



From SEWING MACHINE to JIGSAW

By GUST M. LARSON

THAT old sewing machine long relegated to the attic can be converted into an excellent motor-driven jigsaw at practically no cost. All you have to do is strip the machine of its shuttle mechanism, located on the underside of the base, and install the blade-tension device shown at the right. Thickness of the stock that the saw will handle depends upon the stroke of the machine at hand, although it is possible to increase the stroke of most machines simply by raising the needle bar in the head. Drive is by a $\frac{1}{2}$ or $\frac{1}{3}$ -hp. motor mounted on a hinged base to bring it in line with the pulley on the handwheel. A small insect sprayer, attached by brackets to the cover plate, is operated by the needle bar to provide an efficient sawdust blower.

The machine can be left on its original stand, or you can set the head and base flush in the top of a sturdy bench. In either case, a board must be installed, as shown in the cutaway view, so that the tensioner can be screwed to it, directly below and in line with the needle bar. The tension device consists of a floor flange threaded to a slotted tube in which slides a spring-loaded shaft. The tension of the spring is adjusted by a nut at the end to suit the blade being used. A cross pin keeps the shaft from turning in the tube, and a collar and setscrew, soldered to the upper end of the shaft, form a blade clamp. The needle clamp will hold jeweler's blades but will require enlarging for saber-type blades.

