

Living History

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THE MILL AT LEDYARD, CONNECTICUT

In response to my request for information on up-and-down sawmills, a friend in Albany county, New York, sent a drawing of a blade he had documented on a mill at Kent, Connecticut, and a letter telling of another vertical mill he had discovered in Ledyard, Connecticut. He had visited the Ledyard site in July but it was not in operation because the water in the millpond was low. He planned to go back in April or May of this year when the mill would be working and open to the public.

In early May I called the number he had given me and was told by Ruth Dyer, one of the volunteers at the site, that the mill had just suffered a major breakdown. The men who operate and maintain it were working on the problem but were not sure when it would be operational. I told her I would come anyway. After all, maintenance and repair are important aspects of a water mill.

Ledyard, Connecticut, is a hilly township a few miles from the states southern coast. It lies in the watershed of the Mystic River, east of New London. In the nineteenth century there were many small water-driven mills in Ledyard. As part of the town's bicentennial celebration in 1975, the last of these mills, an up-and-down sawmill, was restored to working condition on Lee's brook. Other mill sites in Ledyard are prized by their steamside homeowners who preserve their foundations and artifacts.

When I arrived at Ledyard on a bright April afternoon, the pond was full of water and the mill was sawing a one-inch-board from a 16-foot hemlock log. Half a dozen visi-

Sawyers and Millwrights of Saugerties, New York



Charlie and Michael Rothe Training Their Team, Michael keeps six Belgian horses for logging. They are ideal for selective harvesting and do less damage to the forest than modern diesel equipment.
(Photo by P.Sinclair)

Although little remains in the written record, some believed there was a sawmill in the mid-Hudson Valley at the present town of Saugerties, New York, before the area was formally settled in the 1680s. According to Charles Rothe, a contemporary sawyer in Saugerties and at one time the town historian, the only evidence of this early mill is the name given to a small stream or kill mentioned in a 1667 treaty with the Esopus Indians. Sawyer Kill, says Charlie, inspired the legend of the "little sawyer" from which the township took its name.

By the early 1970s most of the water mills of Saugerties were gone and forgotten. Eventually, Charlie recalls, some citizens of the town got interested in local heritage and decided to rebuild a water-powered grist mill on Sawyer Kill so people wouldn't forget what the town was all about. The mill was to be built above the place where legend puts the little sawyers mill, on the relative well preserved foundation of Terwilliger's Grist Mill.

The committee of the Little Sawyer's Association hired local carpenters to reconstruct the 14-foot wooden waterwheel and timber frame structure. Charlie, a committee member, and his wife, Lillie, donated the clapboard siding and pine shingles, which they cut on their newly restored shingle mill.

(Continued page 10)

(Continued page 8)

COMMUNICATIONS

Dear Peter,

It was nice meeting you again last Saturday. Hope everything worked well moving the pigs to their new house. Enclosed is my student subscription to Living History. I am enclosing some photos of an up-and-down sawmill I saw in Norway.

Sincerely,
Carla

Dear Carla,

Thanks for helping us move the pigs. We tied a rope around Diana and she jumped two feet, three inches. We gave that idea up fast and built a four-sided box as you suggested. If the government grants us a patent we will, with your approval, name the device in your honor.

I would be interested in more information about the sawmill for the summer issue.

Sincerely,
Peter

Dear Peter,

I'm glad you liked the *oppgangssag* (up-and-down saw). It was built in 1826 and is located 1/4 mile off the road down a wooded path near Rouland in the Telemark region of Norway. It is owned by an older man who uses it for personal projects, in the spring time

when the rivers are high. Riksantikvaren, the national governmental organization that oversees the restoration of all 'listed' buildings in Norway, uses this and other saw mills to cut lumber for restoration work. I helped to repair a nearby loft, which predates 1350, with lumber cut on this mill. After the boards were machine cut, we used a hand-hewing technique to simulate the pre-1350 method.

I believe the saw mill has two undershot wheels, the first to raise and lower the saw blade, the second to return to carriage after the cut. I am sure that all materials are original except maybe the roof. I saw another sawmill similar to this, which was moved to the folk museum in Oslo.

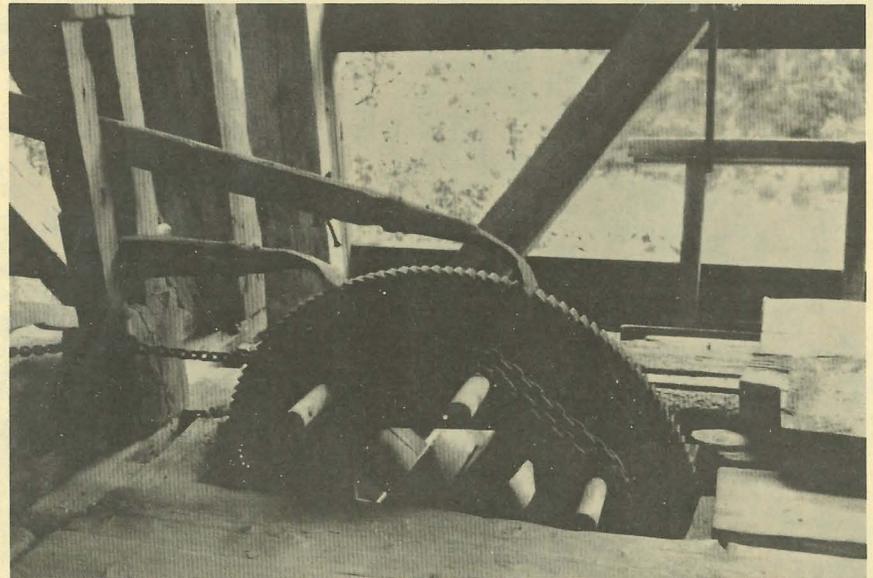
If you decide to market "Carla's Portable Pig Mover" I will require royalties. I'm glad it worked for you.

Sincerely,
Carla



1.) Sawmill, Telemark, Norway. Looking down on the undershot wheel. The pitman arm on the right is connected to the crank of the wheel shaft and operates the saw frame.

(Note: Carla Cielo is from Glen Ridge, New Jersey. She is a graduate student in Historic Preservation at Columbia University.)



2.) Sawmill, Telemark, Norway. The rag wheel pushes the log at an adjustable rate into the blade. This model uses a chain drive.

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ANNUAL MEETING
 ALBANY, NEW YORK



3.) Sawmill, Telemark, Norway. From under the sawmill we see the small water wheel which returns the log-carriage, and behind that the flutter wheel which drives the blade.

More than 150 members of The Early America Industries Association attended the group's annual meeting at Albany from May 12 to 15. On the first day some members visited The Farmers Museum at Cooperstown where they toured the extensive tool storage facilities with curators and staff.

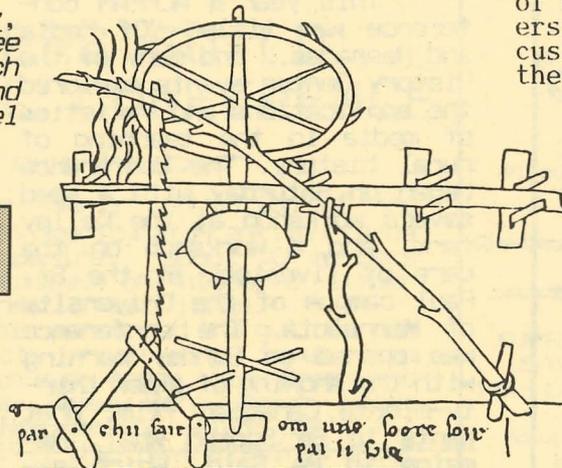
In the afternoon, members visited Hanford Mills Museum in East Meredith, New York. One of the most active and best interpreted water-mill sites in the state, this "rural industrial complex" was closed down in 1967, and restored in the 19-80s. A 12-foot over-shot water wheel, made entirely of steel by the Fitz Waterwheel Company

in 1926, powers a saw mill, a woodworking shop, and a feed mill. Evidence in the timber frame of the sawmill indicates that the present round saw, which dates back to 1870, replaced an earlier up-and-down mechanism.

Hanford's staff of six, interpret the material, social, and economic development of its site to the public with a short introductory film and demonstrations of its restored machinery. Hanford is an independent site which actively studies and documents local milling. Hanford Mills publishes a quarterly newsletter and will be the future custodian of the library and papers of the late miller Charles Howell (1926-1993).

Later in the week there were visits to the Shaker Museum at Old Chatham and Eastfield Village in Rensselaer County as well as demonstrations, tool displays, and talks at Albany. Kathy Boardman and David Parke of the Farmer's Museum in Cooperstown showed slides and discussed the life and legacy of the late William Sprague, a pioneer in the preservation of early American tools and technology and a founder of EAIA in 1933. His collection of antique tools remains an important part of the collection at Cooperstown.

Among the tool displays at Albany was a working scale model of an up-and-down sawmill based on a drawing from the year 1270 by the French artist Villard de Honnecourt. It is thought to be the earliest documentation of a water-powered sawmill. Unfortunately Villard was an artist rather than a sawyer, and his drawing raises several questions. The scale model, which was present (continued page 6)



Sketch of a Sawmill (about 1270), from Villard de Honnecourt's Album. This may be the earliest depiction of a water powered sawmill.

LIVING HISTORY

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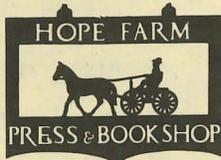
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23rd Annual ALHFAM Conference St. Paul, Minnesota

About two hundred members of the Association for Living Historical Farms and Agricultural Museums (ALHFAM) came from many places throughout America and Canada to St. Paul, Minnesota, for the group's annual conference June 19th to 23rd. There were workshops and lectures at the newly completed Minnesota History Center in St. Paul, as well as bus tours made to local historic sites, such as the nineteenth century living history farm of Oliver H. Kelley, founder of the Grange, Fort Snelling, and the Lower Sioux Reservation.

This year's ALHFAM conference was titled "Of Media and Messages," and many of the History Center events explored the applications and varieties of media in the teaching of rural history. The conference began on Saturday with a seed savers workshop at the Kelley farm, and a workshop on the care of livestock at the St. Paul campus of the University of Minnesota. The conference was opened on Sunday morning with the showing of a new thirty-minute Canadian film, What Wants to Be Spoken What, Remains to Be Said, which explores the contradictions that

exit within historical documentation and presentation. The film was introduced by its script writer, Helen Humphreys, and followed by four concurrent sessions, including one entitled The Symbiotic Relationship of Living History and Historical Film by the noted author of the living history movement, Dr. Jay Anderson of Utah State University, who contrasted the historian's discipline in research with the emotional effects of media on its audience.

Regional ALHFAM groups met at lunch to plan future meetings. The afternoon featured ten concurrent sessions ranging in subject from USDA Guidelines and the Historical Farm to techniques for designing a visitor's survey. Andrew Baker, the new director of Lake Farm Park in Kirkland, Ohio, a 235-acre site founded in 1990, spoke on the need for new directions in agricultural and environmental education. The decline of the farm population to less than 2 percent of the American population today has been accompanied by a growing public illiteracy about the basics of food production. Children are more knowledgeable about wild animals of the zoo or the extinct animals that inhabit contemporary media than with the basic farm animals on which their lives depend. A recent Gallup pole found that 49 percent of Americans could not identify the main ingredient of bread.

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Where the traditional role of the living history farm has been to recreate the architecture, handcrafts, and lifeways of the past, the farm park concept is a new paradigm that presents a more contemporary picture showing the farm as a place of choices and showing how things work. Lake Farm Park plans to maintain 200 breeds of farm animals and establish a working family farm of the 1950s.

Lance Belville, co-director of Great American History Theater based in St. Paul, founded in 1978, spoke about his group's work writing and presenting a form of musical theater that deals with rural issues. While the historic site tends to present a static happy picture of its past, the theater is able to express controversy and the collision of values in the music and humor of the lumberjack or the hard life of a rodeo cowgirl.

Dale Jones of the Baltimore City Life Museum showed a video of a theater he is producing, 45-minute dramatic pieces written for and about specific historic sites and performed by a mix of professional, amateur, and student actors.. Jones described the possibilities of this dramatic form as well as the methods he has been using to organize and produce these cooperative ventures.

Next years ALHFAM conference will held at Russel Sage College in Troy, New York. Clarissa Dillon and her Past Masters have promised to do an historic hands-on cheese making workshop. For information, write...

ALHFAM
Kathryn Boardman
Box 465
Cooperstown, NY 13326

TIMBER FRAMERS GUILD NINTH ANNUAL CONFERENCE

by Greg Huber

On July 25, during the yearly convention of the Timber Framers Guild of North America at Franklin Pierce College in Rindge, New Hampshire, about 40 members gathered to hear five lectures on historic timber framing and to share information and ideas.

Rudy Christian from Ohio announced the guild's new historical archives project, which with input from members, will survey barns in many areas. Alex Greenwood and Rick Endersby of the New Jersey Barn Company spoke on idiosyncratic barns of New Jersey, which don't fit standard categories. Since 1977 they have examined about 1,000 early New Jersey timber frame barns, among them English barns, a few Pennsylvania German barns, 100 Dutch examples, and many of mixed or eccentric design.

Paul Russell of Sussex, England, gave an introduction to the traditional processes and techniques of English house and barn construction, and then discussed The Library Barn at Hampshire Cottage. Peter Sinclair from New York spoke of the New World Dutch Barns of Ulster County. He showed slides of the early lap-dovetail joints found in about a dozen early barns and emphasized the need to document and preserve, not only the frames of large early manor-barns, but also the details and uses of the more common, smaller and later Dutch barns.

The author spoke about the design decisions made by early Dutch timber framers in conjunction with regional farming practices. He described two Dutch basement barns in New Jersey, that have a unique bent system, a seven-bay rampbarn in Rensselaer County, and a side-entrance barn in Dutchess County, New York, with eleven bents. Rudy Christian described the Pennsylvania-style forebay barns of Ohio and the three methods used in attaching the forebay sill to the extended threshingfloor joists.

(continued on page 7)

Venture to the 11th Annual

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E.A.I.A. ANNUAL MEETING
(continued from page 3)

ed by Richard Kappular, Executive Director of EAIA, incorporated certain changes and technical improvements on Villard's mill. The model did not survive long after an EAIA member gave it a speed test.

Emphasizing that the model was speculative, Kappular made available six architectural drawings of his model, asking members to comment. Here goes: Villard's drawing seems to show a technology that predates the use of a crank on the waterwheel shaft, and the use of a frame for the sawblade both of which appear on a drawing by Leonardo da Vinci from about 1500. Da Vinci's drawing also shows the use of a fly-wheel, which was typical for up-and-down sawmills. On Villard's drawing there appears to be a wheel to advance the log into the blade; perhaps this was an attempt to represent a rag-wheel, but it could not operate as shown.

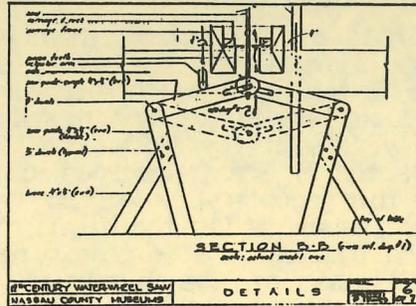
Because the machinery shown in the Villard drawing predates the use of a crank it achieves the reciprocating motion by using a bent sapling to pull the blade up and a cam-action on the waterwheel to pull the blade down. The bottom end of the blade is attached to a saw guide made of four pieces of wood. I believe your mill model misinterprets this part. I prefer one I saw in *Alte Bauernsaen* by Herbert Juttemann, ISBN 3-7650-9020-4, published in 1984. This German book from the Howell collection deserves translation. It has great drawings and offers the most exhaustive study of up-and-down sawmill technology I have run across.

Peter Sinclair

The next annual meeting of EAIA will be held in Williamsburg, Virginia (see COMING EVENTS page 11).

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Detail Drawing, "12th Century Water-Wheel Saw", 1993, by P. Haws, Nassau County Museums. This scale drawing shows a blade guide as suggested by Villard Honnecourt's drawing, and is one of seven drawings used in construction of the EAIA model.

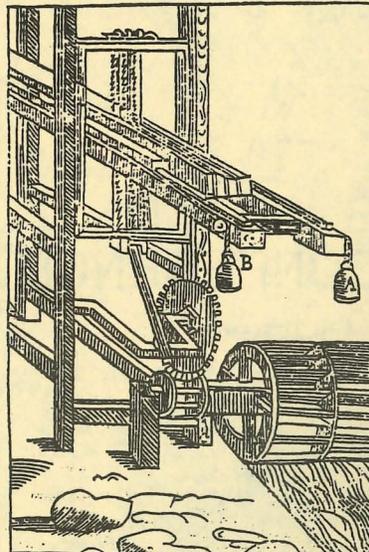
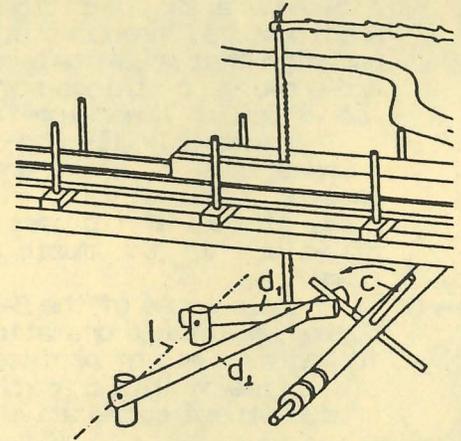


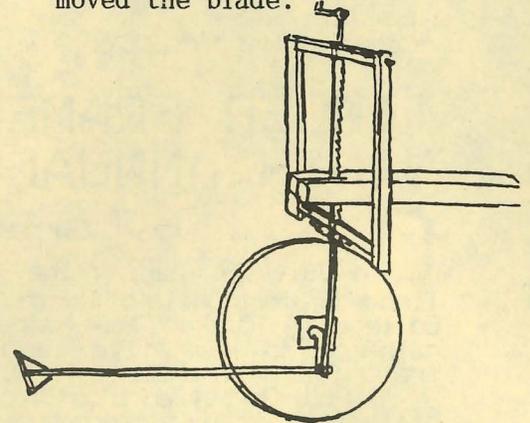
Illustration of a Sawmill (about 1650), in a book by Edward Williams. He suggested this design, based on those "common in Norway and the mountains of Sweden," for building sawmills in the colonies of the New World. Power from the water wheel is transferred through wooden gears to speed the action of the blades; it is a gang-saw with three blades. The log carriage is moved forward into the blade by the use of rope and weights.

Williams knew of the rag wheel which was "common" in Norway at that time, but he felt that in Virginia it would be difficult to keep it in repair and so he suggested the use of weights.

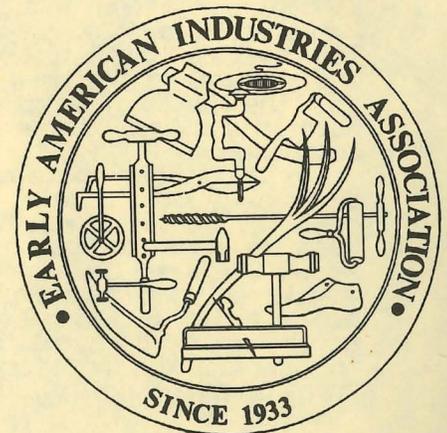
"...the ingenious Artist", Williams wrote, may easily convert the same to an Instrument of thrashing wheat, breaking hempe or flax, and other as profitable uses".



Detail of Drawing, water wheel shaft and blade guide, 1984, from book by Herbert Juttemann. This interpretation of Villard Honnecourt's drawing shows how the arms of the shaft may have moved the blade.



Sketch of a Sawmill (about 1500), by Leonardo da Vinci. This hand operated sawmill makes use of a saw frame, crank, and flywheel.



PUBLICATIONS

TIMBER FRAMERS GUILD NINTH ANNUAL CONFERENCE (continued from page 5)

The day ended with out door demonstrations of early timber framing techniques: splitting and shaving tree nails with a drawknife and shave bench; riving 5 and 6-inch oak boards with a froe and mallet, hewing a white pine timber with a chalk line, scoringaxe and broadaxe; cutting and joining timbers with a drill, saw, and slick. There were also demonstrations of Japanese timber framing and the French scribe-rule.

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Greg Huber from Mahwah, New Jersey, has been documenting barns since 1974.

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OLD MILL NEWS, published four times a year, is a 28 page newsletter and journal of the Society for the Preservation of Old Mills (SPOOM). It includes articles, site descriptions, letters, free want ads, paid advertising, and coming events. It is in its twenty-first year of publication.

SPOOM is a 2,400 member international organization of mill owners and people with interest in mills. Its 1993 annual meeting, with seminars and mill tours, is being held September 10-11-12 at Springfield, Missouri. The 1994 meeting will be held near Albany, New York.

A \$12.50 membership to SPOOM brings you a subscription to OLD MILL NEWS, a 40 page ROSTER of present members, and a catalogue of books and publications available from THE BOOKSTORE. This last service includes inexpensive lists of documented mills, which are organized according to types and locations. SPOOM lists 3,700 standing mills in the US, as well as mills in Canada, England, Ireland, and Belgium. The information is kept in a data base and is continually updated. write...Fred Beals, 1531 Folkstone Court, Mishawaka, Indiana 46544.

THE JOURNAL OF THE SOCIETY FOR INDUSTRIAL ARCHEOLOGY, is published twice a year, it is an 80 page journal of scholarly, well written articles and reviews that combine the insights of field work and historical research. It deals with conservation, adaptive re-use, and museology and is illustrated with many good maps, photographs, and drawings.

Volume 17, Number 2, 1991 contains an article by Robert R. Gradie and David A. Poirier about small-scale hydropower development in Connecticut which points out the importance of archeology and historic research in understanding not only the history of water power but in planning for its future uses. In 1980 and 1981 the Public Archaeology Survey Team, Inc. (PAST), a non-profit research group, with grants from the National Parks Service and the Connecticut State Historic Preservation Office, researched and surveyed mill sites in a 137 square mile tract of the Shetucket River water shed. They discovered that the 1880 census which had attempted to assess the state's water power uses, documented only the larger and more easily accessible mills and failed to appreciate the complexity and size of Connecticut's system of using, sharing, and storing water which had developed over the previous 250 years.

In 1979 the governors of New England initiated a study of the hydroelectric potential of their states. The survey found nearly 11,000 existing dams, 1,511 in Connecticut, but the study concluded that water power could generate only 10% of New England's electric power and would be too costly to implement.

Using the 1981 findings of PAST, the authors point out that the 1979 study, like the 1880 census, failed to appreciate 19th century uses of the river, and that many of the dams they documented and found unusable, were never mill sites, but retention ponds in a complex system of water use. To emphasize the importance of historic knowledge, the authors use the example of the Congdon hydroelectric project which has been proposed for the Oxoboxo River in Connecticut. It is being planned to produce 60 Kilowatts of electricity, although the site was operating a 335 horse power turbine plus a 250 kilowatt electric generator in 1919.

Single copies of the journal are available for \$10, society membership is \$30, write... Society for Industrial Archeology, Room 5014, NMAH, Smithsonian Inst., Washington, DC 20560.

Sawyers and Millwrights of Saugerties, New York

(continued from page 1)

The committee hired carpenter Jim Kricker, from nearby Bearsville to build the wheel. With a group of local carpenters, Jim had just completed a small nineteenth century sailing sloop for Pete Seeger, *The Woody Guthrie*. The mill building and the wheel were completed. The project was two-thirds finished when all work stopped and interest in the mill seemed to fade. Today its vandalized remains are out of sight and out of mind of most local people.

It is sad that the mill never served a function for the community during its short life, but even under the best of circumstances wooden mill wheels and shafts survive only ten to fifteen years before they must be replaced or rebuilt. Since working on the Saugerties mill, Jim has twice replaced the wooden shaft of the Phillipsburg Manor Mill at Tarrytown, New York, an early gristmill and the largest water mill restoration in the Hudson Valley.

Charles Rothe, a lifelong resident of Saugerties, said that when he was a boy he recalls buying lumber from local sawmills with his father. Today he credits those visits with awakening his lifelong interest in sawmills. Charlie estimates that there are still 30 sawmills in Ulster County but fewer than five operate full time. One is the Rothe family mill he began as "a hobby" in 1972; it is now owned by his son, Michael.

Charlie smiles when he remembers seeing the last Catskill Mountain water-powered sawmill in about 1959. The mill in New Kingston, Delaware County, was then owned by the Smith family, who maintained it mostly as a conversation piece. It hadn't run commercially for 20 to 30 years. The Smith mill had a circular blade and was powered by a primitive tub wheel, an early form of water turbine. When Mr. Smith showed it off to guests, the blade would often jam in the log and the whole building would shake. Smith would back off the log and try again.



Robert Grassi and the cast-iron hub of a 24-foot diameter high breast water-wheel. This iron hub was cast in about 1830 to power a trip-hammer and iron-forge at Rochester, New York. Its spokes and paddles will be restored with oak. This type of waterwheel had a longer life than one with a wooden shaft, but when rolled steels became more available the all-metal wheels like the Fitz waterwheel surpassed the cast-iron models in durability. (Photo by P. Sinclair)

Charlie's father came to Saugerties from Germany in 1924, and Charlie has been back many times to visit his father's hometown in Silesia near Poland and to tour the nearby countries. He has found that up-and-down sawmills, powered by gasoline and diesel engines, with cast iron saw frames and often fitted with two to eight blades, are still commonly used in Germany. He found only one water-powered sawmill, in Bavaria; it had recently stopped working.

Jim Kricker's restoration of the Saugerties watermill in the early 1970s came to the attention of Charles Howell,* who was then the millwright and Master Miller of Phillipsburg Manor at Tarrytown. Howell, who died this spring at 67, represented the fifth generation of a family of British millers; he had worked as a miller since the age of 14. He became a mentor to many with an interest in mills.

Howell supervised and consulted on the restoration and reconstruction of numerous mills in the United States and England. In 1974, Robert Grassi, a young carpenter from New Jersey, who was fascinated by old mills, met Howell through the Society for the Preservation of Old Mills (SPOOM). He worked for Howell two years at the Phillipsburg mill, learning to dress (sharpen) mill stones, and maintain and repair mill machinery. Robert has since joined Kricker at Roundout Woodworking in Saugerties.

Roundout Woodworking is presently restoring an up-and-down sawmill in Connecticut on Sprain Brook, a stream that flows into the Aspetuck. In the nineteenth century three miles of this river had 21 water privileges. These mill sites were occupied by trip hammers to forge iron, slitting mills to make nails, small mills to churn butter, and a grist mill with an "eel rack," which could

catch a barrelful of eels in one day during the eel run. The sawmill on Sprain Brook was the last to survive.

At the Rondout Woodworking shop, Robert has rebuilt the rag wheel of the Sprain mill. It is a five-foot-diameter geared wheel and shaft which drives the log carriage through the blade. He is presently working on the twelve-foot oak shaft of the flutter-wheel into which the arms of the long paddles will be morticed.

These relatively small and fast moving undershot water-wheels used a simple crank and pitman-arm to drive the saw frame. Often the flutterwheel was a direct drive to the saw blade and did not use gears. When the cut in the log was complete, the water flow was stopped to the flutterwheel and a second smaller water-wheel was engaged in pulling the carriage back to reset the log. It was a Wooden Age design commonly used before cast-iron water-turbines and gears became available. Because of weathering and stress factors, few of these wooden flutter-wheel saw mills have survived. Recent documentation of the Stanley sawmill in Ohio, and three early sawmills in New Hampshire done by the Historic American Building Survey (HABS) in the 1960's as well as the archives and library of Charles Howell have been extremely helpful in guiding Robert and Jim in the restoration of the Sprain Brook sawmill.

(* The Mill at Philipsburg Manor Upper Mills and a Brief History of Milling, by Charles Howell & Allen Keller, Sleepy Hollow Restorations, 1977. Tom Kelleher, Supervisor of the mills at Old Sturbridge Village in Massachusetts, recommends this book as the best introduction to the subject.

Charles Howell was a member of a number of groups which are important in the study and preservation of mills. These included...

Society for the Preservation of Old Mills (SPOOM)
1531 Folkstone Ct.
Mishawaka, IN 46544

Early American Industries Association (EAIA)
P.O. Box 2128,
Empire Plaza Station
Albany, NY 12220-012

Society for Industrial Archaeology (SIA)
Room 5014, NMAH, Smithsonian Institution
Washington, DC 20560

Association for Preservation Technology
P.O. Box 8178
Fredericksburg, VA 22404



Charlie and Michael Rothe training a team of Belgian horses for a pulling contest.

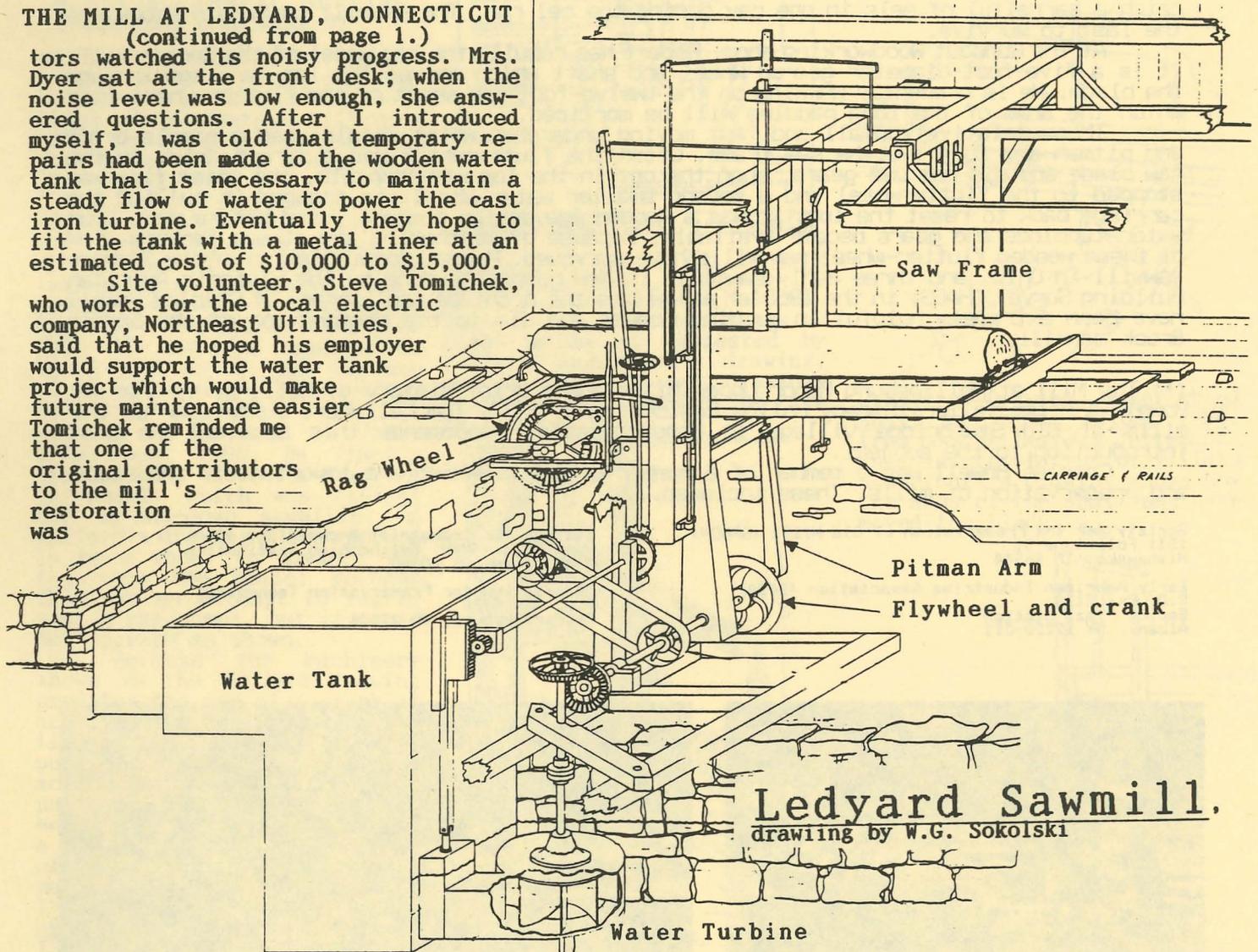
The horses are eager participants in pulling events. On a quiet command, "go", they dig their back hooves into the ground and lean their weight against the 4,500-pound load. Instantly, the horses, sled, and men move forward in a cloud of dust and noise. At about 35 feet the team is halted and rested for ten minutes.

Contests feature a measured pull of 27 feet six inches. The sled weight is increased from 3,000 pounds to 10,000 pounds. Teams are eliminated when they can not move the load. (Photo by P.Sinclair)

THE MILL AT LEDYARD, CONNECTICUT
(continued from page 1.)

tors watched its noisy progress. Mrs. Dyer sat at the front desk; when the noise level was low enough, she answered questions. After I introduced myself, I was told that temporary repairs had been made to the wooden water tank that is necessary to maintain a steady flow of water to power the cast iron turbine. Eventually they hope to fit the tank with a metal liner at an estimated cost of \$10,000 to \$15,000.

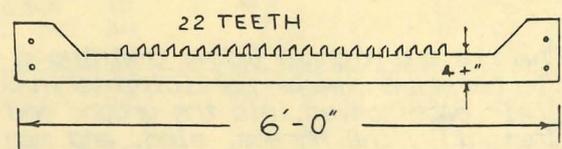
Site volunteer, Steve Tomichuk, who works for the local electric company, Northeast Utilities, said that he hoped his employer would support the water tank project which would make future maintenance easier. Tomichuk reminded me that one of the original contributors to the mill's restoration was



The Electric Boat Company in nearby Groton, which makes military submarines. In the early 1970s the company reconstructed the rag wheel that drives the log carriage through the blade. The rag wheel is a complex and precise part merging wood and metal. Its restoration was vital in getting the mill back into operation in 1975.

The Ledyard mill functioned until 1938, when a hurricane destroyed the ice house and blacksmith shop, and damaged the sawmill. At that time the mill's water turbine not only drove the pitman arm that worked the vertical saw blade but also supplied belt power for two specialized saws with circular blades. One for cutting shingles and the other railroad ties. Today the 1878 shingle mill is once again throwing off showers of long white shavings. The railroad-tie mill which once cut 1,500 ties a year, is ready to go again. Nearby stands a working blacksmith with a smoky forge and a new shop built on the old foundation.

The earliest sawmill at this Ledyard site was built in the late 1700s. It may well have been powered by an undershot water wheel placed directly in the stream. As technology and business changed, so did the mill. A pond was built in 1805 to increase the water supply, and eventually a cast iron water turbine was installed. This early 19th century turbine, probably manufactured in Massachusetts, powers the mill today. In 1966, the town of Ledyard acquired the eleven-acre park, including the sawmill and the pond for \$12,000. Today the park is maintained by the town and is used year-round for picnicking, hiking, and children's activities.



Saw Blade Measurements, Sloane-Stanley Museum, Kent Connecticut, drawing by Robert Anderson, Westerlo, NY.

In the nineteenth century, the mill was owned by a series of families, and by the time of the 1938 storm, Horace Main, was using the mill mostly to entertain his friends, it was in bad repair and no longer not operated commercially. Today the mill is kept up by a few paid staff and an enthusiastic group of local volunteers. No admission is charged but donations are accepted. Lumber and shingles are for sale.

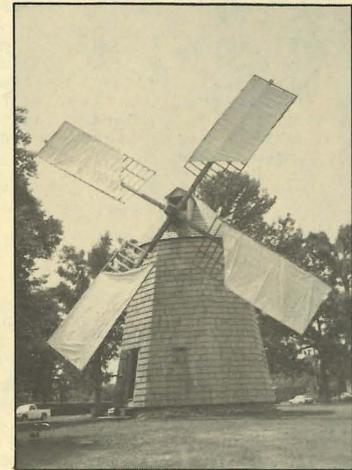
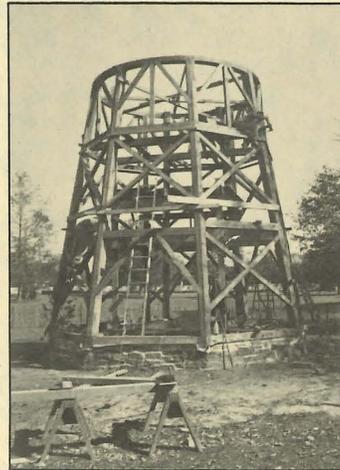
John Kelley, who oversees the demonstration and repair of the mill, estimates that there are now six to ten working vertical sawmills in the northeast. He is proud that Ledyard was one of the earliest restorations and has been able to give advice in the restoration of other saw mills like the one at Old Sturbridge Village. Ledyard has twice hosted the annual meeting of SPOOM (the Society for the Preservation of Old Mills).

The Ledyard up-and-down sawmill is in operation on Saturday afternoons, 1:00-4:00 PM, April through May and mid-October through November. For information and directions write or call...

Ruth B. Dyer
21 Hemlock Circle
Gales Ferry, CT 06335;
1-(203) 464-2874, or...

Ledyard Town Hall
Ledyard, CT 06339
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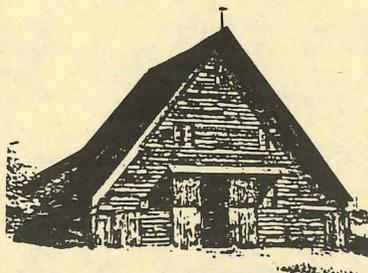
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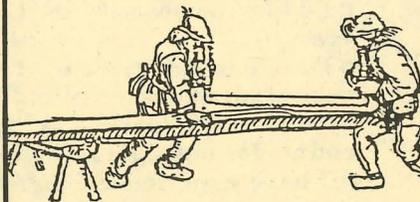


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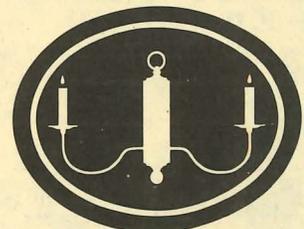
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 Jackson County Parks and Recreation
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 Blue Springs,
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 Elizabeth Johnson
 Landis Valley Museum
 2451 Kissel Hill Rd.
 Lancaster, PA 17601
 1-(717) 560-2147

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 Schoharie County
 Historical Society
 North Main Street
 Schoharie, NY 12157

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 Indiantown Road
 Ledyard, CT 06339-3060

October 22-24,
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 The New York Folklore Society will hold its annual Fall Conference in the Conference Center at The State University (SUNY) Brockport. It is being planned in conjunction with the Empire State Foxfire Teachers Network.
 Contact:
 New York Folklore Society
 P.O. Box 130
 Newfield, NY 14867

October 23-24,
 Jamestown, Virginia
 Annual meeting of S.W.E.A.T. (Society of Workers in Early Arts and Trades) will be held at Jamestown Festival Park. There are lots of interesting local sites, including Williamsburg. For information write:
 Fred Bair, Jr.
 606 Lake Lena Blvd.
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write:

AASLH
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Nashville, TN 37201

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Grady Manus
Fort Osage
105 Osage Street
Sibley, Missouri 64088
1-(816) 249-5737

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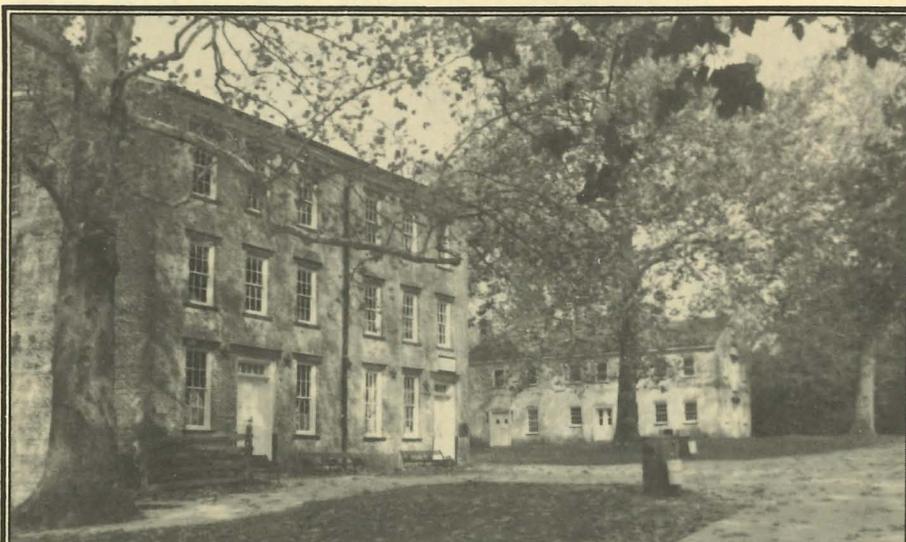
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The NEXT ISSUE of Living History will travel to the Mohawk Valley of New York State to visit with Willis Barshied in Palatine Bridge and see his barn museum. Living History welcomes information on historic interpretation in the Mohawk Valley.