CHAPTER 8

WHIMSY DIDDLING

I can feele A whimsey i’ my bloud.

Ben Jonson, Volpone (1605)

Toys in the family. The mechanical ones are by my sister Barbara and the ball in the cage by Great-uncle Graham.
Old wooden cigar boxes were still generally available when I was a kid. I remember asking for them at the counter at my father's pool hall down by the Washington Navy Yard. The thin, soft, aromatic wood from these boxes was great for making all kinds of things. My favorite were little stern-wheeler paddleboats. With my coping saw, I cut the bow to a V and the stern to a U-shaped fork to hold the paddle wheel, with its two interlocked blades. Propelled by a rubber-band motor, it would putter across a puddle. Making them, though, was the greater pleasure.

These boats are part of a whole class of toys of sticks and strings that are largely got out with the coping saw. I never spent much time developing skills in the toy department, but my sister did. Barbara makes mechanical toys, cutting the outline with a coping saw and then carving in the details with a knife (the same way a Chippendale chair is made). Working primarily with wood gleaned from old crates and other odd pieces that people find and save for her, she has made virtually every wooden toy known, but my two favorites are the acrobat and the log cutters. Working from the traditional patterns, she personalizes them with a likeness of the recipient's face.

The acrobat is a simple jointed figure suspended between two uprights that flips about when the twist in a cord through its arms is undone by stretching. I'm sure the idea for this must have come from the winding cord on bow saws—or perhaps it was the other way around. The rubber-band motor of the paddleboat is simply a modern version of this. Working with wood from old crates and other odd pieces that people find and save for her, she has made virtually every wooden toy known, but my two favorites are the acrobat and the log cutters. Working from the traditional patterns, she personalizes them with a likeness of the recipient's face.

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Another variation on this theme is the "buzz saw." This is simply a disc with two holes drilled through the center and a looped cord passed through the holes. To make ready, the cord is twisted with the disc in the middle. When the ends of the cord are pulled apart, the disc spins and the cord unwinds and then rewinds, lengthening and shortening like an elastic band. Holes drilled along the periphery of the disc will cause it to emit a peculiar whirring sound as it is spun.

This same motion has been used in making an interesting return spring for cord-driven lathes. The disc in this case is elongated into a spool that is suspended by the doubled line strung on an archer's bow. The drive cord is wound on the spool so that when it is pulled, the spool rotates, the string on the bow is twisted and shortened, and the bow is bent. The return is smooth, and the mechanism is compact.

Whimmy Diddles

An awful lot can be done with a jackknife. One dry, windy spring while I was still in school, there were terrible forest fires up in the mountains. About mid-morning one day my classmates and I were called to go in as a relief crew for the regular fire fighters. For the entire week that we were in the mountains, however, we were kept in reserve, being thrown into the breach only for after-midnight mop-ups and village-idiot scrub fires. The days were spent sitting on the grass outside the ranger station in the valley. By the second day, boredom had reduced us to a state of abject stupefaction. Most of us had pocket-knives, and the hills about us were covered with mountain laurel. So it wasn't long before someone started whittling, and somehow we got started on what must have been the largest gee-haw whimmy diddle whittling binge in history. A gee-haw whimmy diddle is a stick with notches cut along its length and a propeller on one end. When you rub the corrugated length just right with another stick, the propeller begins to spin.

The gee-haw part of the name refers to the directions shouted to oxen to steer them to the right or left. By skillful guidance, you can get the propeller going to the right or left as you wish. Few toys are more strongly associated with the mountain folk tradition than the gee-haw whimmy diddle.

These things are awfully simple to make. You just need a knife and a pencil-sized length of hard twig. Trim a half inch of the end down to smaller than a match stick, leaving the very end fatter in a little bulge to keep the propeller from flying off. The propeller is a piece about an inch long trimmed down in the middle thin enough that you can work a hole through it with the point of your knife. The hole must be just big enough to force over the swelling on the end of the stick, leaving the propeller to spin freely on the shaft. The notches are
Willow Whistles

After two days of heavy whimmy diddling, even their elusive charm was wearing thin. Several people had gone nuts, taking multiforked twigs and making Medusa-headed devices with as many as five or six propellers going at once. I, for one, was getting desperate. We were supposed to stay close to the ranger station in case we were needed in a hurry, and as luck would have it, there was a stream across from the station with a weeping willow on the opposite bank. As soon as I saw it, I knew we would be able to make it for another day or so. I waded into the ice-cold water far enough to break off a half dozen of the long green whips and headed back to the station.

Willow whistles can only be made in spring and early summer, when the tree is growing strong. This job requires bright green twigs with long spaces between the bumps, or nodes, where the leaves come out. The fresher and greener and fatter and smoother the piece, the easier the whistle will be to make. A sharp knife is the only tool needed. Find a long space between the nodes and cut it out by rolling it between a flat surface and the knife blade.

A whistle whistles when a jet of air is directed at the edge of an opening in the chamber. Differential air pressure causes the air stream to oscillate on either side of the edge, somewhat in the manner of a fluttering flag. Make this edge in the willow whistle by first making a perpendicular cut through about one-third the diameter of the willow about \( \frac{3}{4} \) inch in from one end. Then cut down from the far end at about a 35-degree angle and remove the little chip.

To make the chamber, you need to take out the insides of the twig, and for this the green willow is very obliging. In the spring the layer of cells evenly spaced down the midsection to the fore end of the stick. The scratching stick appears to work best when it is sliced to a V-shaped cross section, although some prefer to leave theirs round.

There is a lot of argument and conjecture about effective design in weighting the ends of the propeller and spacing the notches and the proper way to hold the thing. This is what makes it such a good toy: it takes skill and involvement to operate, the sound and action are gratifying, and you can't for the life of you figure out how the darn thing works.
between the bark and the wood is rapidly growing and dividing, and it is very fragile. You can crush this cambium layer by gently rolling the willow between a flat surface and the side of your jackknife. Don’t press too hard or you can crush or tear the bark as well. When you feel that you have rolled over every spot, place the end grain of the stick on the corner of something and push down firmly on the bark as if to slide it off. The crushed layer of cells should give with a snap, and the bark can be slid off the stick. If it doesn’t give, you can try rolling a bit more. If it still doesn’t work, it’s the wrong time of year. The expression “clean as a whistle” is said to come from the pure whiteness of this inner stick.

Set the bark aside and cut the stick in twain by rolling the knife blade on it right where the first perpendicular cut was made. The shorter of the two pieces will become the ramp, or fipple block, which funnels and directs the air at the angled cut in the bark. Slice this short piece lengthwise, taking off one-quarter of its diameter on one end and angling to about one-half the diameter on the other. Push this piece back into the bark, larger end first, so that it will aim the air right at the sharp angle. Stick the other piece of the stick a short ways into the back end of the bark and you’re in business. You can change the pitch of the whistle by sliding the long stick in and out.

Once you get the hang of it, you can turn out a whistle in about a minute. This was our fourth day with nothing to do, and it wasn’t long before every one of us was armed with a brace of willow whistles and attempting to play them all at once. They are shrill devils, and I guarantee that if you get twenty people all tuning
A sharp knife is essential.

Clean as a whistle.
and playing willow whistles while simultaneously rattling away on their multiheded whimmy diddles, you can crack even the most hardened mountain forest rangers. Within an hour they had scrounged together a set of horseshoes and a volleyball, putting an end to our whittling diversions. The willow whistles had dried out by late that afternoon and were unplayable. We later traded all the whimmy diddles to one of the rangers for ramps (wild mountain onions) and venison. A few of us were even called on that evening to help put out a fire—and we just about beat that barbeque grill into the ground.
The number of different toys based on the simple principle of axial symmetry is unbounded. To some, such as toy soldiers, the turnery lends a delightful abstraction; to others, like croquet balls and spinning tops, the symmetry is its essence.

One of the simplest and earliest toys of childhood is a rattle made up of captive rings on a single piece of wood. This toy is greatly beloved by novice turners, as it looks much harder to do than it is. You simply chuck up a semidry piece of beech, birch, or what have you, in the lathe, cut rings, and then undercut until they are free. Slide the free ring to one side and clean out underneath. This sort of captive ring turnery is a standard production item for Mexican artisans, who make the most elaborate chocolate stirrers on a bow lathe in minutes.

Just to give you more ideas for toys from the lathe, a croquet set is all turnery, as are tops, yo-yos, baseball bats, ten pins, and the elusive Bilboquet, the cup and ball game that can give you such a fit.

One final item for the lathe. If it’s the wrong time of year for willow whistles, you can make terrible loud turned whistles. This is a good use for scraps of attractive wood that are too small for anything else.

The concept of how the whistle works is of course the same for both willow and wooden whistles. These, however, are a lot more durable. It’s best to bore out the length of the whistle first and then turn true to this axis. Just about any sort of bit will bore through end grain, although if it is not correctly sharpened it cannot be forced simply by pushing harder, as it can through side grain. I have found % inch to be a good size for the hole.

If you are using a spring-pole lathe, you can easily set the conical centers in the openings at either end of the rough blank and turn away. On a wheel-driven lathe, you will probably need to fashion a set of plug centers. These act as false ends to center the prebored hole precisely on the lathe. To make them, set a conveniently sized piece of good hardwood in your lathe and turn it down in the middle to
the same diameter as the hole. Then remove it from the lathe, saw it through in the middle, and insert the pieces into the two ends of the whistle blank. After securing the whole affair in the lathe, you are ready to turn the whistle to the pattern that you want. This is the same procedure that I use when turning wheel hubs to ensure that the circumference and shaft hole are concentric.

Cut the angled air outlet with a fine saw. You will make a much cleaner cut if you push a filler rod into the saw cut before you start sawing. Clean up the cut with a chisel before you pull the rod out, and it will be perfect. If the rod is a tight fit, you can use it to make the fipple block to direct the air flow right at the sharp edge. The end where you will blow should be a half section of the rod, sloping to a three-quarter section at the other end. The far end of the whistle must be stopped to close the air chamber. You can use either a fixed block or a sliding one, which will allow you to vary the pitch.

We tend to pass off things like whimmy diddles with little thought, just as the pre-Columbian Mexican Indians gave little thought to the terra-cotta toys with wheels on them that they made for their children. They had the wheel for toys, but there is no evidence that they used it in other activities, not for even so much as a wheelbarrow. Perhaps some future civilization will ponder how strange it was that people used the whimmy diddle only as a toy and never harnessed the awesome power hidden within it.