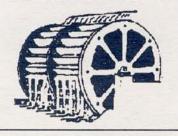
# MILLWORK



Winter, 1998

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Vol. 12 - No. 1

### What's News?

### The Apple Quilt

Have you always wanted to own a beautiful hand-

made quilt, but didn't have the time or skill to make

one, and buying one was too expensive? This year, Hanford Mills Museum is raffling off a hand-appliqued, hand-stitched quilt in memory of Richard Applebaugh. Mr. Applebaugh was a good friend of the mill, supporting the museum with donations of money and artifacts. In honor of this support, the quilt has an apple theme. The quilt is queen size and is hand sewn by the Susquehanna Valley Quilters Guild. Raffle tickets are \$1.00 each with all donations going towards the Hanford Mills Museum Endowment Fund. All donations will also be matched by the O'Connor Foundation. If you are interested in a chance at this quilt, you can get raffle tickets at the museum or from a museum board member. The quilt will be on display at many of the museum's special events. The drawing for the guilt will take place during the Sawyer's Holiday event on October 10, 1998. Help support the museum and, at the same time, get a chance at a beautiful piece of artwork and skill.

### Hunting for a New Educator



Museum educator, Mark Watson, left us in January to take an educator's job with the New York Transit Authority Museum in Brooklyn, NY. Hanford Mills Museum is at present searching for a new educator to take his place. The educator's job entails overseeing

all education programs which include school group tours, a day camp, workshops and an Elderhostel. We are looking for a MA in museum studies, history or education with at least 3 years experience in museum education. If you know of anyone who might be interested, please have them send a resume and three references to Hanford Mills Museum, P.O. Box 99, East Meredith, NY 13757.

### The Information Super Highway



Last year, Hanford Mills Museum entered the 20th century and jumped on the Information Super Highway with an Internet web page. If you have access to the Internet and you haven't taken a look at our page recently, you may want to visit again. With the help of

John de Marrais, Hanford Mills Museum's web site is bigger and better, and we hope you like it. The site now includes color photographs of events, more historic information and even authentic sounds. Don't forget to bookmark the site. It is especially useful if you lose your calendar and can't remember event dates. So stop by and visit at http://hops.norwich.net/hanford1/

### 1997 Collection Donations

Hanford Mills Museum would like to thank the following people for donating artifacts and documents to the museum's collection in 1997:

Alene Alder Emma Smith Chase Erna Chichester Sandra Hanford Davis & family Ken Faust Robert Grassi Hardy & Ronald Hanson Kendall Hay Roy Ickes Chester Keeler Grace Kent James Kricker Joseph Marguet George Marquart Jane McCone Wayne Miller William O'Dell, Jr. William & Hazel O'Dell, Sr. Seth Rick John Scharff Celin Schoen Bob Stark Bob Stone Louie F. Trask (in memory of James Lane)

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John Voorhees

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# Why Do Women Come to Hanford Mills?

### by Jane McCone

Why do women come to Hanford Mills Museum? Now that is quite a question and one I set out to answer. At our Winter Ice Harvest, I asked several women why they came. Some came with their spouse and children for a good winter outing. Some came with friends to see ice harvesting, something they had never seen before. One lady told me her husband had the flu, so she left him home and came by herself to see the harvest. But there were more women there that day than those that paid for a ticket. Those women are the ones I want to tell you about.

The first was a group of women from the Cooperstown Graduate Program, a division of the State University of New York at Oneonta. These women volunteered to help with this winter event. Two of them were busy selling coffee and donuts near the mill for all the cold guests. One was watching the perimeter of the pond to be sure no one entered the ice field at a dangerous location, while another was helping guests get ice cleats on and off their boots. Two more students were in the Hanford House selling scones and spiced tea. These women from the graduate school were a tremendous help to Hanford Mills Museum and, in the process, were gaining experience in the museum field.

Another two women that were quite visible during the Ice Harvest are members of the Board at Hanford Mills Museum. One was in the Hanford House selling tickets for our Quilt Raffle. She took the lead in having the quilt designed and sewn by the women of the Susquehanna Valley Quilters Guild. She is now helping us show it about the region as we

all sell tickets. The second board member was busy in the soup concession area selling hot dogs, soup and hot beverages. She comes to all of our special events and works in the snack shop all day long.



Women of all ages enjoy Hanford Mills Museum - museum Curator Caroline de Marrais & a young visitor cutting ice.

Along with the board member in the concession area, there were several other ladies hard at work - these are members of the Delaware Valley Draft Horse Club. They assist Hanford Mills Museum with concessions at Ice Harvest, Spring Planting and Fall Harvest. Hard work does not deter them and they always seem to be having a good time.

Working with the other women in the food area at Ice Harvest was one of the museum's newest female employees, a highschool student who will often be seen this coming season in the snack shop. At Ice Harvest she be-

came a professional at making popcorn. At all the concession areas, there were many women members of Hanford Mills Museum. They come often and help with many tasks.

Then, besides these volunteer women, there were several more women both visible and behind the scenes, playing crucial rolls. The Museum's Curator was on the pond for the entire day helping cut ice and explaining the process to our guests. She monitored the ice thickness for days, made sure all the tools were ready, and created all our advertisements on the computer. Visitors could not miss the welcome smile of the gift shop manager as she sold tickets and handed out programs - it was a long day with over 835 people coming through her little shop. Behind the scenes, where no one could see, was one more woman, the museum's new Administrative Assistant, in the office answering the telephone (which rang over 227 times in 3 1/2 hours), making change and administering Band-Aids and coffee to the staff.

Why do women come to Hanford Mills Museum? These women came to enjoy themselves, to serve a not-for-profit organization, to preserve and interpret our history, to fulfill a career, and to generate an income. They all had a very enjoyable time, and you will see them all again as the new season progresses. They are as important to the Mill as the water in the pond. Please note, all the men you saw working at Hanford Mills Museum are just as dedicated and helpful. This article was written in celebration of March - Women's History Month.

# **Thunderbolt Splitting Tool**

by Eric Olson

Editor's Note: Eric Olson is a member of Hanford Mills Museum's Board of Trustees. He lives in Delancy, NY.

Each year I generally do a tool exhibit at the Lumberjack Festival held at the Bobcat Ski Center in Andes, New York on Labor Day. I set up two eightfoot tables "filled with a wondrous display" of 17th and 18th century hand tools. Happily, there is a great deal of interest in these and I have a good time explaining each tool.

Three years ago, a gentleman came up to me and said, "Betcha don't know what this is?"

I was stumped, but persuaded him to sell it to me on the spot after explaining what it was.

It was ... the Thunderbolt Splitting Tool. Caroline de Marrais of Hanford Mills Museum supplied this flyer she had in her files donated by William O'Dell, Jr.:

PURPOSE: With this tool one man easily and quickly splits large logs for fuel and cracks stumps for easier pulling. Reduced charges split logs for posts or pulp wood.



Eric Olson

By splitting logs a small outfit and a few men produce more at lower cost due to easier handling. A few pennies worth of 2f or 3f or 4f Blasting Powder does the heavy work. NEVER use dynamite or any high explosive.

PREPARATION: An old pant-leg wired or chained at hole provided is a carrying bag, a fuse cover while driving and a finding flag.

LOGS: Pour powder into large hole to within 1 inch of full, insert a dry leaf or paper wad and drive into end of log hardest to split 2 or 3 inches using an 8 or 10 pound maul. Drive it TIGHT. Cover fuse hole while driving. A block or stone back-stop adds power in very large logs - otherwise optional. Insert 5 to 10 inches of standard safety fuse

FIRMLY into fuse hole. CAUTION order others away from danger of
flying splinters and see that your
exit is clear. Slit end of fuse and
insert match as illustrated. Strike
match with box. When fuse spits
fire and smoke leave quickly.

STUMPS: Drive tool into top of stump as in end of log. Place a 20 to 50 pound weight on top before lighting fuse.

Use will quickly develop judgment as to amount of powder, fuse length, and a safe distance. ALWAYS drive into sound wood at or below center of end of log. Full charge is seldom necessary and hinders driving at least 3 gripper rings into wood. Allow room around log - other logs tight along side interfere. See that small hole at bottom of fuse hole is always open.

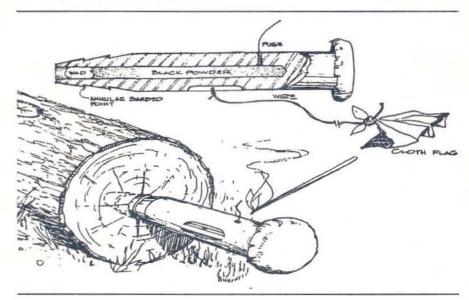
POST HOLES: Load, insert fuse FIRMLY and bend up alongside tool. Drive FULL LENGTH into ground placing a 20 to 50 pound weight on end of tool before lighting. Generally the heavier the weight the larger the hole. Poking a bar into the ground often avoids striking stones. Keep powder DRY and don't handle it near fire.

Over two more years of exhibiting, I never fail to find some old timers who have used these in the woods. Most of them got lost in the trees due to a backfire.

A number of people have said as kids they would sneak these out and use them as mortars. They filled the Thunderbolt with BBs, bolts or wood knots. They then planted them firmly against a stone wall and fired them up in the air like a homemade mortar.

One old timer said they would use the metal roof of a barn for a target as it would make such a noise as the ammo came raining down.

This tool was created in a different age not thinking about product liability or OSHA interference. Just think what urban street gangs could do with a thing like this.



This illustration, done by Eric Olson, based on the original instruction's illustration, shows how the Thunderbolt was to be used.

## **New Workshops**

### by Mark Watson

Hanford Mills Museum is offering a full calendar of interesting hands-on workshops throughout 1998. Drawing from the expertise of the Museum's staff, membership and local professionals, these programs will appeal to all age groups and interests. Most are scheduled for Saturdays and/or Sundays but we also offer a couple longer programs. There are fees, but remember, Members can receive a discount for most workshops. You should receive a Workshop brochure with more details in the mail soon.



Saturday,
March 14, make
your own **Woven Seat Stool**. Local
weaving expert
and Museum
member, Ellen
Kupiec, will lead

a small group through the process of weaving seats for wooden stools. Interpreter Bill Brindle has already crafted the stools, constructed of maple sawn here at the mill in 1996. All materials are included, and the stool is yours at the end of the day! Space is limited, so you'll want to reserve "a seat." Member's Discount.



Saturday,
March 21, learn
how to Write
about History for
Children.
Carolyn Yoder, an

Carolyn Yoder, an accomplished writer of

children's historical literature, will lead a comprehensive workshop on "making history come alive." She will gear it to writers, students and teachers. Among her impressive credits include her present positions of Executive Director of the New Hampshire Antiquarian Society

and Senior Editor of Highlights Magazine. She will address historical magazines and books, and proper research methods, tone and writing styles. Bring plenty of questions and be prepared for a very fruitful day. This all-day workshop will take place at Oneonta's Holiday Inn. Member's Discount.



Over the weekend of May 16 and 17, Robert Grassi, Hanford Mills Museum's Mill Foreman, will take you on a two-day **Run of** 

the Mill Tour. Grassi has years of experience in mills and milling, and has led restoration projects in mills and historic structures throughout the eastern United States. Over this weekend, you'll learn about water power systems and how they function, how the saw and grist mills operate and much more. Grassi hopes to base this course on your interests, so when you sign up, please mention what you are most interested in. Space is limited, so please call early for details and booking. Member's Discount.



Saturday, June 20, Hanford Mills Museum's Executive Director Jane McCone will share her expertise in preserving,

storing and displaying **Family Heirlooms**. Learn about proper techniques and supplies for saving your photographic, paper, glass, textile and metal treasures. Proper care of these artifacts is crucial to passing your family's treasures on to future generations. Member's Discount.



On the same day, June 20, learn **Basic Blacksmithing** from our own smith, Tres
Loeffler. In the Museum's

pondside blacksmith shop, you will have an introduction on how to set up your own shop, build the proper fire, and perform simple metal working operations. You'll understand properties of various metal and their most suitable uses. Due to space limitations, we advise you to sign up early for this one. Member's Discount.



Through the week Monday, July 20 through Friday, July 24, kids ages 8-13 will love our special history day camp! The

Summer Apprentice Workshop offers an entire week of handson activities. Learn how your great-gramdparents worked and had fun! Campers will perform jobs, cook food, make ice cream, do "chores" and play a variety of old-fashioned games. The final day consists of a "Townball" (historic baseball) match and a party for their families. This is a really special event. Some scholarships are available.



Saturday,
August 8, Mill
Foreman Robert
Grassi's **Hand Tool Workshop**will explore the
basics of hand
tool use, care and

maintenance. Learn the correct ways to sharpen planes, saws and other tools. Find out how hand tools can outperform

# Lulu Briggs - Her Interesting Family Story by Caroline de Marrais

You probably haven't failed to notice that Hanford Mills Museum's worker articles are about men. That's not particularly surprising since no women ever worked at the mill. That doesn't mean that the Hanfords didn't hire women. Instead of working in the mill, they worked on the Hanford farm as hired girls and dairy maids. Many East Meredith farms hired local young women to help with housework and to make butter. In honor of Women's History month, this is the story of one of those women - Lulu Briggs.

To tell Lulu's story, we are going to go back a few generations. We know nearly nothing about Lulu's life after she worked for the Hanfords and then got married. Perhaps we can get an idea of what she was like from the background history of her family.

Lulu's grandfather, Luther Briggs, was born in 1816. We are not sure where he was born. The 1860 census said he was

born in Delaware County, New York, but by the time he was married he was living in Otego. just north of Delaware County. Luther married a woman named Betsev Hvatt and had six children (from 1841 to 1850) -Ellen, Oscar (Lulu's father), Warren, Florence, William and Emmet. At some time Betsey died, perhaps around 1852 when their last child was born. We have no records to show us when or how she died. Perhaps it was grief over her death or just a need for a change of scene, but Luther moved his family to East Meredith about 1853. They lived on a farm on Pumpkin Hollow Road overlooking the Kortright Creek valley.

Here, Luther found a new life and a new wife, Janetta Cowan, and they continued to add to his family with the birth of Mary in 1854. Then Luther's bad luck started on January 28, 1857 with the death of his new daughter. Exactly one year later, tragedy struck again as a

fire destroyed his home taking five of his children with it. Somehow Luther, Janetta and one son, Oscar, survived. We could not find a news story about the tragedy, so we have no information on what happened. We don't know how Luther, Janetta or Oscar felt, but we do know they continued on. Luther and Janetta started to build a new family. Six more children were born between 1859 and 1870 - Elizabeth, Sarah, Ira, Orville, Emma and Ermine. This time, all the children survived, except Sarah who died at the age of three. Luther built a new house, and continued to farm.

Oscar's life also continued. He helped his father on the farm and picked up carpentry and masonry skills. Through the first years of the Civil War, Oscar stayed home, perhaps because Luther was afraid of losing another child. Nevertheless, in 1864, when Oscar reached the age of twenty, he joined the 144th New York regiment and fought in the final year of the war. He came home unscathed.

At home, Oscar married a local girl, Sarah Parris, and set up housekeeping. He farmed and built up a good business in masonry and building construction. As his half brothers grew older, some joined him in his work, especially Orville. Our records show that Oscar and Sarah had only one child, Lulu. Though we do not know, one has to wonder if they named Lulu after her grandfather, Luther. Since the town did not record births in this period, there is some mystery when Lulu was born. School records suggest it was in 1877, while



It is very likely that Lulu Briggs' father, Oscar Briggs, is in this photo of the masons working on the new Presbyterian Church in June of 1895. Perhaps he is the man on the right working on a stone.

Briggs - con't. from page 5 her gravestone suggests 1872.

Life was going well, until tragedy struck again in 1888. In July of that year. Oscar's wife and Lulu's Mother, Sarah, died of cancer. Elizabeth Hanford wrote on July 13, in her diary: "I up to Oscar Briggs, his wife died of Cancer." Mrs. Hanford often helped nurse neighbors, and if they died she helped prepare them for burial. She wrote the next day: "We all attende[d] Sarah Briggs Funeral." Lulu was about eleven years old. Oscar was left alone to raise his young daughter. At least, he had several sisters to turn to for help. We know that by the 1892 census, Emma (twenty five vears vounger than Oscar) had come to live with them - keeping house, helping raise Lulu. and working as a teacher. Oscar became known as a lady's man: "O.A. Briggs is the man who is to do the repairing in the iron bridge. ... O.A. will get tangled up sometimes with some susceptible young widow. but he never neglects business." (Delaware County Dairyman, September 30, 1892) Oscar finally married a Lydia Griffin about 1896.

Like the quote said, however, Oscar never neglected business or his daughter. He made sure she staid in school, and they were active in village life. While her father was Methodist, Lulu became a founding member of the Presbyterian youth group, Christian Endeavor, in 1893. She also participated in local plays. The most memorable was the "Heroic Dutchman of '76," a play about the Revolutionary War. Lulu received a lead role, one of only three female parts in the play.

As Lulu grew older and the end of her school years approached, she began to look around for a job. The local Delaware County Dairyman newspaper chronicled her

search. On March 5, 1897, they reported: "Misses Maud Hanford and Lulu Briggs attended the teachers examinations at Delhi this week." Perhaps Lulu did not pass the exam or maybe she found she didn't like teaching. Whatever the reason, on September 10, 1897 the paper tells us: "Miss Lulu Briggs is now in the employ of Hanford Bros. vice Lillie Hill, time expired," Of course, she was not working in the mill, but she could have been working as a hired girl keeping house for the Hanford brothers, or she could have been hired to run their farm's creamery - separating cream, churning and packing butter. Whichever job she had, she went on to work in other local villages as well.

While working in Bloomville, Lulu met her husband, Marshall Every. They married, perhaps around 1898, and lived there the rest of their lives. We know little of their life together, but the cemetery stones tell us Marshall died fairly young at the age of 45 in 1923. Lulu continued to live in Bloomville until her death in 1951. She never remarried. Her stone says she was nearly 80 years old.

As you can see, we know little of this female Hanford employee, but despite this, the story of her family is interesting. If any of Lulu's family members remain in the area, we would love to hear more about her life to fill the blanks that we have covered with supposition. If nothing else, Lulu Briggs takes a special place among Hanford workers as one of their few female employees.





Lulu Briggs and the cast of the "The Heroic Dutchman of '76," Dec., 1894.

From l. to r. are: Alfred Thompson, Charles Hanford, Joe Roberts, Libbie Hanford Barnes, Lulu Briggs, Mel Hamilton, Belle Lauren, Horace Hanford, Arthur Hamilton, Will Hamilton, & Hector Haxton.

Workshops - con't. from page 4 expensive power tools. Limited space; Member's Discount.



Sunday, October 11 through Friday, October 16, Hanford Mills Museum and the State University of New York are

co-sponsoring a week long **Elderhostel** program at the

Museum. The program will focus on three different college level courses: the water powered mill, edible and medicinal plants and the preservation of family heirlooms. Elderhostel programs are offered to senior citizens only and are administered by the Elderhostel organization. Please call for details on how to register for the Hanford Mills Program with the Elderhostel organization.

## A Woman's Place - in East Meredith, NY

### by Caroline de Marrais

March is Women's History month. When this time of year comes around, it seems that Hanford Mills Museum should also do something to celebrate. Of course, when we look at the mill, not that many women were involved directly. We can look at the village of East Meredith, though, and see what "a woman's place" was like. The men who worked at Hanford Mills came from East Meredith and the surrounding area, and most shared their homes with women - mothers, wives, and daughters. These are the women who helped make East Meredith and Hanford Mills possible.

A look at the local newspaper, the Delaware County Dairyman, shows us a reflection of life in East Meredith that we can use. Of course, the East Meredith correspondent filled most of the local column with the doings of men, but sometimes we see what the women were up to. As an introduction, one quote from the November 18, 1898 paper shows us what the ideal woman was. The East Meredith correspondent was listing why East Meredith was better than another local town. and in his list appeared

...that our young ladies were handsomer, our middle-aged ladies better cooks, and our old ladies more attractive.

East Meredith had perfect children, perfect wives and perfect mothers. This was what was expected of women in the nineteenth century, but other views also appear in the paper. In some stories, we see the effect of women on men, usually as it relates to courting. We also see how women could become a financial force as they



"... our young ladies were handsomer our middle-aged ladies better cooks, and our old ladies more attractive ..."

formed a church Lady's Aid society. We see women at work and how well they did. Here are some of their stories.

The best place to find tributes to women as good children, wives and mothers was when it is too late - in their obituaries. The death of a young woman was considered a special tragedy; as one article put it "death loves a shining mark." On May 13, 1898, the paper announced the death of 22 year old Jennie Smith, who died of complications due to measles. The author of the article wrote she

was admired, respected and loved by a large circle of friends. Her accomplishments were many, her manners were pleasant. She was a consistent Christian ...

Older women also received glowing testimonies in their obituaries. Mrs. William Brownell, who died on August 23, 1895 at the age of 63, received this eulogy in the August 30 issue of the Delaware County Dairyman:

To everyone who had the pleasure of her acquaintance she had a kindly word and pleasant smile. That she was a christian in the broadest sense of the

term was plainly exemplified in her useful life, devoted to the interests of her family and society - a loving wife, a kind and affectionate mother, a kind friend and neighbor. ... It could be truly said of her, behold a woman in whom there is no guilt.

A woman didn't necessarily have to be dead, though, to receive praise from the newspaper. During her recovery from surgery for appendicitis, the newspaper recorded concerns for 21 year old Nellie VanAlstyne, writing on January 25, 1895: She has a host of friends here as well as in Meridale who hopefully await her recovery.

Mrs. Carrie Hanford and her mother-in-law Mrs. Elizabeth Hanford were also sick when the newspaper wrote about their accomplishments in the May 3, 1895 edition of the <u>Delaware</u> County Dairyman:

We have known both ladies for a number of years, and can say with many others that their charitableness and neighborly assistance in times of sickness have been highly appreciated.

The newspaper also congratulated Carrie Hanford on February 8, 1895 for winning a diploma for a package of butter she sent to the 1893 Columbian World's Fair in Chicago, IL.

Perhaps some of the most amusing entries in the local paper, are news items that show how much men appreciated women. Many of these little news items were about young men and women courting. The November 29, 1895 newspaper shows how important that special girl might be:

We are informed that a Kortright young man contemplates studying for the ministry in order to make himself good enough for an East Meredith girl.

Women - con't. from page 7 Even a force of nature couldn't keep young lovers apart:

Leo Palmer it is rumored roosted in a tree in George Warren's pasture the other night, while a two year old bull entertained him with an impromptu serenade. I think this is a fake as there was a hammock and a young lady awaiting him just over the line, and it would take a whole drove of wild Texas steers to tree Leo when bright eyes were awaiting him. (August 5, 1898)

The lovers didn't always have to be young either, as this July 10, 1896 entry in the Delaware County Dairyman tells us:

Mrs. Robt. Haslett has returned from her Walton visit, and Rob looks as pleasant as though he had sold a car load of feed.

The newspapers weren't necessarily exaggerating either, as this 1875 letter written to East Meredith resident Anna Flower shows:

Anna I am glad to hear that you have not given up coming to see us altogether. You must hurry Will up just as soon as you can. If he won't come with you, come alone and stay till he is glad to come for you. That would'ent be long I guess.

Will was Anna's husband, of course.

Outside the home, women in East Meredith often formed education and religious groups. Perhaps one of the most influential in the late 1800s was the Lady's Aid Society of the Presbyterian Church. They helped raise money for the new church when it was built in 1895 and other projects throughout the years. The local paper occasionally reported when they met with small items like this from the February 1, 1895 paper:

The ladies aid society met at Mrs. L.O. Hanford's last week.

At other times, the paper reported their earnings for various special events such as an ice cream social in June of 1895 where they earned \$14. It may be significant to note that in all these early newspaper entries the group is listed as "the ladies aid society" all in small letters. Yet in 1898, we hear how impressed the East Meredith correspondent is by the way he adds capitalization to the group's name, and by the language he uses:

The fancy fair or novelty social at the parlors of the 1st Presbyterian church Friday night was a great success, over \$40 in the current coin of the realm being realized. The Ladies Aid society is developing into a mighty power as a money raiser. I want to just whisper in the ears of the public that when the ladies of East Meredith combine and start out to accomplish an object it is a sure winner, right from the start. (March 4, 1898)

The Ladies Aid Society was able to help many people.

While women were praised for their skills in traditional women's roles such as wife and mother and in charity societies, the newspaper also shows us a few women who took on jobs outside the home. We read about school teachers:

Miss Belle Laughren has closed another successful term of school in this place ... giving entire satisfaction to both pupils and parents. While here Miss Laughren made a host of friends. (July 19, 1895)



Dr. Gertrude Maharg Peck, c. 1885

There are also the traditional hired girls, such as:

Miss Lottie Munson has received the appointment of pancake engineer in the Thompson kitchen. - Jennie Williamson has gone to her home in Kortright on vacation, but has left the Thompson kitchen in good hands during her absence. (December 10, 1897)

We also hear about women who actually had to travel to do their jobs:

Miss Lottie Street from Mrs.
Knapp's millinery establishment, Oneonta, was at the
Congdon house for four days
with a fine display of hats and
millinery goods of all kinds and
was well patronized by the
ladies of this place. (May 17,
1895)

Mrs. Congdon was a partner in the hotel, the Congdon House, along with her husband. We read about her job in the May 3, 1895 Delaware County Dairy-

Last Saturday night Mrs.
Congdon served the guests and people of the place with excellent ice cream. Mrs.
Congdon's cream has already become famous. No picnic ice cream about that. By request it will be furnished every Saturday night ...

Other women had less traditional jobs. Doctor Gertrude Peck, who lived in Davenport Center three miles away, often treated area patients. When the local paper mentioned her, though, they always referred to her as "Dr. Peck." Another woman was Mrs. J.L. Murdock who ran her own farm. The local correspondent seemed to like her:

Mrs. J.L. Murdock is moving back to her place from Oneonta. Glad to see them coming back. (November 29, 1895)

It is interesting while women in jobs were becoming accepted, they still had to be pretty:

We saw a new hired girl at Will Archer's the other day. She was a nice looking girl but we did not learn her name. (November 29, 1895)

Women - con't, from page 8 or

S. Kimball is the new trustee in the Blakely district. Have not heard what teacher he had hired, but you may gamble that she will be a good looking school ma'am. (August 20, 1897)

The Delaware County Dairyman newspaper shows us a woman's place in East Meredith, New York. This "place" was

traditional, but it also was beginning to move into a twentieth century where women began to take on roles outside the home and their immediate community. They were a "loving wife," a "consistent Christian," a "nice looking girl," and a "mighty power." Perhaps the highest tribute they received was on May 8, 1891:

Sunday was an exciting day in this place. About 9 o'clock, A.M., Chappel's hardware store was discovered to be in flames. ... Too much praise cannot be lavished on the ladies of our village. They worked as energetically, carrying water and removing goods, as did the men. Everybody did all they could. ...



### Hanford Mills Museum's Blacksmith Shop

by Tres Loeffler

The recreation of the Hanford Mills Museum's blacksmith shop started in late spring of 1997. I was greatly aided in the design and layout of the original structure by four existing photographs in the museum's

This photograph taken during the flood of 1935,

Measurements and

scale were worked out from

these photos, so that our repro-

duction matched the original.

public utilized at that time.

logs for the eight by ten foot

In June, we sawed out the

RTLAND CENENT

collection.

reproduction, and I laid up a rock foundation. All of the mortice and tenon joinery was completed by mid-month. With the help of the museum staff, along with interns. David Lewis and Chris Dobbs, the frame was

> of June. The siding was installed using lumber generously donated by board member, Craig Van Cott. and the building was enclosed in pictures of three of the four sides. and none of the interior, I chose a

erected by the end July. Only having

shows the original blacksmith shop or "forge" on the far left with the "Atlas" sign on its side wall. traditional layout. Two double hung doors across the front, and a workable interior was set up. I matched other features, such

> The only set back came during the UPS strike, when

the delivery of the forge firepot was held up for three weeks. This delayed the opening of the shop until August 23, 1997, the first day of the Lumberiack Festival.

On special events and several times weekly throughout the season, I demonstrated the blacksmithing trade. Several specialty items and custom orders have been placed with the museum since August. We have returned the branding of boxes once again to the forge, as traditionally done. Restoration in the mill has also been aided with the help of the blacksmith's shop, by producing period replicas of missing or broken pieces.

Please come out this year, and see another of history's traditional trades being demonstrated and interpreted here at Hanford Mills Museum. It is an exciting and interesting chance to see how things were done vesterday.



This photograph shows the completed reproduction blacksmith shop from the front.

## The Miller and Millstones - Part I

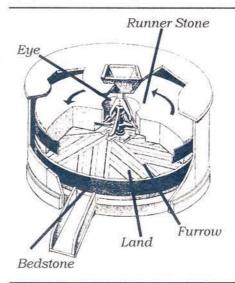
### by Robert Grassi

D.J. Hanford claimed to be a miller in the 1892 census. A miller, in that time period as now, was defined as a person who owns and/or operates a mill, particularly a grain mill, but not always. Most of us consider the occupation of miller as someone who grinds grain into meal or flour, an occupation almost as old as civilized man himself, but few really know or can appreciate what was required of this profession, particularly with regards to the use of millstones.

Previous to the early 1880s, in this country almost all grain was ground using millstones, whether it was flour for human consumption or livestock feeds. With their advent and eventual acceptance, steel roller mills replaced millstones in flour mills, and steel plate mills (including the advent of the attrition mill in the 1890s) and hammer mills replaced millstones in feed mills. Of course, all this did not occur overnight, but by the mid-20th century nearly all millstones had disappeared from general use. The use of steel rollers and plate mills made millers into machine operators. The end of the millstone era signified an end to milling as a craft and brought milling into the industrial age.

Traditionally, it took three to four years practice and experience to become a miller. Most of this time was spent on learning the skill of dressing and handling millstones. Millstones work in pairs, typically set horizontal, the *runner stone* (in most cases the top stone) turns under power and the *bedstone* (the bottom stone) remains stationary. As the runner stone is in motion, grain is fed into the *eye* (the hole in the center of the top stone), works between

the grinding surfaces and is ground, and exits the stones as finished flour. Contrary to popular belief, millstones in operation do not rub stone on stone against each other making contact. The miller carefully maintained a clearance at all times. This tolerance may be, depending on what was being ground, as close as a tissue papers distance apart.



The quality of the finished product was a direct result of the miller's skillful control of the distance between the stones (the act of tentering). Equally as important, was his control of the rate (the feed) of whole grain being fed between the stones, and the speed of the runner stone. While in operation, the miller initially made adjustments to these three areas determining the consistency of the finished product by a keenly developed sense of touch. Then once satisfied, he would only occasionally check on the flour throughout the grinding making adjustments when necessary. This could be quite demanding when one considers the different grinding properties between grains and by the variable moisture contents that the miller encountered. Every day was a slightly different experience and adjustments were made accordingly. Today, mills blend and *temper* (add or remove moisture to) grain, making a very consistent raw product before grinding.

With all the skill required to produce a quality, consistent finished product, by far the greatest skill required in milling was that of keeping the stones in good order. Millstone dressing (sharpening) was the work of cutting the dress pattern (the grooves) into the grinding faces of the millstones. One pair of 48" diameter millstones would typically take between 16 and 20 hours to dress completely and, depending on their use and the hardness of stone they were made of, might need dressing within every two weeks.

During the 19th century, two natural millstone materials held favor with American millers. Hard conglomerates such as granite, were quarried locally, and a form of silica, not as brittle as flint but equally as hard, referred to as French buhrstone, was quarried just outside Paris, France in the Marne Valley. The French stones were considered superior, especially for the manufacture of wheat flour, but being imported as they were, they were not without their high price. When D.J. Hanford built his gristmill in 1868, he purchased a 32" pair of French buhrstones, from Hart and Munson Company out of Utica, New York, along with a hoisting screw and bales for a millstone crane. The total price was \$400. This was expensive but worth it when you consider they were in continuous use at Hanford Mills

The Miller - con't. from page 10 from 1869 to 1898, almost 30 years. Still, the life expectancy of a pair of French stones was approximately 100 years, granite stones about 60 years, so mills were not in need of replacements too often.

The Walling mill in the museum collections (located in the original position of the Hanford's Munson mill in our gristmill) contains a 24" pair of French buhrstones. The stones in this mill are quite worn indicating that it has seen a lot

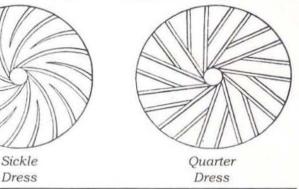
of use. This mill is unusual, but not extremely uncommon, in that it is an *under runner mill* (the bottom stone turns and the top stone remains stationary). The mill has several registered U.S. patents filed March 3, 1879 from a local gentleman,

Stephen P. Walling from South Edmeston, Otsego County, New York.

The use of millstone dress patterns developed several thousand years ago. Like every development throughout human history, no single person or group of individuals can be credited with its first use, but we do know Roman millers were dressing their millstones. Interestingly enough, tests demonstrate that millstones are 70% efficient without any dress at all, but that added 30% did make a significant difference in their performance. The dress pattern serves three functions during the grinding process. The first, and probably the most important, is the shearing action created between both surfaces that actually cuts up the grain as well as pulverizes it. Both grinding surfaces are dressed identically so when the runner stone is inverted and set on top of the bedstone, the patterns oppose each other. The

second function of the dress is, along with the action of centrifugal force, the movement of the grain from the eye section to the outside of the stones. The third function is to provide ventilation to help keep the temperature of the grinding process at an acceptable level. The temperature of the flour as it leaves the stones, along with the quality of the finished product, is how a miller determines that the millstones are in need of sharpening.

Two basic styles of millstone



dress evolved and proved themselves through use, the sickle or circular dress, and the quarter or straight dress. The variety of millstone dress styles was as varied as the individual millers themselves. In fact, it was not uncommon when a new miller took over a mill that the old dress was removed from the stones and a new one put in. the favorite of the new miller. There exists a pair of millstones in the vard of a local Historical Society in Shoreham, Vermont that demonstrates this well with both sickle and quarter dresses on each stone. In this case the new miller preferred his own adaptation of the quarter dress, with at present, the sickle dress being almost completely wore out of the stones. By the 1870s, there were many patents for millstone dresses registered with the U.S. patent office, but all these dresses fell into the basic two styles with just slight variations prevailing. It has been my experience that no two pair of millstones have exactly the same dress style unless they came from the same mill, or were dressed by the same craftsman.

The grinding faces are divided into two distinct areas, the *furrows* (grooves), and the *lands* (flat surfaces). The master furrows run from the periphery of the stones to slightly off true center giving the furrows draft. The amount of draft is about 1 inch per every

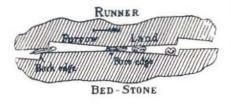
- foot of millstone
diameter and is
either pulled off one
side or the other from
true center depending
on which direction
the stones are to
operate. In some
cases smaller secondary or auxiliary
furrows connect with
the main furrows
- from the outside edge.

The furrows vary in width from 1" to about 1 1/2" depending on personal preference, and are deeper on one edge (the back edge) and taper up to the land face on the other edge (the feather edge). The depth of the back edge largely depends on the grain to be ground and is usually between 1/4" and 1/16", always deeper nearest the eve and shallowest at the outside edge. The flat areas between the furrows (the lands) are cut with fine lines called cracking or stitching. These vary in amount, again depending on personal preference and the type of grain to be ground, from 8 to 30 cracks per inch, usually cut in parallel to the feather edge of the furrows.

Many millers prided themselves in their millstone dressing abilities taking great care with them even to the extreme. Some argued too much time was lavished on the stones, but

The Miller - con't. from page 11 all would agree a quality, well-executed millstone dress produced a quality flour. The large milling centers like Rochester, New York and Minneapolis, Minnesota supported the itinerant millstone dresser but for the most part millstone dressing was performed by the millers themselves.

Learn about the tools used to dress millstones in Part II of The Miller and Millstones in your next issue of Millwork.



This illustration gives an idea of how grain in ground - it shows the furrows and lands.

### **Projects From the Mill Foreman**

by Robert Grassi

Among the lumber sawn this fall, was a new white oak sill to replace the old rotten one at the entrance to the sawmill. Exposed to the elements, the old sill (only installed in 1982) was almost completely rotted.

Some research into the mill's history revealed the use of off-feed rollers in the operation of the sawmill. Four new roller stands were recently constructed and installed. We are also working on new oak mud sills for the sawmill which we will install under the husk frame. The Pizzas sold the sawmill in the 1965 auction and it was later returned. When it was reinstalled in the mill, wood shims were used in place of proper mud sills under the husk frame. The husk frame (the frame that carries the saw mechanism) should be bolted to the mud sills, which are usually constructed of solid timbers. The previous multiple shims did not maintain their correct position during operation. It required frequent adjustments, almost on a daily basis. We are rectifing the situation with this new installation.

Other work includes the replacement of the infeed roller for the Greenlee power feed rip saw, which was worn to the point it needed replacement. The step cut-off saw had its babbitt bearings repoured and drive system tuned. Our elevator has received some attention with a new drive rope being installed and we are exploring the possibility of returning it to its original power drive system. After the quern's first season's use, it will get its stones dressed. It had some hard use especially from our younger visitors.

As always, we welcome your comments on all our ongoing projects in the mill both past, present, and future. We hope to see you all this spring.

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