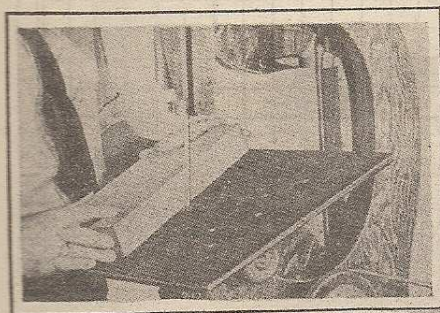


Homemade BANDSAW for your Workshop



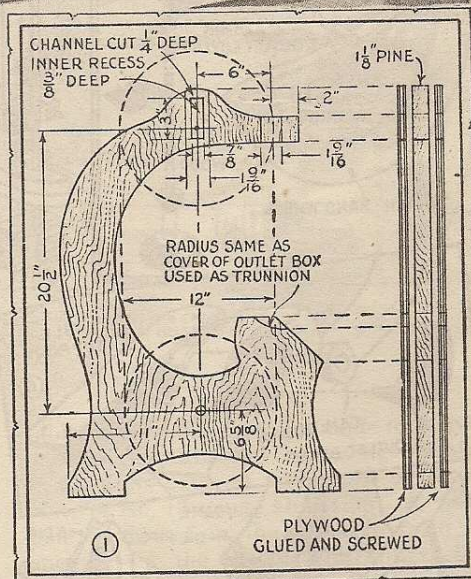
By
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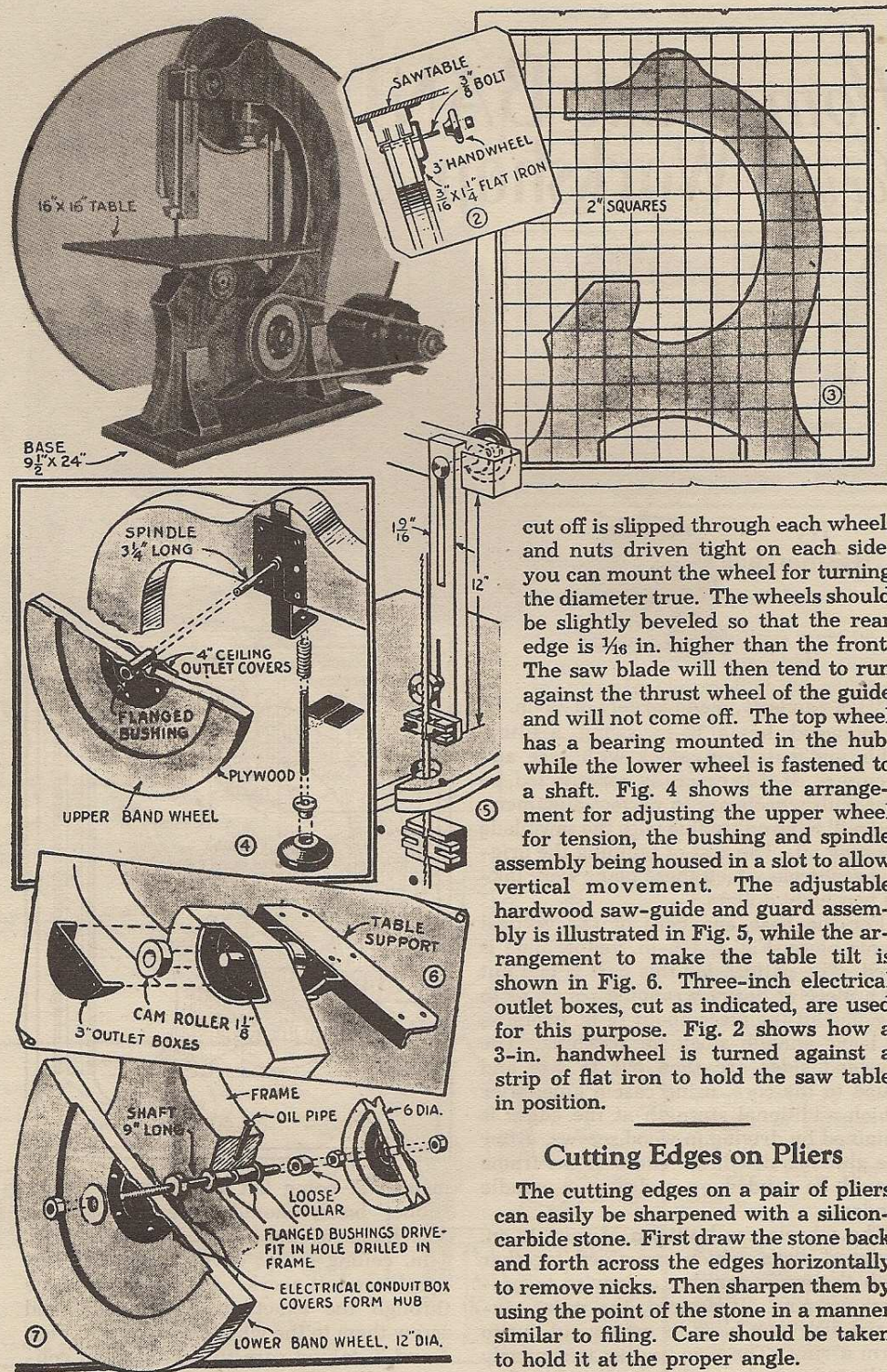
THIS bandsaw, made largely of $\frac{1}{4}$ -in. fir plywood, has a 12-in. swing, a tilting table and cuts 2-in. stock with ease and accuracy. If it is carefully constructed, so that both wheels are in perfect alignment, you will have no trouble with the saw blade running off. The cost of building the original saw from which these plans were taken was eight dollars.

For the base and core of the vertical frame piece, Fig. 1, $1\frac{1}{8}$ -in. yellow pine is used. The pattern for this part is laid out on a piece of heavy wrapping paper, as in Fig. 3. Cut the piece about $\frac{1}{8}$ in. oversize, to leave enough stock for finishing. The plywood sides are then cut to size and glued to the core, using casein glue, after which additional strength at the edges is obtained by driving in wood screws. After the glue has dried, the edges of the frame should be sanded on a drum or spindle sander.

The wheels are built up of four 12-in. plywood disks, which are glued together with the grain running crosswise to prevent warping. If desired, the outer, exposed disk may have its center cut out to form a ring. The 6-in. pulley is similarly built up from plywood disks, but the edge,



instead of being flat and covered with a rubber band, should have a V-groove. The hubs for the wheels and pulley are 4-in. ceiling-outlet covers, used in electrical conduit work. Drill a $\frac{1}{2}$ -in. hole through the exact center of each, and screw them to the wheels as shown in Figs. 4 and 7, taking care to get them on concentrically. If a $\frac{1}{2}$ -in. bolt, with the head



cut off is slipped through each wheel, and nuts driven tight on each side, you can mount the wheel for turning the diameter true. The wheels should be slightly beveled so that the rear edge is $\frac{1}{16}$ in. higher than the front. The saw blade will then tend to run against the thrust wheel of the guide and will not come off. The top wheel has a bearing mounted in the hub, while the lower wheel is fastened to a shaft. Fig. 4 shows the arrangement for adjusting the upper wheel for tension, the bushing and spindle assembly being housed in a slot to allow vertical movement. The adjustable hardwood saw-guide and guard assembly is illustrated in Fig. 5, while the arrangement to make the table tilt is shown in Fig. 6. Three-inch electrical outlet boxes, cut as indicated, are used for this purpose. Fig. 2 shows how a 3-in. handwheel is turned against a strip of flat iron to hold the saw table in position.

Cutting Edges on Pliers

The cutting edges on a pair of pliers can easily be sharpened with a silicon-carbide stone. First draw the stone back and forth across the edges horizontally to remove nicks. Then sharpen them by using the point of the stone in a manner similar to filing. Care should be taken to hold it at the proper angle.