

ST. GILES, MATLOCK

December 1st 1993

Request for inspection from Mrs. B. Hughes, P.C.C. Secretary. Inspection was observed by Mr. John Statham, Churchwarden and bellringer. A previous inspection was done on 12th. July 1970.

TOWER

The eight bells are rung from a ringing room which is about 15' above ground level. There is an intermediate clock room with a central clock case. The entrance to ringing room, intermediate room and bell chamber is by a spiral staircase in the S.W. corner of the tower. The bell ropes are drawn away from the vertical in this intermediate room and pass over small ground pulleys. These pulleys are in good condition, having been recently overhauled. The bells are housed in a two tier metal frame located adjacent to the louvres. These louvres have been wire-netted to prevent birds getting in; one louvre has been partially boarded over. Boards or wire netting are equally good at keeping out birds, but plain boards tend to stay in place much longer without the need for regular attention. Moreover, plain boards keep out wind blown rain and do not significantly alter the external sound.

BELLS

There are eight bells plus an old medieval bell. Only the former were inspected. All the eight bells were cast or recast in 1904. None have been quarter turned. None are cracked. All have small canons. The details of the bells are as follows:

No.	diameter	weight	date	founder	note
1.	2' 3 1/2"	4-2-22	1904	Mears & Stainbank	F
2.	2' 4 1/2"	5-0-24	1904	Mears & Stainbank	E
3.	2' 6 1/2"	5-3-27	1904	Mears & Stainbank	D
4.	2' 8 1/4"	6-3-2	1904	Mears & Stainbank	C
5.	2' 9"	7-3-1	1904	Mears & Stainbank	Bb
6.	3' 0"	8-2-4	1904	Mears & Stainbank	A
7.	3' 3"	10-1-6	1904	Mears & Stainbank	G
8.	3' 7 1/2"	14-0-0	1904	Mears & Stainbank	F

The amount of wear at the clapper strike points is acceptable.

BELLFRAME

This is a two tier all metal bell frame. Bells 1, 2, 3, 6, 7 and 8 are housed in the lower bell frame, which is a high-sided 'A' frame. The upper frame is low-sided and carries bells 4 and 5 and also the old No. 5 medieval bell. The lower metal bell frame is carried by wooden beams. The upper frame is carried on the lower frame.

Whilst the bell chamber is generally remarkably clean, there is a need to remove dirt and pigeon guano which is packed into the narrow gap between the walls and the wooden beams supporting the bell frame.

The metal parts of the frame are showing signs of corrosion and are in need of wire brushing and repainting. A special effort is needed to get behind some of the frame work which is close to the walls. The wooden beams would benefit from a treatment with wood preservative.

#### HEADSTOCKS

These are made of wood. The bells are supported by their canons by U bolts. Likewise the gudgeon plates for the main bearings are supported by U bolts passing through the headstocks. All these bolts/plates are corroded and should be wire-brushed and painted. At present all these bolts appear to be sufficiently tight. To be confident that they really are tight, each nut should be removed in turn one at a time, the thread wire-brushed and then liberally coated with oil before the nut is re-tightened, using washers to take up any space.

#### MAIN WHEELS

All satisfactory. There is a small piece missing from the rim of No. 3. Treat wheels with a wood preservative.

#### STAYS

All satisfactory.

#### SLIDERS

Satisfactory. Those of No. 8 and No. 6 do not move easily. The surface on which the sliders run should be clean and dry. Try rubbing the surface with a bit of wax so as to reduce friction.

#### GROUND PULLEYS

Those on the lower frame and those in the intermediate room are in excellent condition, all having been overhauled and put on ball bearings. The pulleys on Nos. 4 and 5 need overhauling in the same way.

#### MAIN BEARINGS

All are fully enclosed ball bearings. Modern thinking advises that this type of bearing despite the presence of greasing points should never be greased after installation. Ball bearings should be left untouched until there is a very strong suspicion that one has failed. Symptoms such as the bell becoming harder going than its neighbours or coming to rest more quickly after swinging through a small arc, are warning signs. These symptoms are now exhibited by No. 7. Thus the bearings of this bell should be inspected with the expectation that replacement bearings will be needed.

#### CLAPPERS

All are of the independent type. However the design is somewhat obsolete. The clapper suspension is a metal ring carried by the staple bolt which passes through the headstock. All clappers are flattened at the strike point. Overhauling of the clappers is now due. The proposal to modernise the design is preferred to the alternative one of refurbishing the existing clappers.

#### SUMMARY

The bell installation is basically in sound condition. The bells can continue to be rung indefinitely in their present condition. There is however a need to catch up on some minor items of maintenance

#### RECOMMENDATIONS

Urgent - nothing

Desirable:

1. Overhaul ground pulleys on bells No. 4 and 5.
2. Overhaul or modernise all clappers.
3. Wirebrush and repaint all metal parts. DO NOT PAINT THE BELLS.
4. Lift No. 7 bell and inspect it's bearings.
5. Clean out debris between wooden beam supports and walls.

For consideration:

Apply wood preservative to lower wooden beams and main wheels.

Tighten all bell bolts and bearing bolts as described.

Keep one of the old clappers in ringing room as a museum piece.

Advice given in good faith no liability accepted.

G.A.HALLS.