

THE SUTTON HISTORICAL SOCIETY

SUTTON, MASSACHUSETTS



— BULLETIN —

VOL. V No. 4 DEC. 1979

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YANKEE INGENUITY EXEMPLIFIED

By a dam at West Sutton Road and Central Turnpike is a mill reported in the Sutton History of 1704-1876 as, "The first framed building raised in West Sutton..." The exact historical evolution of the mill is somewhat obscure except for the name "A. Draper" on the 1831 map and owned by a David Draper with the notation, "There were no buildings on the place except the remains of an old saw mill."

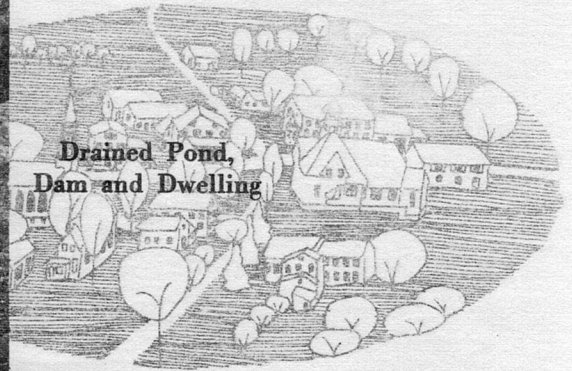
Eventually another mill was built to utilize the water power and a vertical up-down saw was installed [see photo of blade]. For over a century the mill continued intermittently in production with modifications later such as an automobile engine for power when the water level was low. The mill roof was restored after being severely damaged in the 1938 hurricane and in 1955 a flood partially eliminated a section of the dam. The mill lay dormant until 1964 when Barry B. ("Put") Putnam purchased the site and commenced a fifteen year conversion to a tinsmithing shop and attached dwelling.

The main thrust of this saga is in the reclamation of the dam and installation of a hydro-turbine to generate electrical energy. With the completion of a shop using part of and many timbers from the old mill to conduct his trade and then building a tee section attached to the shop as living quarters, he was ready to commence the dam project.

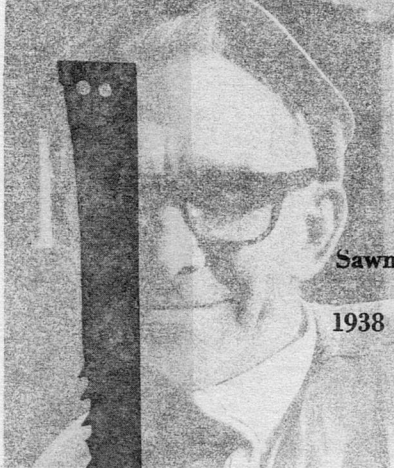
As a lay person not versed in the art of dam building, he researched construction methods and the application of water power into usable energy. Being mostly a one man effort, with occasional help, the logistical placement of stone became paramount. A salvaged aluminum traffic light pole for a mast fitted with a 360° pipe swivel boom and a chainfall resolved this problem. The installation of a water turbine which has a 14" pipe intake with a 18' drop [head] will turn a hydro-turbine having a 10" discharge that is controlled by a mechanical vane governor. This equipment should produce about 8hp to generate approximately 6kw of electrical energy. The photos show details of construction.



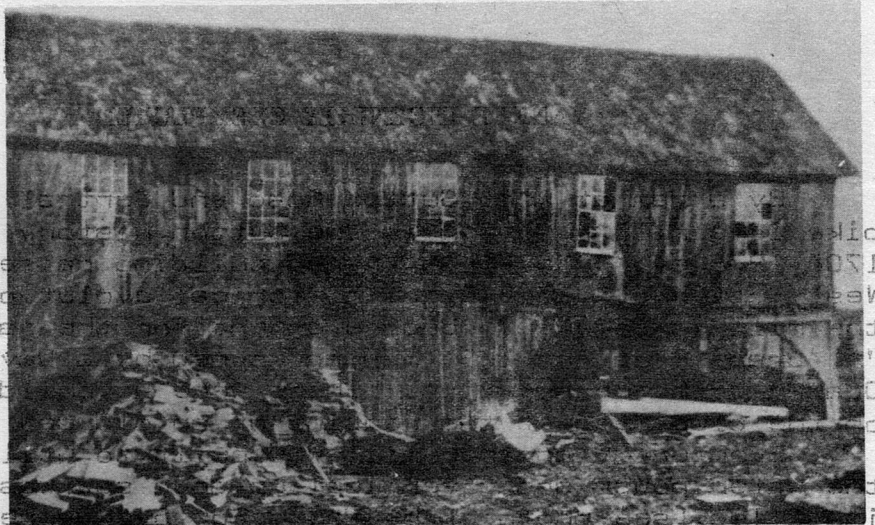
BARRY B. PUTNAM



**Drained Pond,
Dam and Dwelling**



**Sawmill before
the
1938 Hurricane**



**Vertical Up-down Saw Blade was attached
by rods to a crankpin on a bullgear driven
by reduced gearing to the old turbine.**

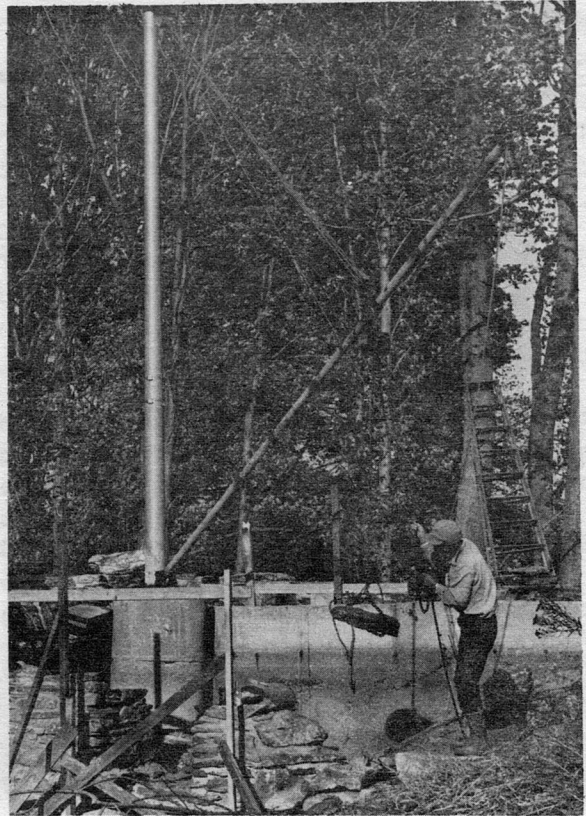
**Pond Drain Off with disc valve and control
handle. Water pressure holds the large
round plate against the drain pipe.**



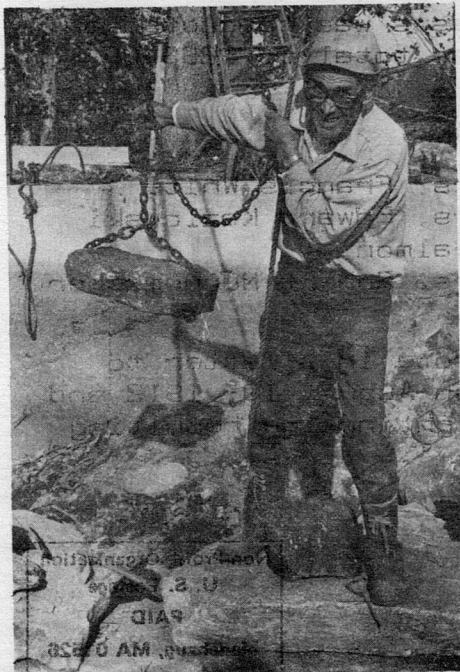
**Up Stream Side of Sluiceway. On the run off side is a
lip stone measuring 1 ft. x 2 ft. by 10 ft., weighing 1
ton. It was transported from Manchaug and put into
place with the derrick.**



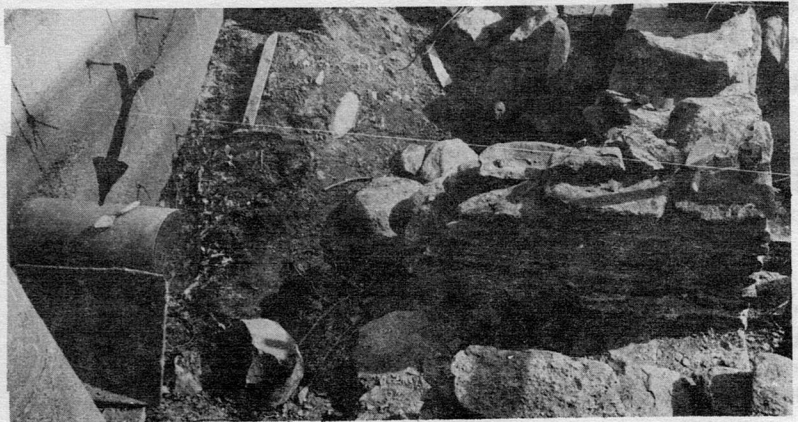
Down Stream from Dam with corner of house and shop to left.



Mast and Swivel Boom Derrick



Placement of Stone with Derrick



14" Dia. Pipe (arrow) to Turbine. A valve controls the intake.



Pond from Dam

MONTHLY MEETING PROGRAM REVIEWS - (A Short Synopsis)

October - At this meeting new officers were elected for the ensuing year as follows: President, Charles Pentland; Vice President, Marjorie Knapp; Treasurer, Keneth Hoover; Recording Secretary, Shirley Nelson; Corresponding Secretary, Faith Hebert. Elected to the Board of Directors are: Lester Aldrich, Rae Johnson, Shirley Nelson, and Malcolm Pearson.

John Brigham resigned as Curator, but consented to remain on the Board of Directors. Doris VanTwyver resigned as Historian and Director.

The Society voted to accept from the Sutton Fire Department for custodianship and display at the Blacksmith Shop a 1926 gas engine driven fire pump.

Daniel Griffith presented an interesting slide presentation and talk on 19th century farming implements and sites in Nova Scotia.

November - Minutes of the October 18, Directors meeting were read and accepted. Mary King was elected Historian and Rae Johnson as Curator.

Green lumber batten boards for the Blacksmith Shop purchased in September will air dry at the Shop until spring.

Peter Hackett, octegenarian historian from Northbridge presented a slide show, narrated with background music, a travelogue of Plimoth Plantation and the Cape.

December - The annual auction for members and guests was conducted and the competitive bidding raised the evening's gross total to \$283.00 in sales of items donated for the occasion.

1979 - October, November and December - WELCOME TO NEW MEMBERS

Harry Anderson

Mr. and Mrs. Lincoln Bordeaux

Mrs. F. Hagen Bordeaux

Mr. and Mrs. David Picard

Mr. and Mrs. Francis White

Mr. and Mrs. Edward Kazlowski

Helen M. Salmon

Mr. and Mrs. Robert Nunnemacher

READER INFORMATION - Ref: Moo Mill

Walfred Landgren of West Yarmouth, Mass., wrote in a letter to Laura Moe Fulton that lightning struck the mill on August 19, 1912 and it burned to the ground. Daniel Smith recalls fighting the resulting brush fire.

From

SUTTON HISTORICAL SOCIETY

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