

Ringing the Changes

Campanology

The art of bell ringing is known as campanology and those who ring bells are called campanologists. The word campanology comes from the Latin word campana, which means bell and the Greek word logia, which means study. Campanology is the study of how bells are cast, tuned, rung, and sounded as well as the history, methods, and traditions of bell-ringing.

The Bells in the Cathedral Today

In the Cathedral there are thirteen bells in total; the ten World War I Memorial bells, two bells which were donated to the Cathedral from the Parish Church of St. John, Little Horton in 1975 and also a much older bell dated 1715.

The Memorial Bells are made from an alloy (a mixture) of two metals, copper and tin. They are arranged in the tower in the order of the musical scale, from the smallest and highest pitched (the treble) to the largest and lowest pitched (the tenor). The weight of the tenor bell is 1,300 kilograms (kg) and the weight of the treble bell is 254kg. Compare these to the weight of an average man in the UK today, which is about 83kg and the average weight of a woman, which is about 70kg and you can see that even the smallest of the bells is in actual fact very heavy!

The bells are hung within a wooden frame and attached to a wheel. The bells rotate 360 degrees on this wheel and a piece of metal called the 'clapper' in each bell strikes the inside of the bell at the end of the swing to sound the note. The bells are rung, using long ropes that hang down from the belfry where the bells are hung, into the ringing chamber where the bell ringers stand to ring.



Change Ringing

The English practice of change ringing is unique. To change ring you need a 'peal of bells'. Peal is the collective noun for a set of bells, but it can also be used as a verb to refer to the sound made by bells when ringing. The word peal comes from the medieval English word, appeal, which is what bells are supposed to do, appeal to those that hear them! A peal of bells is rung by a band of bell ringers. In change ringing, bells are rung in a sequence, not to form a tune or melody.

They are rung in a different order in each sequence. To do this pairs of bells change place in the order in which the clapper strikes. The challenge is to make sure that no 'change' is repeated in the same sequence. This is a tricky test of maths and skill for the ringers. In change ringing, a 'peal' is the ringing of 5,000 or more different changes on bells. This can take between 2 ½ and 3 ½ hours depending on the weight of the bells. It is a very difficult thing to do; for all the bells to be sounded exactly when they should be requires excellent teamwork and a good bell captain or conductor.

Bell Ringers

Bell ringers have been a part of what is now the Cathedral's life since the seventeenth century and some, like Joe Hardcastle, had a huge impact on the heritage of the Cathedral. Joe must have been an exceptional bell ringer. He gained an international reputation and was invited to the 300th anniversary of the The Ancient Society of College Youths in 1938. This is the premier change ringing society in the City of London that promotes excellence in ringing around the world. They were responsible for arranging for Joe to go to Australia to ring at the Armistice Day Commemorations in 1934 where a memorial was unveiled by the Duke of Gloucester. The journey by sea took a whole month! The Cathedral bell ringers rang for the BBC on Christmas Day 1947: the sound of the bells was broadcast live on the 'wireless' radio across the country.



Bell ringers continue to be part of the Cathedral community today.



This photograph of Bradford's bell ringers hangs in the ringing chamber. Notice the peal of hand bells which would have been used for competitions and practise.

Competitions and Events

The Cathedral's bell ringers have taken part in many change ringing competitions and held meetings and events at the Cathedral. One such event was held to celebrate the installation of the Memorial Bells on the 10th December 1921 when The Yorkshire Association of Change Ringers met with 250 members present. The new Memorial Bells were 'open' for ringing and this was followed by prayers and by tea at the Captain Street Schools. Taylor's Bell Foundry provided £10 toward the cost of the tea. Later many members took advantage of a room booked at the Talbot Hotel and hand bells were rung 'in great style' late into the night. The bell ringers made a profit on the occasion and as a result purchased hand bells. Look closely at the photograph taken in 1922 (to replicate the 1888 photograph) and you will see them proudly displayed.

Bell ringers continue to be part of the Cathedral community today. The band now consists of male and female ringers from all walks of life. Bell ringers from different churches still visit the Cathedral to ring a peal on the Memorial Bells (and the two St. John Bells) and the Yorkshire Association of Change Ringers is still going strong.