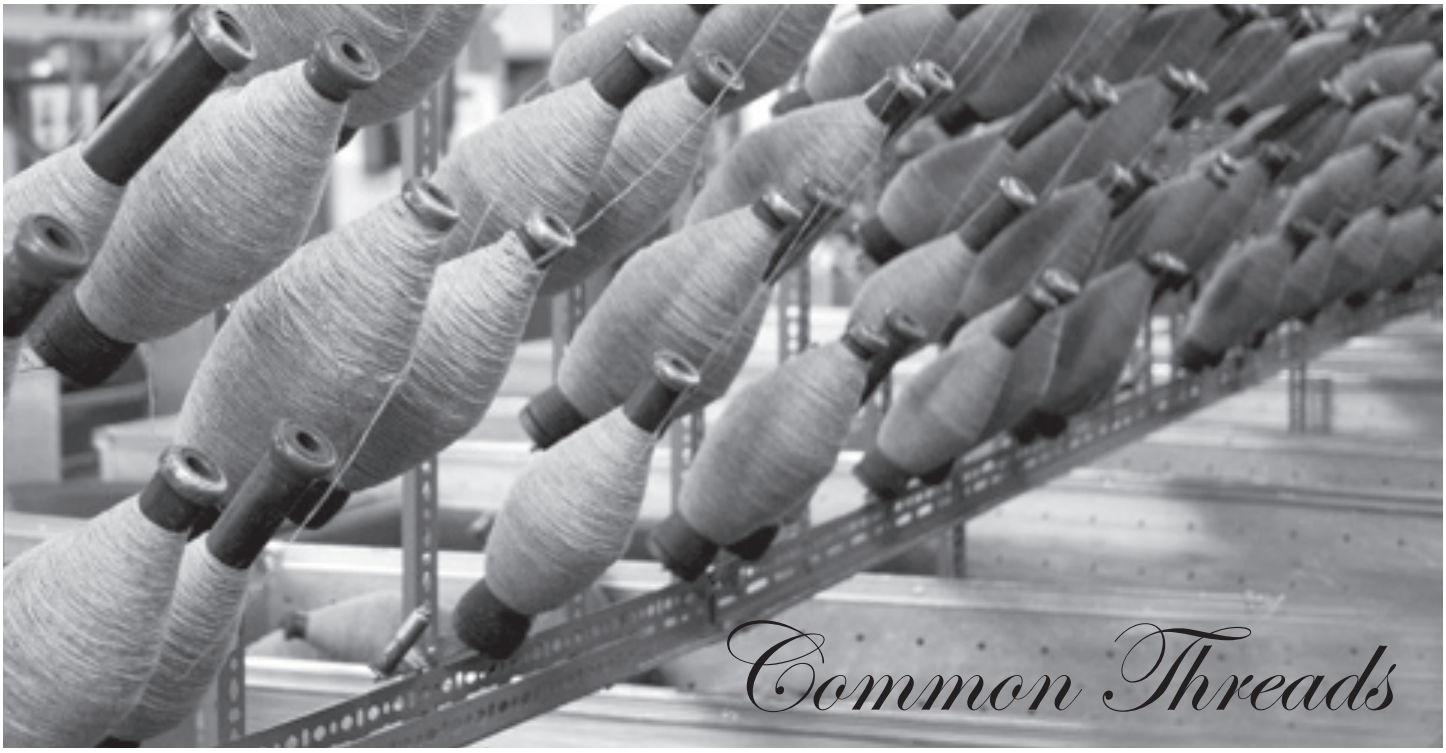


PHOTO: REBECCA UPJOHN SNYDER

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A TALE OF SPINNING IN HARRISVILLE

The story of spinning in Harrisville began in 1799, when Jonas Clark built a "small establishment on the banks of Goose Brook . . . for fulling and finishing cloth."[1] His wife, Mary, one of Abel Twitchell's daughters, used the water-power in her husband's clothier shop to spin linen thread. The Clarks' endeavor did not last long, but the manufacturing of yarn in town continues to this day. And, as with all good stories, you can't tell from a casual glance that there is magic at work here.

Although the Cheshire Mills closed in 1970 following the collapse of the textile industry, Chick Colony, who established Harrisville Designs in 1971, found a way to rescue some of the mill machinery and put spinning back into production. Then, in 1977, the new Harrisville Spinning Mill, designed to rehouse the old machines, was built near the old rail freight yard off Skatutakee Road.

The machines range in age from the picker, made before 1900, to the ring twister for plying yarn, which is dated 1980. "Through the 19th century there were a lot of improvements to machinery," says Chick. "By 1900 most of these were in place. That's why most of the equipment that carried the textile industry through the 20 century was actually from 19th-century designs."

Babs von Stade, the Harrisville Spinning Mill supervisor, was 19 when she started working in the card room at the Cheshire Mills the summer before it closed down. She has been at the new spinning mill for 37 of its 40 years and knows each machine and every step of the process. She and her mill team share the steps of how they make wool fleece into yarn.

"Every yarn has a formula," Babs explains, "for color, weight, ply, how tightly it is spun, lot size, and how it is packaged."

When a new color formula is being worked out, Babs uses the sample card machine. "You weigh out bits [of wool] up to 100 grains[2] and put them through," she says, making it sound like a casual thing. I learn from two different people that she is exceptionally gifted at designing and blending colors, although she doesn't tell me this herself. Her assistant Sarah Bethel, also the spinning mill's team manager, explains further. "We create variations, each 100 grains. From there, we pick which one we like and then scale it to the lot size we make."



PHOTOS: REBECCA UPJOHN SNYDER

Jimmy McClure supervising the flow of web.

The first step in yarn production takes place in the picker, where the wool is opened, mixed, blended, and oiled. Wool passes through the picker two or three times under the watchful eyes of Jimmy McClure or Rick Prentice, who also run both cards and maintain and fix all the machines.

Once blended, the wool is hand-fed into the carding machine. The card, loud and



Rick Prentice adjusting the card.



Joyce Davis removing bobbins from the spinning frame.



Claire Somero monitoring the ring twister.

impressively long, combs the wool into a smooth, even web. Rick, who has worked at the mill for 3½ years, explains that the wool gets pulled apart 60 times as it passes through the wire combs, over and under the many tumbler rolls, cylinders, and doffers before coming out the other end.

The gears, gauges, and belts of the card require constant supervision for safety, and frequent fine-tuning. I watch as Rick adjusts a gear to slow the pull of one of the rolls. Keeping the card running smoothly is sometimes like solving a puzzle, which Rick enjoys. "There is a big variety of things to do," he says. "I love it!"

Jimmy McClure, a veteran of 30 years at the spinning mill, shows me the web as it comes off the first section of the card and is laid down on the table feeding into the next section. "It cards 60 pounds an hour," he says, and after every 2,000 pounds the cards need to be stripped clean. Jimmy points out the hoses along the ceiling that connect to the vacuum stripper tank in the next room.

Near the end of the carding process, the flat web is cut into ribbons of wool. It then passes through a tape condenser that rubs the flat strands into round roping (sometimes called roving), readying it for spinning. "It's like making play-dough worms," says Babs.

The spools of roping are then fitted onto the two spinning frames. Joyce Davis, who is the main spinner, began spinning at the age of 18, "100 years ago," she says with a laugh. Her spinning experience brought her to the Harrisville Spinning Mill and she has worked here cumulatively for 29 years. She likes the physicality of the work, she says, and the fact that she is constantly moving.

Joyce splices the strands of roping onto the 144 wooden bobbins below, with the deft movements of someone well-practiced. The gears of the frame are set, she says, to determine the speed of the machine and how much twist goes into each yarn. Once the yarn is spun, Joyce removes the bobbins and places them into trucks (trolleys) that she wheels into the steamer, which "sets" the twist in the spun yarn.

After steaming, the yarn is plied, a process of twisting two or more strands together. The ring twister, used for plying, that Claire Somero is working on is a recent replacement, one that everyone seems happy with.

Claire has been at the mill only a few months, and although she'd never had a manufacturing job before, this one is a good fit and she is eager to learn more. "I knit and crochet," she says, then she grins and hugs a bobbin of yarn. "I love yarn. Being a part of making yarn . . . I'm trying to contain my excitement."

After plying, the yarn is wound into skeins or balls or onto cones. Cherilyn Hautanen, who has been at the mill four years, operates one of the skein winders. She jokes with Babs and me, but her hands are never still, and by this point in the process I see how much physical input and manual skill yarn-making requires.

"People think that synthetics put the textile industry out of business. It didn't," Chick Colony tells me. It was a "third-world emerging industry, where labor is cheap. Textile-making is very labor intensive."

Melissa Nelson, five years at the mill, never pauses in her work as she talks. She is twisting skeins of Peace Fleece[3]



Cherilyn Hautanen making skeins.



Melissa Nelson twisting skeins for packaging.

for packaging. She is cross-trained on many of the machines, like most of her co-workers. "I don't run the card, I've never done picking or spinning. Other than that I've done everything."

There is a great deal of co-operation and co-ordination that goes into the yarn production here. They work as a team, keep each other safe, and help each other out, says Babs. "We don't leave anyone in a mess."

"Working for a small company . . . [it's] a small group of us, so we are all friends," says Sarah, who has been at the mill 13 years. "I really like being on my feet all day, changing what you're doing often. I've been lucky that I get to do a little of everything." She smiles. "And it's nice to make something that's made in the United States, locally."

"The nice thing is that we have found a demand for high-quality yarn. And that quality comes down to raw materials. We can buy 100% virgin wool and make yarn out of it because we have an end user that can afford it," Chick tells me. "Our yarn mostly goes to hand-weaving or hand-knitting. Very little goes into commercial use. People value their time and they want to use the best yarn they can get their hands on."

Perhaps there isn't a fairy godmother in this story, but the spinning mill team is creating something remarkable. I imagine Mary Clark spinning her flax into thread in her husband's "establishment on Goose Brook," more than 200 years ago, and how her legacy continues through hard work, grit, imagination, passion, pride, and a group of people working on machines that in some cases outdate us all.

Beyond the sound of factory machines, the smell of wool, and the mesmerizing sight of smooth web and spinning bobbins is the talk of problem solving, the rise of friendly teasing and laughter, and the smiles of satisfaction from producing a product that is valued by everyone. Although I see that the success is due to a combination of skill, experience, and the willingness to work hard, there is no question in my mind that there is a kind of magic at work in the mill. But Rumplestiltskin need not apply: Babs and her team have got it covered.

For an online spinning mill tour visit: https://harrisville.com/pages/milltour

Rebecca Upjohn Snyder

1. Armstrong, John Borden, *Factory Under the Elms, a history of Harrisville, New Hampshire 1774-1969. Phoenix Publishing, 1985, p. 13.*
2. *A grain is an old English unit of measure for woolen yarn.*
3. *peacefleece.com/history.php*



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