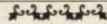


## Hints on making Scale Models of Monuments

By Leonard V. Huber



Very often one will run up against a prospective customer so lacking in imagination that he is utterly unable to perceive from a perspective drawing or from scale drawings just how his memorial will look. In a case as this, it is advisable, if the size and price of the work justify it, to make a scale model in either clay, modeling wax or plaster. A model will enable the unimaginative client to see how his memorial will look; it will generally land the order for the craftsman submitting it for it will flatter the customer's vanity to have a model of *his* memorial submitted. It will make the customer feel that the dealer knows his business, too, and that is a decidedly good state of mind to get the customer in.

To model objects such as monuments that are not too elaborate or too complicated in design is not a difficult matter for the average draftsman in a memorial shop. To begin with the object to be modeled is drawn to scale. A ground plan is drawn on a board (an old drawing board is generally satisfactory) and the necessary materials and tools assembled. The cheapest material to use is modeling clay; this material is easily worked but must be kept damp constantly by keeping it covered with moist cloths. If for any reason the work is to be stopped or on its completion, it should be covered

with damp cloths; failure to do this will cause the clay to dry out and crack, thus spoiling the model. Modeling wax is far more satisfactory as it does not require this attention. It is considerably more expensive however, and its use may be dispensed with when one wants a permanent model in plaster. In this case it is best to model in clay and cast the model in plaster.

Modeling tools are simple and may be obtained at little cost from a dealer in artists' supplies. If not obtainable makeshifts can be made of stiff wire bent into triangular shape, the ends being left long enough for fastening into a wooden handle. A penknife is also useful. A good procedure in modeling a monument is to make templates of the die and base in stiff detail paper to the scale selected. These will materially aid the modeler in his work. If the base is to be moulded a template of thin tin should be cut to the desired shape and this passed over the clay until the desired moulding has been run. Surfaces may be made smooth with the knife or like object. Ornament can generally be indicated for it is extremely difficult to model in small scale. The name may be engraved with a stylus or sharp-pointed pencil. The scope of this article is limited to suggestions and the technic of modeling may be best learned by experimentation. Modeling



is very interesting and the joy of watching the thing grow under one's hand is fascinating.

Sometimes it is desired to keep the model for a permanent display—such things making a good appearance in the showroom—and it is then necessary to cast the model in a more permanent material. Plaster of Paris is generally used and the procedure is as follows: the clay or wax model is coated with a mixture of green soap and olive oil, (half-and-half). This should be done with a camel's hair brush and all surfaces covered. A piece of thin strong wire should be pressed into the soft clay or wax so that it conforms to the shape of the model. This wire should be placed so that when the mould is cast by pulling the two ends before the plaster hardens the mould will be separated into two halves. The wire should be placed approximately along the center of the object to be cast and the ends left long enough to grasp. Next take the model to the shop or back yard where muss isn't minded and prepare the plaster. Into a bucket three quarters full of water shake the dry plaster a handful at a time giving each handful time to settle to the bottom. Do not stir or agitate in any manner and continue to place the dry plaster into the bucket until it is apparent that the water will dissolve no more. Then splash the liquid plaster over the model a little at a time until it is entirely covered and of uniform thickness, ( $\frac{3}{4}$ " will do). Wait until the plaster has set, probably 15 minutes being required though some plaster sets much faster and some much slower. Before the plaster is rock-hard but after it has hardened to firmness grasp

the two loose ends of the wire and pull them upward with a firm, even pull. After the wire has been removed the moulds, for that is what they are, should be allowed to harden for a day.

After the moulds have reached sufficient hardness, they are gently pried apart. During this process the original clay model is usually ruined beyond repair. The two moulds are then cleaned out with a soft brush and all clay removed from the plaster. The interior surfaces are then given a coat of the soap-olive-oil mixture and firmly bound together in the correct positions. Plaster is mixed as before and this is poured into the inverted mould and allowed to harden. After being allowed to harden for a couple of hours the mould is gently broken off and the plaster cast comes to light. It is advisable to use a small marble lettering tool to chip off the plaster of the mould and care must be exercised not to chip too deeply and injure the model.

After casting, the model may be finished off with a penknife and fine sand-paper and air holes, if these are present, filled with fresh plaster. The model should never be gone over with water or a damp rag as this will bring out innumerable air spots. If the model is realistically placed against a background of miniature shrubs which may be fashioned from sponges dyed green, it will usually prove quite effective and help land the elusive order.

The modeling of mausoleums is not so simple and requires a great deal of patient work. A model of a mausoleum will sometimes take over a week to complete but if it strikes the customer right it is a powerful aid in getting the order.