon when about eighteen years of age, from which he had made this town his permanent home. Not long after his coming to Sharon he united with the Methodist Church in the various offices and committees of which he served for many years.

On the twenty-seventh day of March, 1861, he was married to Miss Helen Winans of Sharon. Four children were born of this union. Twin sons died in infancy. Two daughters Mrs. Pancoast and Mrs. Cameron of Philadelphia, with their mother are still living.

From early manhood Mr. Bartram has been intimately and extensively identified with politics and public affairs of the town having served seven terms in the state legislature, six terms as Representative and one as State Senator. In his lifetime he has won a large number of friends and his presence and influence in the community will be greatly missed.

Funeral services, in charge of W.A. Mackey, the family pastor, assisted by Dr. Parker Morgan, D.D. were held at his late residence on Friday afternoon at three o'clock. The burial was in Hillside Cemetery in the family plot.

For the date of November 21, 1913, the Diary of the Poconnuck Historical Society carried the following notation:

“Mr. Bartram’s funeral attended by many out of town people as well as by all of Sharon. The weather was all that could be desired. His age was 75. Was born in Redding but most of his life was spent in Sharon. Possibly no other inhabitant of the town would be more missed.”