Was there ever a bookcase that gave a fraction of the satisfaction as the one fashioned by your own hands?

The editor, *The Handyman and Home Mechanic*

**On Sawing a Plank**

I am making a bookcase from wooden planks. Each shelf has to be cut to the right length. Marking the distance along the plank with a tape measure, I use a pencil and set-square to draw a straight line across it. After these preliminaries, I set the plank on a trestle, lift my left leg, and kneel with as much of my weight as I can upon it, while keeping my balance on the ground with my right foot. The line to be cut slightly overhangs the right end of the trestle. Then, stooping, I place the palm of my left hand on the plank just to the left of the line, grasping it around the edge by the fingers. Taking up a saw with my right hand, I wrap my fingers around the handle—all, that is, except the index finger, which is extended along the flat of the handle, enabling me to fine-tune the direction of the blade.

Now, as I press down with a rigid arm on the left hand, I engage the teeth of the saw with the edge, at the point where it meets my drawn line, and gently nick the edge with two or three short up-strokes. To guide the saw at this critical juncture, I bend the thumb of my left hand, so that the hard surface of the joint juts out to touch the blade of the saw just above the teeth. Once the slot in the edge is long enough that there is no further risk of the saw jumping out and lacerating my thumb, I can
begin to work it with downward strokes. At this point, I have to attend more to the alignment of the blade than to the precise positioning of the teeth, in order to ensure that the evolving cut proceeds in exactly the right direction. To do this, I have to position my head so that it is directly above the tool, looking down. From this angle, the blade appears as a straight line and I can see the wood on either side of the cut.

The first strokes are crucial, since the further the cut goes, the less room there is for manoeuvre. After a while, however, I can relax my gaze and settle down to a rhythmic up-and-down movement with long, smooth, and even strokes. Though delivered to the saw through the right hand and forearm, the movement is actually felt throughout my entire body in the oscillating balance of forces in my knees, legs, hands, arms, and back. The groove I have already cut now serves as a jig that prevents the saw from veering off the straight line. Because of the way the saw’s teeth are cut, they slice the wood on the downward stroke, whereas the upward stroke is restorative, returning the body–saw–plank system to a position from which the next cycle can be launched. However, a good saw requires little or no pressure on the down-stroke, and works under its own weight.

Although a confident, regular movement ensures an even cut, no two strokes are ever precisely the same. With each stroke, I have to adjust my posture ever so slightly to allow for the advancing groove, and for possible irregularities in the grain of the wood. Moreover, I still have to watch to make sure I keep to the line, since even though the saw is constrained to slide within the existing groove, the groove itself is slightly wider than the blade, allowing for some slight axial torque. This is where the index finger of my right hand, stretched along the handle of the saw, comes into play. In effect, I use it to steer within the tight margins afforded by the groove. The actual width of the groove is determined by the setting of the saw’s teeth, which are bent outwards, alternately to one side and the other of the blade. The point of this is that it allows clearance for the blade to slide within the groove. It would otherwise become jammed.

As I approach the end of the line a marked drop in the pitch of the sound created by my sawing, caused by a loss of tensile strength in the plank, serves as an audible warning to slow down. Once again, I have to concentrate on the cutting edge. For a clean finish, the last few strokes are as critical as the first. To prevent the free end from breaking off under its own weight, leaving a cracked or splintered edge, I must shift my left hand to the right of the groove, no longer pressing down on the plank but supporting it. At the same time I saw ever more slowly and lightly until, eventually, the cut end comes free in my left hand and I allow it to drop to the ground.