

OLD BRAMPTON ST. PETER & PAUL
23rd. November 1994.

Request for inspection from Mr J.E.Platts, Secretary to the PCC.

TOWER.

The bells are rung from an upstairs ringing room. The bells are reached by a vertical steel ladder against the wall in the N-W corner of the ringing room. There is a double floor below the bells with about 1 foot of space between the two. The bell chamber is just over 12 feet square. 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 64 inches high. There are other louvres, on each side of the spire, about 10 feet above the bells and there is a further set of openings on each side at the top of the spire. The two sets of louvres are covered with plastic netting which excludes birds. Unfortunately the netting should have been positioned right up against the louvres rather than flush with the internal surface of the spire walls. 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 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 spire plastic netting, like that currently in use, 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 be used. This will keep out the birds as well as the rain whilst having only a very small effect on the sound from the bells. Obviously the louvres should be raised to a good standard of repair before any of this work is done.

The openings at the top of the spire also should be covered with plain board to stop both rain and birds.

The bell chamber is dirty and needs sweeping out. There is an accumulation of dirt lodged 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 are in sound condition: i.e. none are cracked. None of them have been quarter turned; all have flat tops and conventional cast iron metal headstocks. Details of the bells are as follows.

Bell	Diameter	Weight	Date	Founder	Note
Treble		25 1/4 "		3-1-12	1923 J. Taylor.
2	27 1/2"	4-0-13	1923	J. Taylor.	
3	30 1/4"	5-1-8	1923	J. Taylor.	
4	31 3/4"	6-0-0	1923	J. Taylor.	
5	34 7/8"	8-0-17	1923	J. Taylor.	
Tenor	39 3/4"		12-0-9	1923 J. Taylor.	G

The inscriptions on the bells are as follows:

Treble
AND REHUNG AND THIS BELL WAS
ADDED BY EDWIN CLAY BARNES
SHERIFF OF DERBYSHIRE
1923

THE FIVE OLD BELLS WERE RECAST

* * *
DOMINE DIRIGE NOS

No 2.
TAYLOR
LOUGHBOROUGH
RECAST 1923

1887

No 3.
HD
TAYLOR
LOUGHBOROUGH
RECAST 1923

IESVS BE OVR SPED

No 4.
TAYLOR
LOUGHBOROUGH
RECAST 1923

HD

IN NOMEN IESV

No 5.
TAYLOR
LOUGHBOROUGH
RECAST 1923

GOD SAVE HIS CHVRCH

No 6.
HD
TAYLOR
LOUGHBOROUGH
RECAST 1923

IESVS BE OVR SPED

BELL FRAME.

This is a low sided wooden frame of a well established design. It was originally designed to be supported by four massive wooden beams 13 inches deep and 8 inches wide running E-W. Unfortunately these wooden beams were mortared into the E and W walls so that there was no ventilated air space to the side of them or to the top of them. As a result the beam ends built into the western wall have completely rotted away. The beam ends at the eastern wall seem to be in better condition. The beam ends at the western end have suffered worst because of wind blown rain coming with the prevailing winds via the louvres and spire openings. Even now there is evidence of rain falling on to one of the massive E-W beams and causing it to rot away. The nearby floor is suffering in a similar way. It is vital that the rain falling on to the frame be halted immediately. In the short term it should be deflected away from the frame by plastic or metal sheet. Hopefully, if the recommendations relating to the louvres are carried out the problem of wetness could be eliminated, but this cannot be guaranteed as a complete solution. Rain may be getting in by other routes, if so, these must also be dealt with.. There is some evidence of woodworm attack in one of these massive beams. Because the beam ends rotted away at some time in the past two 8 inches by 5 inches steel RSJs running N-S, and each consisting of two halves plated together, have been installed to support the four massive wooden beams. It is solely these two beams which now carry the bell installation and transmit all the bell loads to the tower. These RSJs are badly corroded and are in need

of repainting.

The bell frame itself features a top frame and an identical matching bottom frame with angled struts between them. The top frame is designed to be pulled down onto the bottom frame and also onto the massive E-W beams by vertical tie rods. There are also horizontal tie rods and bolts and metal plates which are intended to pull the whole structure together to make a stiff and rigid assembly. These tying elements have probably not received appropriate attention at any time since the bells were installed. All are corroded and some are loose. They are no longer doing the job they were installed to do. Each tie and plate should be removed, wire brushed, given two coats of (hammerite) paint and reinstalled. Before retightening the nuts the threads should be lubricated with oil to reduce friction on the threads. New rods, new nuts, and new spreader washers should be used where necessary. Repaint again when installed. This work is best done in the summer when the weather is dry and the wood has had a chance to dry out. Despite all this adverse comment there was only very slight frame movement when any of the bells was rung. In the short term it is still safe to continue to ring the bells.

HEADSTOCKS

All bells have metal headstocks. All are in acceptable condition. They need painting.

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 and have nylon bushes at the clapper pin. They do need greasing from time to time. There is negligible wear at the strike points and negligible wear at the clapper pins. Thus the clappers are in very good order and none needed tightening.

WHEELS

All in good order.

STAYS AND SLIDERS.

These are of the traditional type. All are in acceptable condition. It is noted that the runner board on the slider of bell No 4 has been repaired. As a result the heads of two nails are sticking up and interfering with the smooth running of the slider.

GROUND PULLEYS.

The tenor and bell No 5 have single pulleys all the others have double ones. While all rotate freely, under load there is a very slight tendency for some of them to rub on the side of the pulley boxes. This aggravates rope wear and makes the bell a trifle more difficult to ring. Reluctance to rise at handstroke is the most noticeable symptom in severe cases. The pulley on the treble is cracked. The pulleys should perhaps be overhauled in about 5 years time during which they should be fitted with fully sealed ball bearings which do not require regular maintenance.

SUMMARY.

The bell installation is not in good working order, however the bells can safely continue to be rung in the short term whilst action is taken to deal with the problems.

RECOMMENDED ACTIONS

- (1). Take immediate ad hoc action to deflect the water falling on the bell frame.
- (2). Clear out the rubbish between the bell frame and the walls.
- (3). Repair louvres and put up boarding close to them on the S and W sides of the spire.
- (4). Repair louvres and put plastic netting up against them on N and E sides of the spire.
- (5). Board over the spire high level openings.
- (6). Deal with any other points where rain water is getting into the spire.
- (7). Remove, wire brush, paint and refit all metal tie bolts and stiffening elements.
- (8). Creosote the wooden parts of the bell frame.
- (9). Deal with the nail on the slider of bell No 4.

A faculty is not needed for any of the above items. All should be within the capability of DIY enthusiasts.

NOTE ON TREATMENT OF LOUVRES.

With an arrangement like that at Old Brampton where the bells are opposite the louvres three things can happen. Birds can fly in and make a mess, wind blown rain can get carried in, and the sound of the bells goes out. The first two are obvious problems which need to be eliminated. But the latter can also give problems. When the bells are adjacent to the louvres the sound of the bells can sometimes be uneven, with the bell close to a louvre being louder, on that side of the church, than those bells which are away from that louvre. Also the actual sound level can sometimes be high enough to give rise to complaints from people living close to the church.

Ideally the bells should be sited well below the level of the louvres. The sound is then more even with no bell dominating above the rest. The sound level close to the church is markedly reduced. Perhaps surprisingly, the bells can still be heard just as loud and as clear at a distance. This effect could be created at Old Brampton by building a wall adjacent to the lower louvres, (breeze block is a good material) and covering the bottom 3/4 of area. The louvres should of course be brought up to a good standard of repair before doing this. The wall needs to be of massive material, plain boarding has very little effect on cutting down the sound transmitted. This alternative method of dealing with the louvres, which has to have faculty approval, is not strongly urged unless the above description fits the situation at Old Brampton.

G.A.Halls

Diocesan Adviser on Bells

Advice given in good faith no liability accepted.