

ST. MARY, ILKESTON

FEBRUARY 24th 1993

Inspection requested by the Secretary of the P.C.C.

TOWER

The bells are rung from a ringing chamber situated about 30' above ground level.

The ringing chamber is 12' 7" high. There is a clock room, 10' high, between the bell chamber and the ringing chamber. There is a spiral staircase from the ground level connecting all three chambers. The walls of the staircase between the clock chamber and the bell chamber are crumbling. It is suggested they be painted with Thompson's Transparent Waterproofing Sealant.

The louvres on all four sides of the tower are 6' wide. They have been bricked up to a level of the mouths of the bells in a raised position. Above this level there are plain boards and wirenetting which keep out the weather and the birds. This is as it should be. The floor space in the bell chamber is littered with dirt and rubbish. It should be cleared out.

BELLS

This is a modern well-tuned peal of eight bells, one of the best in the county. All the bells were cast in 1910, some being recast from previous older bells. The bells themselves are in good condition, none having been quarter turned. All the bells are covered in certain areas by greasy slime as a result of oil from the plain bearings dripping on to them. There are clock hammers on bells 2, 3, 4, 7 and 8. There is an Ellacombe chiming apparatus in a derelict state. The Ellacombe hammer on bell no. 1 has been completely wrecked. The ropes on the others are either rotten or non-existent.

The details of the bells are:

bell	dia	weight	date	founder
Treble	2' 3 1/2"	4-3-0	1910	J. Taylor
2.	2' 4 3/4"	5-0-27	1910	J. Taylor
3.	2' 6 1/2"	5-3-20	1910	J. Taylor
4.	2' 8 1/2"	6-2-11	1910	J. Taylor
5.	2' 11"	7-1-25	1910	J. Taylor
6.	3' 1"	9-0-8	1910	J. Taylor
7.	3' 5"	11-3-3	1910	J. Taylor
Tenor	3' 10"	17-0-9	1910	J. Taylor

The inscriptions are as follows:

Treble: MAGNIFICAT ANIMA MEA DOMINVM

VICTORIA MEMORIAL 1902

THE GIFT OF

E. MUIRHEAD EVANS M.A.

VICAR

* * *

RECAST 1910

2.: TE DEVM LAVDAMVS

VICTORIA MEMORIAL 1902

THE GIFT OF

CHARLES MALTBY J.P.

CHURCHWARDEN

* * *

RECAST 1910

3.: A R 1732 PROSPERITY TO ALL MY BENEFACTORS
RECAST AT THE EXPENSE OF
THE TEACHERS AND SCHOLARS
OF THE SUNDAY SCHOOL 1910

4. : GOD AVE HI CHVRCH 1660

5.: ALL GLORY BEE TO GOD ON HIGH
RECAST AT THE EXPENSE
OF JOHN BALL J.P. AND
ELIZABETH WOOD, THE
SURVIVING CHILDREN OF
Wm BALL OF DODSON HOUSE
IN THIS PARISH 1902 *

6.: PROSPERITY TO THIS PARISH 1749
RINGERS 1910
* *

HARRY FLETCHER FOREMAN
ALF. T. BAKER SECRETARY
JOSEPH H. ILIFFE ERNEST POXON
CECIL J. BAKER EDWARD C. GOBEY
JAMES F. GEORGE HENRY HARRISON
ARTHUR NICHOLSON

7.:ROBERT SKEVINGTON & SAML TAYLOR CHWARDENS A R 1732
C. MOLLAN WILLIAMS * VICAR
W. F. BUTTERTON * CURATE
CHARLES MALTBY) CHURCHWARDENS
JOHN F. WALKER)

Tenor:GLORIA PATRI ET FILIO ET SRIRITVI SANCTO
VICTORIA MEMORIAL 1902
* * *

* THIS BELL WAS GIVEN BY
JOHN RALPH MELLAND THOMPSON
OF KNIVETON HOUSE, ILKESTON
AND ALICE HIS WIFE *

BELLFRAME

This is a high sided cast iron H frame supported on a steel grillage built into all four walls. The cast iron parts of the installation are corroding slowly. Those parts closest to the walls have not been painted since they were installed in 1910. Although difficult to reach, it is not impossible to paint these surfaces. The steel parts of the frame, particularly the supporting grillage are badly corroded (steel corrodes faster than cast iron). All steel and iron parts should be wire-brushed and painted with Hammerite paint. Parts which are heavily caked with oil and grease should be cleaned first before painting.

HEADSTOCKS

These are all hollow section cast iron. They need painting. All bolts holding the bells to the headstocks (except bell no. 3.) are badly corroded and should be replaced in the near future.

WHEELS

All are in sound condition.

STAYS

These are of the Hastings type. All are present. The bolting on no. 7 is inadequate. Other stays are loose. Sliders, with which the stays engage, are dirty and corroded.

GROUND PULLEYS

The ground pulleys on bells 1, 2, 4 and 5 are showing significant signs of wear. Pulleys on bells 3, 6, 7 and 8 show a lesser degree of wear. It is recommended they all be overhauled. In such an overhaul, the bearings on the pulleys should be up-graded from the present, unlubricated plain type, to ball bearings. Pulleys with ball bearings require virtually no maintenance and do not deteriorate so quickly due to wear.

CLAPPERS

Clappers in bells 4, 5 and 7 are loose. It is essential these be tightened immediately, using packing washers where necessary to take up space. The clappers on these three bells have been loose for some time. This has caused undue wear to the clapper strike points on the bells and on the clappers themselves. Clappers on all bells have become flattened on the balls at their strike points. Whilst this is not yet unacceptable, it is desirable that their shape be restored. Thick leather washers are needed between the bell and the clapper. All clappers need regular greasing at their pivot points to prevent undue wear. The greasing cap on bell no. 3 has disappeared.

MAIN BEARINGS

All bearings are plain gudgeons turning in half brass bearings carried in cast iron hinged closing top housings of a traditional design. This type of bearing needs regular (fortnightly) lubrication. The problem at Ilkeston is that the H frame design of bellframe makes for extreme difficulty in actually getting to the bearings to do the necessary oiling. It is a dirty and dangerous operation as one has to climb through and over parts of the bell frame up to 8' from the floor. Because of this difficulty there could be a tendency to neglect this regular maintenance. The bearings themselves are satisfactory on all bells but some wear over the years has taken place. As a result of this wear the lubricant now runs out of the bearings more quickly. This makes the bells and the frame dirty and greasy. Moreover the bearings now demand more and more frequent oiling due to this wear. Indeed in recent peal attempts certain bells have become impossible to ring due to loss of the lubrication. In addition to the above, the stay side gudgeon on bell no. 7 and the wheel side gudgeon on bell no. 2 are suspect; there may be others in this category. The steel gudgeons of the bearings fit tightly into the cast iron headstocks and are rivetted over on the side remote from the bearing itself. If these steel gudgeons break inside the headstock or work loose, the first sign is a wetness at the rivetted end - this is what can be seen on bells 2 and 7. Ultimately the bell becomes more and more difficult to ring, sometimes this happens quite suddenly. The ideal solution for all these problems would be to rehang all the bells on self-aligning ball bearings, which do not require regular maintenance and do not release dirt and oil on to places where it is not needed.

GENERAL SUMMARY

It is safe to continue to ring the bells for the immediate future. However, it has to be stated clearly that the bell installation at St. Mary's has been badly neglected over the last few years and essential care and maintenance has not been carried out. The work summarised below is recommended. Some of this work could be done by local DIY enthusiasts with some basic engineering skill. The major

tasks should be entrusted to a professional bell hanger, some names of which are provided.

URGENT - needing to be done within the next two months:

- * 1. Tighten the clappers on bells no. 3, 5 and 7.
- * 2. Grease all clapper pivot points.
- * 3. Replace all split pins in clapper securing nuts.
- * 4. Clean out all rubbish and debris from under the bell frame.
- * 5. Treat wall crumbling on stairs.
- * 6. Bolting of stays, particularly no. 7, improved.

DESIRABLE - major overhaul of the entire installation with the following specific requirements:

- + 1. Rehang all bells on ball bearings, using new stainless steel bell bolts to fix the bells to the headstocks.
- + 2. Refurbish all ground pulleys with ball bearings.
- + 3. Overhaul clappers and reshape the balls.
- * 4. Clean oil and grease from bell frame and the bells.
- * 5. Wire brush and repaint the bell frame, headstocks and grillage with Hammerite paint. Try to paint sides of the H frame close to the walls. DO NOT PAINT THE BELLS.

Items marked * could be done by local DIY enthusiasts

Items marked + are best done by a professional bell founder

BELLFOUNDERS

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G.A.HALLS

Adviser on bells to the DAC.
Advice given in good faith no liability accepted.