

5-2

binder applied to wheel as the abrasive element. Apply light pressure. For highest gloss, follow with open muslin buff at 8,000 feet per minute, using a softer silicon abrasive compound and extremely light pressure.

For hand polishing, use automobile body rubbing compound or pumice stone and oil.

SATIN FINISH: Rub with fine steel wool, fine emery cloth, or sandpaper. Rub back and forth in one direction only. Wear plain cotton gloves to avoid finger mark-

ing while finishing. This will give a high gloss and even finish. To prevent finger marking, apply wax as above.

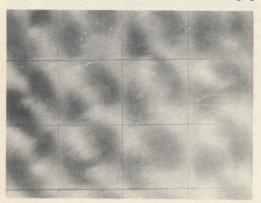
Damascene or Watch-case Finish (Fig. 5-1) is possibly the most beautiful of all the mechanical finishes. It is also known as an engine finish or sun-swirl finish. It is easy to make on plain aluminum sheet using a drill press fitted with a tool made as shown a $\frac{1}{2}$ " dowel rod with a soft rubber tip covered with fine emery cloth. Set drill press for slowest speed of tool. Touch work lightly. For the straight formal pattern shown, make contact in series of spots spaced $\frac{1}{4}$ " apart in a straight line. Then make next line overlap first by $\frac{1}{4}$ ".

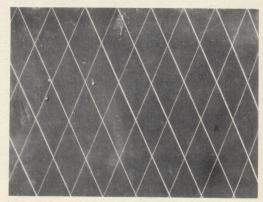
To do this work with a portable electric drill, the dowel tool must be fitted with a $\frac{1}{4}$ " shank by drilling the $\frac{1}{2}$ " dowel and inserting a $\frac{1}{4}$ " shank or by reducing the $\frac{1}{2}$ " dowel to $\frac{1}{4}$ " with a wood rasp or with a bench saw as in Fig. 4–16.

Next make the saddle block shown in Fig. 5-2, and drill a $^{33}\!\!/_{64}$ " diameter hole to take the dowel tool. Cut a straight edge 1" x 2" to the length desired for the setup (Fig. 5-2). Mark off front edge with $^{14}\!\!/_{4}$ " marks. Now ride saddle block against straight edge, and make row of spots spaced $^{14}\!\!/_{4}$ " apart along straight edge. Move straight edge $^{14}\!\!/_{4}$ ", clamp, and make next row of spots.

GEOMETRIC DESIGNS: Figures 5-3 and 5-4 illustrate two novel mechanical finishes

5-3





5-4