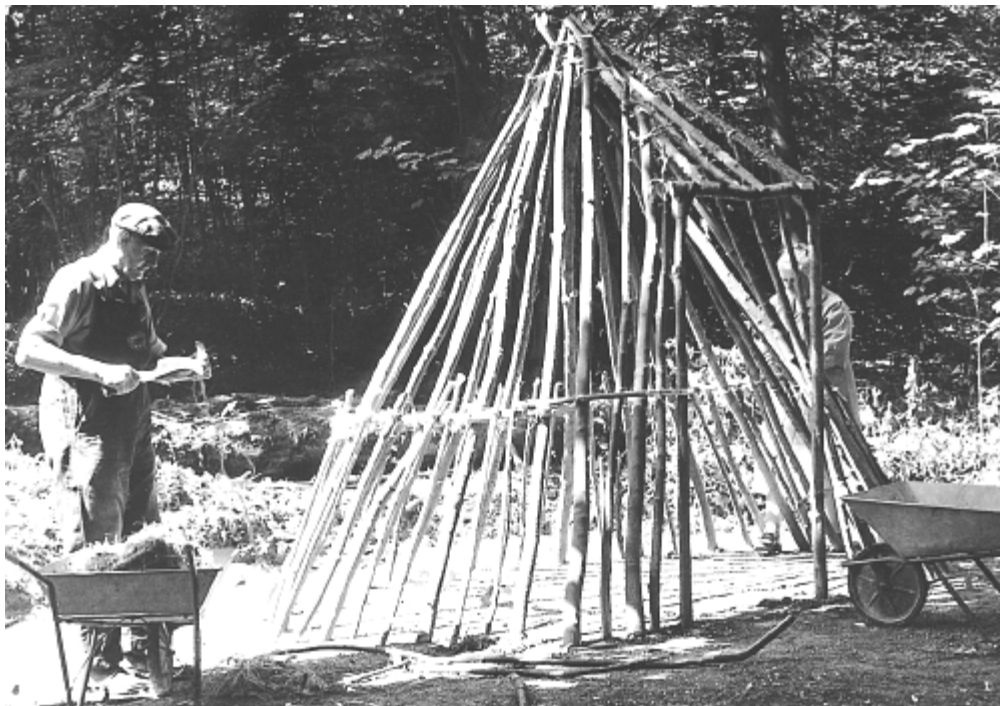


## Charcoal Burning

The craft of charcoal burning is a very ancient one, practised as early as 4,000 BC in Central Africa. The basic methods changed very little until the recent introduction of metal kilns. It has long been an important industry in the Weald, supplying the essential fuel for ironworking in the area. John Evelyn gives a detailed account of charcoal burning in his book *Sylva*, first published in 1664, describing the traditional methods which remained unchanged in this country until the Second World War. Of the 17<sup>th</sup> century market for charcoal, Evelyn writes: *Of these coals the grosser sort are commonly reserved for the forges and ironworks: the middling and smoother put up in sacks and carried by colliers to London, and the adjacent towns; those which are char'd of the roots if pick'd out are accounted best for chymical fires and where a lasting and extraordinary blast is required.* Today the demand for charcoal is limited to certain chemical processes, charcoal biscuits, artists' pencils and fuel for barbecues, and the traditional craft of charcoal burning is dying out.

Charcoal gives about twice the heat of an equivalent weight of wood, making it very important to the iron smelting industry. The craft of the charcoal burner lies in building a kiln which restricts the air supply while it is burning, and then watching the kiln continuously until the burn is complete.



*Mr. and Mrs. Langridge building a hut at the Museum*

When the kiln is built and ready to be fired, glowing embers of charcoal are dropped into the flue until the wood is well alight. The top of the flue is then sealed with turf and earth. Once the kiln is burning the long watch begins. A kiln the size of the one at the Museum could take three days and two nights to burn and must be watched constantly. Burning is controlled by making small holes to let in a little air and repairing any part of the kiln which slips. When the charcoal is judged to be ready, the burning is extinguished by water and the kiln is opened up. The charcoal is then spread out and sorted and sifted three times to make sure it is cool and clean. While one kiln was burning, a second would be built, to waste no time. Charcoal burning was practised all the year round.

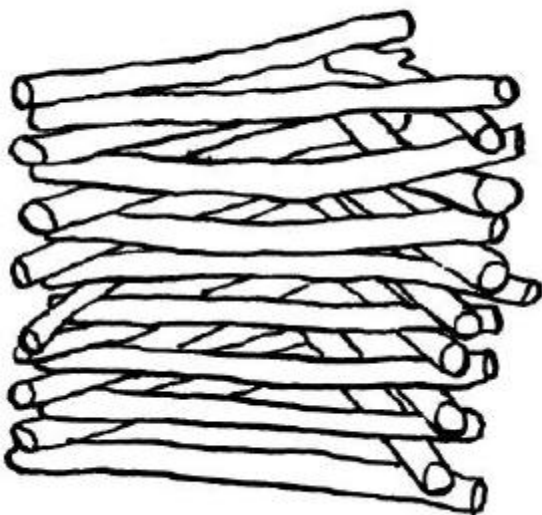


*The kiln during a burn at the Museum.*

Because it was essential to watch the burning kilns night and day, the charcoal burner always lived on site with his family. The camp at the Museum was originally built by Mr. and Mrs. Langridge, two retired charcoal burners from Kingsfold near Horsham. Mrs. Langridge's family have been charcoal burners for generations, and Mr. Langridge took up the craft at the time of his marriage. His camp consisted of small turf huts, one of which can be seen at the Museum. The simple structure of the huts, with turf and sacking over a pole frame, follows a very old tradition, but it is an extraordinary thought that Mrs. Langridge knew no other home until the age of sixteen. Cooking was done over the open fire and in the simple traditional oven, and Mrs. Langridge's only complaint is that it was difficult to dry clothes. Every Sunday the best clothes were brought out of a chest and the whole family went to sing with the Salvation Army, which her father staunchly supported. A camp of this kind could remain in use for up to four years if constantly occupied, but new huts would be built if the family returned to the camp after working elsewhere for a time.

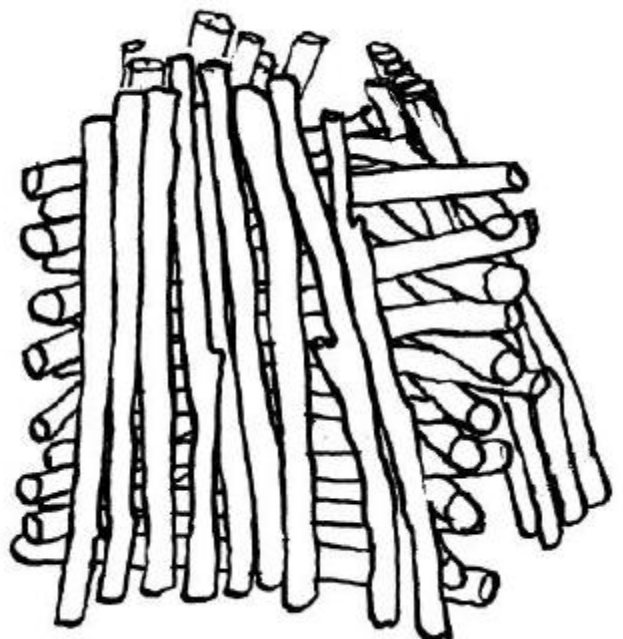
**The construction of a medium-sized kiln is shown in various stages at the Museum.**

**Stage 1**



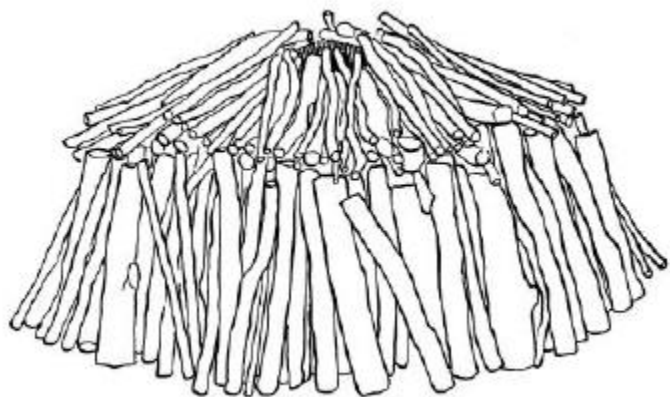
Suitable lengths of wood, called cords, are cut and built up to form a triangular central flue - not to let out the smoke but for lighting the completed kiln.

**Stage 2**



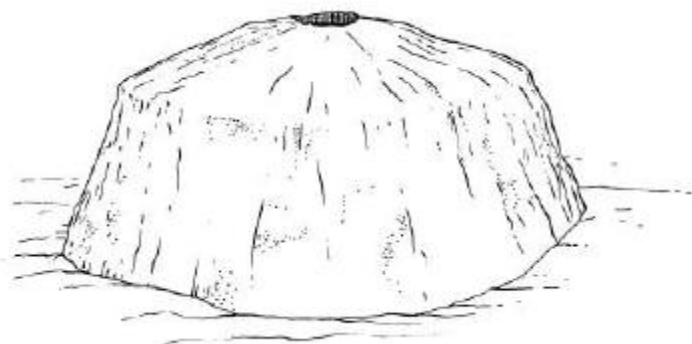
Once the flue is high enough pieces of wood, cut to the right length, are laid vertically around its sides.

### Stage 3



The kiln is built outwards and when it is wide enough the 'roof pieces' are laid, leaving the opening of the flue clear. Stage 3 shows the completed kiln with smaller pieces of wood on the outside to fill the cracks.

### Stage 4



Then, to exclude the air, the kiln is thatched with whatever herbage is conveniently to hand, and the thatch is covered with a dusting of earth, which must be free of stones. Stage 4 shows the kiln with its thatch and earth covering.