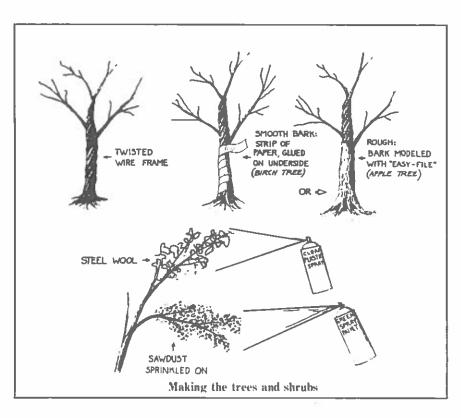
Add a dark brown to the bottoms and sides of the boards to get a worn look. All these effects in painting are a little difficult to achieve, but with practice can be brought about quite realistically. This leaves only the application of shrubbery or small trees around the edges of the building to complete the setting.

An old building usually has bushes growing up around it and a model such as we have described would look too bare and incomplete without an attempt to recreate some of its surroundings. Small trees or shrubs are quite easily made and again the best instrument is a good eye to see how they grow.

Get some rather fine wire a little smaller than snare wire and cut it into several dozen pieces about five inches long. Take eight to ten strands and twist them together at the bottom for about one-half inch. Start bending one strand at right angles to the rest and then continue to twist for a quarter inch. Bend out two more strands opposite the first one. Continue this process, pulling out strands all



around the tree, until finally only one or two are left. These strands that have been separated must now be twisted together themselves. The wires should be clipped shorter as they near the top. If the wires are bent and twisted in a correct manner. the form of the tree can be seen. The tree trunk is wrapped with a thin strip of white paper glued on the underside for a smooth bark tree such as a birch. For a tree with a rougher bark the wire is covered with a modelling compound called "Easy File" Body Fill. This is a type of plastic used in auto body repair work, and can be obtained in hardware or auto supply stores.

Finally, obtain some fine steel wool, shred a small

amount out sparsely and apply it to the branches. To finish the foliage a couple of cans of spray paint are needed, one clear and one dark green. The shrub now containing steel wool is sprayed with clear spray and while the paint is still wet, fine sawdust is sprinkled over the shrub, care being taken not to let it fall too thickly. After this has dried the foliage is sprayed green. Hold the tree well away from the spray can when spraying. Now the shrubs (for several will be necessary) are glued in holes drilled previously along the edges of the foundation. After the shrubs or clusters of shrubs have dried in place the model should be almost complete. Other additions might be a pile of old boards lying next to the foundation, an old wagon wheel or plow.



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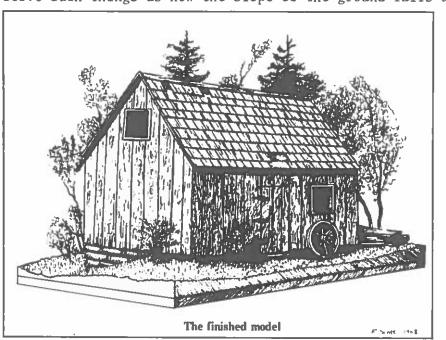
Modelling Buildings

by David Coldwell, Modelmaker

drawings by Fred Scott

Model making does not have to be confined to models of ships, cars, and airplanes, but can cover a vast range of subjects. For instance, how many modelers have ever considered the possibility of making a model building, such as an old grist mill, an abandoned farmhouse or a team of oxen plowing a field, complete with human figures? You can construct models of trees, people, wagons and buildings, then combine them into a composite set which is very appealing. For the person who has the desire to do this but does not know how to go about starting such a project, I would like to set down a few points to follow.

Suppose that a scene showing an old barn and its surroundings is to be constructed, with tall grass growing around it, boards missing here and there, and a couple of wagon wheels leaning against a weather-beaten wall. The first step would be to find such a building still standing, if possible, and take pictures of its four sides. Have a person stand against the wall to give an idea of scale. Often measurements will be necessary, and you should record any other observations, such as colours and the general state of the building. Try to observe such things as how the slope of the ground falls away, how high the grass



is, whether the roof has a sag or the walls lean slightly. You may notice the chimney is not brick red but rather a dirty brown and grey. Are any bricks missing? What about the old hay rake leaning against the east wall, or the old sleigh with grass growing up through it? All these things help to tell a story and add interest. just as in a painting. Your extra work in modeling them will be well worth while.

Equipment

The tools and equipment needed are few: a good jackknife or carving knife, a sanding block about 1" x 2" x 3", scissors, tweezers, several small drills and some small, good quality artist's brushes. Pinchers and wire cutters may sometimes be needed as well.

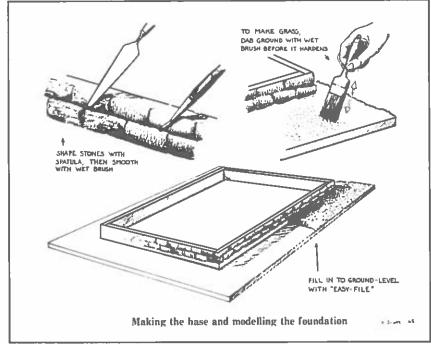
Basic supplies include bondfast glue, household cement, an assortment of pins, wire and thread, both water and oil base paints, and papier maché or Polyfilla. The wood that I have found to be most satisfactory in quality as well as cost is white pine. Take good, straight-grained pine and cut it in strips on a circular saw with a planer blade. Basswood has modelling qualities similar to pine; balsa is useful when carving thick objects or for rough, loose construction; mahogany is suitable for dress work on some ship models.

Procedure

Cut a plywood board so as to give a good three or four inches clearance around the model. It is on this extra space that a margin of interest can be added to enhance the subject. The foundation is then made by glueing strips of wood about 1" x $\frac{1}{2}$ ", on edge, to the main board. The dimensions of this foundation should be slightly less than that actually desired, for over it papier maché or Polyfilla will be modelled to represent stonework. This modelling of stonework is tricky. Basically, the Polyfilla is modelled over a wood form about $\frac{1}{4}$ " thick; then, following a good picture of a stone formation, individual stones are shaped with a spatula or knife. After this is done the shaped stones are gone over with a small brush to soften or round the edges. Finally, a bristle

brush can be used to texture rough rocks (such as granite) by repeatedly touching the Polyfilla with the points of the bristles. The stone work should then be allowed to dry and finally be painted with a different tone for each type of rock.

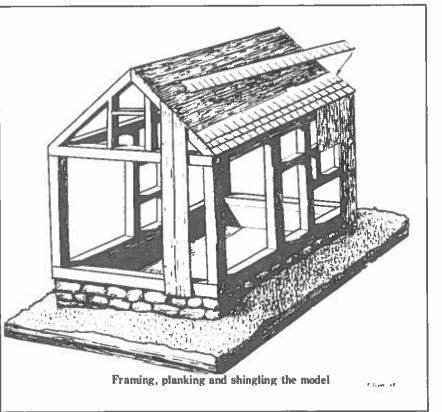
The surrounding margin of earth can be modelled at this time. This is done by adding material to slope away from the stone work and to give slight rises and hollows to suggest the contour of the land. One way to get the effect of grass on this slope is to "lift" the soft Polyfilla with a ½" bristle brush



which is dipped in water and then dabbed over the surface of the material. The material is then allowed to harden and is painted a grass green colour.

Now the construction of the actual building can be started by erecting a skeleton of the structure on the foundation wall. This should be done according to the method used in the actual building, fitting in frames for doors and windows.

The boards, which have been cut to scale, about 1/8" thick (some wide, some narrow) are glued over this frame. Often when an old structural effect is desired I take a jackknife and whittle the edges of the board, especially in the places of most wear such as the bottoms, and in doing so give a rough hewn effect. The boards are put on vertically. Occasionally a short and long board should be com-



bined for variety, when a barn or shed is built. However, if a building is shingled, quite often the boards will run horizontally. Usually the windows and doors are boarded over and cut out later. After this is done the doors and window sashes are added.

In making the roof, I would again suggest that the rule to follow is to try to duplicate the original method of construction. The roof will be boarded over and shingles added.

The shingles are made by cutting strips of thin cardboard or wood and glueing them horizontally on the roof, starting at the bottom and working to the top. The shingles must overlap each other by a small amount, as seen in the sketch. These strips can be cut with a sharp knife to break them up into individual

shingles, after they have been securely glued in place.

Doors, windows and other small details can now be made and fitted to the model. Any items of metal work, such as door hinges, can be made from thin cardboard and glued on in their respective places.

It is the final painting that either enhances or ruins the model and for this reason one cannot be too careful. I use what is called the 'dry brush' method of painting models that are to look old and weathered. The building is first painted with casein water paint in a driftwood grey to simulate old wood after years of exposure. Over this add a color which is that of the building when last painted. This will be put on in occasional places only, with other places left bare or grey.

Sometimes a wash of brownish black can be applied over all, wiping off the high spots and allowing it to stay in the cracks. This helps to create depth and shadow. The aging of metal parts can be best done by first painting the hinge or latch a dull black and then adding a reddish brown color in the form of fine streaks below the metal, as if rusty water had run from beneath the hinge. Also spots of the same color are added to the hinge itself. The entire metal hinge could be painted in a rusty shade.