

INTRODUCTION

Cleaving means splitting timber along the grain. It was an important method of breaking down timber before the advent of efficient saws. The traditional tools used were simple, usually some form of wedge and a mallet for larger pieces, while thinner rods were split with a billhook or similar blade. Cleaving timber consistently is a very skilful process and over the centuries many ingenious devices have been used to speed up production.

There are many products derived from cleft timber, a few important examples include:

- Clog soles from birch or alder
- Spelk baskets from oak
- Garden trugs from willow or sweet chestnut
- Sheep hurdles from hazel, ash or willow
- Barrel staves from oak
- Wheel spokes from oak
- Tent pegs from ash
- Roof battens from oak or pine
- Thatching pegs from hazel
- Roof shingles from oak

While many of these products are still made in small quantities the most important market today is for fencing material.

Cleft timber fencing is invariably made from oak or sweet chestnut: the only species widely grown in Wales which are durable when in contact with the ground. The commonest types of cleft fencing are post and wire and post and rail.

POST AND WIRE FENCING

Post and wire usually uses 5'6" posts (165cm). Four of which are cleft from an 8" (20cm) diameter log. More posts can be cleft from larger logs.

It is important to remember that only the heartwood is durable. Sapwood, the lighter timber under the bark, decays rapidly. At least two thirds of the cross section of the post should be heartwood. If oak has a large sapwood band it should not be used. Sweet chestnut has very little sapwood and material as small as 5" (12 cm) can be used. Chestnut, especially when grown from coppice can produce this material in 15 years on fertile sites.

POST AND RAIL FENCING

Post and rail fencing is more demanding, requiring very good quality material to produce 8" or 12" rails and heavier posts to carry the mortices. This type of material is only likely to be found in well managed coppices.

The traditional way to split posts was with a sledge and wedge, beginning at one end of the log with a thin wedge and following the line of the split with larger wedges. Good logs will produce 3 posts per cubic foot but twisted or knotty material produces much less.

Nowadays, hydraulic splitters speed up the process but they do need good quality material. Rougher material is better sawn. After pointing, the posts are usually stacked to dry (or season) for 6 months (see figure 2) before use as this is said to improve durability. One final point to remember is to drive staples into heartwood, not sapwood, or else they will fall out as the timber decays.

Cleft fencing is seen more often in Wales since it has been specified by National Parks, the National Trust and CCW on Tir Gofal sites. The use of naturally durable timbers is likely to increase further as public bodies and landowners come to appreciate their obligation for the disposal of treated softwood fencing.



Fig 1: Cleaving



Fig 2: Cleft posts