

# The Art Of INTARSIA

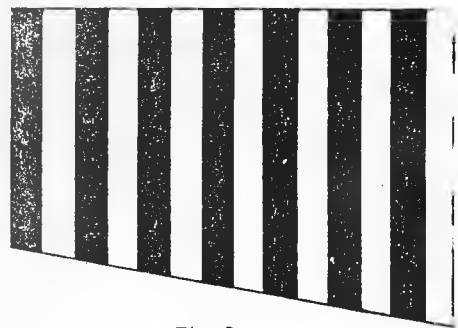


Fig. 2

By William Grundke

On the cover, and on the two color pages that accompany this article, are examples of intarsia, the art of fitting pieces of stone together to form a picture. It is an ancient art form that was known in Roman days and reached a peak of development in 16th Century Florence, Italy. To the gem cutter it offers a challenge, for it requires imagination, visualization and skill. However, anyone who can cut cabochons and lap flat surfaces can learn how to do this work. Or, if you have become involved in today's popular art of making channel jewelry (see article elsewhere in this issue), learning to cut the gemstones to fit into the channels is excellent preparation for intarsia making.

By studying the color photos it can be seen how individual pieces of gem material were shaped and fitted into the appropriate areas of the intarsia pictures. Sometimes a design calls for pieces with straight sides - a geometric pattern for instance; or, an image in a picture, like a building, can require only straight cuts, sometimes strips with parallel sides. At other times outside and/or inside curves must be made. All of these techniques will be covered in this series.

## Selecting a Design

The first requirement for an intarsia is a design or pattern. For the beginner, it is often best to start with a geometric design. The more straight lines it has, the easier the job will be. If you are fortunate enough to be artistically inclined, you can draw your own design. If not, you can find many ideas in publications, especially art magazines. I often use photographs that I have shot of beautiful scenes, buildings, etc. Other sources of inspiration are greeting cards and reproductions of paintings.

Designs can be traced if they are the right size. If they must be enlarged, or reduced, you can use the old method of drawing squares on the design and larger or smaller squares (whichever is required) on a blank piece of paper. Copy the picture by drawing the lines you find in the

original in the appropriate squares on the copying paper. Be sure that your finished copy is a well-executed design with all the necessary lines and connections.

If copying by drawing is unsatisfactory, you can have the design photographed with a camera which makes negatives. The negative can then be put in an enlarger and a photographic print of the desired dimensions made. Perhaps you have a friend who is a photographer, or this work can be done by many camera stores.

Still another possible method would be to use a pantograph, an instrument that operates on the parallelogram principle to copy drawings, etc., reducing or enlarging them as needed. Such devices are available at artists' and draftsmen's supply stores. The average type works reasonably well, but it is quite possible that some touch-up work will be required to make the design completely satisfactory.

Whatever method you use, make duplicate copies of the design. Using a photocopy machine is very satisfactory. The duplicates are carefully cut apart to make templates for the component pieces.

Figure 1 shows a simple geometric design. To facilitate keeping track of the parts, some craftspersons number the templates and their corresponding locations on the master drawings, as illustrated in Fig. 1.

When you cut out the templates,

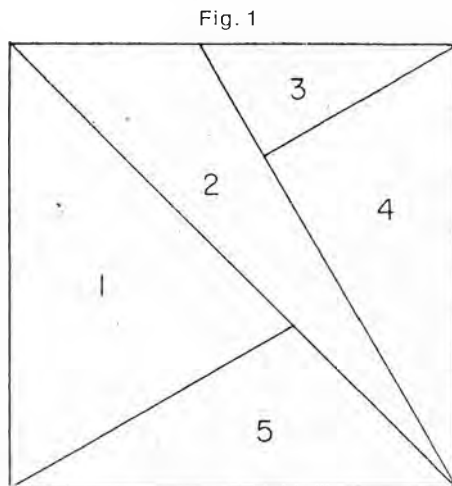


Fig. 1

be sure not to cut off any part of the design, as this will result in a poor fit.

The templates are adhered to the stones with a waterproof adhesive use *Duco* household cement. First an application of the *Duco* is used to attach a template to the appropriate piece of gem material. Next, more *Duco* is smeared on top of the template to give it a waterproof coating. Allow the cement to dry.

In working with geometric designs it is not necessary to use paper templates or tracings on all pieces. Instead, the "direct measuring" method may be employed. Figure 2 shows a striped design made of stone strips of alternating colors. The simplest method for making the strips is to measure their width on the pattern and mark this width on gemstone slabs of the right color. A trim saw is then used to cut the strips. If any are too wide, they can be brought to exact measurement on a grinding wheel. (Sawing and grinding techniques are covered later.) When the strips are cemented together, they form a unit that can be shaped to fit its place in the picture.

## Material

To create maximum beauty in an intarsia, you must have the right gem material for every piece. Select your stones carefully and keep these factors in mind:

1. *Color* - Before starting a picture be sure that you have suitable colors for all parts and that the ones selected are compatible. One difficulty frequently encountered (especially when selecting background material) is finding enough stone of pure, *solid* color. Although not a color, white is a good example. Lots of material look white, but when cut, it comes out an off shade or it may have markings and inclusions. Experienced cutters have found that out of most accumulations of rough gem material, less than half is of suitable color.

2. *Pattern* - Look for patterns that may be utilized to advantage. For instance, in the intarsia of the Grist Mill shown on the first page of color photos, stones were found that had patterns which resembled the leaves on trees, grass, a mountainside and