

## ST JAMES' BELLS INFO.

In **1870** there was a single 15cwt Mears and Stainbank bell gifted by the Duke of Devonshire, the Duke of Buccleuch, Lord Frederick Cavendish, Sir James Ramsden, and Henry William Schneider.

In **1877**, Mr Thomas Mallaby of Masham was commissioned to design & install a ring of 8 bells in an oak frame, costing a total of £747 11s 2d. John Warner & Sons (London) cast the bells in 1877 replacing the original bell.



In **1902** the bells were rehung, and again In **1924** they were fitted with new bearings, and later survived a WWII parachute land mine that exploded early on Sunday 4<sup>th</sup> May **1941** in Exmouth Street. The bells rang regularly apart from these brief periods in 1902 & 1924, and during WWII (June **1940** and Nov **1942**), until **1999** when major repairs to the church began. When the church repairs were complete, the bells were inspected and declared unsafe to ring! Years of pollution from the town & steelworks, and prevailing sea salt spray and rainwater had corroded bells, fittings, and rotted frame, wheels and floors.

In **2008** Geoff Pullin from Northants visiting his son who worked in the shipyard, started to get some essential short term repairs to get the bells ringing again.

A year later in **2009**, Dennis Ellisdon from Essex (who learned to ring at St James) was alerted to the plight of St James' bells in the obituary for tower captain Jack Bagnall, and offered a substantial donation to completely overhaul the bells for a long term future.



A variety of fundraising campaigns (e.g. concerts, church fairs, open days, sponsored swim, items crafted from the oak frame), generous donations, and grant applications reached the overall target when the Heritage Lottery Fund almost doubled the impressive amount of money raised so far, with an award of £74,400 early in **2013**.

In July **2013**, work began erecting scaffold in the tower ready for specialist bell-hangers Nicholson Engineering Ltd (Bridport, Dorset) to remove the bells and frame from the tower in mid-August, with support from a team of volunteers. They then sent the bells to London to remove corrosion, and on to Whitechapel Bell Foundry to have their canons† removed and to be re-tuned. Whitechapel used a new technique involving removal of metal from outside rim as well as inside the bell. They had not previously used this technique on a full set of 8 bells. The tuning has dramatically improved the harmonics in each bell.

Nicholson Engineering designed and fabricated a new galvanised metal bell frame to replace the old oak frame, and made a complete set of fixtures and fittings (wheels, clappers, headstocks etc). *Everything* has been replaced apart from the original bells.

Leck Construction and subcontractors installed weather protection measures behind the louvers in the tower, replaced floors, rewired the tower, and much other building work.

The bells returned to St James on 7<sup>th</sup> January **2014**. The bells are installed lower in the tower in a middle room between ringing room and the old belfry. This helps to protect the bells from the weather, reduces tower sway, softens sound for homes immediately surrounding the church, and brings the bells closer to the ringers (easier & safer to ring).

The bells rang together for the first time in 15 years on Wednesday 29<sup>th</sup> Jan **2014**, and the Rt. Revd James Newcome, Bishop of Carlisle will re-dedicate the bells on 9<sup>th</sup> March **2014**.



The **tenor** (heaviest bell) weighs 621 kg. This is about *half* the weight of a medium size family car such as the Ford Focus

The total weight of all 8 bells = 2810 kg = 2.766 imperial (long) tons.

When a bell swings full circle it exerts a force of up to 4 x weight, so the tenor alone can exert a force of almost 2.5 tons!

St James the Great - Barrow-in-Furness									
8 Bells - John Warner & Sons (London) - 1877									
Bell	Diameter			Weight				Pitch	
	Imperial		Metric	Imperial			Metric	Nominal	Note
	feet	inches	cm	cwt	qtr	lbs	kg		
Treble	2	2 1/16	66.2	4	1	24	227	1424.5	F
2	2	2 15/16	68.4	4	3	5	244	1332.5	E
3	2	4 11/16	72.8	5	0	17	262	1190.5	D
4	2	6 1/4	76.8	5	2	11	284	1063.0	C
5	2	8 1/2	82.5	6	2	7	333	949.5	Bb
6	2	10 7/16	87.5	7	0	0	356	890.0	A
7	3	2 1/2	97.8	9	2	0	483	795.0	G
Tenor	3	6 1/16	106.8	12	0	24	621	710.0	F
1 (long) hundredweight (cwt) = 4 quarters (qtr) = 112 pounds (lbs) = 50.802345 kg									

£6 13s 4d was spent on 400 letters inscriptions on the bells:-

Bell	Latin Inscription	English Translation
1	VICARII MUNUS IN PIAM DEFUNCTORUM MEMORIAM MISERERE DOMINE	The gift of the vicar in dutiful memory of the departed. Have mercy, Lord. (Priest's Bell)
2	AD DEI MAJOREM GLORIAM MATRONARUM AC PUELLARUM MUNUS	To the greater glory of God, the gift of matrons and maidens (Ladies Bell)
3	PSALMUM DICITE CHORI DOMINO DATE GLORIAM LAUDI EJUS	Sing, ye choirs, a psalm to the Lord, give glory to His praise. (Choir Bell)
4	ÆTERNA FAC CUM SANCTIS TUIS IN GLORIA NUMARARI	Make us to be numbered with thy saints in glory everlasting.
5	ADVENIAT REGNUM TUUM FIAT VOLUNTAS TUA	Thy kingdom come, Thy will be done.
6	GLORIA IN EXCELSIS DEO IN TERRA PAX	Glory be to God on high, in earth peace.
7	ADESTE FIDELES ADORATE DOMINUM IN ATRIO SANCTO EJUS	Come ye faithful, worship the Lord in his Holy house.
8	HONORI DEI ET ECCLESIAE USUI HÆ SUNT CAMPANÆ ANNO SALUTIS MDCCCLXXVII RICARDO PALGRAVE MANCLARKE A.M. VICARII JOSEPHO HILL } SACRORUM CUSTODIBUS ROBERTO BOWKER }	These bells are for the honour of God and the use of the Church. In the year of salvation 1877 Richard Palgrave Manclarke A.M. Vicar Joseph Hill and Robert Bowker, Churchwardens

† Canons = the crown shaped loops on top of the bell through which metal straps are used to attach the bell to the headstock.