

Here is a method I have been using to make figures, scrolls, etc., for my model circus wagons.

It requires no special tools, materials or hard to get items, and, best of all, it produces figures that are all alike in shape and size. If you are copying a particular figure then you must carve or have carved only one figure to use as a form, cast the rest and you can make as many as you need.

If you are designing your own wagons there are many things or portions of them that you can use for forms for corner figures or columns, decor for the sky board or mud board.

In this article I will try to show you how I made the figures shown in Photo #1. I made these four figures for the corners of a cage wagon I am building.

To start your project, from a Hobby or Toy shop, get a box of modeling clay (get the drier kind as some clay is softer and wetter and doesn't work as well.) Then from a paint or hardware store get a can of rock hard water putty.

The form for the figures shown, is the stem section of a candle holder with the glass top and the base stripped away. It measured 5 1/2" in length, just right for my scale of 1". It was part of a set of three holders, one larger and one smaller. The smaller one would work well for 5/8 or 1/2" scale. These were found at a rummage sale for a dollar.

Now, for the first step, work the amount of clay you will need, in your hands until it is soft and pliable. On a flat smooth surface place a sheet of wax paper, and roll out the clay much the same as you would a pie crust to a thickness of about 3/16 of an inch. For a roller I used a piece of 1" dowel. Trim the clay with a knife to a size long and wide enough to envelope the form you have chosen. Dust the form lightly with Talc



Photo 1

to help keep it from sticking in the mould.

Wrap the clay around your form, a little more than half the thickness of your form. In this case, I made the figure flat backed, and mounted them on a wood corner panel. If you want a full figure, make a mold for the front and back halves cast, smooth the backs and glue together. When putting the clay on the form, press it on firmly with your fingers, being sure not to miss the deeper parts of your form.

Now with your fingers, peel the clay away from the top and bottom of the form just enough to loosen it. [See Photo #2]. Do the same along the sides, and wiggle or roll the form until loose and lift out. Carefully replace the form in the clay mold and press the clay loosely around the top and bottom and sides where you

peeled it away.

This will restore the shape of the mold in these areas. Lift the form out, careful not to bend or break the mold. If you have trimmed the edges of the mold carefully, it should lay tight on a smooth surface. The mold is now ready to be filled. Lay it open side up on a flat board. At this point put a piece of masking tape across the top and bottom of the mold to close it. It may sag or bulge out when you fill it, but won't matter as the top and bottom can be trimmed flat later on.

In a small dish, mix enough rock hard putty to fill the mold. Mix to a smooth creamy texture. Do not use too much water as this tends to make bubbles in the finished job. I have found that the thicker the mix, the less bubbles. Make is so it will flow into the mold. The thicker the mix the quicker it sets.

Figure Casting

DATE: None

SCALE: 1" = 1'

SCANNED & REVISED:
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Circus Model Builders

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You may have to experiment with this to get the right mix. Should there be small bubble holes in your figure when taken out of the mold, you can fill these and smooth off with your finger. Before you fill the whole mold, take a small brush or stick and fill the tiniest points, such as the chin, eyes or nose, first, making sure they are filled and no air pockets under the plaster.

Work fast and fill the mold to the top and smooth off the back. When filling the mold puddle the mix in gently. This helps get the plaster into all the folds and indents in the mold as well as to eliminate bubbles.

Now that it is filled and smoothed off, lay it aside and wait 20 to 30 minutes or until the plaster is solid to the touch. This is what I call a green casting, as it is not fully hardened and appears to be damp. Remove the casting from the mold in the same manner as you did the form. At this green stage, you will find that the plaster can be shaved with a sharp knife.

It cuts or shaves about like you were shaving a bar of soap. This is the time to level off the top and bottom and to trim away any slag around the edges. If you wish, you can let the casting, fully dry until hard, and trim and level with sandpaper or even a file. When green the work is easier and faster but the casting can be broken easier, too. When fully hardened and you are ready to mount the figures on your wagon, check to see if the back is flat.

You can do this by laying a straight edge the full length of the figure and noting any difference between the straight edge and the figure. If you find any low places they will most likely be in the center section. If this is the case, take a file somewhat longer than the figure and cradling the figure, gently in your hand, file the full length in even strokes, checking often with your straight edge. You may find after filing, that the top and bottom are fairly flat, but you still have a gap in the center.

To correct this, when you are ready to mount the figure, mix a little

plaster rather thin and mix in a little Elmer's glue, mix well and butter on the low places, position the figure on your wagon, press gently until it lays flat for its full length and clear away any paste that oozes out along the edges and let dry.

Now that you have completed your figures and put them in the proper places on your wagons, give them a coat of white shellac. When this is dry, gild, silver or paint them out in colors, whichever fits your scheme.

I have made many figures, scrolls and trim for my wagons this way. Some of this trim can be seen in the top part of Photo #1 above the

figures.

This is not really a hard system to master but should you fail in your first effort, try, try again. My first ones were not so good either.

Happy Molding!

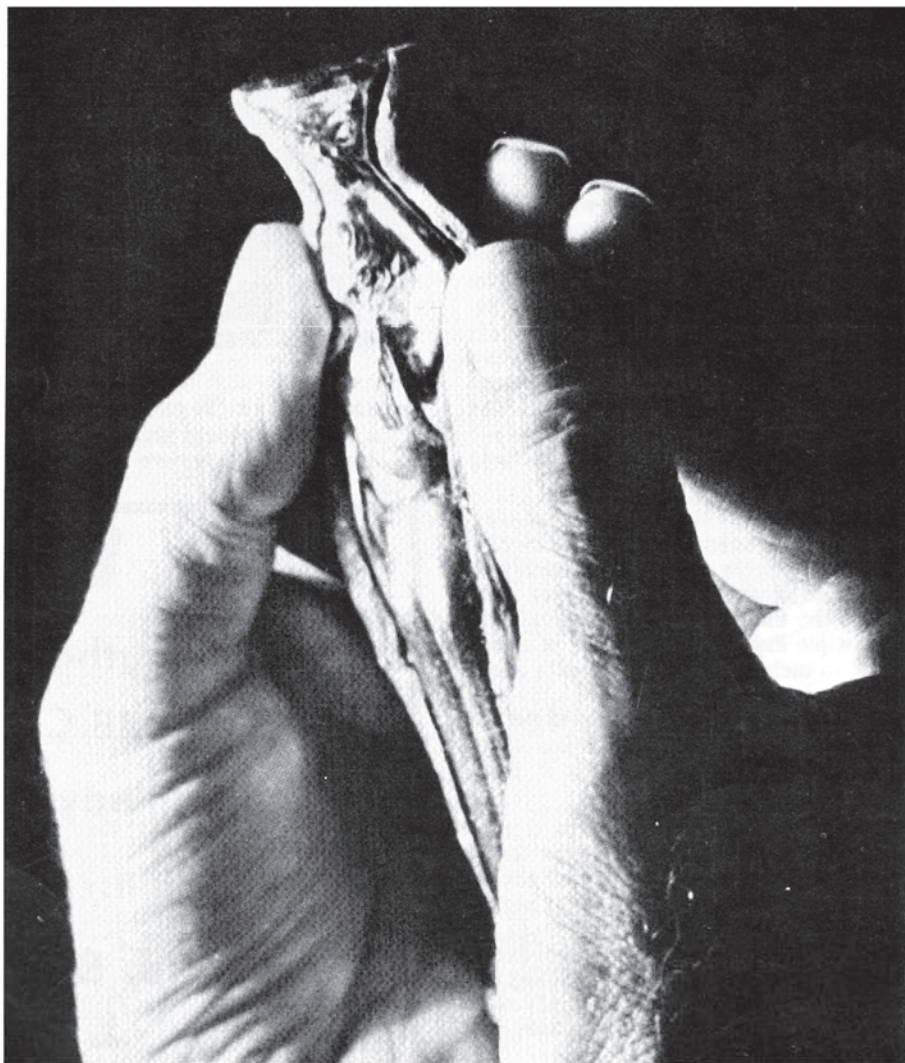


Photo 2

Figure casting