# MILL MUSINGS

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#### PROGRESS ON EARLY CARDING MACHINE

Following the opening of the new textile exhibit area on the second floor of Falls Mill, we have begun restoration work on some of the machinery in the exhibit. John started with the 1830's wool carding machine donated by the former American Textile History Museum. He removed the cylinders of the machine one by one. stripped the old carding cloth, and trued the cylinders in the old Hamilton lathe in the blacksmith shop. Since the cylinders are wooden, the wood changes dimension through the years but the roundness must be maintained for the machine to operate properly. This is a somewhat slow and tedious task. After each cylinder is completed in the lathe, a coating of varnish is applied to help seal the wood from further dimensional changes. The next step will be to apply the new carding



cloth, called "fillet," to the cylinders. We have the equipment for accomplishing this, donated several years ago from a woolen mill in Minnesota.

Several repairs were necessary to the carding machine. Four of the cast iron bearing supports were broken, and two pieces were broken and missing from the cast iron arches that support the bearings and cylinders. The bearing supports were repaired with J. B. Weld cement and reattached to the arches. Two pieces of steel were cut and bent to match those broken from the arches, and they were also cemented into place. A long missing carriage bolt was made in the forge at Falls Mill to match the one remaining. A missing wooden part is awaiting fabrication after we view a similar one at Ketner's Mill near Jasper, Tennessee. Fortunately, most of the critical parts remained with the machine, and we feel confident it will run again and process wool into 2-foot long slivers that may then be spun into yarn.

The machine itself was bought around 1830 for use in a woolen mill in West Virginia, where it operated a century and was moved into a barn in 1930. Here it remained until 1966 when the American Textile History Museum acquired it, but it was never restored or put on exhibit. This historic and rare machine will be powered off the water wheel at Falls Mill when it is ready to be tested and operated.

#### LOGS FOR SCHOOLHOUSE RECONSTRUCTION

A log corn crib has been donated to the museum by B & W Growers, Inc. The company raises water cress, arugula, and other salad greens at several farms in the area. The crib, located in Lincoln County, Tennessee was surrounded by a frame barn. The structure was in a state of deterioration, following roof damage during the 2011 tornado. Track hoe operator Travis Gamble accompanied John to the barn site and dismantled the barn on Memorial Day. The numbered logs were loaded onto three trailers and brought to the mill. While John was stacking the logs, one slipped off the pile without warning and hit his left leg below the knee, causing a nasty abrasion and considerable bruising. The leg is healing slowly and fortunately nothing was broken.



Plans are to construct a close replica of the Caney Hollow one-room log schoolhouse, which was located three miles from Falls Mill. The corn crib will provide most of the walls for the schoolhouse, and we are planning a "schoolmaster's quarters" as an addition, to serve as a handicap accessible bed and breakfast unit. We already have several fixtures and artifacts to furnish the schoolhouse, including a large 1916 bell, schoolmaster's desk, some vintage student desks, lunch buckets, slates, and a pot belly stove. Once the schoolhouse is finished, we plan to use it for educational purposes and possibly as a wedding venue, in addition to the bed and breakfast accommodations.

## **DONATION OF RARE FLY SHUTTLE LOOM**

Greenbank Mills and Philips Farm Museum in Wilmington, Delaware, have donated a rare Eureka fly shuttle weaving loom to our museum. The fly shuttle loom was originally developed in England by John Kay in 1738 as a means of speeding up productivity on a hand loom. Prior to his invention, hand loom operators passed the shuttle holding the weft yarn back and forth manually. The fly shuttle attachment allowed the loom to mechanically throw the shuttle back and forth by a jerk on a connecting cord, performed by the operator with greater speed. This type of loom persisted into the mid-twentieth century, almost 150 years after power looms had replaced manual looms in textile factories. The Eureka loom was developed in the late nineteenth century by William Kynett and Ira Tuttle of Battle Creek, Michigan, and manufactured by them for several years thereafter. It is not known how many remain, but it is considered a rare loom, this particular example having been restored to operate some years ago. Museum member Kyle Dugger accompanied John on the trip to Delaware to pick up the loom. They returned on July 22<sup>nd</sup> and assembled the loom on Monday the 23<sup>rd</sup>. It will be on display in the new weaving room. It is a two harness loom used for weaving rugs.





#### **DONATION OF A WHATSIT DEVICE**

Johnny Mack Bull donated a very unusual device to the museum that he purchased from an antique shop in Alabama. It was tagged as a cotton gin, but it was unlike any cotton gin we had ever seen.. It is operated by a crank wheel similar to a spinning wheel. This wheel runs a set of blades in a small box. The wheel also turns a set of gears to discharge something from the back of the box. We believe it might be a peeler of some sort, as the blades are made to expand and contract with the size of whatever goes through them. There are discharge holes on one side of the box. Searches for a similar device in the patent records and on the Internet have yielded no clue. If any reader has seen anything like it, please let us know.



**ADDITIONAL DONATIONS** 

In addition to several monetary donations received since the last newsletter, for which we are very grateful, the museum has been gifted more items of interest. Fred Benson donated an old hand cart he believes may have been used to move cotton bales. Longtime museum member Larry Hasse donated five copies of his recently published book entitled *Industry and Subsistency*, which chronicles the development of a sawmill industry in Washington state and its influence on the local farming community between approximately 1897 and 1943. Larry grew up on one of the subsistence farms he writes about. John found the book quite interesting, and additional copies are for sale at Falls Mill.

Museum member Frank Turpin donated a set of tongs we believe were used with a coal stove. Joshua Burton donated two church pews, one of which we are using for additional seating for the Falls Mill video. Richard Gulley donated some blacksmith items, including a post vise and hand turned grinding wheel, and Ray Torstenson also gave us a similar grinding wheel that was mounted to a workbench.

#### RARE SPINNING WHEELS ON EXHIBIT

Museum member and benefactor Kim Caulfield and her mother Jane, owners of Far Out Farm in Lincoln County, Tennessee, displayed three of our unusual spinning wheels as a part of an exhibit hosted by the Alpaca Owners Association, Inc. This Natural Fiber Extravaganza, as it is called, took place July 13 – 15, 2018, at the Wilson County Exposition Center in Lebanon, Tennessee. Kim displayed about 17 spinning wheels representing a great variety of these devices, including those from our museum as well as her own personal collection. The track wheel, the accordion wheel, and the pendulum wheel from the museum here at Falls Mill represented three unusual attempts to allow the spinner to remain seated during the spinning cycle rather than having to walk back and forth.

#### **DEMONSTRATION DAYS**

The demonstrations on the second Saturday each month will continue through November. Steve Walker sets up his 1880's cowboy camp and talks about the glory days of cattle drives and the role of the cowboy during that era. He also displays saddles and a metal "roping calf" the kids can try out. John or Gary Runyon are featured in the blacksmith shop making a variety of forged art. Carole Runyon demonstrates her skill on the spinning wheel with members of her spinning guild. Candy Albright and Janie are on hand to weave on the hand looms in the mill.





## **REMEMBERING LOST FRIENDS**

It is with sadness that we acknowledge the deaths of our friends that have occurred since the last newsletter. Ralph Cunningham of Belvidere, Tennessee was the brother of Donald Cunninham, the previous owner of Falls Mill. We also lost Mr. Tom Knapper, of Belvidere. Tom's son Andy Knapper and his wife Kathy have made numerous donations of hand tools and spinning and weaving equipment to the museum over the years. John also recently lost a longtime friend and colleague, Michael Jones, who taught engineering with him during his tenure at the University of Tennessee at Chattanooga between 1976 and 1984.

# MEMBERSHIP PICNIC SATURDAY, SEPTEMBER 8th

There will be barbecue and music on Saturday, September 8<sup>th</sup> at Falls Mill. The annual membership picnic begins at 5:00. Bring your favorite covered dish or dessert and join in the festivities. Music this year will be provided by the Horse Mountain Old Time String Band. The group plays bluegrass, Americana, and contemporary music in the old time string band tradition. Mark your calendar and join us for the party. R.s.v.p by September 1<sup>st</sup> (931) 469-7161 or by email at admin@fallsmill.com

Check your museum membership card, and if it is time to renew, please join us at the Museum of Power and Industry, Inc., at Falls Mill for another year! Your membership fee and any donation you care to make are so important to us in continuing the work we have undertaken these last 34 years. Thank you for your contribution.

Check the contact/calendar page of the webs	site fallsmill.com for special events.
INDIVIDUAL/FAMILY MEMBERSHIP	\$25.00 per year
TAX DEDUCTBLE MUSEUM DONATION \$	