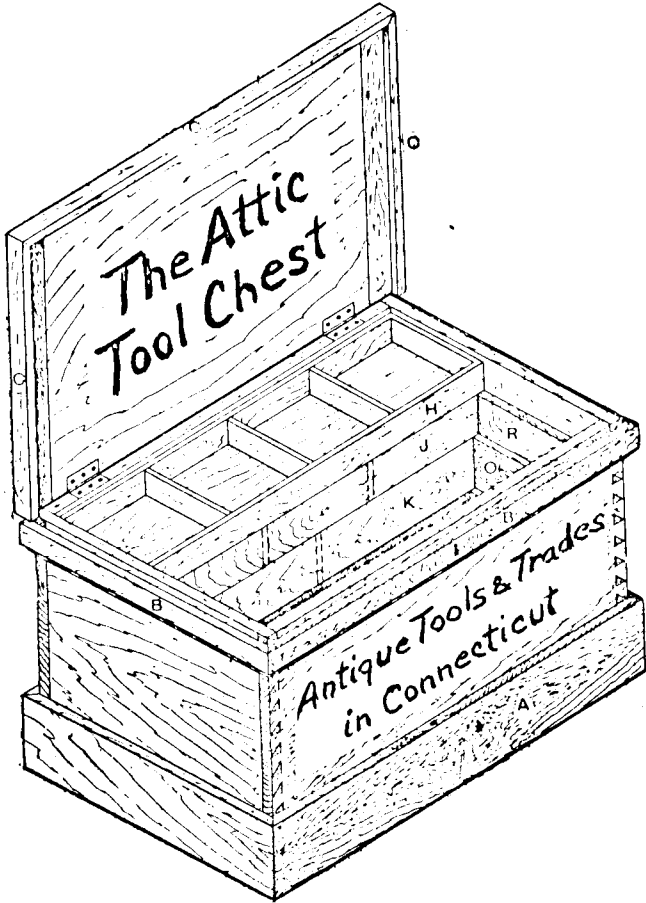


ATTIC DUST



April Meeting

The plans for an April 25th meeting at Ledyard, Conn. were finalized at a Directors Meeting on March 21st. We met at Frank and Elsie Bawden's home in Newtown. Afterwards, we proceeded to admire Frank's great tools. Incidentally, Frank's 17 acres and chain saw keep a stove going in the house and in the barn too. He can tell you how much oil can be saved that way.

George Campbell has finished all the leg-work relative to our meeting. The results were presented to the Directors by Tom Elliott, since George was in Mexico. Such a full program had been developed that the Directors agreed that there would not be enough time for an auction at this meeting. It was decided to hold the auction the latter part of September. Plans will be presented at the April 25 meeting. We expect that the September auction will be different in that all the money bid for a tool will go to the owner of the tool. We also expect to invite young craftsmen who would be interested in our more common tools, that they could buy at a reasonable price and actually use.

Getting back to the April 25 meeting, George wants you to know that the Farm Tool Museum and the Woodworking Shop at the Lester House are in formative stages, but nevertheless of interest. Any contributions of such tools, and blacksmith tools, will be very welcome. The restoration of both the Lester House and the Sawmill has been the work of the Ledyard Historical Society and the Ledyard Historic District Commission. The demonstrations we will see will be by volunteers.

We'd like to cover several things during the meeting itself, starting at 12:45. First, there are a couple of business items. Next, we'd like you to bring your logging and sawmill tools, and have someone explain their use. Last, bring your What'sits for identification. Tailgate swopping is encouraged, as usual.

The registration fee for the meeting will be \$1.00 per person, to partially cover our costs. No mail reservations will be required. The program, map, etc. follow on separate sheets.

Dues

To date, 1976 dues have been received from 82 members. This is a fine response, but there are 112 members on our current list. This means that 30 people need to remember that dues should be paid by our April meeting.

Questionnaire

So far there have been 68 responses to the recent questionnaire. As promised, we'll include the responses to the first ten questions in the membership list to be issued late Spring. However, you might find

some of the statistics enlightening. Sixty five people out of 68 expressed an interest in the history of tools; 61 in the history of trades; 61 in identifying woods; 59 in books; 56 in catalogs; 53 in being shown the use of tools; and 47 in dates of manufacturers. Forty four are members of historical societies; 51 would show their collections; 40 would welcome being photographed; 39 would trade tools; 14 have surplus plane irons to sell or swap; 14 are dealers in tools. A brave 20 people offered to demonstrate how to use tools; 4 of them then became faint-hearted and failed to indicate which tool they would demonstrate. The most interest is in the woodworking trades, as one would expect. Next comes blacksmithing, then a real scatter of interests.

Your response to the questionnaire will be very helpful in planning our future activities, and is much appreciated. Our next task is to design events to meet the desires and interests expressed. Your suggestions will be welcomed.

#### A Dictionary of Tools

Two members beyond an original four expressed an interest in buying Salaman's book mentioned in the last Attic Tool Chest. Meanwhile Elliott Sayward has written us that all ATTIC members will be able to buy the book at discount from Early American Industries Association. This is an unexpected, valuable service to us. More members may wish to use the opportunity to buy this book when you see a copy at some future meeting. Ordering information will be given in a future issue of the Tool Chest, when the book becomes available and the price is set.

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#### "RUSSELL JENNINGS'S NEW PRICE LIST"

Roger K. Smith, Lancaster, Mass.

and

Stephen Jennings, address uncertain - try C/O Saint Peter, first

Editor's note: Roger Smith recently acquired an original of the Russell Jennings Price List enclosed. He very generously had copies made for the Attic Tool Chest. In looking over the Price List, I encountered bit names new to me. As a consequence, I wrote to the Sage of Auger Hollow and asked him to explain the terms used. In the grumpy manner one associates with sages he replied as follows.

".....I will comply with your request, and try to define them; but I feel it's hard to do so without graphics. I can do the graphics; but then it seems to me to become another article, namely identifying special boring tools. For instance, the Jennings list does not include the following types of bits: Electricians and Plumbers, Ship, Scotch, Pole, Post, Gas, Telephone, Felloe, Hub, Clay (earth), Derrick, Sugar, Stump, Solid nose, Fencing, Lamp Standard, and a few more. And these are only the fairly standard augers and bits. How about Forstners, center, spade, and all the various gimlets?"

"Having made my point (I hope) that this is a surface-scratcher, I will try to answer your question on the Jennings list only.

Auger bits: the standard all-purpose type.

Dowel bit: to bore short, accurate diameter holes, used chiefly by cabinet-makers.

Boat bit: same purpose as a dowel bit, but about twice as long; used in boat framing to bore holes for iron drift pins. (tapered pins used to align holes in adjacent members)

Hand rail bits: This is a new term to me, and I have never seen it in any catalogue. I suspect that it is a dowel bit used to join banister rails endwise, where great accuracy is necessary.

Machine dowel: same as dowel bit, but with round shank to fit in a drill press (often with multiple chucks).

Machine bit: Again, I am not positive; but I believe this is a round shank bit with two vee-shaped gouge spurs, used primarily in industrial production.

Boring machine auger: self-explanatory. Round shank.

Car bit: named for its primary use, building railroad cars. Also used in bridge, trestle, and dock work. Longer than the common auger (usually 18" overall). I am surprised to see it listed in such small diameters; even though I have a few of such sizes. I would expect that they would run with the grain and not bore a straight hole.

Carpenter's auger: This is again the standard auger, but in the larger diameters and with the familiar T - handle. General purpose and used by the house builder. Length of twist, 6 to 8 inches. Shank, about 12 inches.

Millwright's auger: basically the same as the carpenter's, but with a 12" long twist and a 12" shank. Used in heavy construction (factories, bridges, coal-mine shoring, etc.)

Note on hand-rail bits: I now see that at the bottom of the price list they are described as, "same length as auger bits, but they have very long points, and are designed for boring at an angle to the wood".

Again I am guessing, but I think they were to join banisters, especially the fancy curved ones so beloved of the Victorian builders. However, I am still bothered as to why they are as "long as a standard auger". The reason for the "very long point" is clear; a standard Jennings bit jumps out of its start when you try to bore at an angle, because the spurs engage the wood before the center screw can take hold.

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EXCERPT FROM 1883 BRITISH BOOK "JAMES NASMYTH, ENGINEER" (SAMUEL SMILES)  
2                      *The Original Naesmyth.*                      [CHAP. I.                      CHAP. I.]                      *Origin of the Name.*                      3

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of Scotland. The following is the family legend of the origin of the name of Naesmyth:

In the troublous times which prevailed in Scotland before the union of the Crowns, the feuds between the King and the Barons were almost constant. In the reign of James III. the House of Douglas was the most prominent and ambitious. The earl not only resisted his liege lord, but entered into a combination with the King of England, from whom he received a pension. He was declared a rebel, and his estates were confiscated. He determined to resist the royal power, and crossed the Border with his followers. He was met by the Earl of Angus, the Maxwells, the Johnstons, and the Scotts. In one of the engagements which ensued the Douglasses appeared to have gained the day, when an ancestor of the Naesmyths, who fought under the royal standard, took refuge in the smithy of a neighboring village. The smith offered him protection, disguised him as a hammer-man, with a leather apron in front, and asked him to lend a hand at his work.

While thus engaged a party of the Douglas partisans entered the smithy. They looked with suspicion on the disguised hammer-man, who, in his agitation, struck a false blow with the sledge-hammer, which broke the shaft in two. Upon this one of the pursuers rushed at him, calling out, "Ye're nae smyth!" The stalwart hammer-man turned upon his assailant, and, wrenching a dagger from him, speedily overpowered him. The smith himself, armed with a big hammer, effectually aided in overpowering and driving out the Douglas men. A party of the royal forces made their appearance, when Naesmyth rallied them, led them against the rebels, and converted what had been a temporary defeat into a victory. A grant of lands was bestowed upon him for his service. His armorial bearings consisted of a hand dexter with a dagger, between two broken hammer-shafts, and there they remain to this day. The motto was, *Non arte sed Marte*, "Not by art but by war." In my time I

have reversed the motto (*Non Marte sed arte*); and, instead of the broken hammer-shafts, I have adopted, not as my "arms" but as a device, the most potent form of mechanical art—the steam hammer.



ORIGIN OF THE NAME. BY JAMES NASMYTH.

Sir Michael Naesmyth, Chamberlain of the Archbishop of St. Andrews, obtained the lands of Posso and Glenarth in 1544, by right of his wife Elizabeth, daughter and heiress of John Baird, of Posso. The Bairds have ever been a loyal and gallant family. Sir Gilbert, father of John Baird, fell at Flodden, in 1513, in defence of his King. The royal eyrie of Posso Crag is on the family estate; and the lure worn by Queen Mary, and presented by her son, James VI., to James Naesmyth, the Royal Falconer, is still preserved as a family heirloom.

PROGRAM FOR THE LEDYARD SPRING MEETING OF ATTIC

DATE: Sunday, April 25, 1976

MEETING PLACE: Ledyard Grange Hall, Ledyard Center, Conn. Route 117

PROGRAM:

- 9:30-10:00 Registration and coffee at Ledyard Grange Hall (next to red Library and across from white Congregational Church). Drop off what'sits and logging tools. They will be guarded.
- 10:00-12:00 Visit to the Up and Down Sawmill  
Demonstrations of sawing logs, sawing shingles, making brooms, and possibly some blacksmithing. Some assistance in identifying use of some smithing tools may be welcomed.
- 12:00-12:45 Lunch at the Grange Hall (or at Sawmill). Bring your own lunch. ( A fast-order Pizza place is within 200 feet of hall)
- 12:45-2:15 Meeting at Grange Hall  
Business  
Showing of Logging and Sawmill tools  
What'sit Session (Recover your tools after What'sits)
- 2:15-4:30 Visit to Lester House  
Demonstrations in the house of weaving, quilting, and butter churning.  
Visit barns to see farm tools and woodworking shop in formative stages. Many of the tools are from George Campbell. Contributions of tools will be most welcome.
- 4:30 Use Route 12 to go most anywhere, south to I-95, north to 2A

BRING: LUNCH - LOGGING TOOLS - WHAT'SITS

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DIRECTIONS TO LEDYARD CENTER

VIA I-95 From the west - pass New London and the Thames River - watch for The Route 117 exit just beyond the reservoir.  
Take 117 north - cross Route 184 - proceed north to Ledyard Center. You will recognize Ledyard Center because 117 intersects another road at a red library building and a white Congregational Church. The Grange will be the white building across from the Church.

VIA Conn. Route 2 or 82

Take these routes to their junctions with the Conn. Turnpike, Route 52. Easiest route thereafter is to 2A on the Turnpike to Pequot-Mohegan Bridge (\$.15) and cross the Thames.  
Continue on 2A till it joins Route 117 - go south on 117 to Ledyard Center. Grange Hall is just beyond Town Hall and Pizza house, on right.

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THE NATHAN LESTER HOUSE, LEDYARD, CONN.

The Nathan Lester House was built in 1793. Whereas it is located at the junction of Vinegar Hill Road and Long Cove Road, the house is down a lane from these roads, well isolated from "progress". The setting is authentically colonial.

The house is furnished with period furniture belonging or lent to the Ledyard Historical Society. Two of the barns are being used to house typical farm tools and a woodworking shop. George Campbell is in charge of the work in these barns.

Norwich

Hallville

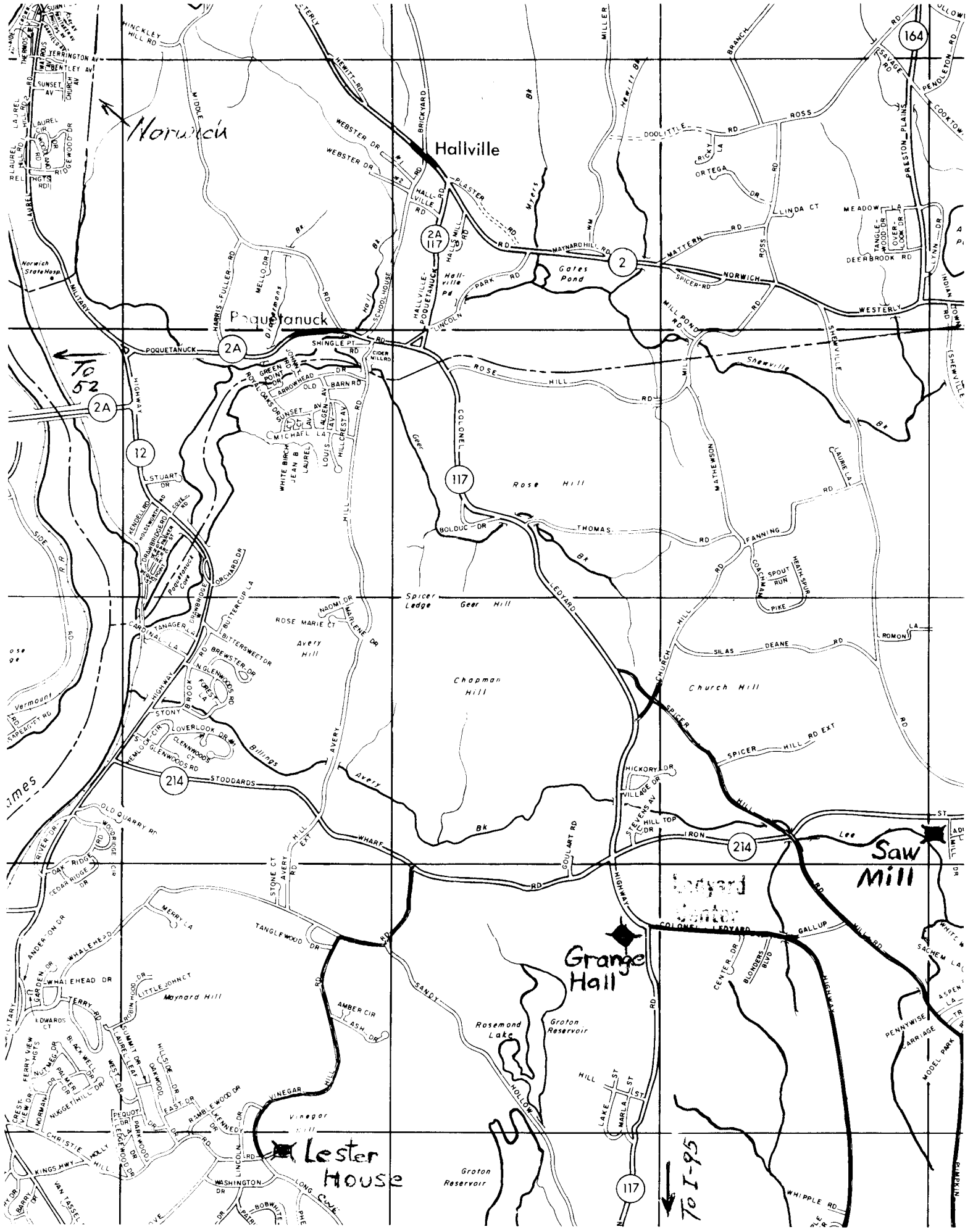
Poquetanuck

Saw Mill

Grange Hall

Lester House

To I-95



## OPERATION OF SAWMILL

Issue -  
Apr 1976

1. Gate valve at pond is opened to admit water to mill.
2. Water fills the water-holding tank and mill is ready to run.
3. Log is anchored to the carriage that runs on the rails. Saw blade fits in slot at left carriage block.
4. Rate at which the carriage moves the log against the saw blade is set to suit the type of wood and the thickness of the log being cut. This is done by adjusting the stroke of the ratchet drive pawl with a mechanical linkage located overhead.
5. To start the saw in motion, the water tank flow control valve is opened by operating a handwheel near the saw.
6. Water flows from the tank and causes the turbine blades to rotate.
7. The turbine drives a flywheel through a pair of bevel gears. The flywheel drives the saw up and down by means of a crank arm and connecting link.
8. As the saw moves up and down, the saw frame drives a series of levers that reciprocate and drive the ratchet gear, which gradually advances the carriage and the log against the saw.
9. The carriage rails slide on wood blocks spaced about two feet apart. The undersides of the rails have recessed teeth that mesh with cogs on the ratchet-driven rail drive shaft.

### REVERSING THE CARRIAGE

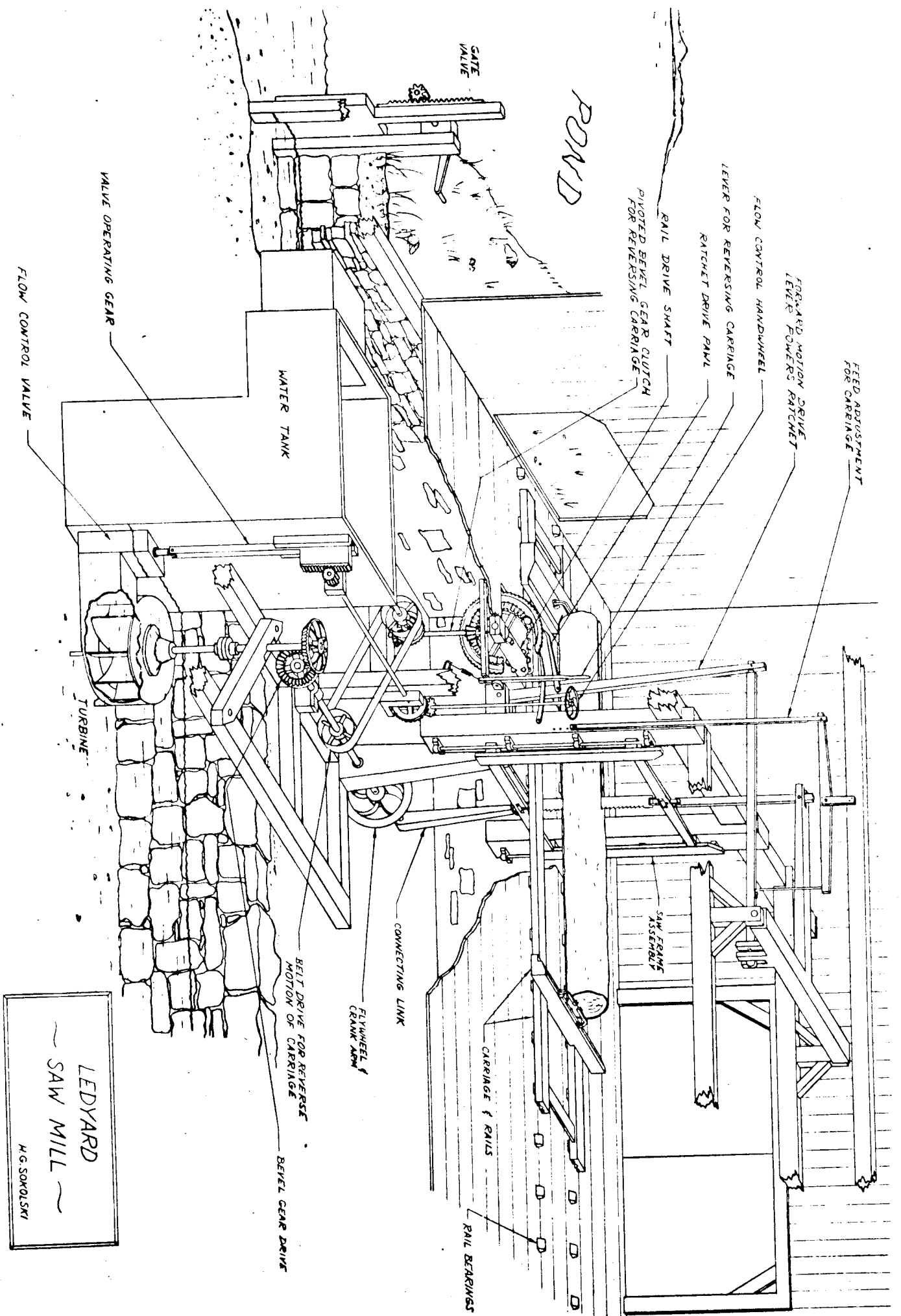
1. After a cut has been completed, the saw is stopped by closing the flow control valve.
2. The two ratchet pawls are pivoted up out of engagement, and the lever that engages the bevel gear clutch for reverse motion of the carriage is activated.
3. While holding the clutch engaged, the flow control valve is opened.
4. The turbine then drives the carriage backwards through a belt drive which powers the rail drive shaft in reverse through two sets of bevel gears.

### HISTORY OF LEDYARD UP AND DOWN SAWMILL

The earliest town records mention Nathaniel Brown operating a saw mill on Lee's Brook in 1790, but a sawmill probably was located on the same site in early colonial times. That part of Ledyard was known as Brown's Town. The mill pond was created in 1805 by building the dam; the mill was rebuilt at the same time. The present mill was constructed in 1869 by Isreal Brown, and included a shingle mill with buzz saw, all run by water turbine. It is also believed that the site contained a grist mill, cider mill and blacksmith shop. The mill pond was also used for harvesting ice. In 1887 the site was mortgaged to the Main family. Both the Brown and Main families are buried in the adjacent cemetery.

The original shingle mill was removed in 1900. The present operating mill was patented by Lane in 1878. It was donated by Albert Steffanson.

The railroad tie mill was removed to Preston, but it has been recovered and reinstalled.



FLOW CONTROL VALVE

VALVE OPERATING GEAR

WATER TANK

TURBINE

BEVEL GEAR DRIVE

BEVEL GEAR DRIVE

CONNECTING LINK

FLYWHEEL & CRANK ARM

CARRIAGE & RAILS

RAIL BEARINGS

SAW FRAMES ASSEMBLY

PIVOTED BEVEL GEAR CLUTCH FOR REVERSING CARRIAGE

RATCHET DRIVE PAWL

LEVER FOR REVERSING CARRIAGE

FLOW CONTROL HANDWHEEL

FORWARD MOTION DRIVE LEVER POWERS RATCHET

FEED ADJUSTMENT FOR CARRIAGE

POND

GATE VALVE

LEDYARD  
SAW MILL  
H. G. SOKOLSKI