



▲ What William Mitchell did for the rules and what Scottish greenkeepers did for the playing surfaces, **Thomas Taylor** did for the bowls themselves. That is he brought a consistency to their manufacture that enabled bowlers to compete on equal terms.

Crucial to this was Taylor's ability to turn out 'woods' with a measured degree of bias.

Vital to both flat and crown green bowling, bias is the characteristic by which bowls roll in a curved projectory towards the jack. It is created by flattening one side of the bowl more than the other.

To see how this was achieved Taylors have set up in their **Bernard Street** premises – to which they moved in 1980 – a small exhibition in which is displayed one of the

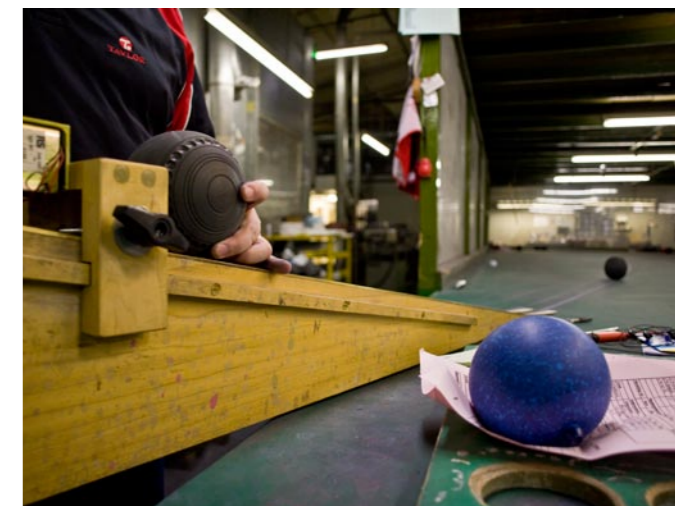
company's original lathes, seen here being demonstrated by former Taylor bowls maker **John Barker**.

Until synthetic bowls came onto the market in the 1930s, all bowls were made from lignum vitae.

First imported from the island of San Domingo in the 16th century, lignum vitae ('the wood of life') is the most durable and densest wood known to man. Virtually

impervious to water, it was perfect for use in shipbuilding, for making tools, truncheons and even, during the Second World War, for the manufacture of Mosquito aircraft.

Nevertheless, as lignum vitae became harder to source various companies started to seek alternatives, the breakthrough coming in 1931 when William Hensell in Australia came up with



a 'composite' made from phenol-formaldehyde (the polymer from which Bakelite was produced).

The final death knell for lignum vitae came when tough restrictions were placed on its import, which persuaded Taylor to concentrate on 'composites' in 1968.

In truth, there is little romance in their manufacture. Much of the process is controlled by computer.

But at least there is now a choice of colour, since the rules on having only black and brown bowls were relaxed in 2001. And human touches are still required in order to finish off each bowl, to test its bias and to add the appropriate stamp and serial number so that it meets the strict requirements of the World Bowls authority.

Currently there are eleven

accredited centres in the world where bowls can be tested before being stamped, each with their own prefix letter. So if you pick up a bowl and it is stamped with the letter A, you know that it was either manufactured, or at least tested in Glasgow, where of course the whole process began.

Old woods have not disappeared altogether, however. Apparently

they are still preferred by one in ten bowlers. Indeed properly stored and looked after, a lignum vitae bowl, or 'wood', can last a lifetime, or even longer. Some clubs have woods thought to be over a century old.

Beautiful they are too, to look at and to hold, which is why for anyone interested in sporting heritage, the exhibition at Bernard Street is, quite literally, Taylor made.