
Hartlepool Archaeological Leaflet

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The Blacksmith's Shop Hart



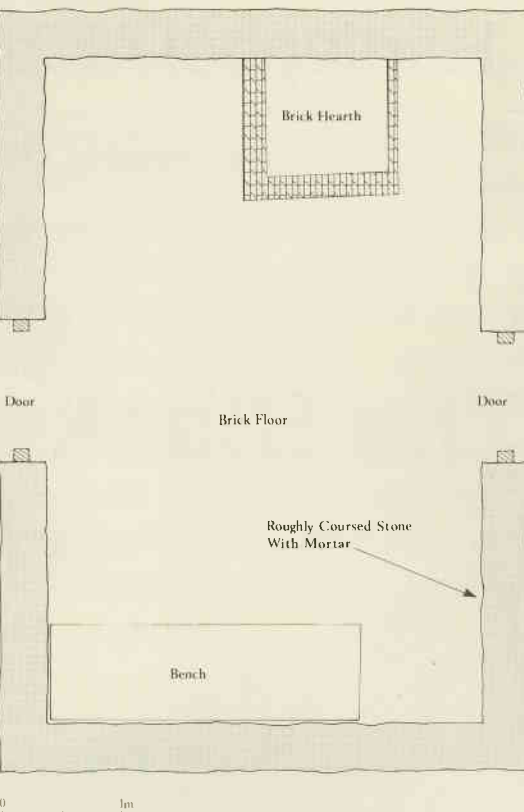
The blacksmith's shop, Hart Village (Photo : D.R.P. Ferriday)

In 1977 the blacksmith's shop at Hart, near Hartlepool, was demolished. The smithy had been used until recently by Mr. W. Proctor, Hart's last blacksmith, and retained its fittings and the smith's tools. The main part of the smithy was carefully taken down and re-erected in the grounds of the Gray Art Gallery and Museum, Hartlepool. The County Archaeology Section took the opportunity to excavate the site of the building in order to establish the date of its construction and the nature of any earlier settlement on the site.

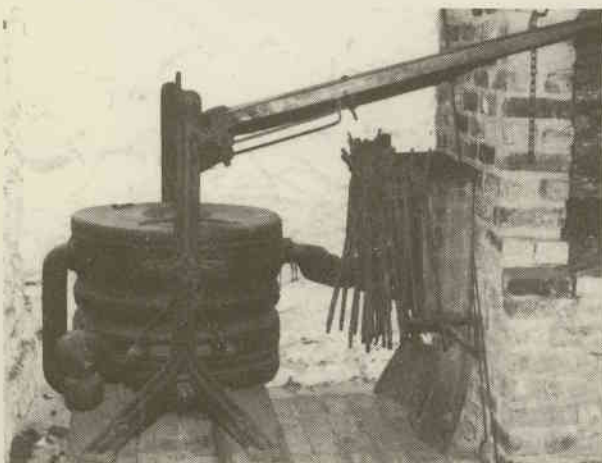
The smithy as excavated and reconstructed is typical of the small smithies which were to be found in nearly every rural community until the industrial revolution brought mass production of tools and machinery. The country blacksmith produced agricultural hand-tools like billhooks, scythes, spades and axes, the design of which had changed little since Roman times. He also made the fittings for gates, fences and wagons, and many smiths were also wheelwrights. In the last century this craft was increasingly turned to repairing machinery and producing 'one-off' items.

The Excavation

The building is rectangular in plan, the front and side walls were found to have a deep foundation of massive stones. The back wall, however, was marked by a much less substantial foundation and this may have been open to allow for better access and ventilation. The building represented by these foundations was adapted for smithy use in the 19th century. Its original function is uncertain, but it was probably an ancillary building, perhaps for a farm. The date of this type of building is difficult to determine, such a rough construction in the local limestone has virtually no dating features and stone buildings are known in this area from the 14th century onwards. There are however, few standing stone buildings in the area which are earlier than the 16th century and the pottery found during the excavation suggests a construction date in the 17th century.



Excavated plan of the smithy



Bellows provided a draught for the hearth

During the 19th century a short wing was added to the rear of the building with a wooden shoeing platform for shoeing horses, but has not been reconstructed at the museum. In addition a hearth and chimney were built against the back wall, these two features connected with

the use of the building as a smithy. The floor of the smithy was made of clay and had a number of pits dug into it. The wooden block on which the anvil stood had been set in a pit in front of the hearth, this would have absorbed the vibrations from the anvil. To the left of the entrance was a row of four post holes which had held supports for a bench. This bench would have been similar to the one now



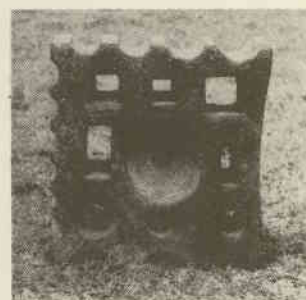
The anvil was set in oak block

placed against the end wall of the reconstructed smithy. Two deep pits outside the back of the smithy may have held the posts of a set of horse-stocks, used for keeping the animal still during shoeing.

The Reconstructed Smithy

The building now standing in the museum grounds has remained unaltered since the 17th century, with the exception of the addition of the brick hearth and chimney, it is constructed of undressed limestone, with a pantile roof and opposing doorways in the centre of the building. This is typical of the type of stone building which preceded the widespread use of bricks in the 18th century, and a trip to any of the villages will reveal limestone built farm buildings still in use.

On entering the smithy the visitor's attention is usually drawn to the fire set on the raised brick hearth. Mr Proctor used the hand driven circular bellows to provide the draught of air needed to regulate the fire. They are connected to the blow pipe by a leather pipe which is cooled by water contained in a tank beside the hearth. These circular bellows are rarely used today; the blacksmith who demonstrates at the forge prefers to use the more recently installed electric fan blower to control the fire. The anvil is the centre of activity in the smithy and its shape has changed little since the 13th century. Most of the work is done on the flat area called the face which extends to a square-ended 'wedge' at one end and a pointed 'beak' at the opposite end. The anvil is mounted on a tree-trunk which rests on the brick floor. Other pieces of equipment used by the blacksmith includes the swage block with its many holes and curves which help in the shaping of iron and the punching of large holes.



Swage block, used for shaping metal



Finishing a ramshead poker

Farriery

The blacksmith at Hart was also the farrier and the excavations have revealed the base of the wooden shoeing platform. The shoeing process starts at the anvil, where the new shoes are made, and there are a number of horseshoe blanks hooked over the rafters of the smithy. Shoeing a horse involves removing the old shoes with pincers, cleaning and filing the hoof until it is flat enough for the new shoe, and fitting and nailing on the new shoe.

Ornamental Work

Ornamental work in the form of screens, fences and fire irons must have made an occasional change for the blacksmith at Hart. In the reconstructed smithy a blacksmith operates the forge regularly and specialises in making ramshead pokers from mild steel. The process involves forging and twisting two long tapers to form the ram's horns, and forging the pointed end of the poker. Beeswax is applied to the finished article for protection against rust.

R. Daniels and S. Jackson

This leaflet has been produced with the assistance of JW Cameron and Co Ltd, Hartlepool.

Prepared by Cleveland County Archaeology Section in association with Hartlepool Borough Museums Service. The smithy now stands in the grounds of the Gray Art Gallery and Museum, Hartlepool, and a blacksmith works the forge at least twice a month; telephone the Curator for details (68916 Ext. 259).

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