

**THE MOORE/McLEAN SUGAR HOUSE
(44AX96)**

by

Keith L. Barr



**Alexandria Archaeology Publications
Number 6**

Alexandria Archaeology
Office of Historic Alexandria
City of Alexandria, Virginia
Copyright, 1988



ALEXANDRIA CITY COUNCIL

James P. Moran, Jr., Mayor

Patricia S. Ticer, Vice Mayor

William C. Cleveland

Kerry J. Donley

Lionel R. Hope

T. Michael Jackson

Redella S. Pepper

CITY MANAGER

Vola Lawson

Foreword

The Alexandria Archaeology Publications series is composed of papers on various aspects of research conducted under the auspices of Alexandria Archaeology, a division of the Office of Historic Alexandria, City of Alexandria, Virginia. The authors include professional staff members, university students and Alexandria Archaeology volunteers. Editing of the papers has been kept to a minimum. It should be understood that the papers vary in tone and level of technicality, since they were originally directed toward many different audiences.

We are pleased to offer the papers within this series and in so doing are opening our "manuscripts on file" - including professional conference papers, background documentary studies, student course papers, and volunteer research papers - to professionals and public alike.

This paper was originally presented at the First Joint Archaeological Conference in Baltimore, Maryland, January, 1989.

Pamela J. Cressey, Ph.D.
City Archaeologist
1991

Since the spring of 1987 Alexandria Archaeology has investigated the site of a sugar refinery that operated from 1804 to 1828. The site is presently an asphalt covered, city-owned parking lot. The refinery, or "Sugar House," processed raw sugar grown on Cuban plantations. "Havannah Sugar" was shipped in "boxes" to Alexandria, then a part of the District of Columbia. The District ranked third in the nation for volume of refined sugar, according to the 1810 Census of Manufactures. Sugar refining in Alexandria was second only to rope production. In 1810 three ropewalks produced 400 tons of rope worth \$160,000 while two sugar houses made 400 tons of sugar valued at \$144,000. Sugar refining was a lucrative business! By comparison, two textile factories in the city made 16,000 yards of cotton fabric valued at \$8,000 (Cressey n.d.:1).

The earliest record of the Sugar House appeared when William S. Moore paid the taxes on a half acre lot containing the refinery and a dwelling house in 1804. The same year the partnership of Brunner & Moore were advertising sugar and molasses for sale at the sugar house. Moore, an entrepreneur from Maryland, lived in the two-story frame dwelling for which he took out a fire insurance policy in 1805 (Revis 1988:4). The sketch on the policy indicated "A Sugar House 5 stories high covered with slate" stood at a distance of 82 feet from the dwelling (Mutual Assurance 1805).

Moore owned the property and refinery business, first in partnership with Andrew Brunner and later alone, for approximately nine years. During this period a number of tenants living on the property were listed in the tax records. It is possible that Moore had returned to Baltimore as early as 1810 leaving a household of five whites and six slaves to run the Sugar House. In any case, on 8 March 1815, the buildings and business were sold to Daniel McLean for \$19,500. Within two months McLean and his partner, Clement Weston advertised refined sugar, candy and molasses ready for delivery (Revis 1988:5-7).

McLean and his family had moved to Alexandria from New Jersey sometime in the mid-1790s. By 1799 he was a successful baker employing five apprentices, one servant, and four slaves. Alexandria was one of the largest seaports in the country at that time and there was a thriving demand for ship's biscuits and crackers. As owner of the Sugar House, McLean introduced new machinery Sugar House that improved the refining process (Cauble 1969:9-13).

The usual method of refining sugar in the United States during the early 19th-century was essentially a boiling, draining, and recrystallising process that originated millenia ago in India (Hugill 1978:134). Sugar cane was domesticated in New Guinea about 8,000 B.C. and had found its way to India by 6,000 B.C. Arabs spread sugar making throughout the Mediterranean until it eventually reached Europe by at least the 10th-century (Mintz 1986:19-23). Columbus introduced the New World to sugar cane in 1493

(McCusker 1970:31). Refining sugar in the West Indies began in the mid-17th century on Barbados (McCusker 1970:47). New England colonies developed the first sugar refineries in North America in the early 18th-century (Hugill 1978:136).

Removing impurities from the cane and creating pure looking, crystallised sugar was a tedious procedure. Cane processed on the plantation in mills like these yielded a substance called Muscovado or raw sugar (Hugill 1978:137). Muscovado was crude, grainy, brown, full of impurities and useless in its unrefined state (McCusker 1970:35). At the refinery Muscovado was poured into clarifying pans and mixed with limewater. Eggs or bullocks' blood were added to clarify the mixture. Coal or wood fires heated the pans and caused impurities in the Muscovado to coagulate with the eggs or blood and float to the top. The scum was repeatedly skimmed off until the liquid became bright and clear. Once the sugar master had tested it, workers transferred the sugar to a cooling vessel. When it was cool it was poured into cone-shaped clay moulds. The moulds were set in jars to collect the dark molasses that drained away. The cones were then "clayed", ie., fine white clay mixed with water was laid on top of the cones. The water in the clay percolated through the sugar, and removed any remaining impurities. After eight or ten days the sugar was knocked out of the moulds and left to dry. Those cones considered perfect after examination were wrapped in blue paper to enhance the whiteness of the product (Hugill 1978:137-138).

This process of refining was typical of that in most factories until well into the nineteenth century. Daniel McLean's refinery improvements were probably a system of clarification patented by Edward Charles Howard in Britain in 1812 and 1813 (Reed 1866:12). Howard introduced heating raw sugar by steam in vacuum-sealed cisterns. The temperature of the sugar and limewater solution could be controlled and the introduction of blood or egg clarifiers could be almost eliminated. Such changes were slowly adopted in the United States. As late as 1833, some time after McLean's refinery had shut down, only three sugar houses in the country used this method.

Daniel McLean died in Alexandria on 18 February 1823 (Cauble 1969:17). Samuel McLean, Daniel's oldest son, succeeded his father in the sugar business. Another son, Wilmer, became a wholesale grocer. The family still had sugar connections as late as the 1860s when Wilmer imported large quantities of sugar into the Confederacy (Cauble 1969:32). Interestingly enough, in 1865 at Appomattox, Robert E. Lee surrendered his Army of Northern Virginia to Ulysses S. Grant in the home of fellow Alexandrian Wilmer McLean .

In October 1824, nearly two years after Daniel McLean's death, the Sugar House was offered for sale by his executors (Alexandria Gazette Advertiser 5 Oct 1824:1). Samuel McLean had evidently given up the sugar business to move west with his wife to Galena, Illinois - future home of U.S. Grant (Cauble 1969:17). The business did not sell and the refinery

was run by John Hoffman, son of the other sugar refiner in town, until about 1828. An 1836 tax list mentions the vacant old Sugar House and lot (Revis 1988:8). Sometime before 1839 the Sugar House was destroyed and the dwelling at 111 North Alfred Street was built on the site (Revis 1988:10).

It was unclear until late this year whether construction of the Alfred Street house had completely obliterated foundations of the old Sugar House. The 1987 excavations in the location of the 1790s frame dwelling revealed that that area of the site was considerably disturbed in the 1880s by the construction of a large late Victorian dwelling. In 1987 111 North Alfred Street, incorrectly advertised as the Sugar House, was for sale at nearly 1.3 million dollars (Alexandria Gazette Packett 7 May 1987:43). It seemed clear that if remains of the Sugar House were to be found they would be located between 111 North Alfred and the basement remains of another 1880s structure located on the south side of the site during the 1987 field season. A series of test squares along this strip yielded hundreds of refinery related artifacts including crossmendable sugar cone fragments, parts of sugar jars, white sand and coral of Caribbean origin, water-worn cermaic sherds, and even an eighteenth century Spanish "bit" coin. But no trace of the building itself was discovered until, you guessed it, the last day of the field season this year. Although only about three feet wide the remains of the Sugar House cellar are probably intact for the entire length of the former structure. The brick floor of the Sugar House

basement is about six feet below surface of the parking lot and is covered by a very black layer of cinders and other burnt material. This winter artifacts will be processed and analyzed and next field season we will attempt to further delineate the dimensions of the foundation remains. The search for the Sugar House has been slow and tedious but has afforded us a unique opportunity to study this fascinating era of Alexandria's history.

Bibliography

- Alexandria Gazette Advertiser
1824 "Sugar Refinery for Sale," 5 October, p. 1.
- Alexandria Gazette Packett
1987 "The Sugar House, 111 North Alfred Street, Alexandria, Virginia," 7 May, p. 43.
- Cauble, Frank P.
1969 Biography of Wilmer McLean. U.S. Department of the Interior, Washington, D.C.
- Cressey, Pamela J.
n.d. "History of the North Alfred Street Sugar House," Ms. on file at Alexandria Archaeology.
- Hugill, Anthony
1978 Sugar and All That... A History of Tate and Lyle. Gentry Books, London.
- McCusker, John James
1970 The Rum Trade and the Balance of Payments of the Thirteen Continental Colonies 1650-1775. University Microfilms, Ann Arbor, Michigan.
- Mintz, Sidney W.
1986 Sweetness and Power, The Place of Sugar in Modern History. Penguin Books, New York.
- Mutual Assurance
1805 Photocopy of Mutual Assurance Society Assurance Policy on file at Alexandria Archaeology.
- Reed, William
1866 The History of Sugar and Sugar Yielding Plants. Longman, Green, London.
- Revis, Sara M.
1988 Continuation of "History of the North Alfred Street Sugar House." Ms. on file at Alexandria Archaeology.