

The Steeple First Parish of Sudbury



A Photographic Essay

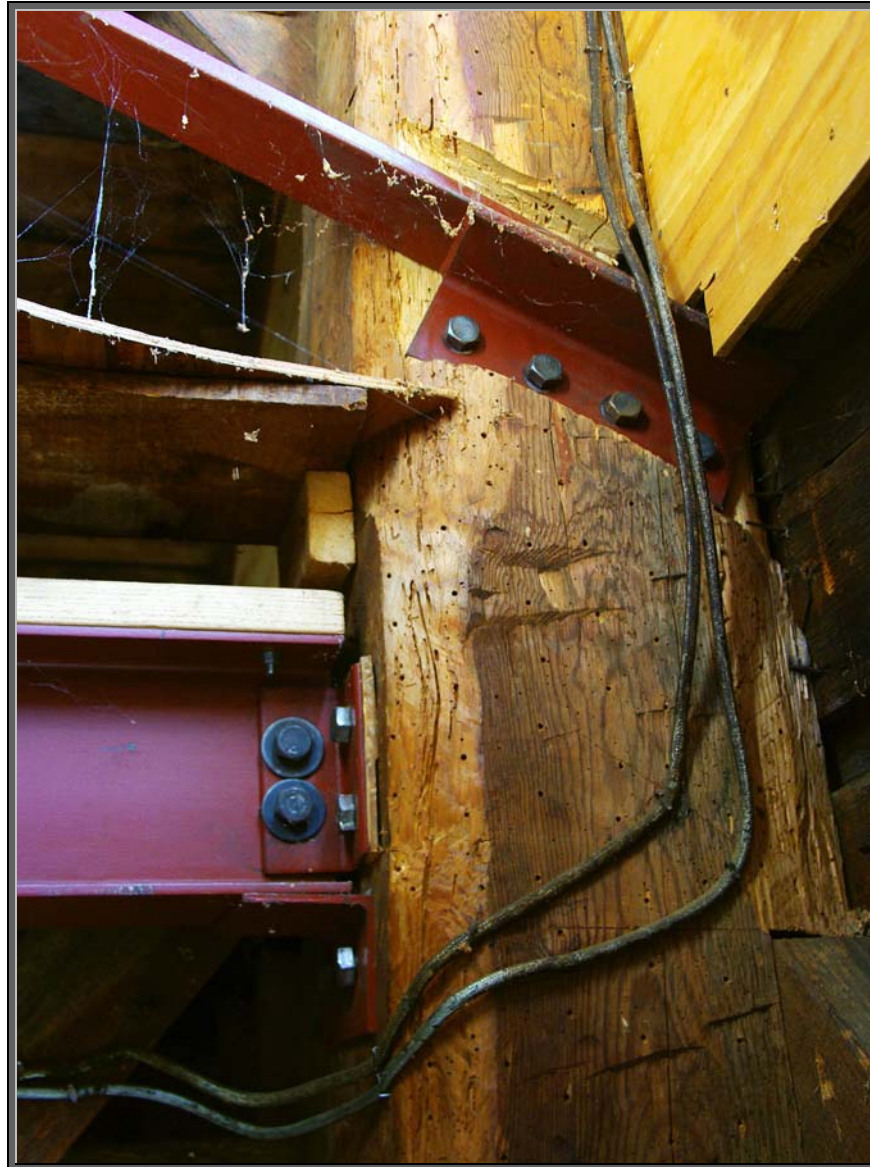
Stephen Gabeler

The steeple of First Parish of Sudbury is a very familiar sight for anyone who passes through the Town Center. The sound of the bell is also well known to those who spend any time there or live within a few miles. Much less familiar is the inside of the steeple, for it is mostly out of sight and is a bit more adventurous to enter and climb than many are willing or able. The history and stories behind what is seen inside take still more effort to dig out and only small fragments are to be found "on-line." I will take you on a tour up the old steeple and tell the tales I have managed to piece together. As with most stories, other versions are quite likely to exist, since many of them have been passed on by word of mouth and guesswork. Some of the story is not in the form of words but rather in what is seen directly. When I go up into the steeple I am acutely aware of the skills and dedication of many individuals for many generations. I am equally aware of how anonymous most of them are. At the start of our tour, a few have signed their names and added cartoons and graffiti on the old plaster walls with dates going back to the Civil War, but much of what we will see was put there and maintained by those whose names we may never know. In the future, that will undoubtedly include some of us.

Looking at the front of the Church from the lawn, we see 3 doors on the first level, 3 windows on the second and an arched window on the gable below the clock faces. The main structure of this Meetinghouse was constructed in 1797 with the foyer and steeple added in 1842. This is the second Meetinghouse on this site. Foundation remnants from the first 1742 Meetinghouse lie below the Parish Hall floor. The outer two of the three windows are what we see in the foyer when we leave the Sanctuary at the end of our Sunday Service. The middle window is inside the space that protrudes into the foyer with the narrow door to the left. The bell rope hangs from the ceiling just in front. We will enter the steeple through that door and climb up.



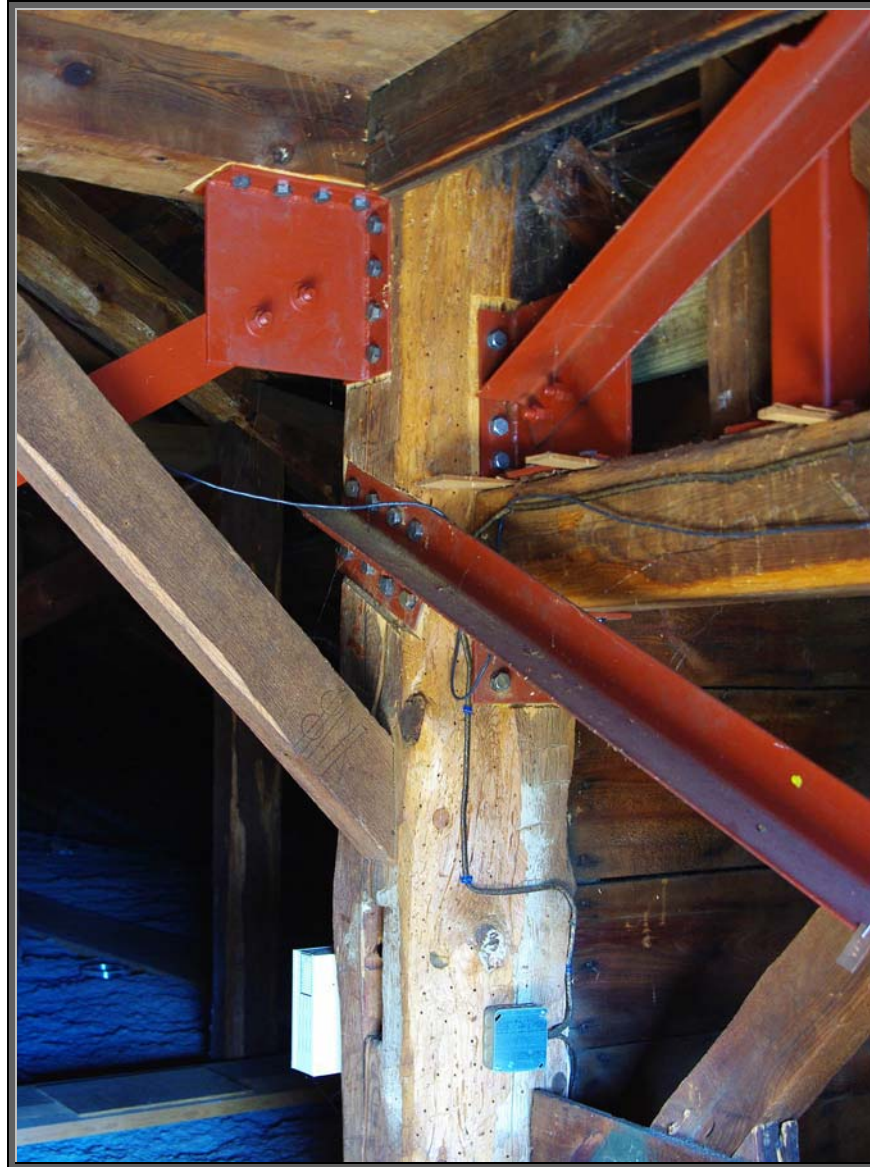
The first set of stairs squeeze past that middle window. The small rope on the left is for tolling the bell. Our current tradition during memorial services is to toll the bell once for each year lived by the person being honored and remembered. The dark open space on the right, where the Flag is resting, looks like a dumb waiter shaft and is, in fact, where the weight for the original clock mechanism was hung. The wooden box with rocks and other debris can still be seen sitting there, although it is no longer used to operate the clock. At the top of the stairs is a narrow shelf that must be traversed to get to the next set of stairs. You are right next to the old window, so don't lose your balance. Greeting you will likely be flies, ladybugs, pine bugs, and (in the summer) wasps. They are preoccupied with other things.



After traversing the shelf, we come to the Southeast timber post of the steeple. The four lower posts are quite large and are part of the original 1842 addition. The numerous holes are the result of an infestation of powder post beetles that were discovered and treated in the 1960s. Each of these vertical timbers is the entire trunk of a large, mature white pine tree. These trees were likely seedlings before the founding of the town 203 years before. The floor at the next level and the inside wall around the arched window are much newer construction using plywood. The red steel beams were added in 1997 as part of a major restoration and preservation effort. We will continue to see this steelwork to the top.



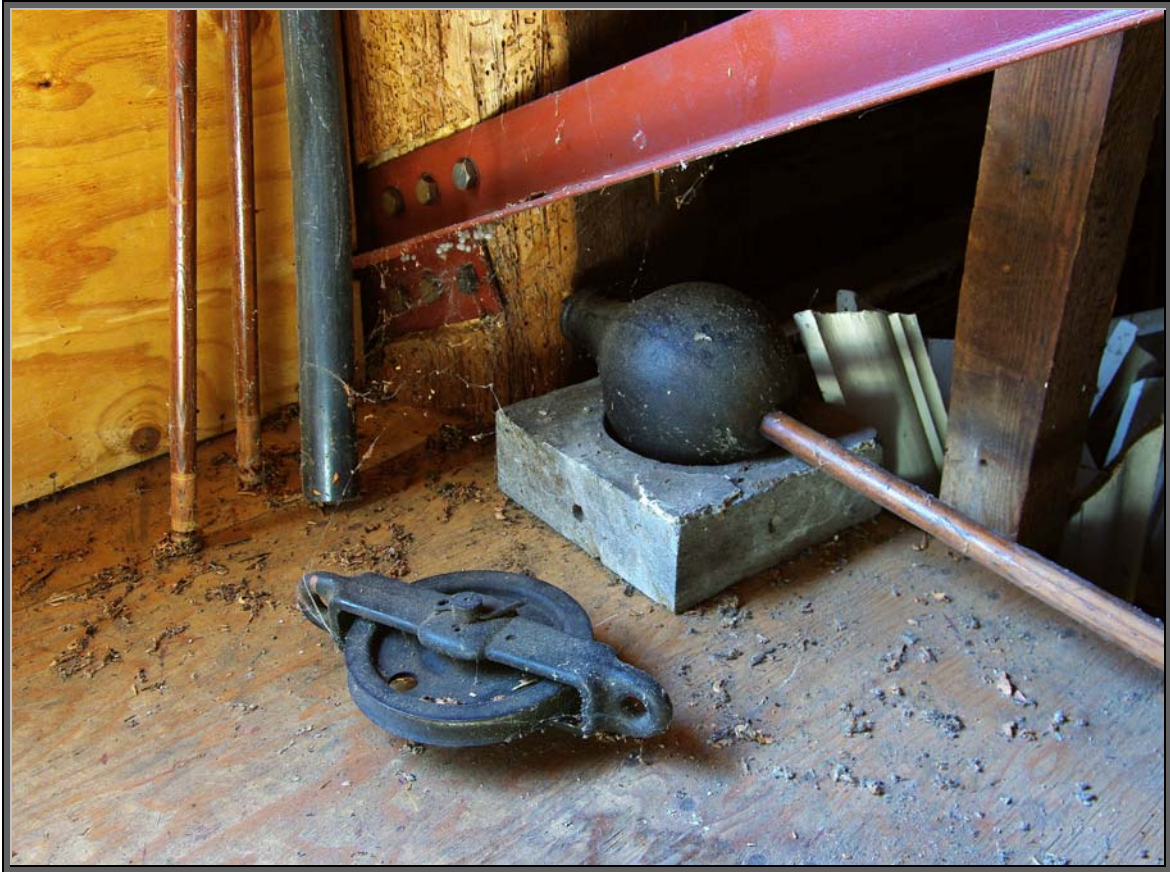
The timbers in the original post and beam construction show the marks of being hewn square with an adze (an axe like tool with a horizontal blade like a hoe). Square cut nails also indicate an earlier age. Hudson's History of Sudbury indicates that there was a nail mill on Hop Brook at one time. Perhaps some of these came from there. There was a time when this was the new addition to the second Meetinghouse of the congregation. The first had been built 100 years before and that is 268 years before today. Thirteen generations of families have come to this place and made it theirs.



We are now on that plywood floor at the level of the arched window seen at the front of the Church. This is the Northeast post showing reinforcement efforts from several eras. The hand hewn timbers are probably all original 1842 construction and have wooden pegged mortise and tenon joints. The wooden diagonal braces are more precisely saw cut oak and perhaps more recent. The steel is 1997 as mentioned before. Some of the electrical wiring looks around vintage 1950's or so and may have been added when the clock was electrified. The space above the Sanctuary ceiling is seen off in the dark with the insulation added in 2008 (did you notice that the ice dams and megacicles were not so bad the last two winters?). Each generation has taken responsibility for stewardship of these spaces.



The next set of stairs continues up to the level above, where the clock works reside. The rope for pealing the bell (ringing it by swinging the whole bell) passes up through the floor we are standing on and through the ceiling above. The wooden box hanging from the ceiling is where the clock pendulum once swung. Sprinklers were added to the Meetinghouse in the 1960s and we see the piping and heads all along the way up. A modern smoke detector has been added on the floor joist above us.



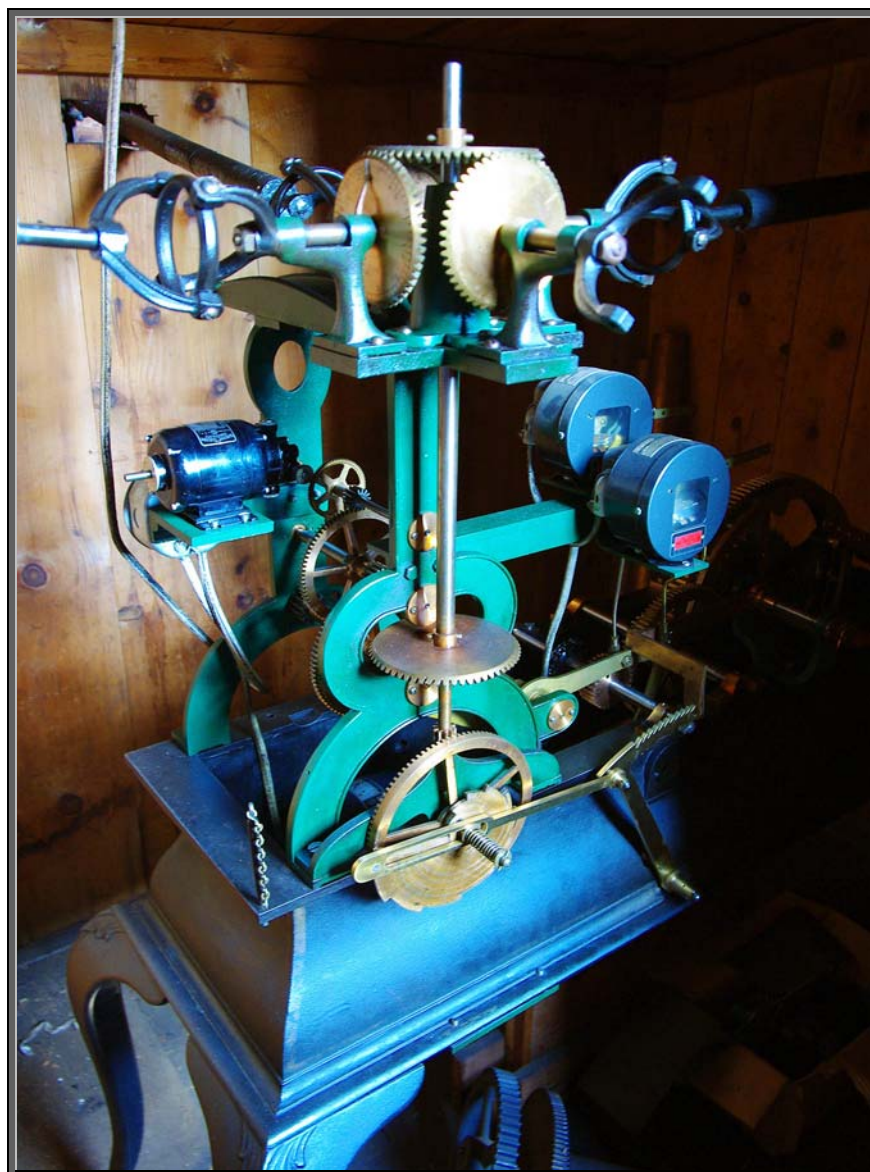
At the base of the stairs to the clock level, by the Southwest post, is the pendulum that was removed from the clock when it was electrified. That heavy cast iron ball and wooden shaft kept time for the Town for about 70 to 80 years before it was set to rest not far from its partner. The pulley next to it was part of a mechanism of weights, cables and pulleys that were cranked up every week to power the clock.



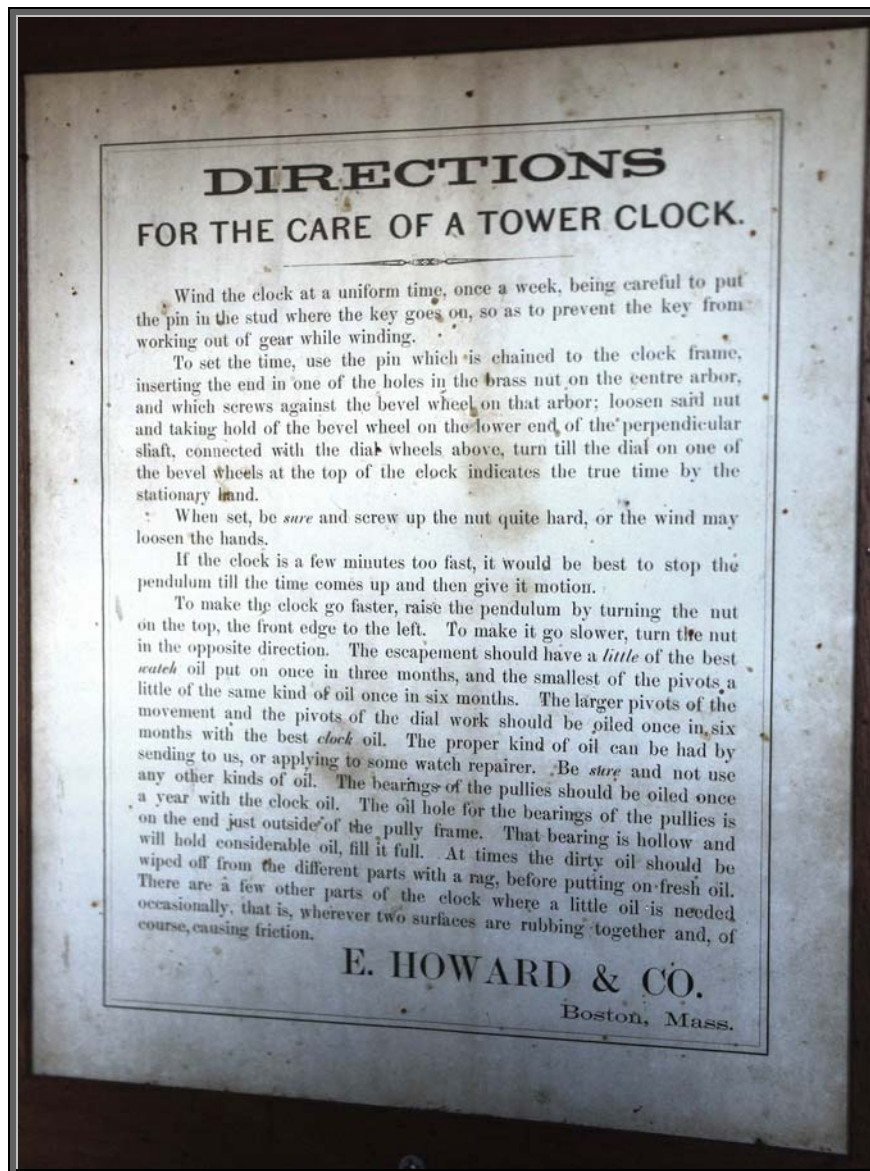
As we climb the stairs to the clock, we stop and look out to the left for an open view of the whole structure above the Sanctuary. The truss structure with center posts, side posts, diagonal braces and rafter beams give the roof the strength required to be able to span the entire width of the building and support the roof, bearing only on the outer walls. The completely open space in our Sanctuary without any posts is a tribute to what is above the ceiling. Most of what we see here is the original 1797 construction using the pegged mortise and tenon joinery (no nails!). The empty mortises and peg holes suggest modifications for the 1842 addition of the foyer and steeple. The horizontal bracing boards look newer and the much more recent 1997 re-roofing with plywood can be seen through gaps in the original roofing boards where sections have broken out (look at their width!). The notched joints along the ridge are especially beautiful.



Reaching the clock level, we find what looks like a small shed inside the steeple. This was constructed to keep dust, bugs, rodents, etc. from getting into the clock mechanism and looks original. The door slides open since there is no room for it to swing. The passage way in front is only about one foot wide from the door to the railing over the stairway we just came up. Of course the rope for pealing the bell comes through the floor in the middle making passage even more of a dance. An oak stop block has been added fairly recently to limit enthusiasm on the rope below to what is safe for the bell. We'll just slide the door open to get a bit more room to pass by.



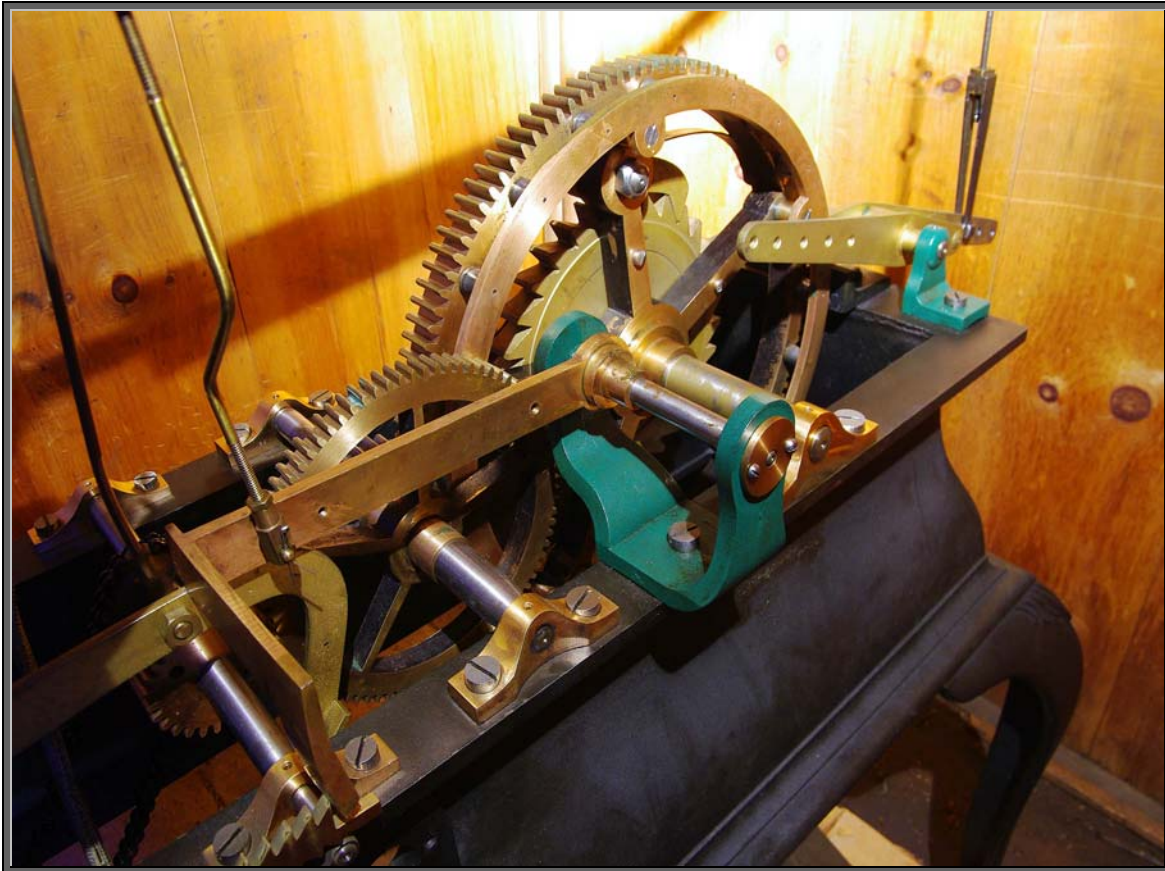
We see in the light coming from the window on the North face of the steeple a beautiful piece of 19th century machinery. The massive cast iron base is decorated with cabriole legs more like a piece of living room furniture. This is an E. Howard #2 Flatbed Striker Tower Clock and was a gift to the Town by the Sudbury school children in 1873. It is nearly identical to the one in Clock Tower Place in Maynard (installed 1892) except for electrification. The pendulum has been removed and replaced by the motor seen here. A second larger motor is in the base to drive the bell striker part of the mechanism. The gears, cranks and cables to the weights have also been removed and can be seen on the floor. Three universal joints and shafts drive the East, South and West clock faces on the steeple. Those children are the age of my great grandparents.



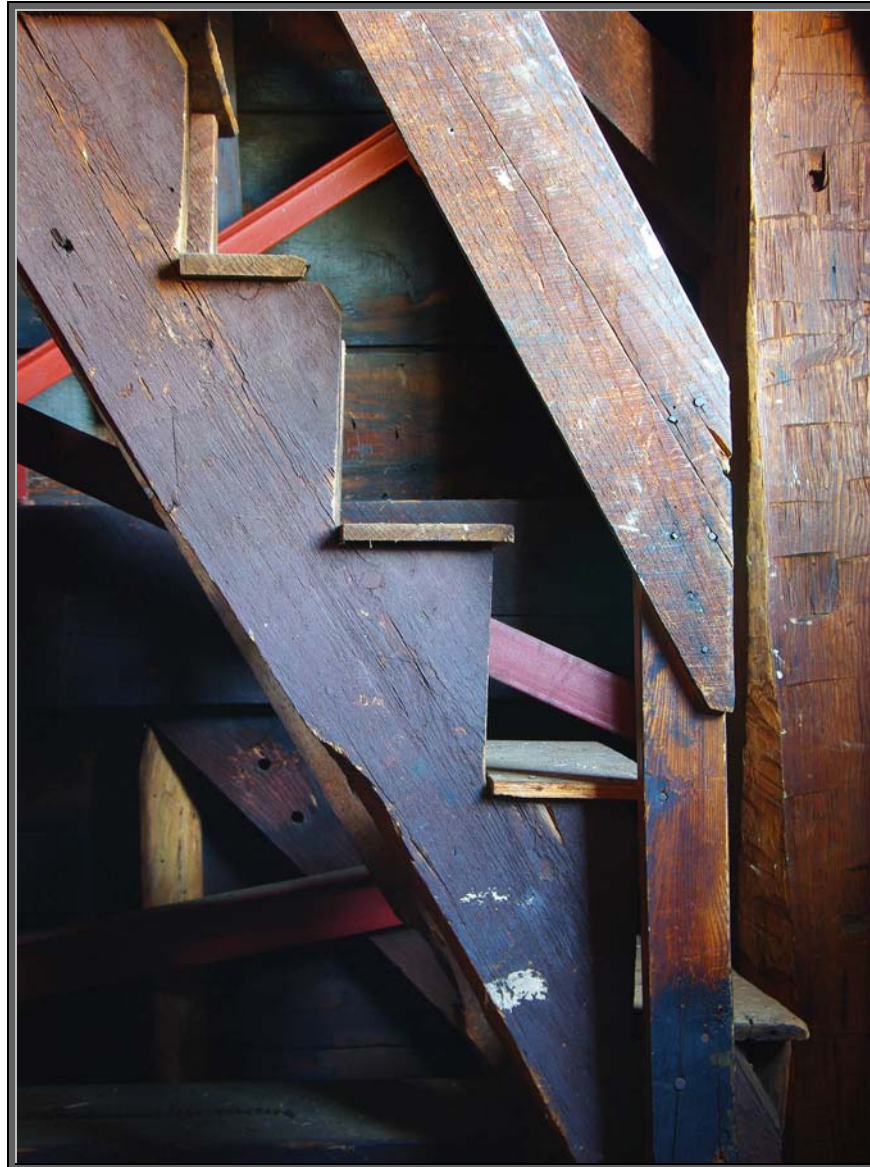
How many times have you lost the users manual to something? This one has been glued to the wall for over 135 years! Judging by the vintage of the electric motors, the change to motor drive probably occurred in the 1940s or 1950s. Prior to that, someone climbed the steeple every week to wind the clock and the striker. Edward Howard was one of the earliest timepiece makers in America and was also one of the founders of the Waltham Watch Company.



To the left and behind the clock shed is the top of the shaft where the weights were hung on steel cables from pulleys on the timbers above. This is the shaft we looked into when we first entered the steeple at the Sanctuary level. Those cables were wound on drums in the clock. Above this ceiling is the open part of the steeple with the bell carriage and bell. Heavy timbers are required here to support the weight of the bell and the forces when it is swung in a peal. A failure in these timbers caused the bell to go silent in the mid 1990s and remained silent until the 1997 restoration (remember all that red steel work?). I remember a service when the bell was exuberantly pealed and we were all startled by the sound of the whole Meetinghouse shaking like an earthquake. I climbed up and found some of those timbers splintered from the pounding of the bell carriage above.



It is too dark to see the right hand side of the clock mechanism so we will turn on a work light (being certain to turn it off when we are done). This is the bell striker mechanism that sounds on the hour. It seems to be much more massive than we might expect in a clock. The reason will become more apparent when we get to the bell and striker. The rod on the far right goes all the way up to the striker. Being a gift to the Town of Sudbury, it remains town property and is maintained by the town. You may have noticed that it looks a lot cleaner and brighter than it's 137 year age. In May of 2003 the Selectmen voted to accept \$1800 from the Sudbury Foundation and \$1200 from First Parish for major repair and cleaning.



To the right of the clock shed is the last stairway. Modern building codes would certainly have a problem with all of the stairs up here. Perhaps we should call it a ladder with wide rungs. I am reminded again of the long period of time that I am looking at with hand hewn posts, steel bracing, cut nails and just plain old looking wood. We are seeing over 150 years of hard work and dedication to keeping this space what it is.



The stairs are not very wide either. The abstract painting above us is the cover over the opening to the outside and the bell. There are no hinges on it, so it must be lifted completely up and forward to get through. Like the roof under the bell carriage, it is covered with copper sheeting and is fairly heavy. With a few gymnastic moves we can now stick our heads up.



We are greeted by a contraption with a head on it as big as a good sized sledge hammer. This is the striker that is pulled down by the clock with rods and cables and released to strike the bell. The bell carriage has 4 inch square timbers and is well cross braced. Most of us think of bells as having this shape and fairly thin walls. This one is solid bronze with walls that are several inches thick. I believe it weighs over a ton. It must have been fun getting it up there with horses and ropes.



Climbing around to the other side of the carriage, we can look down and see the three ways of ringing the bell. On the far side is the clock striker we just looked at. To the left is a round cast iron ball on the end of a curved lever. This is what strikes the bell when it is tolled (remember the small rope we passed when we first entered the steeple?). The large diameter wooden wheel has the pealing rope attached to it (the one that hangs from the ceiling in the Foyer). The clapper hanging in the center of the bell strikes it when the entire bell is swung. Pealing the bell has a different sound because it is moving when ringing and the mouth of the bell is facing outwards over the carriage when struck. It is heard for greater distances as a result. The engineer in me can't help this so hold on – if the clock only rings from 6AM to Midnight, that's 141 times a day – 365 days a year is 51,465 – 137 years is over 7 million times that this bell has sounded the hour since the clock was installed. Then there is the tolling and pealing ...



Did I mention that the view from up here is spectacular? It's a little windy today, but it's worth it! Take your time, there is far more to see than you will notice in one visit. We can now read the inscription cast into the upper part of the bell - "CAST BY GEORGE H. HOLBROOK EAST MEDWAY MASS. 1851". George Holbrook was the third major bellfounder in America, following Aaron Hobart and Paul Revere. The Holbrook foundry cast many of the bells in the old New England churches between 1816 and 1878. About 95 are still ringing. A few made it as far away as the missions in Santa Barbara, San Gabriel and Monterey. It was in 1839 that this congregation split between Unitarian and Trinitarian theologies. Three years later, the bell tower was added and the main Sanctuary was divided into two floors. It apparently took another 9 years to raise the funds for the bell. As we gaze at the bell, the massiveness of the cast iron yoke holding it becomes more noticeable. This balances the bell so that it swings around the center of gravity. Without this, there would be no way for someone to make it move at all by pulling the rope. We look around once more at the Town Center, the cemeteries, Nobscot Hill and Tippling Rock, distant horizons, the trees and sky ... it's getting cool ... it's time to go down.



Coming around to the hatch we see the clock striker is pulled back ready to sound one o'clock. Knowing how loud that is from this distance, I move a little quicker. Climbing carefully onto the narrow stairs, I slide the hatch cover back into position over my head making sure that it is fully seated. We just beat the clock. What a sound! I have read that part of the art of casting these bells is to get them to sound a perfectly tuned chord and not just a single note. I can't imagine how they did it so well. The clock and the bell bring so many metaphors to mind that I don't know where to begin – so I won't. I will leave you to imagine them for yourself.



The last part of the steeple cannot be climbed. We must be content to see it from a distance. The direction of the wind is always changing and while lightning may strike, knowledge of lightning can provide protection to those things we care deeply for.

Reflection – Sacred Space

I have witnessed theological arguments declaring that sacred spaces may only be created by the human hand. I found that to be ludicrous. To me, sacred spaces or places were mostly those that had remained untouched by human intervention, improvement or exploitation. They were to be found in the mountains, deserts and forests that we have struggled to protect as a nation. This to me was the only way to truly respect a mystical original creation and be restored by it. Over time I have been struck that some places and spaces built for community gathering and sharing can, with time, earn that same respect and become sacred. These sacred spaces deserve the same relentless dedication to preserve, protect and maintain.

Every time I climb this steeple tower, I am more aware of so many lives that have touched this place with their hearts and souls and hands and pockets. The times the bell has sung out a birth or tolled the years of a life ended. Even the sounding of the hour as I pass by on my way to work or the uncanny ability to ring at just the right point in a sermon. The inside of the steeple marks the long history of this congregation and its Meetinghouse differently than the way more familiar spaces do. They are all sacred spaces and depend on one another to be whole and complete. It takes time to see, but I can no longer let go of it.