

THE FIRST PRESBYTERIAN BELL

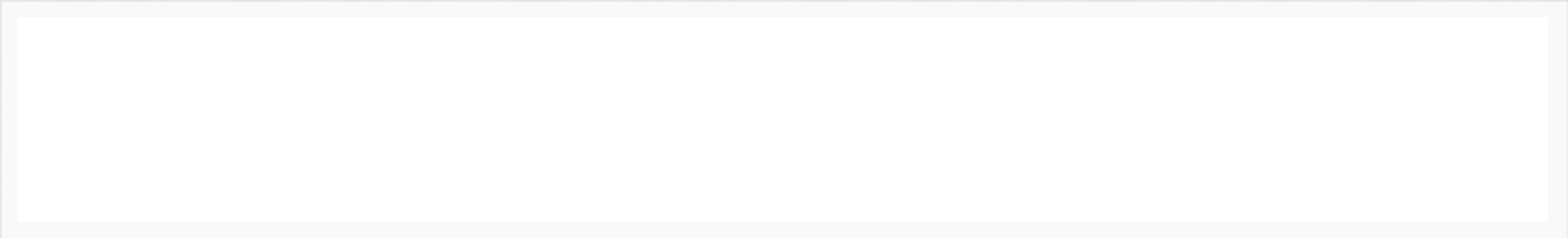
(RINGS AGAIN!)

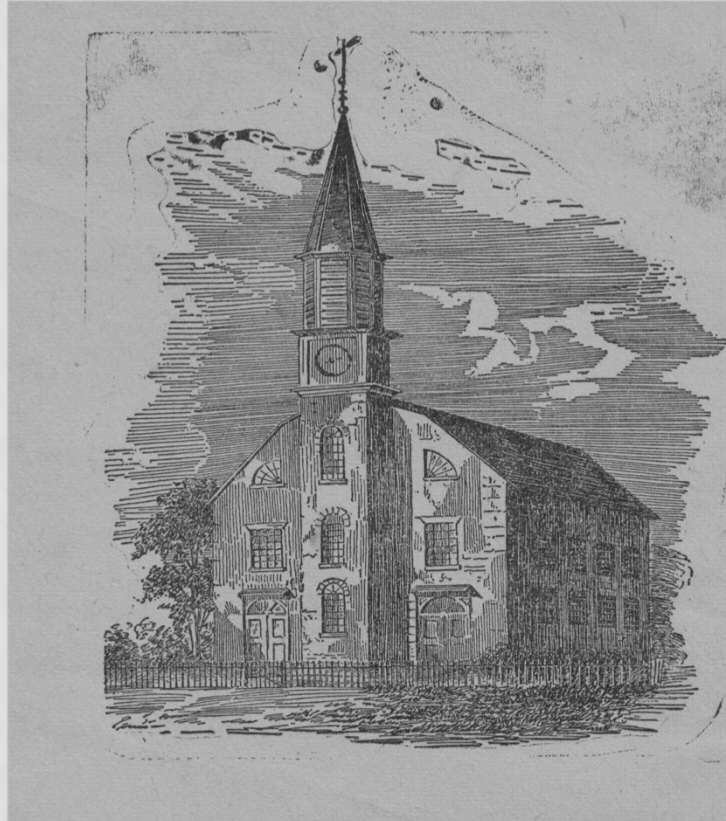


- Today we will learn about:
- the Church for which the bell was cast
- George Hedderly, the bell founder
- The bell; and
- How the ringing mechanism was replaced

THE CHURCH

- The bell was not originally made for the church we are in today.
- In 1726, the Presbyterians in Trenton built a stone church on this plot of land but closer to the corner of State and Broad.
- By the end of the C18th century, the building had problems and was too small.

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- In 1804, the church decided to build a new, bigger church on the same site as the old one.
 - The old church was torn down and the cornerstone of the new church was laid down in April, 1805. The new church was ready for worship on August, 1806.
 - It was known as the “brick church.” This is what it looked like.



THE BRICK CHURCH

- In the Church archives are many documents about the building of the Brick Church.
- These include bills for materials, labor and notes showing money that was borrowed.
- Here are some examples.

Presbyterian Church Dr.
 To Beatty & Wright
 1806
 March 19 To 226 feet Oak Scantling 14/ - - - 4.22
 21 " 194 " Ditto - " - - - 3.63
 April 18 " 94 " - Ditto - " - - - 1.76
 25 " 180 " Cherry Plank #2 - - - 3.60
 May 15 " 105 " Oak Scantling 14/ - - - 1.96
 \$ 15.17

Rec^d June 21. 1806 of Peter Gordon
 the above amount of fifteen dollars & 17¢
 \$15-17 Beatty & Wright

WHAT ARE SCANTLINGS?

A TIMBER OF RELATIVELY SLIGHT WIDTH AND THICKNESS, AS A STUD OR RAFTER IN A HOUSE FRAME.

Mess^{rs} Gordon & Smith. For Pris^{er} Meeting House

1806

To John Sutterley

March 5	To 1 Chisel to cut bricks	L	3.6
25	To 6 Spikes W ^t 1 th at 1/2		1.2
April 2	To 1 th of Spikes		1.2
10	To 1 th 1/2 of ditto		1.9
May 3	To 6 Iron Canasters for Stairs W ^t 32 th at 1/4		3.10.0
23	To 2 Irons W ^t 5 th at 1/6		7.6
"	To 1 th 1/2 of Spikes		2.1
31	To 1 Staple for gait		0.9

Trustees of Presbyterian Church to Am Hunt
1806

March 19 To 6 Cuts Nails. 29th £ 4-9

July 16th 1806 Rec^d. Payments in full
for Abraham Hunt

John Forbush

Recd. of Peter Gordon Three dollars & sixty
Six Cents. for allowance for finding my own
Liquor, whilst working at the Church —
George Monroy

\$3.66

MY FAVORITE

RECEIVED OF PETER GORDON THREE DOLLARS AND SIXTY SIX CENTS FOR ALLOWANCE FOR FINDING MY OWN LIQUOR WHILST WORKING AT THE CHURCH.

- Unfortunately, no documents related to the bell for this Church have survived. However, an 1806 contract for a bell by the same maker, George Hedderly, for the Swedish Lutheran Evangelical Church in Southwark Philadelphia was preserved.
- It is probably similar to the agreement of First Church and Hedderly for our bell.

CONTRACT WITH SWEDISH CHURCH

- “It is agreed between the Rector and Vestry of the Swedish Church and George Hedderly that he will cast a bell of three **hundred weight*** fit for church service to the best of his knowledge and insure for its use for twelve months, if the sound and other qualities be agreeable, but in other case to keep it without any obligation for them to take it. He shall receive from them at the rate of **fifty cents a pound*** after the bell has been hung and tried; he being charged with the hanging of it. He will also take the old bell in part payment at twenty cents a pound and melt the same into the body of the new bell.”

WHAT IS A HUNDREDWEIGHT?

- A hundredweight is a unit of measurement for weight used in certain commodities trading contracts. In North America, a hundredweight is equal to **100 pounds**.
- We don't know the ultimate cost of the bell for the Swedish Church but the costs of building the Lycoming County Courthouse in 1804 were published in the local newspaper and the Hedderly bell that they bought cost approximately \$340.

50 CENTS A POUND OF WHAT?

- Bells were made from bell bronze also known as “bell metal”. The words "brass" and "bronze" are often used interchangeably but they are very different metals. Both are alloys and both contain a lot of copper - but that is where the similarities end.
- Comparatively, brass is a very soft metal. For example, it is used for plumbing fixtures. Bronze on the other hand is very hard and can last forever. There are several grades of bronze.
- Bell Bronze is the purest type of bronze in the bronze family. Not only is the copper content higher than traditional bronze - 85% (vs traditional bronze at 80% copper) and 15% tin. There is also no contamination from other metals such as zinc in the alloy. This is the reason that a bronze bell gives such perfect tone and clarity.

THE NEW BELL IS HUNG

- From a Trenton newspaper of July 29, 1807:
- “On Saturday, the 20th instant was hung in the steeple of the New Presbyterian Church, a new bell, weighing in four hundred and seventy-eight pounds, cast by George Hedderly, bell-founder and bell-hanger of the city of Philadelphia, which does the founder much credit, both for the neatness of its casting and its melodious tone.” (as quoted in, *A History of the Presbyterian Church in Trenton*, by John Hall)

- “In 1813, the Union Fire Company of Trenton agreed to pay \$1 to the person who should first ring the Presbyterian and State House bells for alarm of fire.”

- Only 30 years later, the Brick Church was torn down and the Church we are in today was built.
- The site of the Church was moved from the southwestern corner of the Church's property to the middle of the lot.
- The rest of the Church's property had been used as a cemetery and the Church was built on top of some of the graves. Some of the displaced headstones form the sidewalk in front of the church.
- The bell was moved from the old church to the new one.

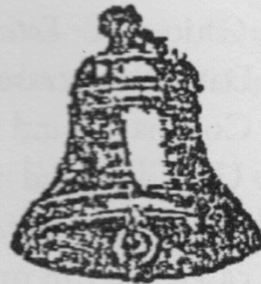
GEORGE HEDDERLY,
BELLFOUNDER

- George Hedderly was born in 1755 in St. Marys, Nottingham, England. He was apprenticed as a framesmith in 1769, when he was 14 years old. (A framesmith was someone who made weaving frames. Nottingham was famous at that time for lace making.) He later worked with his father and brother, Thomas II, probably doing the frame building and bell-hanging work.

- Apparently the family business did not prosper in England. He emigrated to North America in 1793.
- In America, George formed a partnership with John Bailey, a New York artisan. On February 27, 1794, they placed an advertisement in the New York Daily Advertiser announcing the establishment of the 'New York Bellfoundery'.

- By 1798, the partnership with Bailey had ended and he had moved his business to Philadelphia. There is documentation that in 1801, he made 12 house bells for the White House, then under construction but no trace of these remains.
- He became an American citizen in 1802.
- The first large bells he is known to have cast were in 1804.
- It is known that he cast at least 23 bells here in America of which 16 are known to survive in churches and courthouses as far away as North Carolina and West Virginia.

GEORGE HEDDERLY.



BELL, FOUNDER & BELL HANGER
No. 65.

SOUTH FIFTH STREET, PHILADELPHIA:
CASTS and Hangs, Church Bells and Ship
Bells, on the most reasonable terms—has on hand
for sale, Bells, of different sizes, from 50lb to 200
wt: Crier's Bells cast, and House Bells neatly
hung. Locks, Jacks, Bells, and all sorts of Brass
and Iron Furniture neatly repaired. Keys fitted to
old Locks, and Stair Rods, to any dimensions.

N. B. Stocking Looms made and neatly re-
paired. **March 30** **ru&sf**

George Hedderly Advertisement

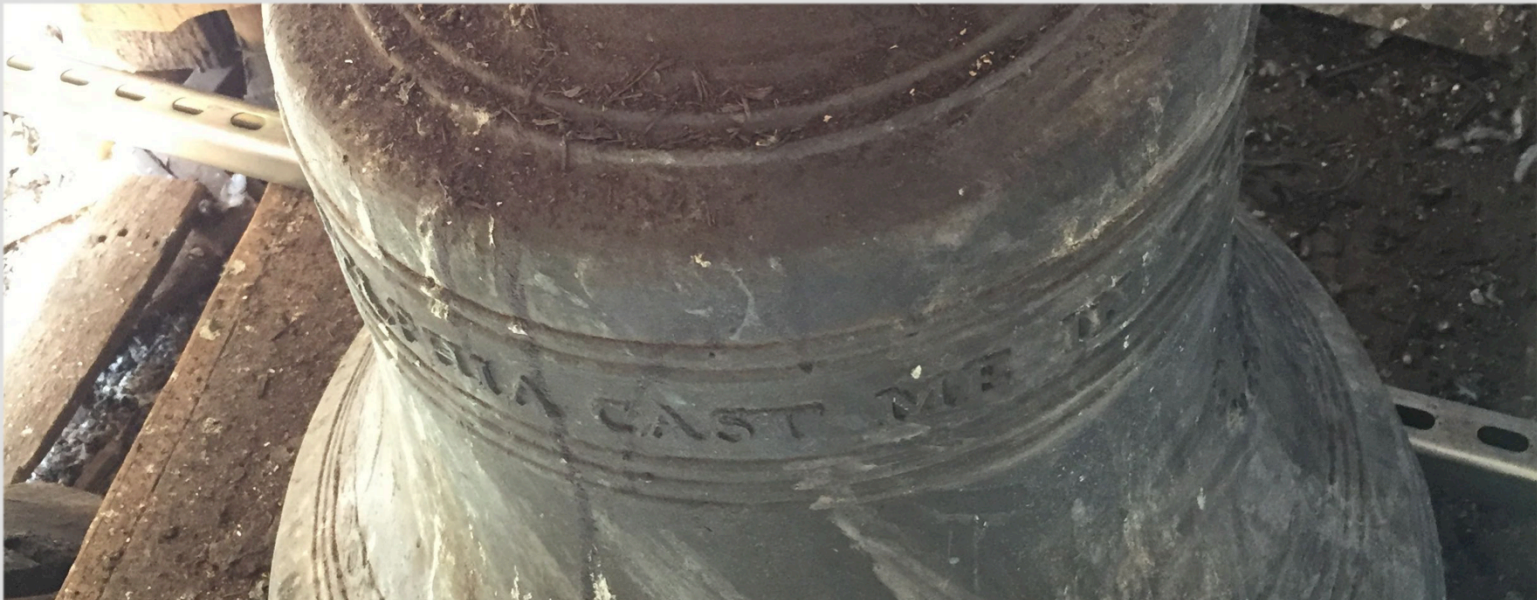
ONE OF THE ADS FOR HEDDERLY'S BUSINESS

PHILADELPHIA GENERAL ADVERTISER (AUG. 26, 1808)

- George Hedderly died on May 3, 1813. He was survived by a wife and son, Edwin. Edwin continued his father's foundry business until his death at age 27 in 1821.



BELL PARTS FROM TOP TO BOTTOM: ARGENT, CANONS, CROWN, SHOULDER, INSCRIPTION BAND & INSCRIPTION, WAIST, MOULDING WIRES (TOP & BOTTOM) SOUNDBOW, LIP



GEO HEDDERLY OF PHILADELPHIA CAST ME IN THE YEAR 1807







- 150 years or so after the bell was hung in the steeple of the new church, the ringing mechanism stopped working and our bell, has been mute for more than 20 years.
- In 2017, the Session of the Church voted to have the ringing mechanism of the bell repaired.

REPAIRING THE RINGING MECHANISM

- It is possible to replace the wheel-ringing mechanism but it is very expensive.
- We opted to install a striker on the bell. As the name implies, the striker strikes to bell to make it ring and the bell does not move at all.
- We hired a company called Church Specialties, located in Vermont, to do the job.

- The original plan was to install the striker on the bell as it was. However, as with many things in our old building, there was a problem. The bell did not appear to be firmly attached to the headstock. Several of the metal straps that held the bell onto the headstock were rusted through and the concern was the continued action of the striker would cause the bell to fall.
- The bell would have to be rehung.



- The striker is made by the Chimemaster company from Ohio and Brian and Alan came to Trenton to rehang the bell and install it.
- It took all day. I hung out with them in the steeple with my go-pro camera and recorded it.

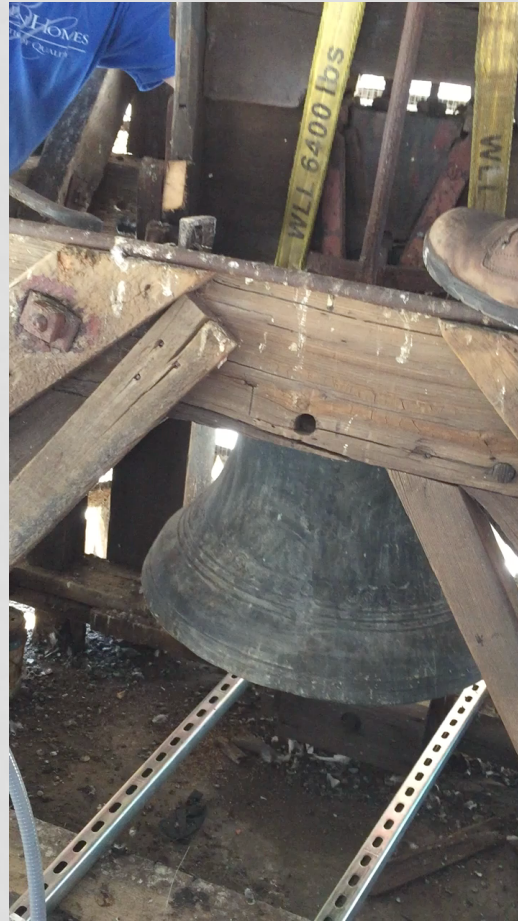


STEP ONE -SET UP THE HOIST. THE BELL IS HEAVY!



STEP 2: DETACH THE WHEEL AND LOWER THE BELL AND THE
HEADSTOCK TO THE FLOOR

LOWERING THE BELL



REMOVING THE HEADSTOCK





THE NEW BELL SUPPORT

REHANGING THE BELL





THE STRIKER INSTALLED!

THE BELL RINGS AGAIN!

