

Daniel Spraggon

From: Howard Smith [REDACTED]
Sent: 08 August 2023 21:08
To: Daniel Spraggon
Cc: [REDACTED]
Subject: RE: Darlington, St. John - tower and bells

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3rd. August 2023 Visit to Darlington, St. John.
Howard E J Smith – Diocesan bell advisor, bell historian and archaeologist.

This was a Durham D.A.C. visit with other interested parties. The views and conclusions that I personally put forward in this document might not represent the feelings and or decisions of the full D.A.C.

There was great concern with regard to safety in the tower due to the large amount of water ingress of the last five years plus.

I talked with Dan Spraggon and suggested that all articles in the tower should be moved out to stop any further damage by water. The suggestion being that they might go on temporary loan to St. Cuthberts Darlington where artifacts would be cared for by the active band of ringers there.

This suggestion was agreed at a later meeting with the proviso that things would be initially kept in the body of St. John's until all required permissions were agreed.

The Diocesan Finance Board has appointed Maya Polenz ARB AABC who is an Accredited Conservation Architect and Historic Environment Advisor. [REDACTED]

Maya and myself did an inspection to assess the safety aspect of accessing the tower to all levels.

It should be noted that on various occasions water has come all the way down the tower through all the floors right down to ground level. It might be thought by some that the floors could be compromised however at this moment I think that for the main part they are safe. It should be noted that almost all of the water has come down the middle of the tower (not down the walls although there are condensation run lines) through the trap doors. This would mean that the trap doors have got the most water damage. Most bellringers tend not to walk on trap doors but I have to say that the metal hinges are certainly compromised.

The first part of access is by stone spiral staircase that gives rise to no special issues.

The access from level one into the ringing room is by two sections of wooden stairs. Fortunately most bell ringers do not wear high heels as both sections of the stairs are very steep and with very narrow steps. This would never be acceptable for members of the general public to use for going up the tower for a visit.

The ringing room has been videoed to enable (if required) the replacement of any articles that have been “temporarily” removed.

On some occasions the carpet in the ringing room has been sudden to the extent of squelching when walked upon. Currently it is dry with the carpet pulled back away from the centre. Again I would say that the floor is solid but remembering that bellringers do not walk on trap doors. There are a relatively small number of water run lines down the walls of the ringing room

Access from the ringing room to the intermediate chamber is by a very substantial solid modern wooden ladder. The wooden floor shows much more of the water ingress although it appears safe except for previous comments made on trap doors.

Access to the bell chamber is by way of a short modern vertical ladder of about nine feet. At this point we enter what must now be described a hard hat area. There is a change to a separate ladder that goes to the height of the upper cills of the bell frame. This is a little awkward and requires a certain amount of agility. Once conquered it is then easy to walk on the metal bell frame.

Up till this present time it was believed that the bells were installed as a ring of six and my previous reports had said just that. In the last week it has become clear that the were initially installed as a ring of five in a wooden eight bell frame during 1848. These bells were cast by Charles and George Mears of the Whitechapel bell foundry in London.

1	Charles & George Mears	29 1/2”	1848
2	Charles & George Mears	31 1/2”	1848
3	Charles & George Mears	32 3/4”	1848
4	Charles & George Mears	34 1/4”	1848
5	Charles & George Mears	c 38	1848

They were on a wooden frame of which only the two main foundation grillage beams remain along the North and South walls. They do not have any loading from the existing frame.

Some few years later Charles and George Mears supplied another bell to make it a ring of six. At this time it is believed that this was in 1859 although no documentary proof has yet been located.

1	Charles & George Mears	27 1/2”	1859 (probably)
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Reasoning behind the date change is as follows

The inscription on the treble of 6 is
 PRESENTED TO THIS CHURCH BY
 NATHANIEL PLEWS ESQ & MESSRS R. & W. THOMPSON
 INCUMBENT THE REV W. H. O STEPHENS, BA
 CHURCHWARDENS ROBERT THOMPSON SHARE BROKER
 RICHARD CHILD SKINNER

Rev Stephens was incumbent between 1856 – 1884

In 1893 Mears & Stainbank (new owners of the Whitchapel bell foundry) added two treble bells and recast the old tenor.

1	Mears & Stainbank	24 1/2"	3-3-22	1893
2	Mears & Stainbank	26	4-0-13	1893
3	Charles & George Mears	27 1/2"	4-2-24	c 1859
4	Charles & George Mears	29 1/2"	4-3-16	1848
5	Charles & George Mears	31 1/2"	6-0-05	1848
6	Charles & George Mears	32 3/4"	6-2-13	1848
7	Charles & George Mears	34 1/4"	6-2-19	1848
8	Mears & Stainbank	38 1/4"	10-0-13	1893

It would appear that this eight had become hard to ring and were not tunefully acceptable so a rival firm, Gillett & Johnston of the Croydon foundry, retuned, put on new elm headstocks and rehung the bells in a new steel frame in the December of 1914. Surprisingly you will note that after retuning, which in theory removes bellmetal, some of the bells were actually weighed heavier than they were before. This can be accounted for as there were at this time discrepancies between weights at Mears and Stainbank and Gilletts. I am also informed (by Chris Pickford) that the weights recorded by Gillett & Johnston were pre tuning weights. That means that nobody has the accurate weights for any of the bells.

					nominals
1	Mears & Stainbank	24 1/2"	3-3-24	1893	1560
2	Mears & Stainbank	26	4-0-12	1893	1470.5
3	Charles & George Mears	27 1/2"	4-2-25	c1859	1308
4	Charles & George Mears	29 1/2"	4-3-18	1848	1174
5	Charles & George Mears	31 1/2"	6-0-02	1848	1040
6	Charles & George Mears	32 3/4"	6-2-13	1848	980
7	Charles & George Mears	34 1/4"	6-2-18	1848	880.5
8	Mears & Stainbank	38 1/4"	10-0-10	1893	782

There are obvious signs of the water ingress in the bell chamber.

- 1 the wooden floor timbers over the gap in the stone flooring below the tenor are sodden

- 2 The tenor stay is visibly wet.
- 3 The tenor headstock (large piece of wood from which the bell hangs) is rotted by water and in one place soft enough for me to push my finger one inch into it.
- 4 Water is dripping down from the roof.
- 5 Either side of where the water gully on the roof is lower than the rest of the roof there are wooden spars. One side has been replaced and looks in reasonable condition. The other side is two spars together that are almost rotted away in the centre and it appears that it may be lower in the centre. That is bad as it is supposed to drain on the east side of the roof with a downcomer inside the tower going out onto a lower roof about 5 feet below the louvres. As the ladder that gives access to the roof hatch rests against these two rotten spars of timber it would need supporting before anyone ventured up it to access the roof. If it gave way it would fall into the bells and frame and be likely to cause serious injury to anyone climbing them.

6 I am surmising that the design of the flat roof (if it remains the same as when built) might not be considered a finished design as it was the intention to have a spire surmounting the tower.

Generally speaking the condition of the frame and fittings gives no rise to safety issues excepting for the tenor headstock.

Is it safe ??? for the time being in my opinion yes.

I justify that by saying that it will never be rung full circle again with it's headstock in the current condition. How long will it be safe – good question – and the answer is I don't know but if there was no more water dripping onto it quite a number of years. The heart wood is very unlikely to be affected. On the side of the headstock the open grain ends do not show signs of major water attack. The rot is in localised places.

Is the roof safe ??? possibly not.

What will happen if part of it gives way ?

Any partial collapse will likely cause damage to the wooden bell wheels but not the frame, headstocks or the actual bells.

I hope that this factual report is of assistance to all.

Howard E J Smith

Diocesan bell advisor, bell historian and archaeologist.