

SPC Bell Renovation

April – June 2015

- **Why the renovation was needed:**

- The bell stand assembly was loose, improperly supported on one side and leaning slightly toward the sanctuary making it unsafe for continued use
- The bell stand assembly was undersized for our 32" bell
- The main support bolt, or clevis bolt, holding the bell to the yoke was loose and worn, causing excess vibration when the bell was swinging
- The toller hammer assembly was oversized and loose. When combined with the "leaning" described above, the toller hammer frequently "hung up"
- The yoke/stand bearing assemblies were worn
- The wooden wheel was weak

- **Renovation / Improvements include:**

- New stands and adjacent wood frame supports
- New clevis bolt to attach bell to the yoke
- New bearings
- New toller hammer, sized for the our bell
- New steel wheel
- New leather pads on the internal clapper spring
- And more...



- **The renovation is being performed by the McShane Bell Foundry, the same foundry that cast the bell in 1898.**

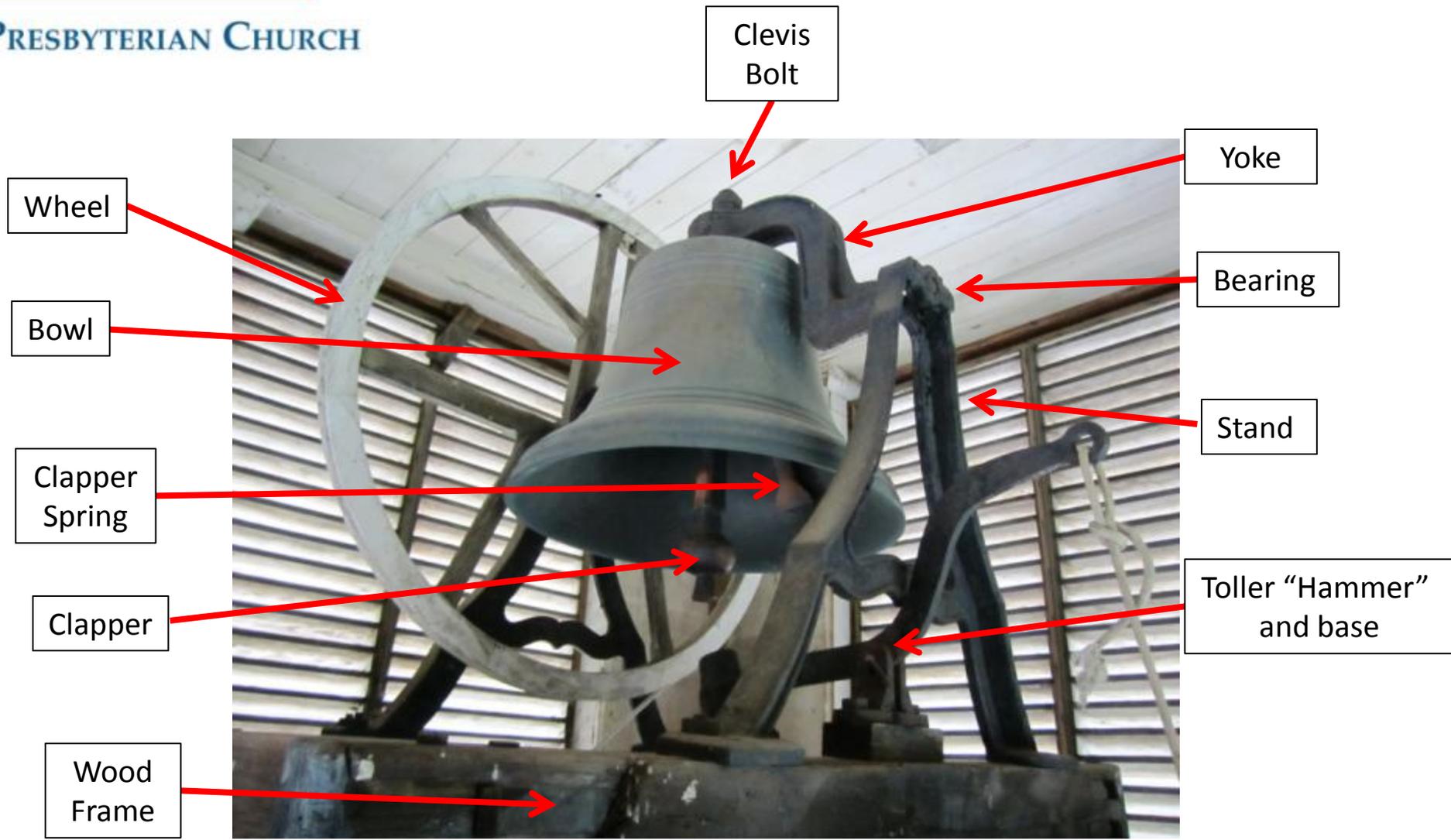
SHEPHERDSTOWN
PRESBYTERIAN CHURCH



Before Renovation



After Renovation



Shepherdstown Presbyterian Church Bell , pre-Renovation
(The wheel side faces West Washington St., the toller faces the sanctuary)



In it's pre-renovation configuration, the stand on the toller side of the bell was partially supported by an "outrigger" 2 x4 . As a result, the stand was not fully seated on the wooden support frame and the entire bell assembly leaned toward the sanctuary.



Clapper

Toller
"Hammer"

Toller Base &
Bolts

The bolts securing the troller were loose, making the troller assembly lean toward the bell . This, in combination with the standards, yoke and bell assembly leaning toward the sanctuary (or towards the troller) allowed the troller hammer to occasionally hit and stick to clapper, instead of striking the rim of the bell. For the person ringing the bell several floors below, this feels like the rope was "catching" or "hanging up".



Toller hammer in contact with clapper, instead of the bell



Renovation Underway (4/23/15)....

The wooden wheel has been partially removed, the toller hammer has been removed, and the bell has been jacked up and secured on temporary support timbers.



Further Progress (5/14/15)....

The wooden wheel has been completely removed, the stands have been cut away, the main support bolt (through the top of the bell and yoke) has been removed, and the yoke has been cleaned and painted.



Renovation Complete (6/9/15)

The bell bowl (the “instrument”) and it’s tone are unchanged. The yoke , clapper and clapper spring have been cleaned up and resurfaced. New items are the sealed bearings, steel stands, steel wheel, stainless clevis bolt, toller hammer, support timbers , ropes and pulley.



There is now sufficient clearance between the toller hammer and the clapper to prevent “hang-ups”. Note also the leather pads on the clapper spring (to reduce noise when the clapper strikes the spring). The previous leather pads were long gone.



New pulley to help guide “pealing” rope and reduce wear.



New sealed bearings for easy “pealing”.

SHEPHERDSTOWN

PRESBYTERIAN CHURCH



The bell was produced in 1898 by McShane Bell Foundry in Baltimore, MD. The company is still in business today and performed the renovation for SPC.

America's finest maker of Bronze Church Bells, Ringing Peals, Chimes, Carillons and Hand Bells the world has ever heard.

 **McShane Bell Foundry**
Established 1836



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more>	more>	more>	more>	more>

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SITE DESIGNED BY [TFC CREATIVE](#)

The old bell standards (or stands) were produced by the McNeely Bell Foundry near Albany, NY



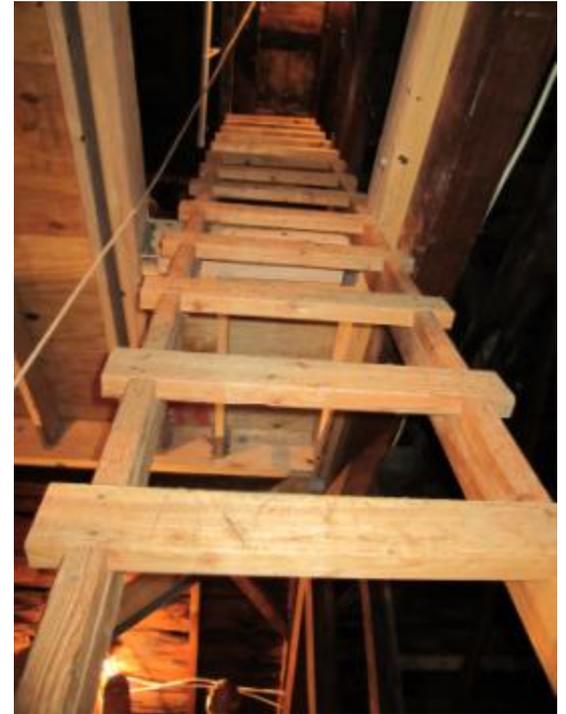
From Wikipedia:

The **Meneely Bell Foundry** was a bell foundry established in 1826 in West Troy (now Watervliet), NY, by Andrew Meneely. Two of Andrew's sons continued to operate the foundry after his death, while a third son, Clinton H. Meneely, opened a second foundry across the river with George H. Kimberly in Troy, NY in 1870. Initially named the **Meneely Bell Company of Troy**, this second foundry was reorganized in 1880 as the **Clinton H. Meneely Company**, then again as the **Meneely Bell Company**. Together, the two foundries produced about 65,000 bells before they closed in 1952.





Post & beam construction
in the attic



The ladder leading to the Belfry
(in the attic above the balcony)

On the way to the belfry