

SPINNING AROUND

Make this whirling dervish spinning top perfect as a gift for both young and old, writes **John Berkeley**

Spinning tops have been known to man since around 2000BC, however, the origin of the top is a subject of much debate and cannot be resolved with any certainty. Through the ages they have been made of rock, ceramic, metal, wood, paper and, more recently, plastics. Designs have varied from crudely hewn stone, to square and hexagonal, to perfectly turned round tops, and they have been found all over the world. They have been the subject of much pleasure to both young and old alike and even today, they are the centre of fierce competition among members of the many spinning clubs worldwide.

Collectable items

Tops are items that are widely collected due to the large variety of types and shapes. As turners, we have the perfect opportunity to try out a large number of these, not only for our own pleasure in turning them, but also as they make very acceptable gifts, even in our modern society.

Whilst not the most simple of twirlers, this whirling dervish design will hopefully stimulate enough interest in spinning tops to encourage turners to have a go. It is not difficult to make. A friend suggested the name "Pirouetting Doll" which I think suits it well.

As may be obvious when spun, the arms extend due to centrifugal force in a manner similar to the system used in the governor of an engine. I have chosen Boxwood (*Buxus*) for this doll as it is clean

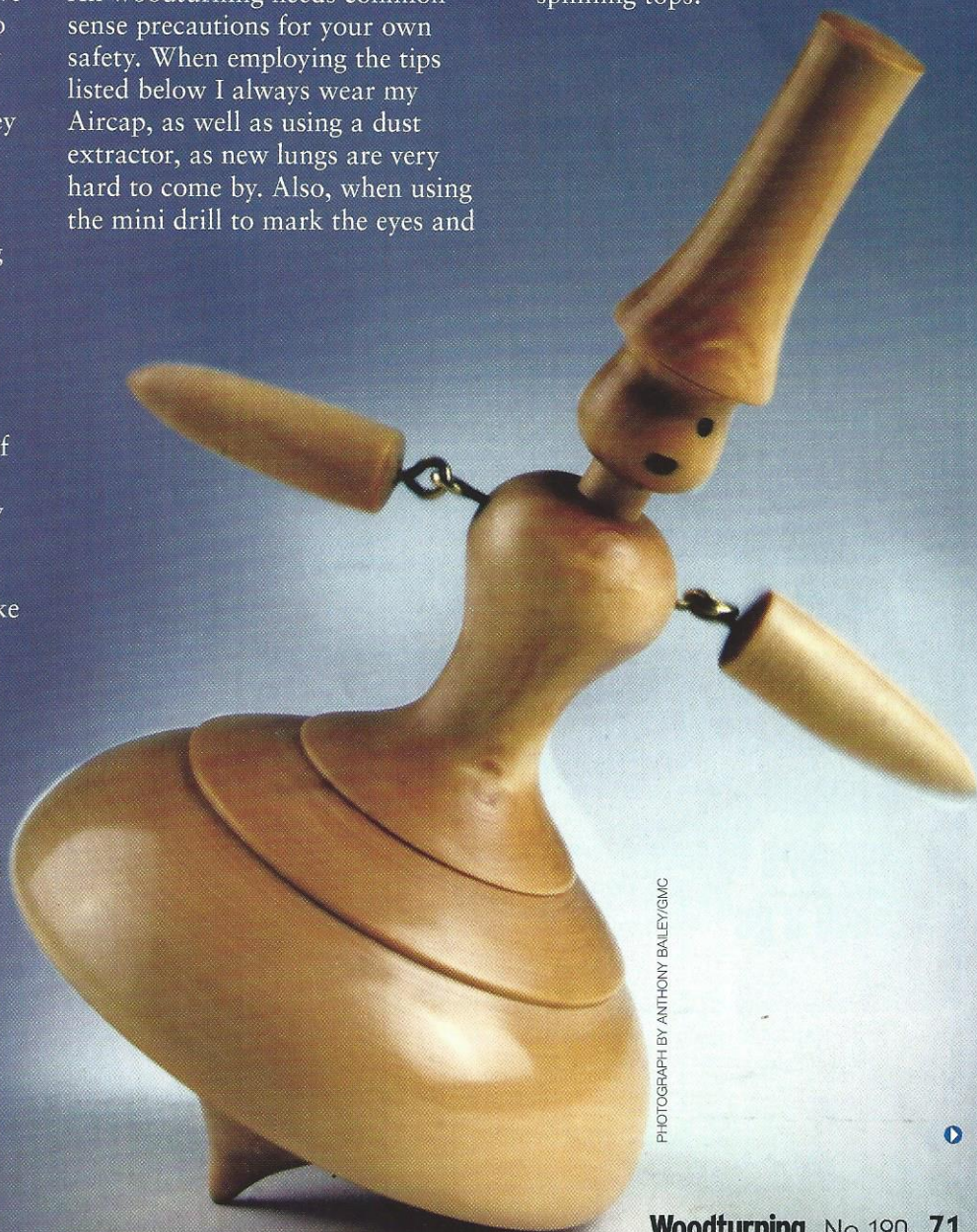
and close-grained. The simple decoration shows up clearly, however, it can be made in other woods and can, if you are of an artistic bent, be painted most attractively.

Safety first

All woodturning needs common sense precautions for your own safety. When employing the tips listed below I always wear my Aircap, as well as using a dust extractor, as new lungs are very hard to come by. Also, when using the mini drill to mark the eyes and

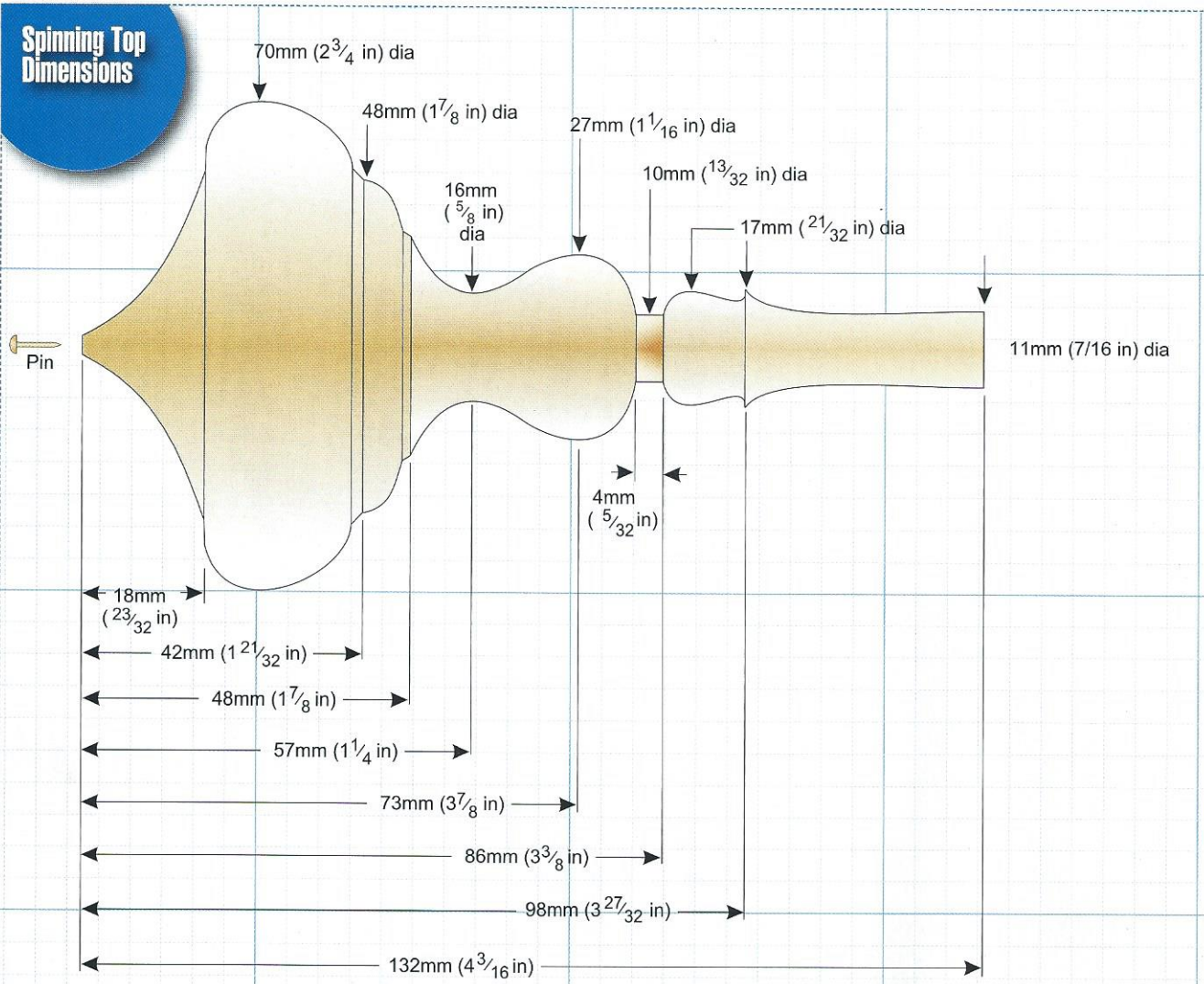
drill the holes for the wires, note how it is safer to clasp your wrists firmly to your stomach (this is easier if your stomach is like mine!) in order to give maximum support to the drill and the object held in your hands. It is all too easy for the tip of the burr to slip and bury itself in you fingers. It is also very simple for it to skate across the surface, potentially ruining all the hard work it has taken to get this far. A slight slip may just be visible on one of the eyes of my dervish. It is not essential to use this means of drilling though but I find it the simplest and quickest.

A useful source of information for spinning tops is a book called *The Top* by DW Gould in which you will find, amongst many other useful facts, a bibliography of 367 other sources of information – I did say there was a lot of interest in spinning tops!

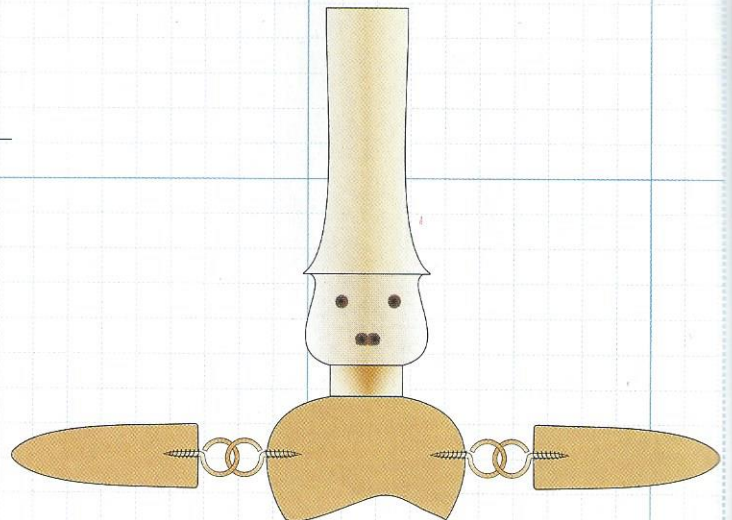
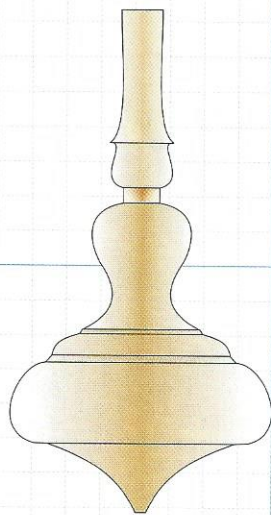
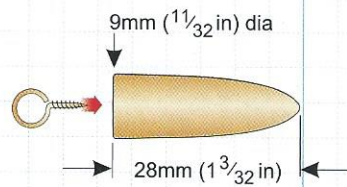


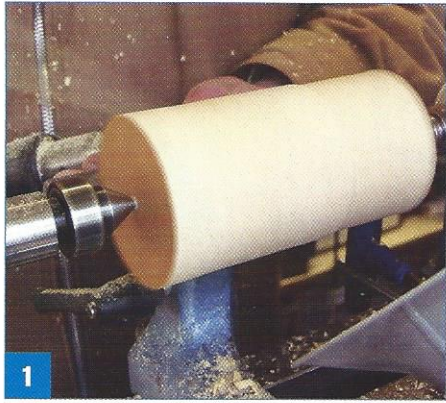
PHOTOGRAPH BY ANTHONY BAILEY/GMC

Spinning Top Dimensions

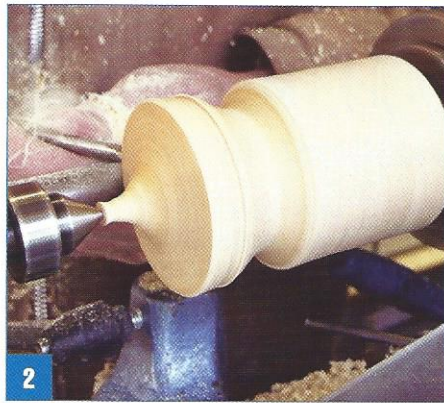


"This design will hopefully stimulate enough interest in spinning tops to encourage turners to have a go"





1 I used a boxwood log 75mm (3in) in diameter but any close-grained wood will work. I then turned it to a cylinder with a 52mm (2in) diameter



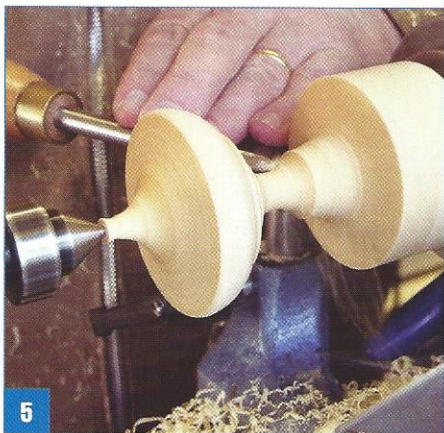
2 Held firmly in a chuck, I began to shape the base and began to shape the upper side



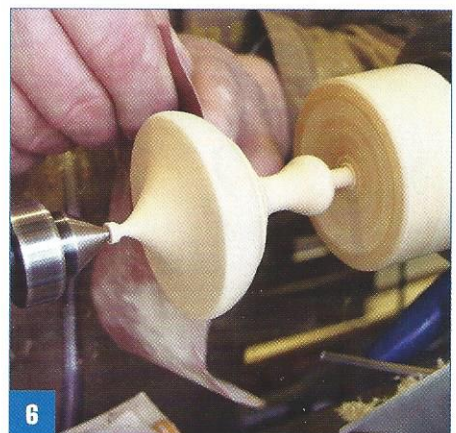
3 After some further shaping I added detail to the top surface using my favourite point tool



4 I began to shape the body of the Dervish...



5 ... and the head end



6 I carefully sanded down to 1200grit



7 I then did some finishing with Chestnut Melamine Lacquer

"The arms extend due to centrifugal force in a manner similar to the system used in the governor of an engine"



8 I found the centre of an 18mm ($\frac{23}{32}$ in) cylinder using an Eli Avisera $\frac{3}{6}$ th Bedan



9 I drilled a 6mm ($\frac{1}{4}$ in) hole to enable the head to affix to the body. The head and body could all be turned in one, but I hate the waste of wood that this would incur



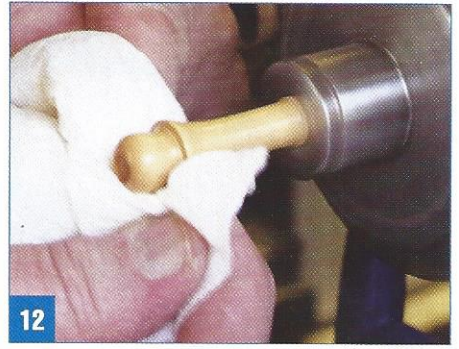
10 I then shaped the head



11 I shaped the hat using the point tool again. Note the position of my left hand on the tool rest

Finishing top tips

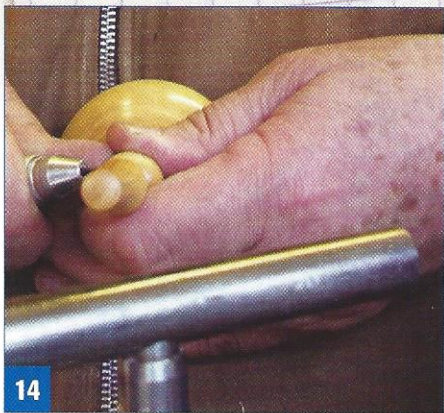
1. Sand right down to at least 1200 grit with the abrasive of your choice, making sure to protect your lungs from the fine dust. Do not fold the abrasive, except to get into some fine detail where folded paper is a little more rigid.
2. Abrasive is normally folded to avoid heat on your fingers, without any consideration for the heat generated on the wood, and some woods react most unfavourably to heat in the form of tiny cracks and heat shakes. These are very difficult to remove without design changes. Too high a speed also produces more heat.
3. Whilst sanding, move the abrasive from side to side in order to avoid rings forming and keep using a different area of the abrasive.
4. A final burnish with a piece of corrugated cardboard often helps with achieving a final finish prior to applying lacquer, in my case Chestnut Melamine Lacquer



12 It was now time to sand the head and hat, and finish it similarly to the body with Chestnut Melamine lacquer



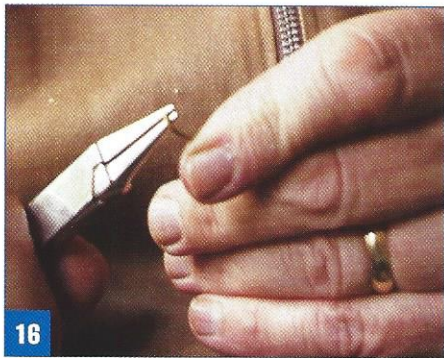
13 From a 10mm (3/8in) cylinder, I turned an arm, again with my ubiquitous point tool. Repeat this process for the second arm and sand and polish



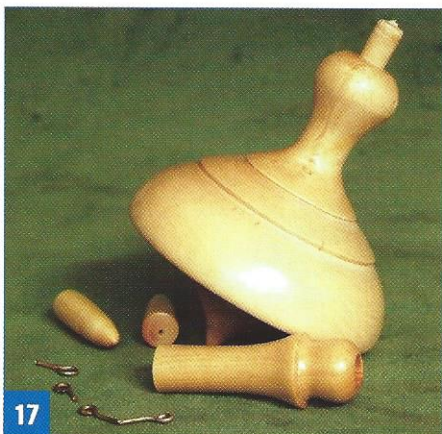
14 To add the mouth and eyes I used the flexible drive of an Axminster multi-tool with a 1mm (1/16in) round-ended dental burr



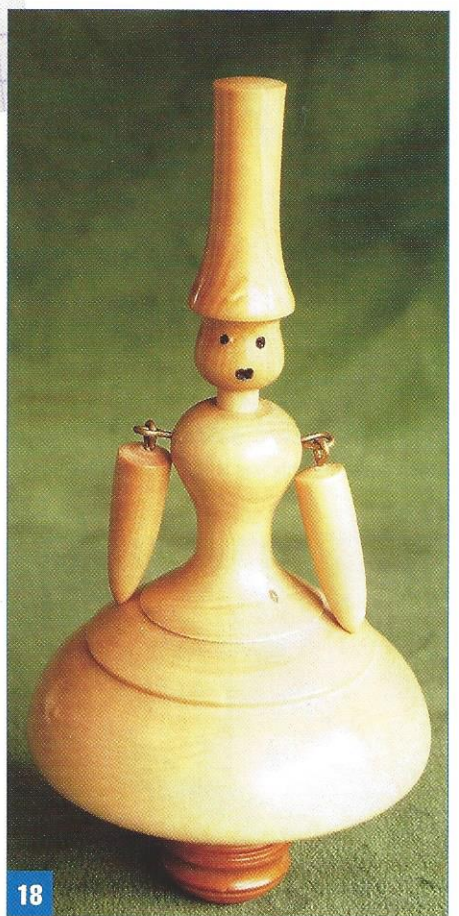
15 I drilled holes to fix the arms



16 I bent four brass wire cleats for fixing the arms. Wire is readily available in most hobby shops or you could use small picture hooks. Wire can easily be bent around a nail of your choice for size, about 1.5mm (1/16in) diameter for the purposes of this top



17 After filling in the mouth and eyes with black wax crayon I got the top pieces together for assembly



18 This is the completed top. In order to spin this top successfully either use a launcher or use the palms of both hands to generate sufficient speed for it to work

WHIRLING DERVISH SPINNING TOP