









THE LIVING HERITAGE OF CHURCH BELLS AND BELLRINGING

Church bells are the biggest and loudest musical instruments. Hidden away in the top of tall church towers, their sound has been part of the rhythm of life in villages, towns and cities across the country for over a thousand years.



Since Norman times church bells have been rung to mark the beginning and end of the working day, to tell the time, to warn people of invasion during times of national emergency, for church and saints' days, for civic and national celebration, and for enjoyment

Over 3.000 bells that were cast in mediaeval times are still rung regularly today.

Church bells affirm our sense of place and national identity.



'Let me wake up in the morning to the smell of new mown hav. to laugh and cry, to live and die. in the brightness of my day...

... I want to hear the pealing bells of distant churches sing"

from "Skyline Pigeon" by Bernie Taupin, recorded by Elton John on the 1968 album "Empty Sky". Bells have been a part of daily life since the 16th century and references can be found throughout literature, folklore and popular culture.

WEDDINGS & FUNERALS Every week bells are rung by thousands of ringers to call people to church, for weddings and festivals, for civic events and for fun. In 2012 bells were rung all over the land to celebrate the London Olympics. Muffled bells are sometimes rung at funerals and at times of local or national mourning.

NATIONAL IDENTITY

During the reign of Elizabeth I (1558-1603) church bells became an important symbol of national identity.

Bellringing—along with the use of bonfires and beacons—was used to mark the festivals and feast days of a newly developed national calendar.



This calendar, which combined historical events from Britain's past alongside the Christian religious cycle, became an instrument for declaring a distinctively national Protestant culture and was designed to break further links with Europe and the influence of Catholic Rome.

BELLS AND THE LANDSCAPE OF ENGLISH MEMORY

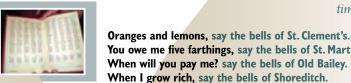
There are over 5.200 churches in England with rings of five or more bells hung for change ringing—the familiar sound of bells rung in ever changing sequences.



Church bells have been ringing in England since the 7th century but it was not until the I7th century that the curious tradition of English change ringing developed.

Change ringing is still practised all over the British Isles and abroad in Australia, New Zealand, South Africa, Zimbabwe, Canada and the United States of America.

> Change ringing is a unique combination of music. mathematics, sport and teamwork. It is practised on instruments which are often hundreds of years old.



BELLS IN LITERATURE. FOLKLORE AND POPULAR CULTURE

With the sound of bells becoming a part of daily life, it was inevitable that reference would seep into literature, folklore and popular culture.

The mediaeval nursery rhyme "Oranges and Lemons" tells a story of London life through its churches and their bells. There are many references to bells in Shakespeare's plays and the great 17th century English poet John Donne wrote

.. for whom the bells tolls, it tolls for thee".

n 1665, in the City of London, Samuel Pepys would console himself with the sound of the

' familiar bells of All Hallows and St. Olave's".

In the 18th century the composer Handel described England as the "Ringing Isle" and this caught on and was used throughout Europe.

In 1850, as Poet Laureate. Tennyson's famous poem ring out wild bells"

tells a tale of Christmas in the Lincolnshire countryside.

The Church Bell written by Elinor Wylie in 1921 begins

"As I was lying in my bed I heard the church-bell ring; Before one solemn word was said, a bird began to sing."

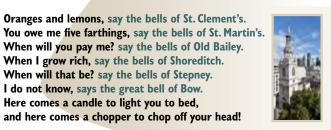
Dorothy L. Sayers' 1934 novel, "The Nine Taylors" is about a murder in a sleepy English village and Lord Peter Wimsey's knowledge of bellringing helps him solve the mystery.

Poet Laureate John Betjeman's celebration of the City of London's "steepled forest of churches"

evokes the sounds of bells breaking the "Sunday silence". It begins with the "tingle tang" of "the bell of St. Mildred's Bread Street", and ends by drowning in "the roaring flood of a twelve-voiced peal from St. Paul's".

"For Whom the Bell Tolls" is a song by the American heavy metal band Metallica. Released in 1984, it was inspired by Hemingway's 1940 novel of the same name.

"He hears the silence so loud... ... for whom the bell tolls, time marches on.



TUNING

Once the bell has cooled and is removed from the mould. tuning can take place. Before the introduction of mechanised vertical lathes in the 19th century, bells were tuned by hand using a special type of hammer or a cold chisel.



Simpson worked out a method of harmonically tuning bells. Today the process o 'Simpson' tuning is greatly aided by

sophisticated technology. The bell is clamped on a vertical boring lathe, mouth uppermost, and is slowly revolved against a cutting tool fixed onto the end of a boring arm.

Although extremely accurate tuning forks and electronic devices are used to appraise tuning, the human ear is still used for final approval.

Peals or rings of bells are tuned in a major scale. The biggest bell, the tenor, gives the ring its key note



THE MAKING OF BELLS

The word bell comes from old Saxons 'bellan', which means to bawl or bellow.

A bell is a percussion instrument, forming sound through vibration upon being hit by a clapper. Bells are made of a bronze alloy of copper and tin, and the success of bellfounding in England has its roots in mediaeval monastic enterprise.



Methods of bell production have

remained largely similar for over 1000 years. Casting is achieved by making two moulds, an inner 'core' and an outer case or shell, between which molten metal is poured. A mixture of red sand with high clay content, black sand straw and manure provides a 'loam' which is applied over the brick and coke infilling and this forms



JOHN MARTIN AND THE CITY BELL MAKERS

The City of Worcester had a long tradition of bellfounding from mediaeval times through to the 1690s when the foundries of John Martin and the lesser known William Huntbach operated within the city.

John Martin's foundry was located in Silver Street in the parish of St. Martin's, not far from the church, on the opposite side of the modern City Walls Road.



With the foundry so close, it is curious that the original bells for St. Martin's were cast by Hugh Watts II of Leicester.

Woodstock. It is

not known where

the bells were

cast, this may

have been

at Martley

Keene's

foundry

or at

How bellfounders managed their work is an intriguing question. The six bells at Martley were cast by Richard Keene of making material, including a mould.

A FAMILY BUSINESS

The first John Martin lived in In the 15th century the whole of St. Martin's parish during the first half of the 17th century. His son, also called John, took over the Bellfoundry Martin II produced 172 bells, 94 of found still in place. these were supplied to churches in Worcestershire including three of the

bells of St. Swithun's in the city. **BELL MAKING EQUIPMENT**

A lengthy inventory dated 1697 lists John Martin's bell making equipment which included a crane with rope and pulley, beam scales and weights.

a furnace. large shop bellows and a vice. Also listed were nine hundred weight of old brass and a bell.

BELL MEADOW

It is probable that the casting of bells was carried out in a long yard behind John Martin's house which had been enclosed from the adjacent meadow. Pheasant Meadow was sometimes known by the alternative name of Bell Meadow as late as the early 19th century. Excavations in 2010 uncovered bell

and ran it until he died in 1697. John

the plot fronting Powick Lane was being used as a bronze foundry with a furnace and associated bell casting pit in which the bases of three moulds were



A 17th century bell foundry was established by the Martin family in Silver Street, John Martin II was operating at 'Bellfounder's Yard' between 1644-1697.



The Worshipful Company of Founders was formed in 1365 and bellfounders had considerable Archaeological evidence of bell casting in the city has been discovered

in recent

years when

such as the

St. Martin's

Quarter, has

development.



BELL CASTING-

ARCHAEOLOGICAL AND

Documentary evidence for bell

casting in Worcester is strong

and this is backed up by archaeological

discoveries of small pockets of activity

materials appear in mediaeval deposits

around the city. Bell pits and waste

recorded in Sidbury and Deansway.

There is documentary reference to a

which is supported by archaeological

evidence in the form of kilns and

Bellyeter owned a number of

properties in Worcester and

was a Sherriff of the city.

bell mould fragments. In 1306 John

Simon the Bellveter in Sidbury in 1226

DOCUMENTARY EVIDENCE















When will that be? say the bells of Stepney

I do not know, says the great bell of Bow.

Here comes a candle to light you to bed,

and here comes a chopper to chop off your head!











in Woodstock before

being transported to Martley.























BELLS IN THE CITY





This "Prospect of Worcester from the East", painted around 1750 clearly shows the City churches which dominated the skyline. The view from Lansdowne Crescent remains much the same today.

CHURCHES IN THE CITY

CATHEDRAL CHURCH OF CHRIST AND THE BLESSED VIRGIN MARY



The Cathedral has twelve bells in the key of B natural with three semitone bells and a bourdon bell (hung dead) for the clock. The bells were recast in 1928 from the previous ring of 1869. The biggest ringing bells weigh 48 cwt and the bourdon bell weighs 82 cwt, over 4 tonnes. Five of the eight original bells, which date from the mediaeval period, can be seen in the Cathedral cloisters.



Worcester's churches from mediaeval times remain as landmarks in the city

ST. NICHOLAS

Standing at the Cross in the heart of the City, St. Nicholas was one of Worcester's ancient parish

churches. It was rebuilt in 1730-35 and closed as a place of worship in 1989. The six bells, which haven't been rung since 1938, are in the key of G.

ST. ANDREW



century tower and spire, which was added in 1751. One bell remains and it is still rung regularly to herald Worcester City Council meetings.

ST. JOHN IN BEDWARDINE

St lohn's church is of Norman origin with a 15th century tower. The ringing room also houses the clock. The belfry has a ring of eight bells in the key of F and a sanctus bell.



dedicated to St. Martin. ST. SWITHUN

St. Swithun's in Church Street is one of Worcester's ancient parishes, but the church was extensively remodelled in early Georgian times. It became a redundant church in 1977.

There is a ring of six bells in the key of F natural, three mediaeval bells and three which were cast by John

Martin. The six comprise one of the oldest sets of ringing bells in the UK.

The tower contains a ring of six bells and

a sanctus bell in the original frame situated

above a new ring of ten bells which were

installed in 2011. The oldest bell of 1320 is



ST. HELEN

St. Helen's has a Saxon foundation and mostly dates from the mediaeval period. The tower was rebuilt in 1821 and contained a ring of eight bells which were sold in 1951.

OLD ST. MARTIN



St. Peter the Great was built in the 13th century on the site of an earlier church The church of Old dedicated to the saints Perpetua and St. Martin stands in what was once Felicity first mentioned in the year 969. St. Peter's was rebuilt on the same site the commercial in Sidbury in 1838, eventually closing hub of the city. in 1972. It was demolished in 1975-76. The Cornmarket and surrounding Two of the bells are on view in the streets were densely Worcester Cathedral Teaching Centre.

closely knit community of family businesses and work people.

All Saints in Deansway was rebuilt in 1739-42, incorporating the mediaeval tower base. The north side of the church was cleared of property in the 19th century and gives us the view we see today. There is a ring of 12 bells in E flat, plus a semitone bell and a disused

CHURCHES IN THE CITY



THE CITY OF WORCESTER—LEADING THE BELLRINGING RENAISSANCE

The Worcester Cathedral Guild of Bellringers is at the forefront of the current renaissance in bellringing.



The Cathedral tower is home to the world's first purpose-built Teaching Centre. It comprises eight dumbbells each of which simulate a tower bell of about 6 cwt or 300 kg. Each dumbbell is connected to a laptop and headphones. It works just like a flight simulator. This teaching method has been emulated by the ringers at St. Peter's Cathedral in

Adelaide, Australia who have a close

partnership with the Cathedral Guild.

Working with local schools, the Guild is developing new and exciting ways to teach this unusual performing art. If you would like to know more please get in touch via email at teaching@ worcesterbells.co.uk or look at our website.

www.worcesterbells.co.uk

NEW BELLS FOR OLD ST. MARTIN'S

The tower of Old St. Martin's contains six original bells, five of which pre-date the Georgian building which was completed in 1772. In 2011 the bells, along with the frame

and fittings, were conserved and 'hung dead' with new clock hammers. The bells, and the rare 'St. Martin's chime', can be heard once again, after a silence of over 100 years.

Clock chimes strike the Angelus service bells using modern chim a modern chiming apparatus.

A new ring of ten bells, with a bright modern sound, have been hung in a new frame below the original bells in a new intermediate chamber. The bells are easy to ring and Old St. Martin's will become the ringing nursery for young ringing talent in Worcestershire.

www.oldstmartinsbells.co.uk

NEW BELLS FOR ST. STEPHEN'S BARBOURNE



Barbourne is to have a new ring of eight bells. The bells have come from St. Nicholas' church, Halewood where they could no longer be rung.

The project is linked with Worcester Cathedral's established teaching enterprise. The project's Patron is Lord Faulkner of Worcester.



"Bellringing is a quintessentially



Worcester leads the world in church where it is possible for would-be campanologist

THE CITY OF WORCESTER—LEADING THE BELLRINGING RENAISSANCE

local community and nationwide

The All Churches Trust Bibby Distribution Bishop Perowne Church of England College The Bransford Trus Caroe & Partners (formally Stainburn Taylor The Central Council of Church of Bellringers Christopher Whitehead Schoo Cumbria Clock Company The D'Oyly Carte Charitable Trus The Edward Cadbury Trust The Elmley Foundation

John Taylor, Bell Founders

BISHOP OF WORCESTER

English tradition which affirms the importance of a sense of place to human experience. It also reminds us of the central importance of the Christian faith and churches to our communities.

"I am delighted that there has been something of a

LORD FAULKNER OF WORCESTER



bellringing, and it is one of very few cities to learn these important and popular skills. "Well done! Ring out, wild bells!"

Justin Hughes - Worcestershire Archive & Archaeology Service

The Worcester Cathedral Guild of Bellringers is grateful for the strong support their projects receive from partners, funders and suppliers in the

Enrich Design The Foundation for Sports and the Arts The Grimley Trus Hereford Galvanisers The Heritage Lottery Fund

The Parochial Church Council of Old St. Martin's

The King's School

The Martley Guild

Nick Bragg, Stonemason

Pete Rose Crane Services

Red Hill Primary Schoo

The University of Worcester

The Whitechapel Bellfoundry

The Severn Waste Environmental Fund

The Society of Royal Cumberland Youths

Worcester Cathedral Guild of Bellringers

Vorcester Diocesan Advisory Committee

The Worcestershire and Districts Change

The Worcestershire and Dudley Historic

The Worshipful Company of Founders

The Worshipful Company of Grocers

The Worshipful Company of Mercers

Ursula Anderson and Gerhard Hamburg

The family of Bishop Philip Goodrich

Eddie and Elizabeth Prior The family of loan Summerhayes

Paul and Gillian Westcott

and numerous personal donations

Bernard Taylor

Worcestershire County Counci

Vorcestershire Archive & Archaeology Service

Philip Pratt, Bellropes

Probert's Builders

The Rowlands Trust

Worcester Cathedral

Worcester Live

Ringing Association

Worcester City Counci

NDS Engineering

www.barbournebells.co.uk

THE RIGHT REVEREND DR JOHN INGE



renaissance of this great tradition in recent years and even more delighted that Worcester is at the centre of it."

Exhibition written and designed by Mark Regan - Ringing Master, Worcester Cathedral



























