

History of Stained Glass at Canterbury Cathedral



The story of glass restoration began at Canterbury earlier than in most other cathedrals, at a time when craftsmen were only just starting to recapture the lost techniques of medieval glass painting. Hence it is perhaps not surprising that stained glass restoration in Canterbury was instigated by an architect rather than by a glass painter, when George Austin Sr. was appointed Surveyor to the Fabric of the Cathedral in 1819. The significance of this event cannot be overestimated, as with Austin's appointment, a stained glass restoration campaign began which lasted no less than 133 years, entrusted to four generations of the same family: George Austin Sr. until 1848, his son George Austin Jr. until 1862, followed by his nephew Samuel Caldwell Sr. until 1906 and Samuel's son, Samuel Caldwell Jr. until 1952.

The architectural structure had always been George Austin Sr.'s main concern, but soon after his appointment he also developed a closer interest in the medieval glass of the cathedral. His obituary in 1848 states that, when he took to the paintbrush, "the imitation was so curiously correct that many artists, when asked to point out the new glass, have failed to fix on the right lights", which astonished his contemporaries since he had "no previous knowledge of the art of glass painting". Today, it is impossible to authenticate these statements. None of his work is in evidence any longer since his restorations have been obliterated in the course of subsequent ones, a fact which is aggravated by the lack of any kind of methodical documentation.



A number of 19th century illustrations are therefore of particular interest. In 1841, James Joyce produced his album of Canterbury drawings for the glass painter Thomas Willement. Later in the 1840's, O. Hudson made several watercolour tracings, most of which are now held by the Victoria and Albert Museum. Towards the end of the 19th century, an album was collated for the stained glass firm of Clayton & Bell, dated 1895 but probably made earlier as permission for its creation was granted already in 1871. Finally, there are the drawings made to illustrate Emily Williams' book of 1897. These illustrations had mainly a practical function, namely to enable their recipients to study the windows through an intermediary, as a source-book for their own designs. It is therefore important to understand that the drawings are in their majority not accurate records but interpretations of their creators. Today, they are nevertheless useful indicators

of the condition of the chosen panel, like the drawings of the panel depicting Adam the Forester in Trinity Chapel Window s11.

Despite the loss of evidence, it is not a secret that Austin's attitude to historic material, its replacement instead of preservation, was not our own. It can be assumed that he, like his successors, used to remove decayed or fractured pieces to replace them with substitute glass. The choice of methods at his disposal were thereby manifold: He may have selected a piece of new glass to blend in with the old but leave it unpainted. He may have painted such a piece in the style of the original glass or could select an extraneous Medieval fragment to insert as a stop-gap, while ignoring any paint it may have had on it. Finally, he may have taken such an old piece, etched it clean and painted it to conform with the style and the design of the original.



These methods remained the same throughout the 19th and the first half of the 20th century, although the attitude of Austin's three successors changed considerably, depending on their training, personal skills and character, on advances in technology and on the prevailing zeitgeist.



Of the four restorers, George Austin Jr. was the one who was most sympathetic to the importance of the original glass and who intervened the least with its settings. He took over from his father in 1848 and remained in charge until 1862. His formative years were marked by the revival of glass painting, and he used those resurrected skills to restore the glass in what he thought to be the Gothic style, by imitating in fact the classicising features of the late Romanesque windows in the north choir aisle.

When copying originals, he turned them into a more academic style when, for instance, replacing the head of Semei in the Genealogical Series.



In 1855, it was agreed that Austin Jr. should reglaze the entire Nave at the rate of one large and two small windows per year, according to an iconographic programme to be decided upon by him in conjunction with Archdeacon Harrison.

Most of the aisle glazing he then produced was destroyed during the Blitz of 1942, but the series of Angels of the Lower Order in the Clerestory glazing is still extant, giving testimony of Austin's own design work.

In contrast to his approach in the Nave, Austin Jr. did not invent scenes when substituting lost glass in the eastern part of the Cathedral, as exemplified in the Miracle Windows of the Trinity Chapel. The knowledge of the stories behind the miracles had diminished over the centuries and it seems that the texts on which the miracle series were based had not been available to Austin Jr.. He therefore made copies of existing panels instead, but disguised the duplication by modifying the colours.



On occasions, he also fused a false patina to the outer surface, made of a mixture of putty powder and ground glass. This artificial ageing is, when known, fairly easy to detect, as it tends to cover the panels evenly while most of the medieval glass, in contrast, develops a lively and colourful patina.



Austin Jr.'s dilemma, however, was the availability of appropriate replacement glass, as most colours were too hard in tone to harmonise with the original, and he thus preferred to renew a whole panel rather than mix old with new glass. For example in 1854, he removed the two surviving panels of the Jesse Tree in the Corona window nII, replaced them with copies and filled the remainder of the window with new stained glass. The original panels, which would only have appeared sombre in this window, were kept in store for 50 years, disposed by Caldwell Jr. but returned in 1953 to be placed in Corona window nIII.



Because of the unpleasant tonality of Austin Jr.'s new glass, much of it was subsequently replaced. But unlike his father's work, enough survived to represent the Gothic Revival Movement at Canterbury, proving Austin Jr.'s high standard of craftsmanship and his approach to ancient glass.

Significantly, he kept even small pieces of old glass in store, not for his own use but for later generations, which is remarkably farsighted for a man of the mid-19th century.

Later in the 19th century, the attitude towards ancient glass began to change. Imperfections in its manufacture, and even signs of age such as corrosion and patina were increasingly valued for the appeal they bestowed on the stained glass windows.



Austin's nephew, Samuel Caldwell Sr., who was in charge from 1862 to 1906, was strongly influenced by this change in attitude and began to sort fragments of ancient glass by colour. For their reuse, he developed methods of cleaning, repainting and firing and applied these techniques extensively, with the exception of window nV in the Trinity Chapel, where he replaced a large number of original pieces.

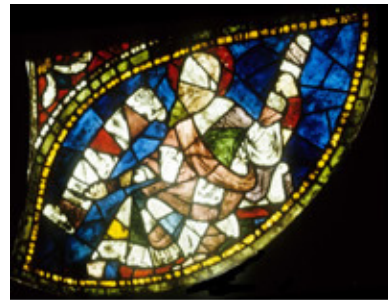
Caldwell Jr. was very particular with every replacement he made. Each piece of new glass was meticulously chosen, cut to shape but subsequently snipped off with pliers at the raw edges to simulate one of the hallmarks of medieval pieces, the jagged or grozed edge. The thickness of the pieces was occasionally reduced to brighten them up, by etching away some of the glass with hydrofluoric acid which created an evenly matted inner surface. Localised etching was then applied externally to replicate pitting, but these artificial pits preserved a slightly rounded edge. In his pursuit of creating a perfect match to genuine corrosion, Caldwell therefore 'improved' his methods further and abraded the glass, thus sharpening the edges of the pits. He also left a narrow raised strip around the grozed edges, as if the flanges of the lead had prevented them from diminishing. The final application of a false patina made the forgery nearly perfect.





Unlike Austin Jr., however, who for the Miracle Windows preferred copying from existing panels, Caldwell Jr. used all the skills and resources at his disposal to fill gaps with scenes of his own design, when, for example, he substituted lost glass in the Trinity Chapel after the first World War. To the layman, his work here is deceptively convincing, and it needs a trained eye to tell ancient from new. Only on one occasion, in the North Oculus Window, did Caldwell Jr. reuse ancient fragments indiscriminately without repainting, in places even without adhering to a colour-scheme.

During the restoration of this window, he removed all plain glazed panels of the outer zone and supplied figures which are largely made up of incoherent fragments. He kept to the main figurative pattern, but was not concerned about colours or paint-lines. This one time, he felt able to do this due to the position of the window and the resulting distance from the eye.



Obvious success has vindicated Caldwell's decision, and although missing areas would certainly not be reconstructed in this fashion today, his methods applied in the Oculus were undoubtedly the first step towards modern principles of conservation.



Samuel Caldwell retired in 1952 at the age of 93. His workshop was taken over by George Easton, his assistant for many decades, whose contribution to the restoration of the stained glass is commemorated with an inscription in one of the north windows of the western crypt (nVIII). Easton was predominantly responsible for the maintenance of the windows, but also oversaw the introduction in the south choir aisle in 1960 of the glass purchased by the Dean and Chapter from the estate of W. Randolph Hearst at St. Donat's Castle.

It was not until 1972 that a new conservation studio was established,



following a survey carried out by the stained glass artist Patrick Reyntiens, which had identified the need for the preservation of the medieval glass before it was lost forever.