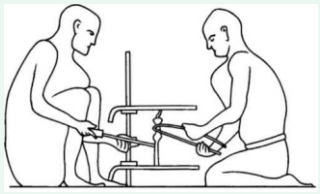
Hands On Learning
with Reading Museum Service

POLE LATHE H180



Wooden bowls were probably used by previous societies much more commonly than we think. Museums often contain lots of pottery bowls. This is because pottery may break, but it does not rot away. Wooden objects, on the other hand, are liable to quickly rot once they are thrown away, leaving no trace of their existence.



This pole lathe is a tool which is known to have been used for thousands of years to turn wood to enable it to be shaped and made into useful objects. It is thought that such tools were in use in the sixth century BC in south Germany. The earliest illustration of a lathe is from an Egyptian wall relief carved in stone in the tomb of Petosiris dated to around 300 BC (left). As with many Middle Eastern lathes of this type it was operated by two men. One man provided the power by pulling backwards and forwards on a cord or leather strap wrapped around the work piece, while the turner sat opposite with his chisel on a tool rest.



In some parts of the Middle East wood turners still sit on the ground, using one hand to drive the spindle with a bow and the other to hold the handle of the turning chisel (right). They use one foot to hold the lathe steady and to act as a tool-rest while the toes of the other foot are used to guide the point of the cutting tool.

In the Iron Age (about 300 BC), the inhabitants of the Glastonbury Lake villages have been discovered to be very competent wood turners. Excavations show these people to have produced some quite sizeable turned artefacts such as spokes, mallets, bowls, tool handles, hubs for wheels and even stoppers for jars.

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The illustration on right is from a German manuscript of 1395. It shows an identical lathe to the one in the box.

These lathes use a horizontal springy pole (usually made of ash, larch or alder) to store energy temporarily, as in a spring. A length of rope at the free end of the pole passes twice around the piece of wood to be turned and then to a foot treadle. When the treadle is pressed the pole bends, the wood rotates and the pole springs back when the foot is removed.

The spinning of the wood is not continuous as it is on modern lathes. Instead the wood is turned back and forth by the pedal action. The wood turner applies his chisel on the down-tread and withdraws it on the release. It takes a great deal of strength to operate such a machine.
During the Middle Ages, turners were found in most towns. They made a living using these machines to create cups, bowls, candlesticks, chair legs, table legs and similar items.



During the Middle Ages the authorities of European cities required that important crafts within their walls should be governed by trade guilds to organise apprenticeships and to exercise control over the standard of members' work. In return, no person could practice a trade or sell goods at a fair unless he was a member of the appropriate guild. The Turners Guild of London was well established in the early part of the fourteenth century and received its Royal Warrant in 1604. Its coat-of-arms can be seen on the left, featuring St Catherine and her wheel, who was the patron saint of the guild.

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Various technical improvements were made to foot-powered lathes in the seventeenth and eighteenth centuries. However, the development of steam and later electrical power led to the steep decline of such man-powered machines.





However, in a few places these lathes continued to be used into the twentieth century. This was particularly the case in the beech woods of the Chiltern Hills, north of Reading. In this region timber provided the raw material for a flourishing furniture industry.

In the Chiltern woods the timber was felled and some basic shaping was carried out on site. This was because beech wood, unlike some other timber, can be worked while the wood is still green. Other varieties of timber have to be dried, often for many years, before they can be cut and shaped.



As electricity was not available out in the woods, small foot powered lathes were used to turn roughly cut billets of wood into chair legs. The men who worked in the woods doing this were called 'bodgers'. The photographs on this page show bodgers at work.

Photographs. Top: Owen Dean turning chair legs on a pole-lathe in his workshop in Hampden Woods, Buckinghamshire in December 1949. Middle: two members of the Stevens family, one working at a pole lathe in their workshop at Lacey Green, Buckinghamshire in about 1900. Bottom: Alec Dean in his workshop using a pole lathe and chisel to turn a chair leg in Hampden Woods, December 1949.

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The model in this box represents a much bigger lathe than the ones used in the Chiltern woods. It is, however, very close to the kind used by George Lailey to make wooden bowls at Turners Green, Bucklebury Common, Berkshire. George Lailey (left), who died at the age of 89 in 1958, is believed to be the last person in England to have made a living using this type of lathe.

George Lailey's grandfather began making bowls at Bucklebury in around 1826. George started in the business in about 1878 at the age of nine. He continued to use traditional equipment throughout his life and his lathe is now preserved in the Museum of English Rural Life in Reading. It still holds the bowl he was working on at the time of his death.



Almost all Lailey's bowls were made from elm, a hard wood which would first have been left to dry in the open air for five to six years, making it less likely to split. These bowls were given little if any decoration, their attractiveness lying in the surface patterns made by the grain of the wood.

He specialised in 'nested' bowls (right), where he would make four bowls from one block of wood, each one smaller in size and sitting inside the last, thus minimising wastage of wood. The largest bowls, up to 24 inches (61 cm) in diameter, took a great deal of strength to carve. The small piece of wood left at the end lent itself well to being made into a spinning top!







Above left: Some of Lailey's tools. Middle: A Lailey bowl. Right: Two candle holders made by Lailey.