

Introduction to Bells and Bell-Ringing

Bells are made of a special alloy of bronze (typically 80% copper and 20% tin) to strengthen two otherwise soft metals, and have excellent resonant qualities.

The molten bell metal is cast in moulds made of horse hair, sand/loam, bricks and horse manure, in much the same way as they have for centuries.

English style bell ringing has not changed for over 400 years. Instead of ringing the bells randomly, the bells are rung in orderly sequences which change (giving rise to the term 'change ringing' or 'ringing the changes'). This requires ability to control when the clapper strikes the bell.



The bells are 'raised' so that the bell mouth faces upwards, and a simple mechanical design allows the bell to rest in this upside-down position. The bell-ringer pulls the rope attached to the wheel, and the bell rotates a complete circle (360°) and the clapper strikes the bell at the end of the revolution.

By balancing the bell upside-down the bell-ringer can wait, or pull the rope earlier, to control when the bell strikes in the sequence with respect to the other bells.

Once the bell is raised, it has almost all the energy stored it needs to swing full circle, and combined with the wheel (which acts like a lever), you do not need to be very strong to ring a bell 10 times your own weight!

Bell-ringing can be enjoyed by anyone from age 10 or 11, and well on into retirement. There is a basic bell handling technique to learn at the start, and then progressively more challenging skills to learn for those who are interested which can be very rewarding when you successfully make progress.

Ringers are welcomed at any bell tower, wherever you work or visit on holiday. Make someone's wedding day complete. Enjoy new friendships and social scene. Come along and find out more!

Ringling Times

The bells are rung for services and other occasions.

Sunday Morning Service : 10am to 10.30am

Wednesday Practice : 7.30pm to 9pm
[Visitors Welcome.](#)

Extended Practice : 7pm to 7.30pm (Wednesday)
Additional ringing practice with 'tied' bells before main practice, to give extra tuition and hands-on practice for novices and early learners.
Not every week - please check beforehand.

Tied Bells = where the clapper inside the bell is stopped from hitting the bell, so the bell makes no noise outside, but the bell swings and the rope moves in the usual way

Other Bell Ringing and Events :
Weddings, and other ringing and events see the [Calendar / Events](#) page on the tower website.

Further Information

The tower has its own dedicated website, featuring news, calendar, photo galleries, and more information about St James' bells and bellringing in general. Please visit:

www.barrowbells.org.uk

Contact the tower captain:
Andy Pollock - 07879 411824

Or visit on one of our Tower Open Days, Heritage Open Day, or come along and join us on a practice night!

We are always pleased to welcome visitors.

Accessibility: please note that there is a spiral staircase (42 steps with handrail) to reach the ringing chamber.



St James the Great, Barrow-in-Furness

The Bells



St James has a fine ring of 8 church bells dating back to 1877

This leaflet tells the origin and history of our bells, and gives an overview of bell-ringing, including how you can ring a bell weighing over half a tonne and how it can be a fun and rewarding hobby.



History of St James' Church Bells

1869 the church opened on Tuesday May 18, 1869

1870 a single 15cwt (762kg) Mears and Stainbank bell was gifted by the Dukes of Devonshire and Buccleuch, Lord Frederick Cavendish, Sir James Ramsden, and Henry William Schneider.

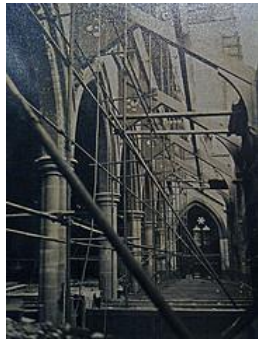
1871 and **1873** St James' School competed in national handbell (tune) ringing competition at Belle-Vue using set of G Stockham handbells (cast in 1870). The tower has a collection of these bells, but they need restoring.

1877 The original bell was recast into a new ring of 8 bells by John Warner & Sons (London) and installed in an oak frame by Mr Thomas Mallaby of Masham, costing a total of £747 11s 2d.

The bells were dedicated on St James' day 25 July 1877 and the first full peal rung by an invited band of ringers from Earlesheaton (Dewsbury) in 3 hours and 15 mins.

1902 The bells were rehung (reason not documented)

1924 The bells were rehung on new bearings (probably ball bearings replacing plain bearings)



1941 At approx. 1am on Sunday 4th May, a parachute land mine exploded in Exmouth Street and badly damaged the church, including the leaded roof above the bells which collapsed on top of the bells and the joists of the intermediate floor in the tower were splintered

1999 Urgent and expensive repairs were undertaken to the roof and west window, and work to the tower (including ringing room windows and belfry louvres). The church was shrouded in scaffold and the bells had to stop ringing during the work.

Once the work completed, the bells were inspected but unfortunately were declared unsafe to ring.

Restoration of the bells

2008 Geoff and Carole Pullin from Northants visit son (a Naval Architect in shipyard) and make initial enquiry about the bells which leads to start of a repair project.

2009 Dennis Ellisdon (a London ringer who learned to ring at St James) heard about the state of the bells in the obituary of former tower captain Jack Bagnall. Dennis' generous donation began a more ambitious restoration project to completely restore the bells and re-hang in a new metal frame lower in the tower.

2009-2013 A fundraising campaign is launched to raise many thousands of pounds - ultimately the final target is about £180,000! **Nicholson Engineering Ltd** is chosen to design and fabricate a new frame & fittings, and remove-restore-reinstall the bells. **Leck Construction Ltd** is chosen to manage all the building work. The **Heritage Lottery Fund** confirm donation of £74,400 and the project receives the green light to proceed.

2013 The restoration work began in the summer with the removal of the bells, bell frame, and floors above the ringing chamber. A team of volunteers helps the bell hanger to remove the bells. Cumbrian craftsmen recycle the oak, elm and ash removed from the belfry.



The bells are sent to Whitechapel Bell Foundry to remove the canons (old-style fixing points on top of bells), send them off to be sandblasted clean of corrosion, and then skilfully re-tune each bell. The bells continue their journey to Nicholson's in Bridport, Dorset to be assembled in the newly fabricated frame.

2014 The bells return to St James in January, and the bell frame, bells and all fittings are installed with help of same team of volunteers. The building and electrical work is completed and the bells are rededicated by the Bishop of Carlisle on Sunday 9th March.

Details of the Bells

Complete Rehang: Nicholson Engineering Ltd 2013-2014		John Warner & Sons 1877		Re-tuned: Whitechapel Bell Foundry 2013	
Bell	Units	Diameter cm / feet inches	Weight kg / cwt-qtr-lb	Pitch	Latin Inscriptions (and translations)
1 (TREBLE)	Metric Imperial	66.2 2' 2 ¹ / ₁₆ "	227 4-1-24	F	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	Metric Imperial	68.4 2' 2 ¹⁵ / ₁₆ "	244 4-3-5	E	AD DEI MAJOREM GLORIAM MATRONARUM AC PUELLARUM MUNUS To the greater glory of God, the gift of matrons and maidens (Ladies Bell)
3	Metric Imperial	72.8 2' 4 ¹¹ / ₁₆ "	262 5-0-17	D	PSALMUM DICITE CHORI DOMINO DATE GLORIAM LAUDI EIUS Sing, ye choirs, a psalm to the Lord, give glory to His praise. (Choir Bell)
4	Metric Imperial	76.8 2' 6 ¹ / ₄ "	284 5-2-11	C	ÆTERNA FAC CUM SANCTIS TUIS IN GLORIA NUMARARI Make us to be numbered with thy saints in glory everlasting.
5	Metric Imperial	82.5 2' 8 ¹ / ₂ "	333 6-2-7	Bb	ADVENIAT REGNUM TUUM FIAT VOLUNTAS TUA Thy kingdom come, Thy will be done.
6	Metric Imperial	87.5 2' 10 ⁷ / ₁₆ "	356 7-0-0	A	GLORIA IN EXCELSIS DEO IN TERRA PAX Glory be to God on high, and on earth peace.
7	Metric Imperial	97.8 3' 2 ¹ / ₂ "	483 9-2-0	G	ADESTE FIDELIS ADORATE DOMINUM IN ATRIO SANCTO EIUS Come ye faithful, worship the Lord in His Holy house.
8 (TENOR)	Metric Imperial	106.8 3' 6 ¹ / ₁₆ "	621 12-0-24	F	HONORI DEI ET ECCLESIAE USUI HÆ SUNT CAMPANÆ. ANNO SALUTIS MDCCLXXVII RICARDO PALGRAVE MANCLARKE A.M. VICARII. JOSEPHO HILL, ROBERTO BOWKER SACRORUM CUSTODIBUS 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

Total weight of 3414 kg (almost 3.5 tonnes) ; 1 (long) hundredweight (cwt) = 4 quarters (qtr) = 112 pounds (lbs) = 50.802345 kg ; Our Tenor is about half the weight of a family car