

STAINED GLASS

By Mary Skinner 13.07.00

Glass is a naturally occurring material, but for thousands of years man has known how to manufacture it and use it in various ways, both for vessels and for decorative pieces. The Romans were probably the first to make use of it in windows, which were usually cast in wooden and sand trays into which the molten glass was poured. It is known that coloured glass has been used in Christian buildings in Constantinople as early as the 4th century AD. We know that in about 670 Bishop Wilfrid described his church at York as being glazed against wind and rain and the passage of birds but allowing the light to shine within thus combining both the practical and aesthetic roles of the material. In 675 AD Abbott Benedict Biscop brought craftsmen from France to glaze the windows of his monastery at Monkwearmouth and fragments of coloured glass from that period have been unearthed there and at nearby Jarrow.

Coloured glass was made by adding various metallic oxides to the molten glass (made from sand with the addition of wood ash or sodium); copper made it green, cobalt blue and iron red. Once it was coloured it was blown into sheets (glass blowing was a technique discovered in Syria c40 BC). Two methods were used. In the muff or cylinder process glass was blown into a cylinder shape that was then cut along its length, reheated and flattened into a sheet. By the spun, or crown method, the glass was transferred from the blowpipe to a pontil iron which was spun round rapidly to produce a circular sheet by centrifugal force. Plain red and blue glass were too dark to let the light through and this was overcome by using white glass and "flashing" a thin layer of colour over it. Detailed designs for windows were drawn on a flat table, and then the panes of glass were placed over them and cut to shape with a hot iron; then by nibbling away at them with a grazing iron until they fitted the exact pattern. Faces, drapery and other details could then be painted on using black or very dark pigment, after which the pieces would be fired in a beehive shaped kiln. The painting was a skilled job and was done with all manner of brushes, made from badger, squirrel etc, or with sticks or with fingers to produce lines of varying thickness, shading, stippled effects and so on. Early in the 14th century it was discovered that by painting the outside of white glass with silver nitrate or sulphide it was possible to produce designs of yellow and orange thus allowing two colours on one piece of glass or making green designs on blue glass. From the 15th century further colours could be

added, and from the 16th century coloured enamels were used. Once the design had been completed and the pieces fired, they could then be re-laid on the original design and be fitted together with grooved strips of lead. The pieces were temporarily held together by closing nails until the whole thing had been leaded, then the leads were soldered together. Large windows were made up in panels that could be placed into the window openings and held in place by iron saddle bars set into the masonry. They were tied to the bars with copper wires that were soldered to the leads.

Although stained glass techniques developed steadily through the middle ages and beyond, the craft has remained remarkably consistent since. Traditional studios today are very similar. These days the painter works from a paper cartoon which can be hung beside the glass easel on which the artist paints his glass against the light, and a separate cut line drawing is laid flat on a bench. Cutting is done by diamond and furnaces are usually gas heated so temperatures and colours are controlled. These days, too there are superior means of protecting the glass and preventing the paint from lifting from the glass. Our East Windows, for instance, are isothermically double glazed, giving all round ventilation and constant temperature, thus preventing condensation. The Great West Window is of similar but slightly different construction.

Stained and painted glass has long been an important feature of churches and cathedrals. It beautifies the building and the pictures act as a teaching aid (especially before people could read). It also has a spiritual dimension as light is of great significance to Christians, and this medium interprets light in so many different ways.

GLASS IN THE MINSTER

Not counting the fragments of medieval glass in the Chapter House windows, there are 30 coloured windows or sets of windows in the Minster, the work of 11 firms and a few more painters. They range from the medieval fragments which were made into the "B" window in the south quire aisle in the 1920s and the 16th century glass in the lower panels of the east window, through the early 19th century, Victorian, Edwardian and George V glass, to the Reyntiens glass of 1996 and the re-glazing of the north and south transepts by Martin Stancliffe and Keith Barley in 1999. There is not time to look at them all today, so we will look briefly at the ten Kempe windows, and, if there is time, at the Nicholson window (which always used to be known as the Becher window) in the Pilgrims' Chapel. Details of the subject matter of these windows can be found in *Stained Glass in Southwell Minster* by John Beaumont.

CHARLES EAMER KEMPE

Kempe was born in Brighton in 1837, the fifth of the seven children of Nathaniel Kemp's second marriage (it was Charles himself who later added the final E to his surname). His mother moved the family to Tunbridge Wells after the death of his father, and it was there that an aunt fostered Charles' artistic talents. He was educated at Rugby under Dr Arnold, and at Pembroke College Oxford. His ambition was to be ordained, but as a severe speech impediment prevented that he decided that if he couldn't serve God in the sanctuary he would use his other gifts to beautify God's house. He joined the firm of a young architect named George Frederick Bodley (who was responsible for the nave pulpit in Southwell Minster). After seeing the work of men such as William Morris, Burne Jones and Philip Webb he decided to specialise in stained glass, and he was trained in the firm of Clayton and Bell (who also have two windows in the Minster). In 1866 he set up his own studio in Camden Town and engaged the help of artists such as Alfred E. Tomblason, and John Lisle his chief designer and draughtsman. By the late 1890s he had gathered a team of more than 50 skilled craftsmen, and the work which Kempe's produced, whether it was glass, embroideries or church furnishings was always distinctive. Over the years the firm produced about 4,000 works of stained glass, the largest of which is in Hereford Cathedral and many of which can be seen in All Saints' Church at Hucknall. Charles Earner Kempe died in 1907, but the firm continued to flourish. His nephew, Walter Tower, became Chairman and four of Kempe's old colleagues became directors of a Limited Company. The firm finally closed down in 1934, but Kempe's work is still much admired and in 1984 the Kempe Society was founded to further an interest in it.

Many of Kempe's windows are "signed" with a wheat sheaf mark (part of the Kemp family crest), which takes several different forms. Sometimes there are three sheaves, sometimes just one, and, after Walter Tower became chairman, there is a wheat sheaf with a tower on top of it. The three windows in St Thomas' Chapel, the two panels in the sanctuary, the soldier saints window in the south quire aisle and the three archangels window in the south nave aisle all have one or other of the marks, but the windows in the Airmen's Chapel; and St Oswald's Chapel do not.

Also typical of Kempe windows are the angels' wings that are composed of peacocks' feathers, and robes that are very heavily jewelled.