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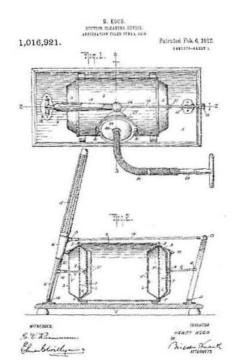
# Vacuum Cleaners Before Electricity?

by Mary Robinson Sive

Editor's Note: This article first appeared in Collector's News on October 2006. Mary has graciously let us reprint it here. Mary is the author of the book Lost Villages. Hanford Mills Museum has two hand-pump vacuums. One was found in the John Hanford Farmhouse. It was likely owned by the Hanfords. The other was donated by the First Baptist Church of Mt. Vision.

A brand-new gadget for keeping carpets dust free appeared in the 1909 Sears Roebuck and Company catalog. The two models of vacuum cleaners shown had to be operated manually, but they looked to be as efficient as the new Hoover electric cleaners. Emphatic sales pitches soon reminded customers that "You need a vacuum" to save time and labor, and to promote health. Farm women - millions of them without electricity until the 1940s wanted to enjoy the same modern conveniences as their city sisters, and here was a machine to help them do so. Or so it seemed.

Only eight years later the Sears catalog showed an electric model and the manual ones were gone by fall 1917.



Patent drawing for the Regina handpump type vacuum cleaner. Compare this drawing with the photograph of a Regina cleaner on the next page.

Yet over 50 different firms produced manual vacuums during those years. At the high point, 1914, at least 18 firms were in business. At least one home economics text as late as 1922 acknowledged the existence of "hand machines."

Their short-lived existence explains why manual vacuum cleaners are so little known. They can be found here and there in small local history museums, only rarely in major ones. Private collectors are even fewer.

Sears Roebuck and Company soon offered customers a choice between models weighing 5.24 or 50 pounds, all with a money-back guarantee. An accompanying picture in the 1909 book showed a boy operating the mechanism while a woman vacuums a carpet. It was omitted in later issues, where mention that the 5 pound model required only one person for its operation was the only hint that others required two.

The three types created suction either by a handle moving back and forth or bellows being compressed. (A bellows cleaner operated by one person was the model shown in use by the family in the "1900s House" feature shown on PBS TV in 2000.) But only the plunger-type was both lightweight and capable of operation by one person. A piston pushed down and up the same tube that ended in a

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## What's News?

We would like to thank all of our members and friends for helping to make 2007 an outstanding year at Hanford Mills. During the past year we saw our audience increase to the highest monthly average since the early 1990s. An average of 1,500 people a month visited the Museum or participated in our outreach activities.

The Museum's 2007 programs began with great suspense: would there be any ice to harvest? Temperatures finally dropped and we started the year with a bumper ice harvest. This year the Museum hosted several very successful events, workshops and programs, and dozens of school groups. We welcomed daily visitors from all over the country and the world.

Thanks: Without all of the help of scores of volunteers the Museum's activities would not be as successful as they are. If you are a volunteer, thank you again. If you would like to become a volunteer please call the Museum – we can always use more help. We'd also like to congradulate John Willis Hamilton, recipient of the William O'Dell, Jr. Volunteer of the Year Award. Many thanks, also, to our friends who have supported the Museum's efforts with donations. Your support has helped the Museum to meet the matching fund requirements for a variety of grant projects and to support the Museum's ongoing operations.

Service Award: We are proud to report that Hanford Mills Museum has been selected to receive the first Executive Service Corps (ESC) Celebration of Service Award, which will be presented by Sen. James Seward in a ceremony on December 5th at the Soccer Hall of Fame in Oneonta. This is the Rasmussen Award for an exceptional not-for-profit organization that has effectively utilized the services of the Executive Service Corps over the past two years. The award is named in honor of Joann Rasmussen, one of the founders of ESC in Otsego-Delaware. For reservations call 607-433-1700.

Changing Faces: Millwright/Mill Foreman Robert Grassi has left Hanford Mills to take up farming. We will miss his dedication and expertise, and hope to see him helping around the Mill from time to time. In his place, please welcome Dawn Raudibuagh as our new Mill Operations Manager. Dawn has worked at the museum on and off since the late 1980s, and has done

the Mill Operations job in the past, so she knows her way around the Mill. We would also like to welcome Beth Rafter, CPA. She has joined the staff as the Museum's part-time accountant.

Looking Forward: In 2008 the Museum will continue the thoughtful stewardship and operation of our unique mill complex. Major projects include revitalizing our interpretation with a new visitor's guide, refreshed Mill tours, and improved interpretive and directional signage throughout the site; finishing the final phase of the Feed Mill's facelift, including a new roof and an exciting new interactive exhibit; beginning the fabrication of an horizontal steam engine with the creation of casting patterns; and moving the Museum's administrative offices to the Post Office building.

In preparation for the Museum's Strategic Plan for 2009 and beyond, in 2008 the staff and board will also undertake an organizational evaluation to establish mission-based priorities. These efforts will continue to improve the Museum's effort to provide visitors with an outstanding experience; diversify our funding sources; and expand Hanford Mills partnerships and public visibility.

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Liz Callahan, Director

# **Up-Coming Special Events**

### Members' Holiday Party

- Saturday, December 8, 2007, 1 to 4 pm See invitation included in center.

#### Winter Ice Harvest

-Saturday, February 2, 2008, 10 am to 4 pm Let's hope and pray there will be ice this year. Come out to join in the harvest. See ad  $\rightarrow$   $\rightarrow$   $\rightarrow$   $\rightarrow$ 

### Volunteer Clean-Up Day

- Saturday, May 3, 2008, 10 am to 3 pm

Come out and help get the Museum site ready for another fun-filled year. We have inside and outside clean-up jobs to suit what you want to do, and we'll feed you lunch, too!

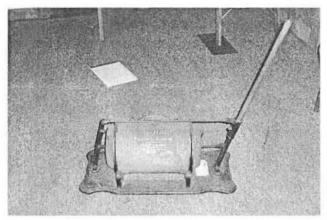
Opening Day - Thursday, May 15, 2008

Fighting Cabin Fever? Come to Hanford Mills Museum's 非恭恭恭恭恭 inter Ice Harvest Saturday February 2, 2008 \* 10 am to 4 pm \* 袋 Watch the mule \* the frozen pond \* \* 袋 \* \* # Cut a block of ice \* from the pond using an ice saw 袋 袋 \* \* \* \* Take a ride or horse drawn 袋 bobsled X # Great hot soups from local restaurants

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nozzle produced the
needed suction, though
only on the upward
stroke or half the time.
The majority of surviving manual vacuums are
of this type.

Early vacuum cleaners, both electric and manual, were the culmination of decades of efforts by inventors. Carpet sweepers date to the 1860s and have remained almost unchanged since. The following decades saw no shortage of ingenious

efforts at creating vacuum suction, from a hand-cranked "sweeping machine" (1869), to a "pneumatic sucker" that proposed catching the dirt in a water-tank (1891), to dozens, if not hundreds of examples of "dust and rubbish suction machine," "dust-suction apparatus," "dust-collectors," "pneumatic renovator," "suction cleaning



This is a photograph of one of the Hanford Mills Museum vacuum cleaners - they are both Reginas. At some point, this vacuum cleaner lost its fancy turned handle and someone replaced it with a dowel. When the handle is pumped you can still hear the suction that pumping creates.

device," "vacuum apparatus,"
"vacuum cleaning device,"
"vacuum dust-remover," etc.
that were granted patents in
the years before World War I.
Several were adapted for
either electric or manual
operation.

Among the more imaginative approaches was the suggested use of the operator's feet as the power

source, leaving the hands free to handle the working end. A "high-stepping cleaner" would create suction through bellows strapped to the operator's feet. A Swiss patent had the operator sit and rock in a rocking chair to the same end. A model that was actually produced required the operator to stand on a platform and "rock from side to side like a teeter-totter," activating two bellows. There

were attempts to use running water to create a vacuum, with five companies advertising water-powered vacuum cleaners in 1914.

Good Housekeeping magazine first took notice of manual cleaners in 1910, wondering "Do vacuum cleaners clean?" The answer was a qualified yes, but operating

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the pump vacuum required two persons and was hard work, the magazine reported. Two years later, the director of the Good Housekeeping Institute observed that a "hand cleaner" weighing 15 to 25 pounds with either pump or wheel was "not for delicate woman" and hardly preferable to a carpet sweeper. She had not tested the lighter piston type.

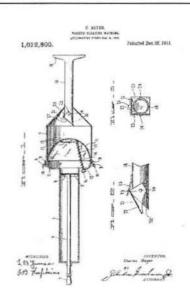
There is no way to calculate how many manual cleaners were sold. Sales data at any rate only tell how many units were sold, and not to what extent they were used. Anecdotal evidence suggests that a fair number may have gathered dust. Older women who remember units in their farm homes in the 1920s and 1930s don't recall seeing them in use. Their mothers may not have realized that two

persons were required to operate the equipment, or they found that pushing that piston down and up was no easier than wielding a broom. So the gadgets were relegated to the attic or a far corner of the barn. Occasionally, one surfaces on eBay, at prices ranging from \$5 to over \$600.

One collector has made it his business to track them down. He is Robert Kautzman, and you can read his story and see a portion of his collection at vachunter.com. Over a dozen manual models, including two British ones, are in the collection of the Hoover Historical Center at Canton, Ohio, Your author became curious about them through reading the diary of a rural New York woman and thus discovered that Hanford Mills Museum owned two examples. No doubt others lurk in forgotten

corners of similar collections, where they may not even be inventoried. In their brief life span manual vacuums promised an easier life to many a hard-working woman. It is time to give them their due.





Patent for plunger-type vacuum cleaner.

# 2007 **Donations**

Hanford Mills Museum would like to thank the people listed here for donating artifacts to the Museum this year. Donations ranged from items from the Hanfords and Pizzas, to an antique electric motor, an ice plow, to a huge collection of house wares and other domestic items. Thank you everyone!

Sandra Hanford Davis Robert Grassi John Hamilton Cindy Kinsey Greg Onasch Anita Pizza Ian Stewart



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