

Tower Clock of The Old Groton Meetinghouse

Time arrived in Groton in March of 1809 for before that only the wealthy owned clocks. The average person in Groton and all the rural communities were dependent on the movement of the Sun and stars to tell time. The oldest timepiece was the Sundial invented about 700 BC, followed by the obelisk, water and hourglass. The pendulum clock like the one on the Old Groton Meetinghouse, was invented in 1656 by Huygens at Dutch mathematician.



While the steeple of the Old Groton Meetinghouse was part of the original 1755 structure the clock was not installed until 1809. The town meeting warrant for the March 1809 meeting, article four stated, “ To see if the Parish will grant any sum of money to purchase a clock or to prepare a convenient room for one in the belfry and to act on this and the foregoing articles as the Parish think proper”.

Voted; that a sum, not exceeding \$30 be expended under the direction of the Parish Committee to prepare a suitable room for the clock being prepared by James Ridgway, in the belfry of the meeting house.

Caleb Butler, Clerk

May 22, 1809, the Town of Groton paid to Mr. William Livermore for work done at the meetinghouse, helping to make a room to contain the clock \$7.87. Paid to Mr David Fletcher for work done to the meetinghouse for reception of the clock \$16.63. Paid to Samuel Lawrence, Esq for helping fix a room for the reception of the Town Clock \$1.50. Paid to Mr. Calvin Boynton for work done on the Town Clock \$4.00,

Amount paid to James (sometimes referred to as Francis) Ridgeway has not been discovered as yet. It has been learned that James Ridgeway was known not as a clockmaker, but as a silversmith. He lived in Groton in a house across the street from the meetinghouse. The Groton clock strikes a remarkable likeness to the one in Hubbardston, Mass built by a Mr. Able Stowell of Worcester in 1807. It is further interesting that James Ridgeway married Mr. Stowell's daughter, Faith in 1802. Also, he was in partnership with his brother in law, Abel Stowell Jr. from 1812 to 1816 in Groton under the firm name Ridgeway and Stowell. Ridgeway built the time side of the clock but did not build the bell striking mechanism. He did build the frame to hold the striking part and left the plans to complete it in anticipation of the bell being added.

The bell situated in its original cradle above the clock room is an 1128 pound bell cast for the meetinghouse by Paul Revere and Son in 1819. This likely replaced the original 500 pound bell purchased in 1730 for the third meetinghouse. In the 1840's Elijah Whiton, likely used Ridgeways plans to connect the bell to the clock so it would now strike the hour.

The clock is notable in many ways. The handmade character of the iron work is rustic and functional while graceful and ingenious. The escapement is of the pinwheel type, which was in use for only about a decade and so would be useful for verifying its date, were that necessary. The pendulum is about five feet long. Wire cables, originally being rope suspend 480 pound soapstone weights.(Likely from the Groton soapstone quarry) In 1864, a new rope was purchased for \$2.35. The main drive of the clock splits off in four directions, three to the eight foot outside faces and one to an inside face that was in the auditorium originally, but has not been in use since the renovation of 1877 when the organ was installed. The weights must be wound up once a week to keep the clock and strike side running. The strike consists of a lever connected by chain to a hammer that strikes the rim of the bell when the clock mechanism trips at the hour.

Recent History

The clock strike mechanism was badly damaged around 2001 when the clock mechanism that controls it stripped its gears allowing the 480 pound weight to fall breaking the cable and twisting several gears. At that time Earl Carter, a local historian and metal worker, took a look at it and decided to take the initiative and rebuild it. Over the next ten years he reforged gears and shafts. He also cut new gears. When clock expert, John Rives, was brought in to assist with final calibration, he stated that he did not know of any clock restorer that could have done what Earl had done. In December 2012, over 200 years from when it originally went into service, it was all working again.

In 2016 the clock stopped running because of excess wear on the clock side (previously noted by Earl Carter for future restoration). The frame that the clock sits on needs to be restored and strengthened. Several bearing blocks need to be cleaned and replaced also one strike shaft and pinion gear had broken needing to be reconstructed.

In June of 2018 a master clock repair man, Philip D'Avanza of Goffstown NH was contracted with to rebuild the clock. He studied the Able Stowell clock in Hubbardston, MA finding that many alterations had been made to the Groton Clock, particularly when the bell tolling mechanism was added. He found several deficiencies in the bell tolling side of the clock due to poor workmanship and quality of material used. He strengthened the cradle, built a new bell tolling hammer, built 3 new shafts, brass gears and regulator fan. His goal has been to restore it to the condition that James Ridgeway and Able Stowell visioned it.



The clock and bell is now telling the time again to the citizens of Groton as it did over 200 years ago. It is one of the oldest original hand operated tower clocks in the United States.

Keepers of the clock

1859 - 1868	L. G. Osborn
1868 - 1910	Charles H Gerrish
1940 - 1963	James P . Fitch
1963 - 1988	Harlan Fitch
1988 - 1998	Stephen Burne
1998 - 2011	Kurt Staven
2001 - 2012	Earl Carter (Restored bell strike machinery)
2011 - 2013	Allen King
2013 - present	Joe Spencer

Clock history updated by Allen King December 27, 2018

