## November 2016 Meeting—Mervyn Cadman

Mervyn lives in the Colne Valley and makes and sells shaving brushes and other wet shaving accessories. The handles for his shaving brushes are turned from polyester resin blanks that he casts himself. He obtains the knots from China.

Having wet shaved for the last 50+ years, I was surprised by how little I knew about shaving brushes. I learnt that the bundle of "bristles" was known as a "knot" and the amount of knot protruding from the handle is known as the "loft". Badger hair is used because it has better water retention, according to Mervyn. I was intrigued to hear that the badger hair came from China and that there were various grades depending from where on the animal the hair came. One of the best qualities is known as "Silvertip" and comes from the neck region of the badger, while the top of the range is known as "High Mountain White". Coarser hair from the back is used in less expensive brushes. Synthetic material knots are available as well as horse hair and boar's hair.





Mervyn casts his own blanks from Polyester resin and adds pigment to give random patterning. The moulds that he uses are made from short lengths of scaffold poles. The resin shrinks sufficiently on hardening to allow easy release of the blank from the mould.

The blank was held in nylon jaws and drilled to take the knot. The diameter of the hole is enlarged using a skew chisel sufficiently so that the knot fits comfortably. A 8mm hole is then drilled centrally in the bottom of the recess and a thread tapped into it. Grooves are then cut in the base of the recess to aid the bonding of the knot into the handle.



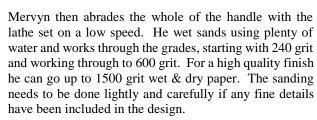
Mervyn has made a special screw chuck so that he can do all the turning without having to remove the piece from the lathe. The blank is screwed onto this chuck and the tailstock brought up as support. Mervyn has various templates for the different designs of handle that he uses and marks the position of the various features of the design on the blank.

With lathe running at a high speed and using a skew as a scraper, he started to shape the design. Gentle cuts were taken which produce lots of swarf which sticks everywhere through static. A brush was used regularly to continually clear this swarf. The important feature of the handle is the thumb notch, the part where the thumb sits on the handle and this must be of sufficient size and depth for comfort.



At this point the tailstock is moved out of the way and the bottom of the handle trued up and the corners rounded over, again for the comfort of the customer. A recess is formed in the base of the handle to accommodate a small disc with Mervyn's logo on it. The disc is fitted after the handle is finished.







The final finish is by use of buffing mops and polishing compounds, the polyester resin ending up with a high gloss. The photo on the right shows the finished handle.



Mervyn bonds his knots into the handle using cyanoacrylate glue. He uses this in preference to epoxy resin and has not had any failures.