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Firm Foundation

This month I found myself reflecting on how good it is to be doing the CWF alongside the daily work of my apprenticeship. It is so good to have applied learning as part of my development. Learning on the job and contributing to the conservation and restoration of the Cathedral. I'm getting so much out of the process, making my two years very fulfilling. I can really see the benefits of good apprenticeships. It would be quite easy for me to go to work, do my job and tasks, go home and get paid. However, having the CWF Foundation Degree as part of the package allows for times of reflection to see how I'm developing. It also has great benefits like being able to share my experiences and gain insights from all the others who are taking part in the course – a great resource.

March has been a month with a nice mixed bag of jobs, all of which have continued to develop my skills, knowledge and understanding. Here are few of the highlights.

Pinnacle of my Career!

At the beginning of the month, it was time for me to fix the two parts of the worked to restore it to its former glory.

In the 1960s, all the pinnacles of the north ambulatory parapet were restored. Before this, some of the pinnacles were restored in the late 1800s. Those responsible for the restoration of the pinnacles in the 1960s carried out an experiment to find potential suitable types of stone for future use for the restoration of the Cathedral's fabric.

The two main types of stone (there are over 80 types that have been identified) used to build and restore the Cathedral were from quarries in Painswick and Minchinhampton. The medieval versions of Painswick and Minchinhampton stones have weathered incredibly well. In the case of the pinnacles of the north ambulatory that were restored in Victorian times, these were carried out using inferior versions of Painswick and Minchinhampton stones with soft beds that had led to their early demise. The types of stone used in the 1960s experiment were: Sherstone, Monks Park and a 19th century version of Painswick. The various portions of the pinnacles – the shaft (bottom), the pinnacle (middle) and the finial (top) were made using either one or a combination of two or three of the experimental types of stone for the various portions. Sadly, by the 1980s, some of these pinnacles were already showing signs of dilapidation. By the quinquennial inspection of 2014 they were all deemed in need of restoration. These experimental types of stones were (hindsight I great gift) unsuitable for this area and aspect of the Cathedral. However, since a more scientific approach to stone testing didn't start until the 1970s, I think we can be forgiving of those carrying out this type of test.



Since the late 1980s and early 1990s the Cathedral has been using Lavoux and Beaunotte-Beauval as the main types of the stone for the restoration of the Cathedral.

Before fixing the new stones in place, I had to carefully carry out structural repairs by inserting long stainless-steel dog cramps (they look like large staples) across the soft beds on the 1960s Monks Park sections of the pinnacle. I had to delicately cut a modest channel and drill a couple of holes for the cramp to slot into. Once in place, I was able to point up the channel and consolidate the soft beds with mortar.

As part of the north ambulatory project, most of the pinnacles along the parapet have been fully restored with new stone. The one I fixed this month only needed a new top section of the pinnacle and a new finial. Having pinned together the two elements which I had previously made, I drilled holes of around 3 inches in the top and bottom beds of the piecing of the pinnacle and in base bed of the finial. Then I glued a 6-inch piece of stainless-steel dowel into the holes. I then drilled a hole in the top of the old section of pinnacle for this to receive the dowel glued into the elements I had made. All happily and safely fixed in place and pointed up, I allowed myself a brief moment to rejoice at the sight of my work before it was onto the next thing - shelter-coating the Monks Park sections of the pinnacle.

The shelter-coat protects the stone from the elements, prolonging its life and it also helps it to blend in with the new, restored elements. The ingredients of the shelter-coat are lime putty and stone dust blended with water and is simply applied with a brush. All this work should at least last until a future generation of stonemasons come round to working on this section of the building again.

Conservation



In March I have been cleaning and restoring the outside of one of the windows of the north transept. Portions of the stonework were covered in sulphur, which had been slowly eroding the surface of the stones. Regular readers will remember that back in January I was cleaning and restoring the stonework around the window at the base of the west face of the tower. The cleaning process is carried out using an ammonium-based poultice - a paste - which is applied to the stone and sulphur which is then covered with cling film to stop the poultice drying out too quickly. Once it is dry, the poultice peels off taking some (or all) of the sulphur with it. This process is repeated as many times as needed for the surface of the stone is clear of the sulphur. It is delicate operation as there are some historic mason's marks and scribe lines on the face of some of the medieval stones, which need to be preserved.



With the poulticing complete, over the past few days I have been cutting out old mortar from the joints of the stones around the window and repointing all of which adds to the longevity of these precious stones.

Part of my task was also to clean and dust the inside of same north transept window. This meant climbing the scaffold in transept to reach the window. The task afforded some excellent views of the Cathedral. It was a great opportunity to get up close with some of the lovely foliage carved on the bosses around this part of the ceiling. Bloomin' marvellous!

