



Benjamin Sawyer's Grist Mill – 1794

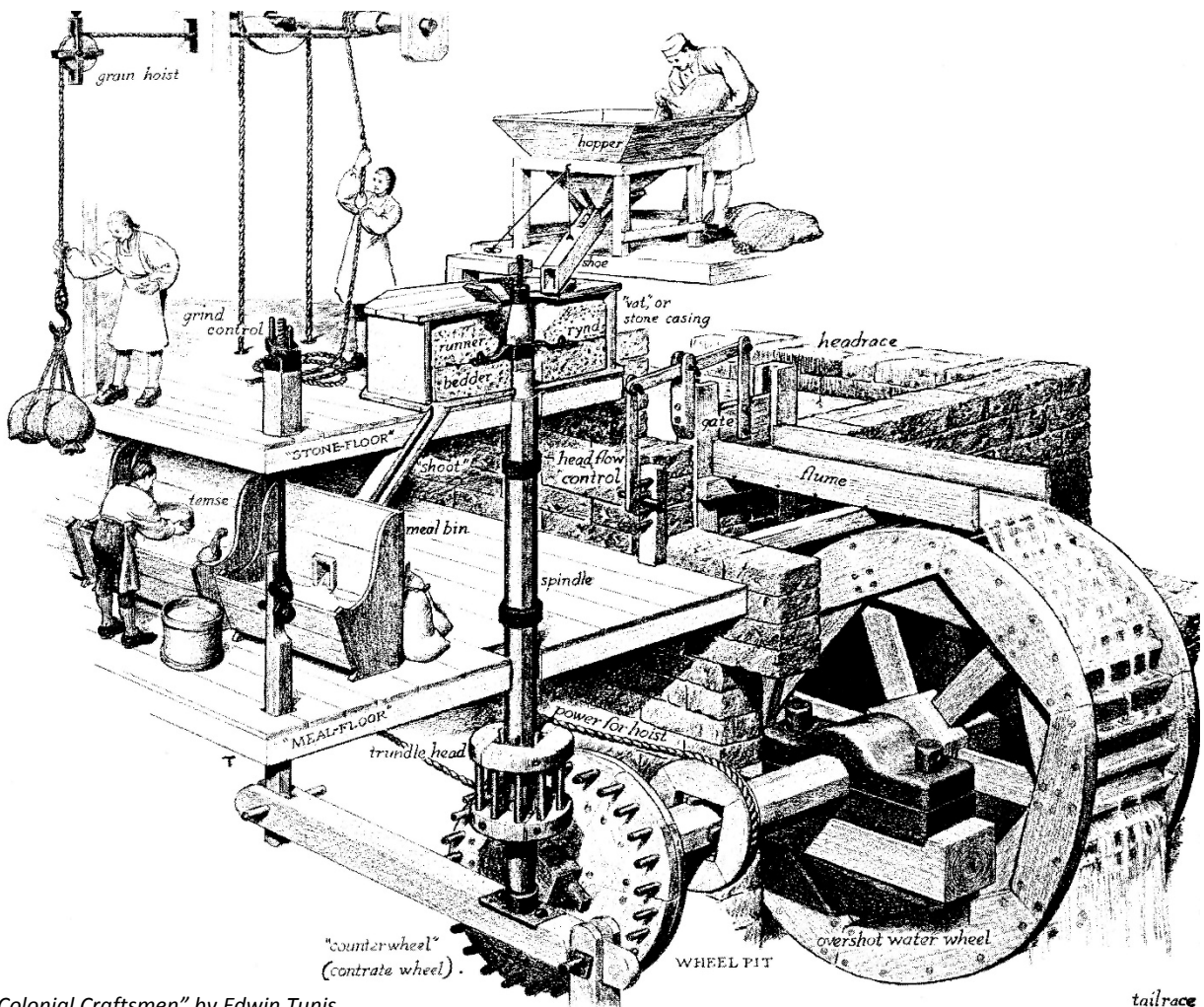
A Brief Description of its History and Workings

The Bolton Conservation Trust thanks Nancy Skinner for her generous donation of the land on which the foundations of the Sawyer Grist Mill are located and to the Bolton Historical Society for the important historical information about the Mill.

Benjamin Sawyer's Grist Mill - 1794

Benjamin Sawyer owned a saw mill and a grist mill relatively close to each other on the east side of Burnham Road and the north side of Main Street (Rt. 117). You are looking at the remains of the foundation of the grist mill. The saw mill was located on Great Brook to the right and behind the grist mill foundation.

Samuel Baker had built the saw mill, a tanning yard and a small house just after his purchase of the 20 acres of land from John Osborne in 1750. The saw mill was powered by Great Brook on a seasonal (freshet) basis from a dammed pond to the west of Burnham Road. After passing through several other owners the land was purchased by Benjamin Sawyer in 1791 after which he built the grist mill just prior to 1794. Unlike the sawmill, the gristmill was powered throughout the year by water from West Pond which passed through culverts under Long Hill Road and the Great Road (now Main street). The water entered the mill from the side opposite to where you are standing and then ran under the building, through a wood channel (flume) and over what is believed (on the basis the height of the foundation) to have been an overshot water wheel and then into the channel (tailrace) to your left where it met Great Brook behind you.



From "Colonial Craftsmen" by Edwin Tunis

The rotation of the wheel was transferred through gears to the grindstones in the building above where the grain was ground into grist of various grades. Although there is little documentation about the specific design of this grist mill, mills of that period typically looked like the diagram above (from "Colonial Craftsmen" by Edwin Tunis). However, the Sawyer Mill probably had a reverse orientation with the wheel on the south side toward Main Street.

Over ↓

The Wire Factory

Although designed as a gristmill, three hand-written contracts from 1813 indicated that the mill was fitted with wire drawing equipment (5 or 6 wire drawing dies and a pair of grippers) in a joint venture between Benjamin Sawyer and his son, Benjamin Sawyer Jr. The factory was operated to produce wire for (at least initially) of a joint venture of two individuals who paid for the stock required to draw the wire. Payment was to be in cash or in drawn wire product at the price specified in the contract.

The process of wire drawing involved pulling metal (wrought iron or other non-ferrous metal) through dies with a pair of grippers attached to a rope which was passed several times around a capstan which was tuned by the water wheel. The diameter of the wire was reduced by drawing it through a sequence of dies of reducing diameter, the final size determined by the size of the last die through which the wire was passed. The initial contract to a client was for “ten hundredweight” (1000 lbs.) suggesting that the wire was wrought iron.

Historical Photos (about 1900)

Looking Northwest from Main Street at the outfall to Great Brook. The water wheel is in the area between the two stonewalls in the foreground and isn't visible.



Over↓

Looking at the Intake End of the Grist Mill from the Northwest



References

1. History of Bolton, 1938, Town of Bolton
2. Plan of the Town of Bolton, 1794, Surveyed by Silas Holman and Nathaniel Longley Jr.
3. Map of the Town of Bolton, 1831, Surveyed by Silas Holman
4. Atlas of Worcester County, 1870
5. "Colonial Craftsmen" by Edwin Tunis, Crowell, 1965
6. Bolton Historical Society Archives, Photographs P1372 & P1373
7. Bolton Historical Society Archives, Contracts D-IN31, D-IN32 & D-IN33

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