

Carved Monograms, Cuff Links, Ring and Necktie Holder, Designed by Mr. Sorensen.

HAND-WROUGHT JEWELRY

H. R. Sorensen, Proprietor Orno Shop, DeKalb, Ill.

(Seventh Article)



WE are going to discuss the carving of monograms and of course, this explanation applies to any kind of carving for instance, rings, brooches and interlaced designs of all kinds.

Some very attractive effects can be obtained in the working of wrought jewelry by carving. The work of carving, chasing and engraving is really a separate line of jewelry work, but the beginner can do some very good work by a little practice and patience.

There are many men who specialize in this work and really are classed as artists as it takes good judgment and taste to execute attractive designs. Now, we feel that if a person can manipulate jewelers' tools he undoubtedly can learn to handle engravers' tools.

The first thing to do is to decide on your letters, then sketch a few arrangements of the letters as shown at Fig. 21. The straight line monogram having been selected, the transferring is done in the following manner: A piece of metal about gauge 16 is chosen. This piece of metal should be a little larger than the outline of the monogram. One edge of this metal is filed perfectly straight and it will serve as a guide when the steel tracing is performed. At this point we will make use of the dividers and try square, A and B, Fig. 22.

The dividers are set so the points are about $\frac{3}{16}$ " apart, then a line is traced on the metal using the straight edge of the metal as a guide.

The transparent paper which has the design on it should be placed on the metal so that the outside line of the R meets the line which was scratched with the dividers, then the transferring is done using the carbon paper.

After the transferring has been done all the vertical lines should be traced with the dividers using the straight edge of metal as a guide. The horizontal lines are traced by placing the try square against the straight edge of the metal and using the steel point as a scratcher. If this method is followed carefully, all of the lines will be true.

The drilling of the holes and sawing are the next steps. The sawing should be done very carefully. The lines should not be touched with the saw blade at all. The finishing up to the lines should be done with small files as in previous problems.

Before finishing the filing completely, the monogram should be dapped or bulged on the back at the points where the letters cross each other. This is done on the lead cake by using a small dapping tool C, or

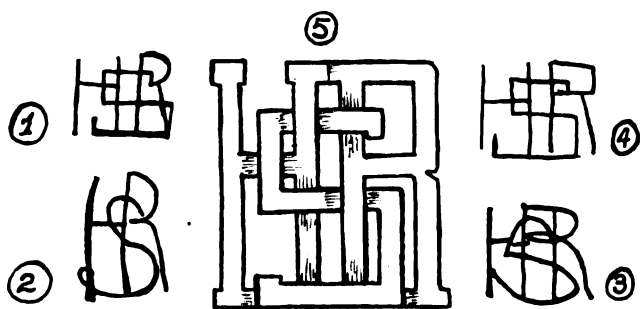


Fig. 21.

repousse tools D, Fig. 22. The interlaced effect will be much better if this is done.

The dapping of the monogram is apt to leave it out of shape, but this can be remedied by annealing the work and placing it on a smooth hard surface, right side up, and tapping it lightly with a hammer. The hammering should be done at the point where the monogram bulges out the most. Now the monogram may be filed true and up to the lines.

At this point the job is ready for carving. In order to hold the work securely it is cemented to a cement stick by slightly heating the monogram and the cement.

Cement sticks can be made very easily. They consist of a round piece of wood about $1\frac{1}{2}$ " in diameter and 3" long with chasers' cement melted on one end E, Fig. 22.

There are only two gravers needed for this kind of work, namely, a pointed or lozenge shape and a flat one, F and G, Fig. 22.

These tools can be purchased of course, but they come without handles and are not sharpened. They are not difficult to sharpen as it is done on an India oil stone by holding the tool at an angle of 45 degrees and using a forward and backward movement, F, Fig. 22.

There are many different opinions among jewelry workers as to the best way to hold the engraver's tool. We are quite safe in saying that there are very few workmen who hold their gravers in exactly the same way.

But nevertheless it is a fact that the handle of the gravers should be placed in the palm of the hand near the little finger and the thumb placed on one side of the graver. Now the thumb or the ball of the hand should be resting on the cement stick and the graver given a forward motion without moving the entire hand. No matter how hard one pushes forward there should be such control as to avoid injury to the work in case the tool should slip. Remember that the thumb should always serve as a guide for the tool, and that the graver can be moved forward for cutting without changing the position of the thumb and ball of the hand.

The pointed graver is the one to use first. It is for the purpose of cutting closely to the line of one letter which goes over the other letter. After that line has been cut the rest of the cutting is done with the flat graver. One can carve at least $1/16$ " deep and about $3/16$ " on the letter which goes underneath, that is $3/16$ " on each side of the top letter.

It is almost impossible to do any carving without leaving traces of the graver. Therefore the marks of the graver are removed either by the use of chasing tools or fine files.

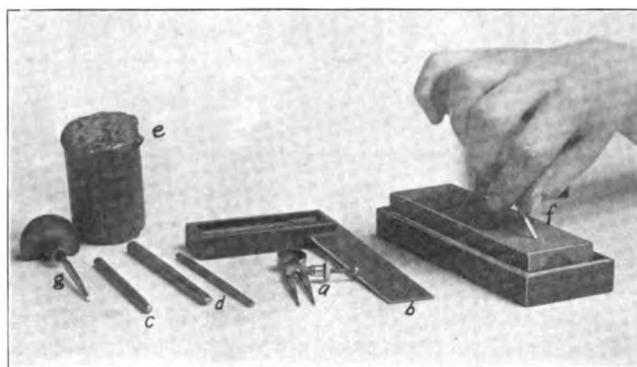
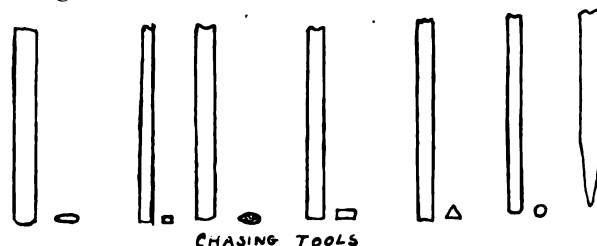


Fig. 22.

What are chasing tools? They are small tools of steel about the thickness of the handle of a needle file. The ends of these tools are variously shaped as shown in Fig. 23. If the workman comes across a place which has an unusual shape and needs finishing with the chasing tool, he very often makes his own tool.

These tools are, of course, tapped with a hammer. Great care must be exercised when doing this work or the results might be too rough.

One can buy an assortment of one hundred different tools but this is unnecessary as this kind of work requires only a few shapes, the most useful being shown in Fig. 23.



CHASING TOOLS

Fig. 23.

Another method of removing traces of the carving tool is by using riffle files and needle files especially the barret and flat file. Riffle files are files with the ends variously shaped for special purposes. A barret file is one that has only one cutting side, the other being smooth to prevent injury to the work. The coarse, flat needle file is a good one to use for the roughest places and should be followed by finer files until there are hardly any unsightly marks.

When the interlaced effect has been obtained, the edges of the letters should be rounded a trifle with a fine file. Then coarse emery cloth is used over the whole monogram, following this with a finer piece of emery cloth.

To remove the monogram from the cement it is heated slightly. The cement can be removed by placing the whole thing in alcohol for about fifteen minutes. When taken from the alcohol the article should be brushed lightly with a brush dipped in alcohol, to remove any cement which may still cling to it.

In order to eliminate all scratches, a polishing lathe is often used to a great advantage, but a fine emery finish is quite satisfactory. A piece of wire is soldered to the back so as to receive the ribbon. The oxidizing is done in the usual way using commercial sulphurated potash.