

Dusting / Basting Brushes

by

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At times most turners who want to sell their work have to resort to making some simple items quickly on the wood turning lathe to keep the cash flow going.

There are also times when one wants to do something very simple and even practice some forgotten woodturning skills, such as roughing quickly from square to round or using the dreaded skew to its full potential. In this article I will attempt to describe the process of making Dusting or Basting Brushes on which some of these techniques are used .

Only a few basic tools are required and only a small lathe is needed to produce these. It is also a very good beginners project during which some basic skills can be practiced repeatedly.

One only needs a piece of preferably dense wood, about 1 ¼" x 1 ¼" x 8" long, and a brush insert which is available from various turning supply houses. The ones I use are about ¾" diameter and 5" long and are available from *Woodchuckers* in Toronto (1-800-551-0192) and come packaged in a plastic container with a cap. They are made from genuine Chinese hog bristles which have been cleaned and boiled and are food safe.

In Fig. 1 the two basic components and a completed brush are shown.



Fig. 1

It is time saving and very efficient to make a few of these items (about 20 in this case) at one time. All wood pieces have been cut square and to length and to find the center of the wood at one end is the first step. I have a center finder bolted to my lathe at the tailstock end which consists of a 90 degree support and a sharp steel knife at the center as shown in Figures 2 and 3. In only a very short time all wood parts are ready for the lathe.



Fig 2



Fig. 3

My preferred mounting and driving method to do the turning in this case is using a small *Oneway Talon* self centering chuck, but a four prong center or “*Stebcenter*” drive would also be suitable. A .693” dia hole by 5/8” deep has to be produced for the brush. I modified and shortened a common 13/16” spade bit for this purpose, which in this case leaves a shoulder to indicate the depth of the hole . In some cases the top of the brush needs a bit of cleaning to remove imperfections to fit smoothly into the hole, (I do this lightly on the disc sander). The drill bit is mounted in a Jacobs chuck at the tail stock and also can be used to center the wood before tightening the chuck.

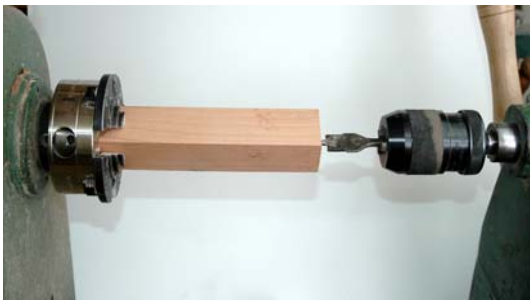


Fig. 4

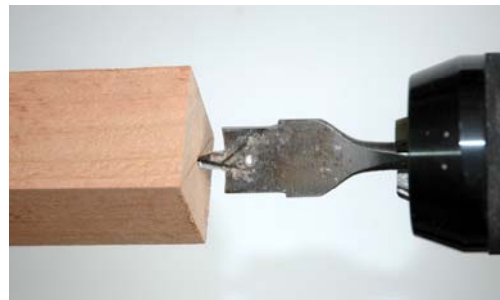


Fig. 5



Fig. 6

The next step is using a live center at the tailstock to give the wood some additional support during the turning process as shown in Figures 7 and 8. The most outer edge of the hole is supported on the revolving cone of the live center which in this case is about 7/8” diameter. Use only light pressure from revolving live center is used, because this end is being turned down to as near the hole size as possible and there is the danger of splitting the wood at the later stage of turning the handle if too much pressure is applied.

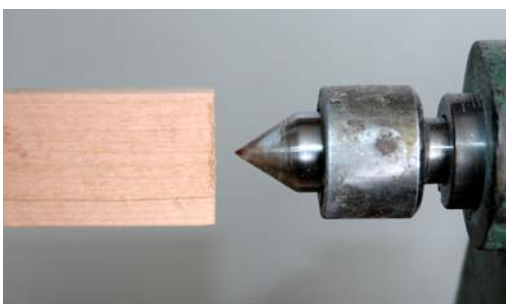


Fig. 7

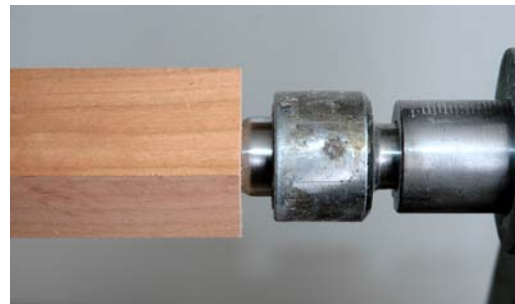


Fig. 8

The process of shaping the wood can begin now. Because of the small diameter a high speed of about 2000 rpm or even higher can be used and using a small 1” HSS roughing gouge from right to left in steps to near the chuck, always turning from the square to almost the finished dia, is in my opinion the fastest way to achieve a reasonable smooth end result, see Figures 9, 10 and 11.



Fig. 9



Fig. 10



Fig. 11

During this type of rough cutting the smooth and polished tool rest is slightly below the center and if care is taken a relatively smooth cut can be achieved at this stage. Only a very light, steady cut with a 1" HSS oval skew (Figures 12 and 13) is needed to make the shaped surface of this brush handle ready for some minimal final sanding at a later stage.



Fig 12



Fig 13

Figure 14 shows cutting off the end of the brush handle, only leaving enough material to support the handle in the chuck for the next operations.



Fig 14

Whilst the skew is in use, decorative grooves or beads of your choice can be formed at both ends, as shown in Fig. 15. These grooves can be blackened with a thin wire, or enlarged to make beads.

Caution: Never hold or wrap the wire around your finger, because any snag or binding of the wire in the groove can result in serious injury. Support both ends of the wire with a dowel or a pencil as it is illustrated in Fig. 16



Fig. 15



Fig. 16

For this particular brush handle a surface texture (lines) at the brush end was applied between two grooves with the *Sorby Texturing Tool*, using the small pitched wheel, as shown in Figures 17 and 18.



Fig 17



Fig. 18

The wheel was adjusted to a slight angle to produce some evenly spaced lines at an angle to the axis of the handle. It takes less than a couple of seconds and a light touch to produce some nicely detailed and crisp decorations. Depending on the density of the wood brushing with a dense steel or brass brush will get rid of some small splinters.

The result of this texturing is shown in Figure 19.



Fig. 19

Depending on the previously performed tool work with a skew, only a slight sanding with 240 or 280 grit sandpaper is required as demonstrated in Fig. 20.

But if a skew has not been used and the surface was left as it came from the roughing gouge the regular routine of sanding from about 120 to 280 grit has to be performed. This creates a lot of dust, so it is prudent to make use of the skew for the final cut and depending on the type of wood used, sanding can be avoided in many cases altogether.



Fig. 20

Now the surface is smooth and a finish can be applied. For these smaller diameter items I generally apply a couple of coats of friction polish in this case the *Mylands* brand and wipe it dry to a high gloss polish using paper toweling, Figures 21 and 22.

Caution: Never use cloth rags for wiping this coating dry when the work piece is revolving. The chances of the rag getting caught by the revolving item are just too great and could lead to serious injuries.



Fig. 21



Fig. 22

The finished turned and polished work piece is now ready for removal from the lathe. The bandsaw makes quick work of parting the waste mounting piece from the handle and a bit of sanding touch up on a fine grit wheel on the disc sander, is all that is needed to finish off the handle and as a last touchup a bit of lacquer is applied to this sanded surface, Figures 23 and 24. This flat surface is later used to add my initials with a fine black *Staedtler* permanent Lumocolor marker



Fig 23



Fig 24

The handle is now ready for the brush insert. Since the brush is supplied with a plastic casing which can be used to protect the brush and keep it clean I found a quick way to keep the brush inside the casing during the next step of final assembly.

Use the band saw to remove the bottom of the container, leaving the brush inside the container, as shown in Figures 25 and 26.



Fig. 25



Fig. 26

Figures 27 show the items ready to be assembled. I use medium density CA glue and coat the hole inside the handle and by adding a drop of accelerator to the end of the brush makes an instant connection while the plastic cover protects the brush at all times, Fig. 28.



Fig. 27



Fig.

28

Producing these Dusting / Basting brushes requires very basic turning skills and making them in batches reduces and speeds up the work and on the average it should take no more than 10 to 15 minutes for each item to be finished to completion.

Typical production runs of 20 or more pieces using various types of hardwoods and handle decorations are shown in Fig. 29 and 30



Fig. 29

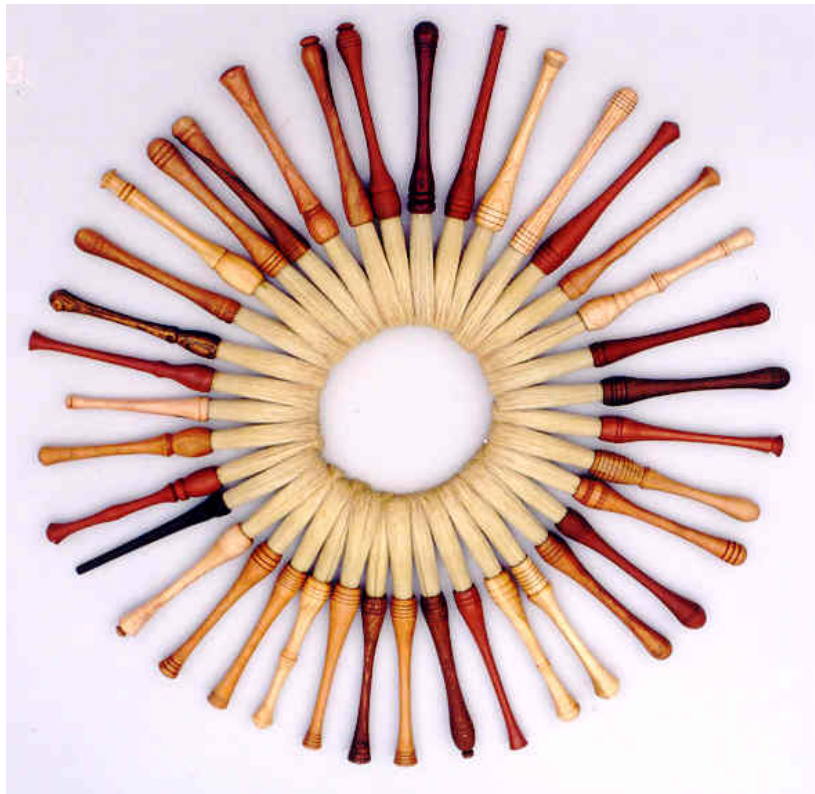


Fig. 30

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