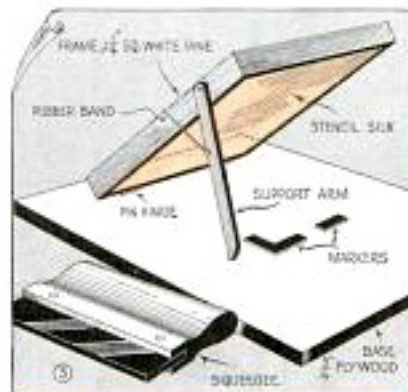


SILK STENCILS

SIMPLER than cutting linoleum blocks, silk-screen stencils offer the home craftsman one of the fastest and cleanest methods for painting greeting cards and cutouts. Painting can be done on any flat surface, and the design can be worked on wood, cardboard, cloth, or any other material. Photographic processes simplify the art work, so that intricate designs can be reproduced easily by the average worker.

The setup is simple. As shown in Fig. 3, there is a wooden frame on which is stretched a piece of stencil silk or organdy. The

*The perfect method
for painting greeting
cards, cutouts and
novelties.*

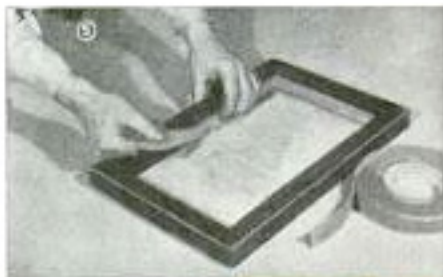


frame is hinged to a base board with two pin hinges. The design is painted or blocked out on the silk screen and is reproduced by forcing paint through the open meshes of the screen, using a rubber squeegee.

In setting up for any job, the first thing required is the wooden frame. For average-size work, this is made from 1 1/4-in. square white pine. The frame should be about 2 in. wider than the design and about 6 in. longer, inside dimensions. Frame members are mitered and grooved, as shown in the detail, Fig. 2. The stencil silk is fitted to the frame by first tacking it loosely in place; then, 1/2-in. square cleat sticks are pushed into the grooves, as shown in Fig. 4, stretching the silk drum-tight.

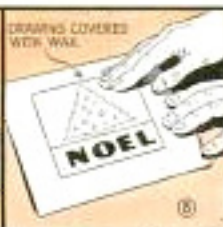
One of the simplest methods of getting the design onto the screen is the paper mask or knife-cut stencil, as shown in Figs. 5 to 13 inclusive. In the example, Fig. 6 is the copy, which is drawn full size. A sheet of tracing paper large enough to cover the screen is coated with shellac, as shown in Fig. 7. While this is drying, the copy is coated with wax, rubbing on a thin film with the fingers, as shown in Fig. 8. A good wax for this pur-





completely blocked off except for the design. Then you pour a quantity of paint onto the screen, and wipe it across the design with the squeegee, as shown in Fig. 12. Fig. 13 shows the screen in an up position, with the work in place, registered by two cardboard markers fastened to the base.

Another method of getting the design onto the screen is to block it out with a special lacquer filler. The Dutch-girl cut-



pose is made from equal parts of beeswax, kerosene and linseed oil. The tracing paper, shellacked side up, is then rolled over the waxed drawing, Fig. 9. All portions of the design which are to print are now cut out with a stencil knife or razor blade and stripped off, as shown in Fig. 10, the wax coating holding the design firmly in place. After the cutting is complete, the silk screen is placed over the design, and, using a thin, soft pressing cloth and a medium-hot iron, the design is adhered to the screen, as shown in Fig. 11. Finally, the inside edges of the screen are lined with masking tape, as shown in Fig. 5, to prevent paint from leaking through. The result is a screen





out for the top of a laundry bag, Fig. 14, is an example. Start, as before, by making a full-size copy of the design. Transfer the outline of the design to $\frac{1}{4}$ -in. plywood or wallboard and cut out the required number on the hand saw or scroll saw. Stack the cutouts on edge and spray with black paint, as shown in Fig. 15, then, spray or paint the faces of the cutouts, as in Fig. 16. In the example, however, the first step is to secure an all-black cutout. The second is to make the screen, which is done by placing the screen over the copy, as in Fig. 17. The design, which is plainly visible through the silk, is then traced with a medium-hard pencil and painted with the lacquer filler. Since the cutout is already black, we will not want any of the black in the design to print. Hence, everything that is black on the copy is filled in with lacquer on the



screen, also, all the area outside the design is blocked off, as shown by the black in Fig. 18. This design is in two colors, yellow face and red hat and dress. The yellow is printed first, and, in order to protect the red, all the red areas are blocked out. This is done with a filler which is soluble in water. In Fig. 18, the gray portions of the design represent water filler. Thus, only the yellow face is left open, and this is painted on the black cutout, as shown in Fig. 19. After the



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run in yellow is complete, the water filler is washed out, leaving the original lacquer-filled screen. The yellow face is then blocked off with water filler, leaving the red hat and dress open for painting, Fig. 1.

The stencil silk used for brush-filled screens is what is known as No. 16, running about 140 threads per inch. It is available in several grades. Knife-cut stencils of open design can be run on organdy. The paints used should be made especially for screen work. These are available in flat and gloss, also in a special-process lacquer, and are put up in paste form, being thinned as required with a special non-clogging varnish. Average consistency for painting on cardboard or wood should be slightly thinner than soft grease.

The photographic method requires no artistic ability, since the worker can copy designs directly from any book or magazine with the aid of a camera. In the example, Fig. 21 is the copy. As in any photographic process, a negative is required, that is, the copy must be transferred, in black, to a clear sheet of celluloid or tracing paper. If desired, the negative can be made by hand by placing a sheet of heavy tracing paper over the copy, as shown in Fig. 20, so that the design can be filled in with photographer's opaque or black ink. In the second method of making a negative, the copy can be made with a camera. This gives a negative which has white lines on a black ground. This first negative is then exposed to a second film, which results in a true copy of black lines on a clear ground.

So much for the negative. The next job is to sensitize the silk screen so that it can be printed just the same as a photographer prints a photograph. No. 16 stencil silk is used. The sensitizer can be purchased from any process supply house, and requires





only mixing with water to make it ready. The solution is flowed on over the face of the screen, as shown in Fig. 22. All operations can be done in ordinary room light except the drying of the sensitized screen, requiring about 30 min., which should be in a darkened room. After the screen is dry, the print can be made. This is done just the same as printing a photograph, Fig. 24 showing the setup. The negative is placed face up (reading position) on the glass in the printing frame. The silk screen, face down, is then placed over the negative, followed by a contact block and clamps. Fig. 23 shows the frame ready for printing, while Fig. 25 shows the exposure being made, using a photoflood lamp. Exposure time is approximately 15 min., and has the effect of hardening the exposed portions of the screen. After printing, the screen is held under a stream of warm water, Fig. 27, which washes out the soft, protected parts of the design. Fig. 26 shows the finished photographic screen; Fig. 28 shows the job being run. While the example shows printing in one color only, as many colors as desired can be run by blocking out with water filler as previously described.

A useful dodge which can be used to advantage for certain types of two-color work is shown in Fig. 29. The copy is the Dutch girl previously shown, but in this case the hat is to be red and the dress blue. By fastening a cardboard bridge to the screen with masking tape and using two squeegees, both the red and the blue can be run at one time. Another method of multi-color printing is the elimination process. Using the Dutch girl again for an example, the first run would paint the hat, face and dress in red. The red hat and



AFTER PRINTING, THE SCREEN IS HELD UNDER HOT WATER TO BRING OUT THE PICTURE—LEFT



dress would then be blocked out, leaving only the face which would be run in yellow. Then, if desired, the face could be blocked out, leaving only the eyes to print in blue.

Ⓢ Dipping a rubber eraser in emery powder will make it suitable for cleaning rusted or corroded metal surfaces quickly.