Buttock bone brushes with pigs' hair

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This advertising display case shows the process of making a natural bristle toothbrush, which was the type of brush in use until the 1920s. The start of mass production of toothbrushes is credited to William Addis in the 1780s. Over 50 separate processes were involved. Thigh and buttock bones from oxen were usually used for the handles and brush backs **1**. They were boiled to remove the fat and grease and the ends were sawn off and sold to button makers. The pieces were subsequently passed to 'fashioners' who roughly shaped them with carpenters' wood planes **2**. The fashioners used a variety of

files further to work the bone into its finished shape and a sharp knife to scrape the surface smooth **3**. The brushes came with a variety of head sizes and handle ends.

Other workers drilled the holes for the tufts of hair **4**. Originally this was done by hand with a small bow-drill but towards the end of the nineteenth century by foot-operated drills. The backs were then 'graved' (engraved) with thin channels, which connected the holes and held the wires that kept the tufts in place **5**.

Next, the brushes were tumbled in large revolving drums to give them a smooth surface and polished by hand. They were bleached – originally in strong sunlight and later by soaking in hydrogen peroxide.

Finally, the 'knots', as each bunch of hair was called, were drawn into the holes by the wires in the back of the brush **6**. Horse or pigs' hair was traditionally used.

This work was often sent out to women to do at home because they were thought to have the essential patience and skill needed. The bristles were then trimmed with a pair of shears and the graves filled with a resinous wax or, later, cement.

Such brushes were sold to well-off clientele. It was only with the advent of cheaper, mechanised production using plastics that toothbrushes began to appear in shops used by the working classes, such as Woolworth's, and their use spread.