Among the Friendship Firehouse Museum’s many traditions is its Father’s Day open house, offering free admission to fathers and father figures. One of the museum’s big attractions, besides the 1858 Prettyman Hose Reel Carriage, which was voted this year’s top endangered artifact in Virginia, is the 1851 Suction Engine manufactured by John Rodgers in Baltimore.

Until its purchase, Alexandria’s four volunteer companies fought fires with buckets of water, usually by forming double-lined bucket brigades. The Rodgers Suction Engine was supposedly able to shoot water 155 feet by drawing water through the hose into the reservoir, and in turn, water was forced onto the fire through the hose on the other side. The machine required 16 to 20 operators, with four to six men on the ground on either side of the engine, and four men on each of the four foldout platforms. By pumping the machine arms, the men created suction pressure in the domed condenser case, which pushed water out through the hose. The work, as one might imagine, was exhausting, and the operators would need replacements every two to three minutes.

This important piece of technology is listed in Friendship’s minute books as costing the company $1,008. The apparatus, which was drawn around Alexandria by hand, was not self-sufficient in changing the way Alexandrians fought fires. The laying of a water main, pipe and hydrants by the Alexandria Water Company starting in 1852 made the use of the more powerful fire engines such as “Suction” operable. Firemen carried spanner wrenches to open nearby hydrants when needed.

The place of the Rodgers suction engine at the technological forefront didn’t last long in Alexandria. During the Civil War, the Union army brought two steam-powered fire engines. These engines

Above: The 1851 Suction Engine.

Right: The 1858 Prettyman Hose Reel Carriage.
required no more than four operators, in contrast to the 16 to 20 required to operate the handpump suction engine.

The steam engines were more costly to purchase, a fact illustrated by the Friendship Fire Company’s return of a steam engine purchased in 1867, due in part to their inability to maintain payments. The City of Alexandria purchased a different steam engine from Philadelphia in 1871, and at the same time, tried to create a municipal fire department.

The members of Friendship Fire Company opted to remain an independent volunteer company and continued to fight fires with the hand-pump into the 1880s. You can view the 1851 Rodgers Suction Engine from 1 to 4 p.m. this Father’s Day. Children receive a free fire hat.

“Out of the Attic” is published each week in the Alexandria Times newspaper. The column began in September 2007 as “Marking Time” and explored Alexandria’s history through collection items, historical images and architectural representations. Within the first year, it evolved into “Out of the Attic” and featured historical photographs of Alexandria.

These articles appear with the permission of the Alexandria Times and were authored by staff of the Office of Historic Alexandria.