



Commissioning Conservation Work from Blacksmiths

What questions could a potential client ask to find out how qualified is a blacksmith to do conservation work?

It will be necessary to keep it brief so that the interview can be face to face to get a true impression of the smith's knowledge. To do it in writing would after all give them a chance to look up the answers! If you can visit the smith in his workshop, you should also get the chance to have a look at some examples of his work.

- **The Ethics of Conservation**

Anyone who wishes to be considered for work on listed ironwork should know at least certain basics like 'recording', 'minimum intervention', 'non-use of irreversible techniques'.

- **Knowledge of materials**

Cast iron of course where present and wrought iron, but the trick is that there are two types of wrought iron; charcoal iron from the eighteenth century and before, and puddled iron from the nineteenth century. Steel comes later. Any smith who knows this is promising; any smith who doesn't is suspect.

What materials do they use in restoration work? If not materials similar to the originals, how do they justify using other materials?

How to identify the different types of iron? Cast iron is usually obvious to most smiths, but there is a quick visual test for the types of wrought iron. Charcoal iron was forged and exhibits a slightly uneven surface, while puddled iron and steel are rolled and the surface is smooth. A smith experienced in historic work will know this.

- **Techniques**

The one that marks out the good smith from the others is forge welding (fire welding). It is as basic as this; ask the smith if he uses fire-welding and if he doesn't he's not up to the job as this is the basic technique behind all historic wrought ironwork.

- **Finishes**

How do they clean down the ironwork?

Are they interested in finding out about historic paint layers?

Do they have experience of taking paint samples?

Do they routinely shotblast? If so beware, there are much less damaging ways of cleaning off the old paint.

Finishing: do they routinely zinc spray or galvanise? These are very bad conservation practise as they are both irreversible and unnecessary if the correct historic materials are used for any repairs or replacements.