

BEELEY ST ANNES

8th March 1995.

Request for inspection from Mr. S. V. Mather, Secretary to the PCC.

TOWER.

The bells are rung from the ground floor. The ringing area is 8ft. 1ins. E to W and 10ft. 3ins N to S. The height is 14ft. 4ins. The bells are reached by an aluminium extending ladder placed so as to reach a trap door in the SE corner of the ringing area ceiling. This trap door which is only 2ft. square is the only opening. Thus there is no ready made access for removing the bells should the need ever arise. The trap door opens into an intermediate room 7ft. 5 ins high. This room is dirty and needs sweeping out. This room has a trap door mid way along the East wall which comes up under the second bell. In the bell chamber there is a single set of louvres level with the bells on each side of the tower. These louvres are 22 inches wide and about 38 inches high. These louvres are covered with wire netting which excludes birds. Unfortunately the netting should have been positioned right up against the louvres rather than some distance from them. The space that now exists between the louvres and the netting is providing a sheltered zone in which birds have made their nests. So much so that this space has now filled up with rubbish almost to the top of the louvres. Apart from making the bell chamber unacceptably dirty, it is a health hazard, a fire hazard, and because the bell frame is made of wood it could be a source of woodworm and infestation etc. It is important that this rubbish be removed as soon as possible. It is recommended that on the North and East sides of the tower plastic netting, rather than wire netting, be used and be placed right up close to the louvres. This will keep out the birds and allow ventilation. On the South and West sides, because these are the directions of the prevailing winds, it is suggested that thin plain wooden boarding or any sheet like material such as perspex or plexiglass be used. This will keep out the birds as well as the wind driven rain whilst having only a very small effect on the sound from the bells. Obviously it is desirable that the louvres themselves should be raised to a good standard of repair before any of this work is done.

The bell installation is immediately beneath the roof which makes it difficult for a person to get all round the installation. The bell chamber is dirty and needs sweeping out. There is an accumulation of dirt lodged between the narrow spaces between the bell frame and the walls. This can harbour damp and infestation. It is a serious threat to the life of the installation. The space between wall and bell frame should be raked out to allow the free flow of air round the wooden parts of the bell frame.

All the wooden parts of the installation should be treated with a good wood preservative e.g. creosote.

THE BELLS

All the bells swing E to W and all are in sound condition: i.e. none are cracked. All the bells were quarter turned when they were rehung by Taylors in 1939; they were probably retuned at the same time. There is negligible wear at the points on the bells where the clappers strike. All the bells retain their canons (the loops on the crown of the bell) which are used to suspend the bells from wooden head stocks. Bell No2. has two holes drilled in its crown which are no longer used. All bells have been drilled to take independent clappers. There is negligible wear at the clapper strike point. Details of the bells are as follows.

Bell	Diameter	Weight	Date	Founder	Note
Treble	26 1/2 "	3-2-18	c1550	? Heathcote.	
2	30 1/8"	4-3-27	c1550	G.Heathcote.	
3	32 1/2"	6-0-11	c1550	G.Heathcote.	A#

THE INSCRIPTIONS ARE

Treble	GOD SAVE HIS CHVRCH				
2	+	*	S	*	GH
3	*	SAE GEORGI O P N ihc GH			

BELL FRAME.

This is a low sided wooden frame of a well established design. It has top and bottom frame elements which match each other. It is quite old, but not as old as the bells. It probably replaced a much older frame about 200 years ago. It has been attacked by wood worm in a few places. It is difficult to say whether this is still active. The original frame was stiffened in 1939 by the insertion of vertical tie rods, which are intended to pull the top bell frame down onto the bottom frame, and by the incorporation of angle brackets in all the corners of the top frame. These features have the intention of minimising movement caused by the forces which occur when bells are rung full circle. When individual bells were rung there was some sideways movement of the top bell frame viz, 0.5 millimetres when No 1 or No 3 was rung and 1.0 millimetre when No 2 was rung. This movement may be due to the vertical tie rods no longer providing a tensioning effect and the angle brackets not being tight, both due to corrosion. Whilst any movement is undesirable this amount, in itself, is not unacceptable. Nevertheless it is advised that action be taken to try and reduce it as if it is allowed to persist it will create wear at the joints of the wooden frame and the movement will then increase to perhaps unacceptable levels. This should be done by sequentially tightening the vertical tie rods a bit at a time. Because these tie rods have become heavily corroded they should be removed, the screw threads should be wire brushed and well lubricated before the nut is retightened. Washers to take up play and to spread the load are necessary. Alternatively new tie rods should be fitted. Similar action is recommended with regard to the angle brackets. The metal parts should be given two coats of paint.

The bell frame is supported by 3 large wooden beams which run N to S across the tower and sit on corbels let into the N and S walls. These beams appear to be much older than the rest of the wooden frame; they may even have the same age as the bells. Wooden floor boards have been placed on top of these beams in the areas between the bell sub frame. As a result it was impossible to properly inspect the ends of these beams. One at least had some rot. It is vital that sufficient of these boards are lifted so that these beam ends can be inspected, cleared of surrounding debris, and given a good treating with wood preservative e.g. creosote. Until all this is done no assurance can be given on how long it will be safe to continue to allow the bells to be rung. There is a support for a flag pole sitting on the bell frame. As the flag pole is no longer used this device should be removed.

HEADSTOCKS

All bells have wooden headstocks. All are in acceptable condition. They were probably renewed in 1939. The supporting straps which hold the bell to the headstock are heavily corroded. They should be checked for tightness in the same way as the tie rods. They should be wire brushed and given at least two coats of a good rust preventing paint eg. Hammerite

MAIN BEARINGS

All are ball bearings. They should NEVER be greased despite them being fitted with greasing points. Ball bearings do not require any maintenance, are very reliable and have to be stripped down if failure is suspected. In this case the bells swing easily and there are no witness marks at the gudgeons and no other symptoms indicative of failure are reported, so it is assumed they are all in good order.

CLAPPERS

All clappers are of the independent type, all are wrought iron. They are fitted with greasing points at the clapper pin. The grease cap for bell No 1. is missing. They need greasing from time to time; this has not been done for some considerable time. There is negligible wear at the strike points and negligible wear at the clapper pins. Thus the clappers are in very good order, however all are loose and need tightening. A thick leather washer is needed between the clapper and the bell.

WHEELS

All in good order. The metal stays between the wheel and the headstocks need painting.

STAYS AND SLIDERS.

These are of the traditional type. All are in good condition. The stay on bell No 3. is rubbing against the board along which the slider runs.

GROUND PULLEYS.

All bells have single pulleys; all are in good condition.

SUMMARY.

The bell installation was restored by Taylors in 1939. It now has all the appearances of being completely unused and completely neglected since that date. It is quite disgraceful. The fittings are unworn but badly corroded and screw joints have lost some of their tightness. The beams supporting the bell frame give the greatest cause for concern, as at least one of them shows some rot; others could not be examined.

RECOMMENDED ACTIONS

- (1). Clear out the dirt and rubbish from the bell chamber especially between the frame and the walls.
- (2). Remove sufficient of the floor boards to allow the ends of the beams supporting the bell frame to be examined/treated. Please call me in to make this inspection.
- (3). If necessary repair louvres and put up sheet material close to them on the S and W sides and put plastic netting up against them on N and E sides of the tower.
- (4). Remove, wire brush, paint and refit all metal tie bolts and angle brackets. Treat other metal components in the same way. **DO NOT PAINT THE BELLS.**
- (5). Creosote the wooden parts of the bell frame.
- (6). Take action to stop the stay of bell No 3. rubbing the slider board.
- (7). Fit new leather washers to all clappers and retighten them. Nuts must be split pinned to stop them coming undone. Make sure the ball of the clapper is equidistant between the two strike points on the bell.
- (8). Replace grease cap on bell No 1. clapper and grease all clappers.

A faculty is not needed for any of the above items. All should be within the capability of DIY enthusiasts. Alternatively you could employ one of the professional bell hangers to do the work specific to the bells themselves, I do not think they, or yourselves, would find it sensible to engage them to do the simple housekeeping tasks. The addresses are attached of local bell hangers whom you might approach.

FURTHER COMMENT

I often say that three bells in a church tower do not provide great interest or challenge to the bellringer and as a result they are likely to fall into disuse and become neglected. I never thought I would see such a perfect example of this as I now see at Beeley. The PCC at Beeley might care to think about this comment as there is probably sufficient space in the tower to house perhaps as many as six bells.

G.A.Halls

Diocesan Adviser on Bells

Advice given in good faith no liability accepted.