

BY: TERRY GRACEY
ST. JOSEPH COUNTY

Metals

Tin punch is worked on a variety of metals — copper, aluminum, and brass, as well as tin. The type of metal used depends on the desired end result. Shiny copper might be your choice, or perhaps you prefer the dult luster of pewter. Each metal has certain special qualities and after metal is punched, various finishing techniques can be applied to enhance or change the metal surface. As you learn how to punch, try all the different metals and finishes to see what effects you can create.

Metal is available in different shapes, sizes, gauges and finishes.

Craft stores carry a nice selection of pre-cut flat pieces in varying shapes and sizes from a square as small as 4" × 4" to a large piece 8" × 19". Check to find out what sizes are available. If you need a different size or shape, the pieces can be trimmed to size. Decorative pie plates for tin punch usually are available at the same store.

On flat goods, gauges vary from very thin (.005) metal to medium (.008 – .020). The .005 gauge metal is called tooling foil, and because of its lightness, there are some simplified punching techniques that may be used when working with it. Usually tin and aluminum are about .008 to .011. Copper is often thicker, .016 to .020, because it is too soft in the lighter gauge. Most craft stores carry brass only in the tooling foil.

Copper

Copper has a warm glow that beautifully accents many decorating schemes. It has a bright, shiny surface that left untreated easily tamishes and shows fingerprints. To keep the shiny look, it is cleaned, then sprayed with a clear satin acrylic spray (see Finishing Instructions). Once spray finished, it doesn't have to be polished — a definite plus! If you prefer a dull rather than shiny surface, copper may be antiqued or sprayed with a matte finish.

Tin

Tin is one of the more common metals found on antique punched pieces. If you want an Early American, rustic look, tin is a good choice. It's available in shiny or pewter tone finish, each of which may be antiqued to add the look of age. It is quite difficult to remove fingerprints on some types of tin, so touch it as little as possible or wear gloves while working. If prints do show, clean and finish the same as copper.

Aluminum

Aluminum looks very much like tin. If you can't tell which is which, use a magnet, it won't stick to the aluminum. For the projects in this book you may use tin or aluminum interchangeably.

Tooling Foil

Tooling Foil is available in craft stores in rolls of 12" × 36" sheets. It's very light and flexible, so it works fine for small projects, but must be backed with wood or cardboard if used in larger pieces. It is commonly available in aluminum, copper, or brass, but it can also be found with one side colored in red or green.

There are advantages to using tooling foil. It is cheaper, and being so light it is easier to cut. Regular punching techniques may be used on it as well as easy-to-do methods, making it an excellent children's craft. The edges of metal can be sharp, so be sure that children always use gloves when working with metal. Outside edges can also be covered with masking tape as an added protection.

Tooling foil is so pliable that it winkles easily. To smooth wrinkles out of tooling foil, work on a hard flat surface. Cover foil with a piece of thin cardboard and smooth lightly with a burnisher or other flat tool. Do not rub directly on the foil and do not work on a soft surface.

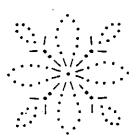
To use foil for punched designs and projects needing a heavier look to the metal, draw shape of project on back of thin cardboard. Trim cardboard to size slightly larger than the shape and glue piece of smoothed out foil to front of cardboard with craft glue (marked for use with metal). When glue is dry, cut out shape with scissors, following outline on back of cardboard. Punch design as for heavier metals. Finish as desired.

Cutting Metal

To cut metal, use tin snips or scissors (an old pair, not your favorite dressmaking shears!) Be careful. Protect your eyes with glasses and your hands with gloves while cutting. Cotton gardening gloves work well and also prevent fingerprints from marking the metal.

Using Patterns

Patterns are printed on both sides of pages, so do not punch through them which will destroy the design on the other side. Transfer desired pattern onto tracing paper with a medium felt tip pen. Distinguish between large and small dots and lines. They will be punched differently on the metal. A traced pattern should be used only once. After holes have been punched through a pattern, it is not as accurate when used again. Also, when your pattern is full of holes, you are apt to miss a few the second time around. If you are planning to make more than one project with the same design, trace a new pattern for each project.

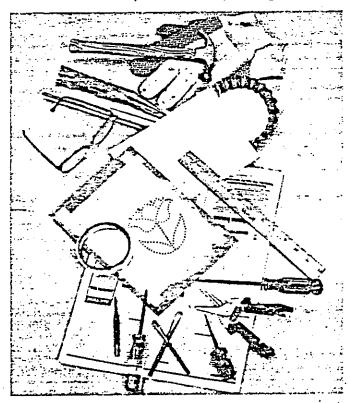


Punching .

Basic Supplies

Metal – sheets or pre-cut pieces of copper, tin, or aluminum; rolls of copper, aluminum, or colored tooling foil; decorative pie pans rieavy Cardboard – to work on Masking Tape – to hold metal and pattern in place on cardboard while punching Pattern – traced from book Ruler – for positioning pattern on metal Lightweight Hammer Tin Snips or Old Scissors Punches – awls, screwdrivers, small chisels, nail sets, nails, etc.

Newspapers – to pad work surface Gloves and Glasses – protection while punching



Surfaces

The surfaces of punched metal pieces can vary from rather smooth with small holes and indentations to a puffy and almost padded look with large holes and deep ridges. The size and shape of the holes and lines are affected by what metal and punches are used, how often and hard punches are tapped with hammer, and variations in working surface.

The lighter the metal, the less depth it will have when punched. Lightweight metals such as tooling foil generally have a flatter appearance than punched heavy metals. The punches penetrate the tooling foil easily and do not distort the surface. Punching on heavier metals accentuates the thickness of the materiai and produces a padded, quilted effect. Sharp punches add more depth than very flat tools. A sharp screw-driver will pierce the metal while a dull one often just makes an indentation.

The harder and more often you hit the punch with a hammer, the larger the hole. However, three gentle taps might produce the same effect as one hard tap. To find out how you can achieve different results, you must practice and get the feel of tin punch before you start an actual project. Use different scraps of metal, tools, and methods following the techniques listed and develop your punching skills.

We suggest using protective eye coverings while punching and gloves when handling metal with sharp edges.

Practice Punching

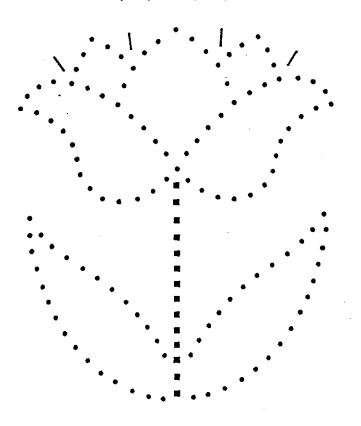
Step 1. For a workboard, use a heavy piece of cardboard larger than project you will be making. Place several layers of folded newspaper between cardboard and work table. The papers will protect your table and will help to muffle the noise as you punch.

Step 2. Trace practice pattern below, following instructions for Using Patterns on page 1.

Step 3. Select a piece of pre-cut metal, $4" \times 5"$, or cut a piece to your specifications. This is for practice only, so don't spoil a large piece of metal by working in the center.

Step 4. Using masking tape around the outside edges, fasten metal securely to cardboard work surface.

Step 5. Center traced pattern on metal, using a ruler to check placement. Remember, once you start to punch, you can't erase, so position pattern exactly where you want design to be. Use masking tape to hold pattern in place. Leave one edge of pattern untaped to lift and peek at work as you go along to check the results of your punching.



Step 6. Now the real fun begins! First, select an awl or nail and practice tapping once, twice, or three times gently with hammer, looking each time to see what marks are being made on the metal. You'll see that with each tap of the hammer, the hole gets bigger and more pronounced. Now, try hitting harder, and check the holes. A gentle tap may just make an indentation in the metal; a hard punch may pierce through. Decide what effect you are trying to achieve, and try to make three or four holes or indentations in a row all the same size. Establishing a tapping rhythm will help to punch holes that are uniform in size and depth. Do not be too overly concerned if all holes are not exactly the same. Tin punch is done by hand and does not have a machine-made perfection. That is what gives the craft its charming, quaint quality.

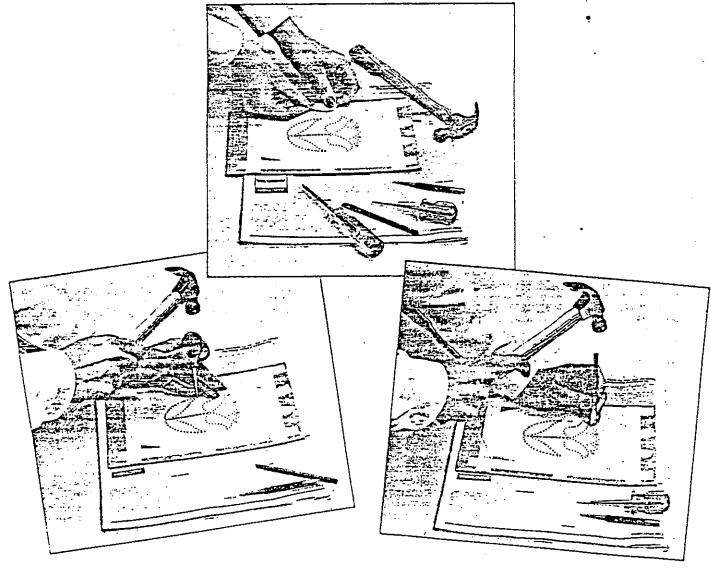
Step 7. Now, practice with the other types of punches. Notice that the chisels and sharp screwdrivers make lines instead of round holes, and the dull screwdrivers just dent the metal. A combination of dents plus holes can make a very interesting pattern. Use round punches for the small holes, chisels or

screwdrivers for the lines, and Phillips screwdrivers for the square punches.

Step 8. If you are using tooling foil, there are some easy-to-do techniques in addition to regular punching methods. To punch small holes, just push an awl through metal; no harmer is needed. To indent, rather than pierce the metal, use a ball point pen or pencil. Push down hard and trace pattern onto metal. Children love to tin punch using these easy-to-do methods!

Step 9. Continue to practice punching until you become comfortable with the process. If the metal seems to be bending out of shape a bit, don't be alarmed. No harm is done. Just check to make sure that your pattern has not shifted out of place.

Step 10. When design is finished, always check to make sure no holes have been missed before removing pattern. Leave metal taped to cardboard while applying finishing and sealer coats.



We have made every effort to ensure the accuracy and completeness of these instructions. We cannot, however, be responsible for human error, typographical mistakes, or variations in individual work.

Finishing the Metal

Supplies

clear acrylic spray – satin or matte finish brown oil-based antiquing stain or glaze transparent glass stain, assorted colors turpentine or paint thinner brushes rags and/or paper toweling

Different Effects

There are different methods for finishing and sealing tin punch work. Individual taste will determine the look you want – shiny, matte finish, antiqued, painted, etc. There will be variations in results within certain techniques depending upon how much and how long finish is applied and individual handling of material. There is no right or wrong way for finished metal to look. Practice and play around with all the methods using scrap metal until you get the results you want.

Before any finish is applied to metal, punched surface must be clean and free from tarnish and fingerprints. Use a soft cloth moistened with turpentine or paint thinner to wipe surface clean, using long strokes in one direction.

If you like the look of the punched metal without any antiquing or painting, just spray surface with a coat of clear acrylic for a shiny finish, or a coat of matte spray for a dull look. This will seal and protect metal from tarnish and fingerprints.

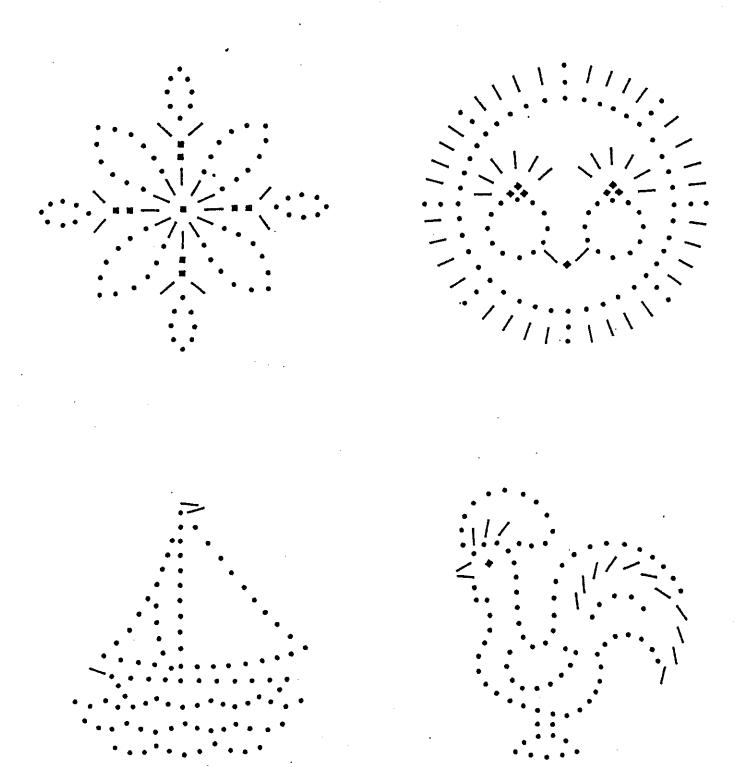
To "antique" metal, paint surface with a coat of brown antiquing stain or glaze being sure to get glaze down into holes. Let glaze partially dry (about 1 or 2 hours) then wipe lightly with a cloth or paper toweling. Stroke back and forth over metal removing a little glaze each time until desired effect is achieved. You can wipe off all the glaze just leaving the holes dark, or you can leave more glaze on surface for a more antiqued look. If you wipe off too much, brush on another coat and repeat. Let glaze dry thoroughly overnight, then spray with a sealer coat of clear or matte finish acrylic.

If you are going to paint any areas of the metal, you may paint first then seal with acrylic spray, or paint then antique and seal. Paint may also be applied after antiquing and sealing. Let every coat of paint, antiquing, or sealer dry thoroughly between coats. Use a brush or sponge applicator to apply transparent stain to desired areas.

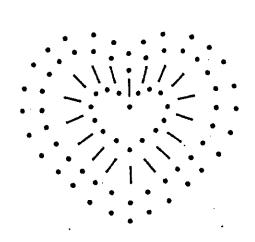
Mounting

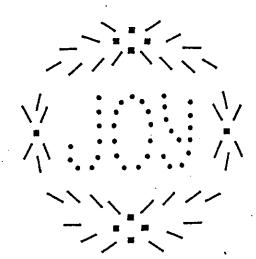
We show many different ways to mount and show off your punched metal projects; in frames, on plaques, hung from ribbons and wooden rods, and decorated with lace and ruffles. See the individual projects for mounting instructions.

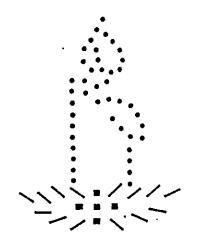
Mini Pan Pictures

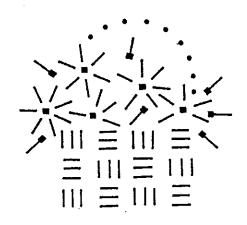


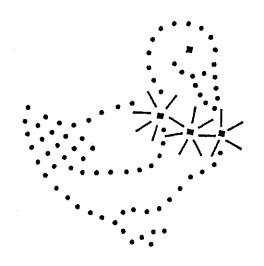
Christmas Ornaments



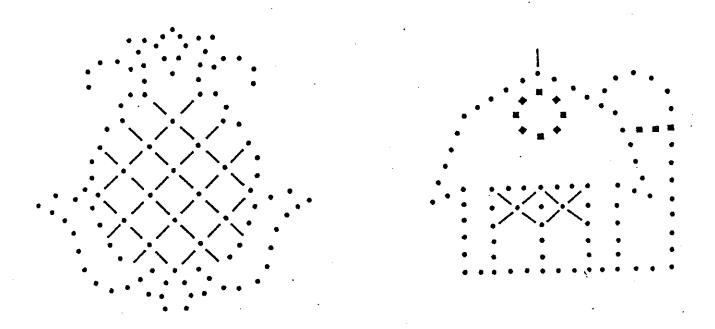


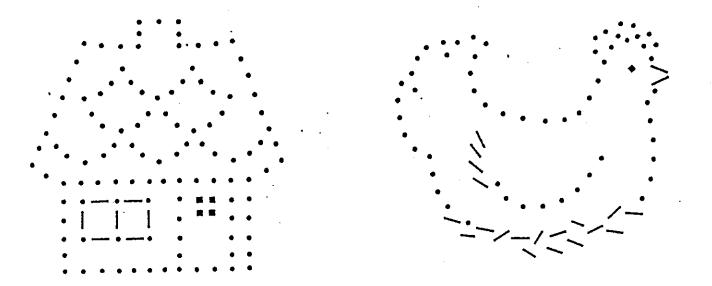


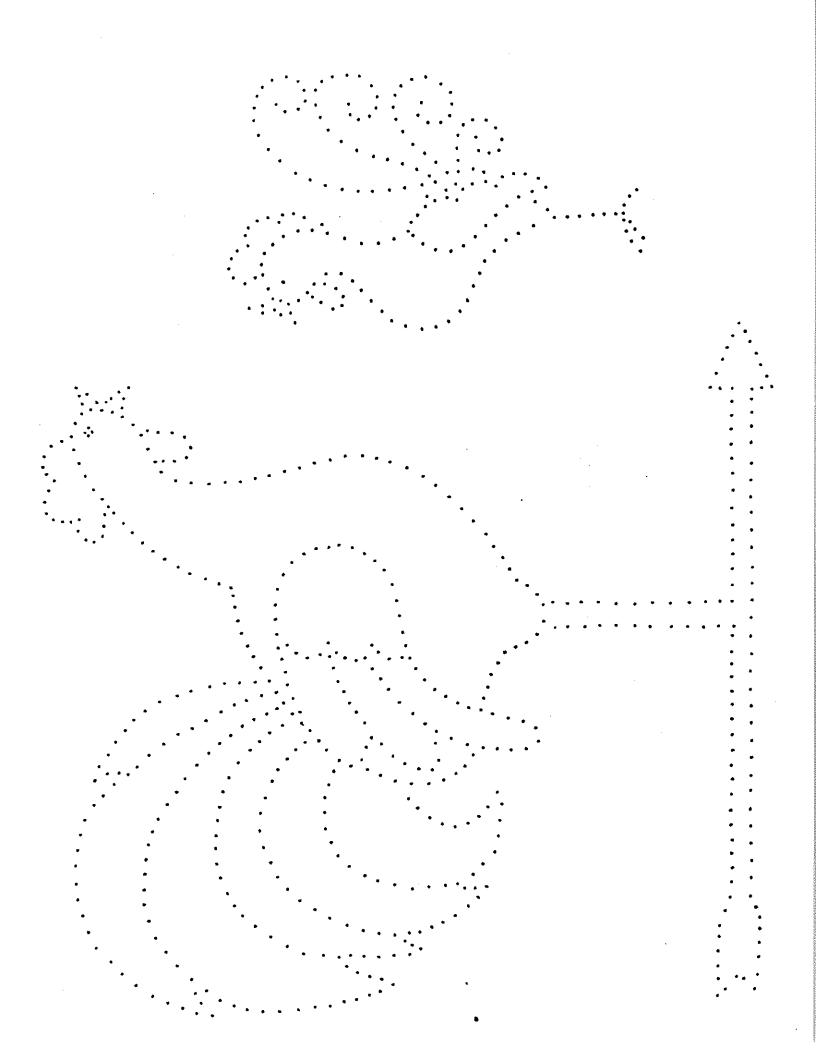


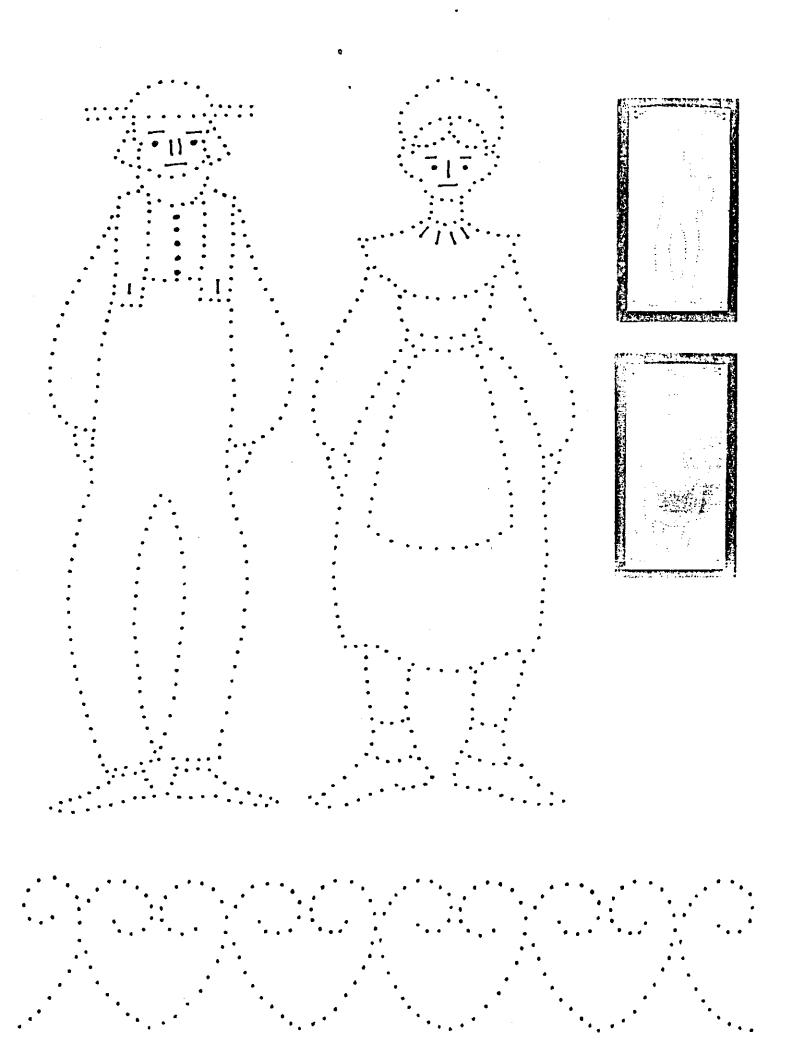


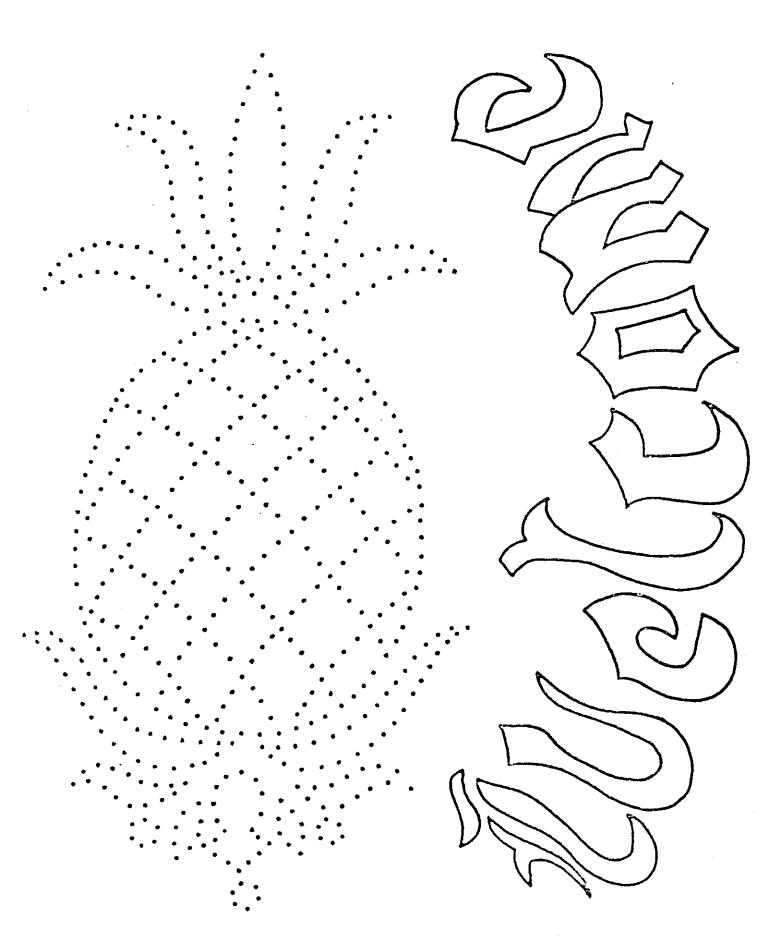
Trio of Pans



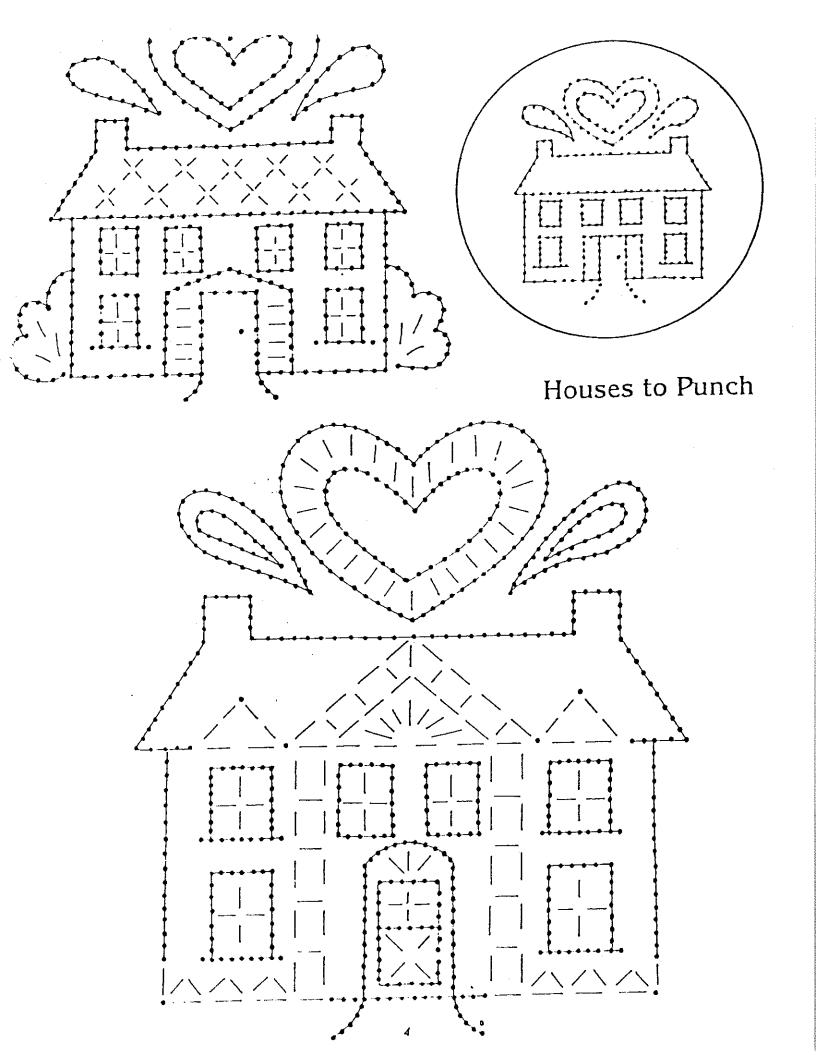


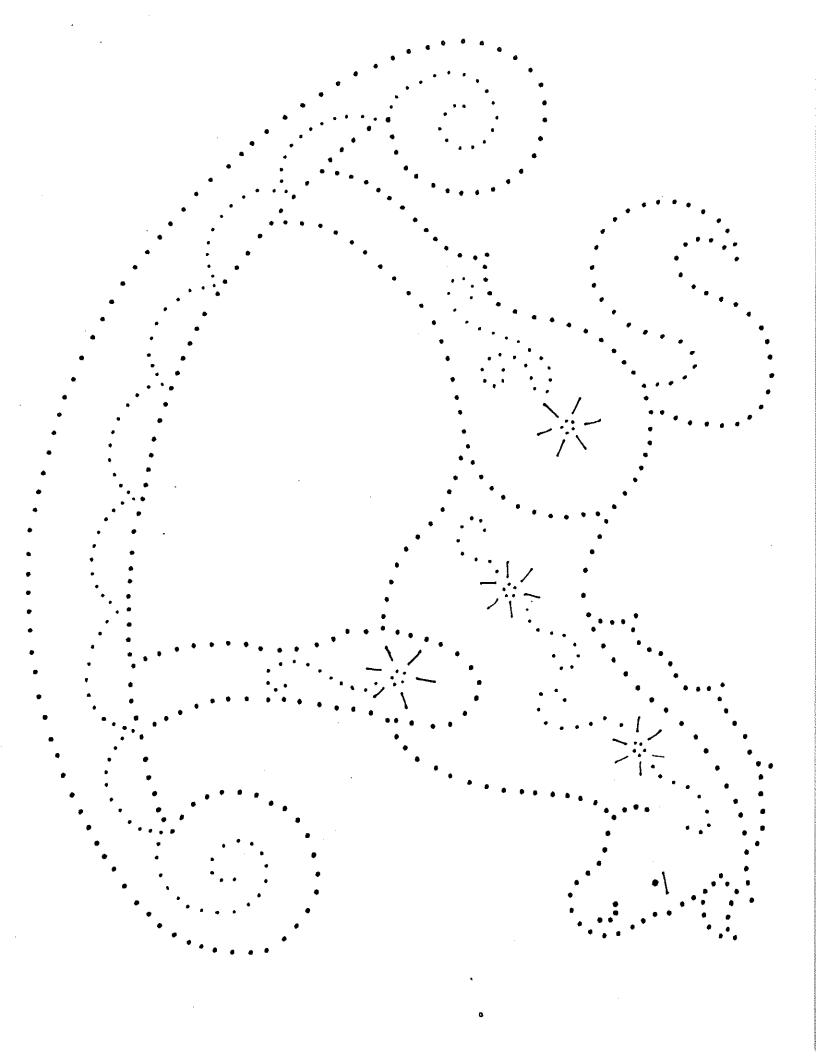


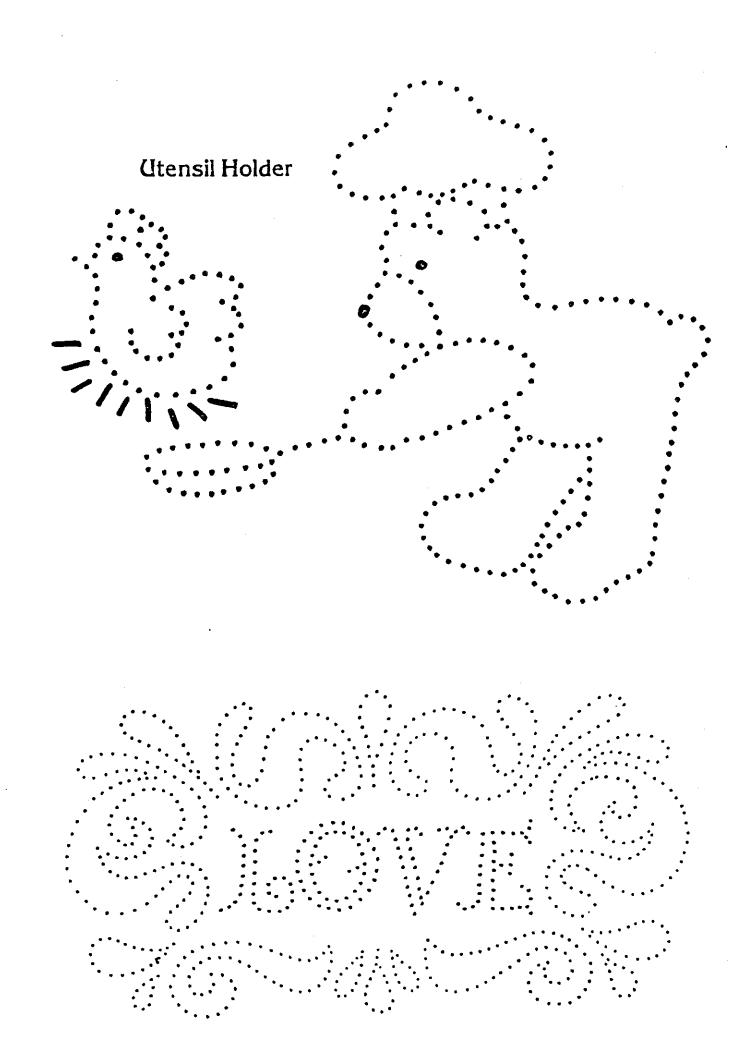




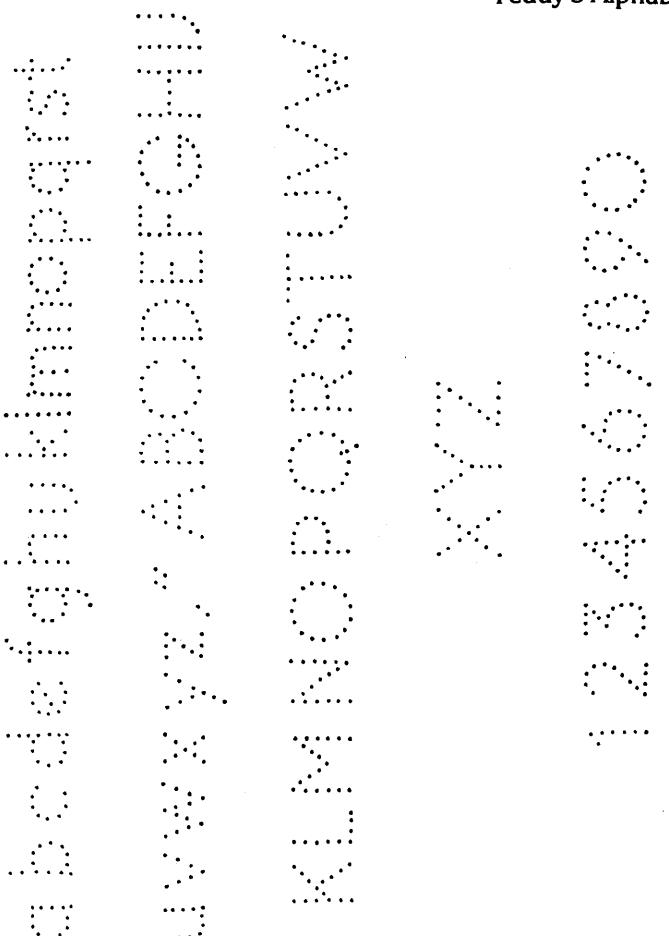
jointing pottern for WELECME board

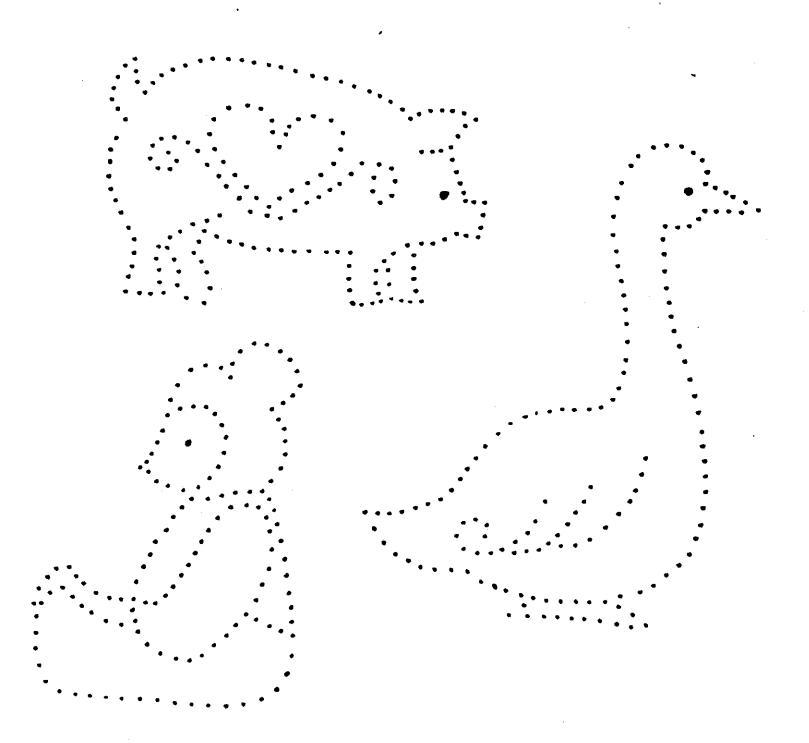




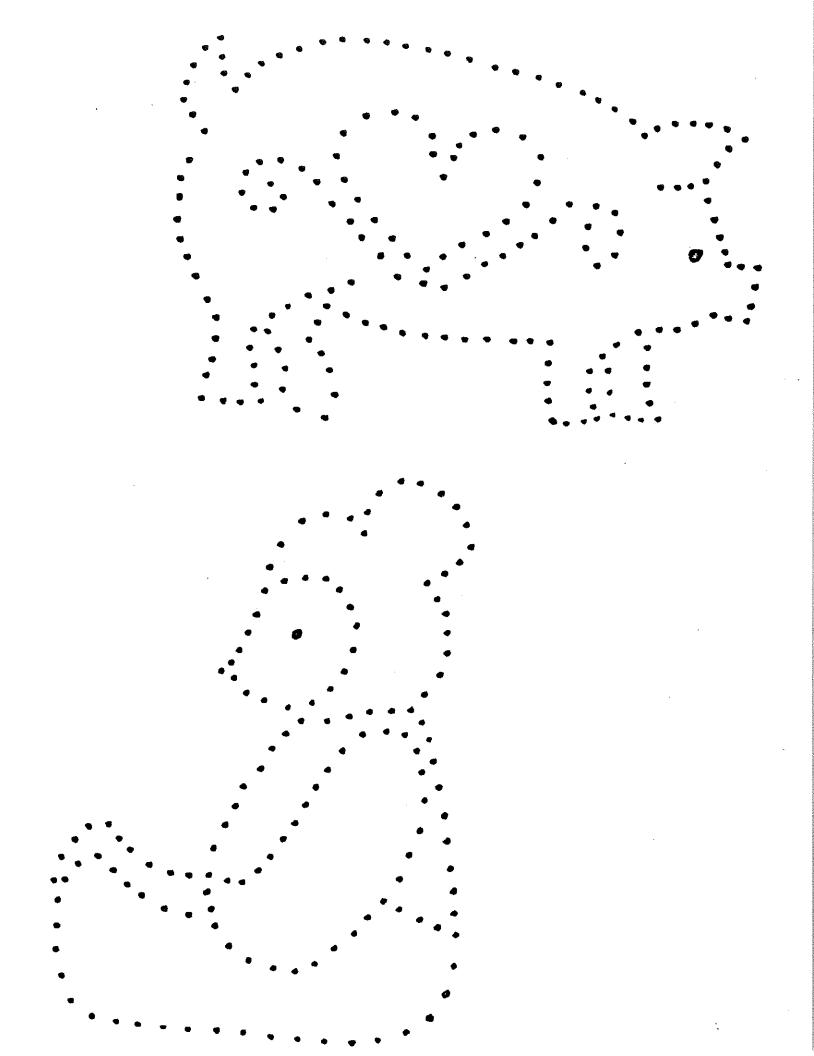


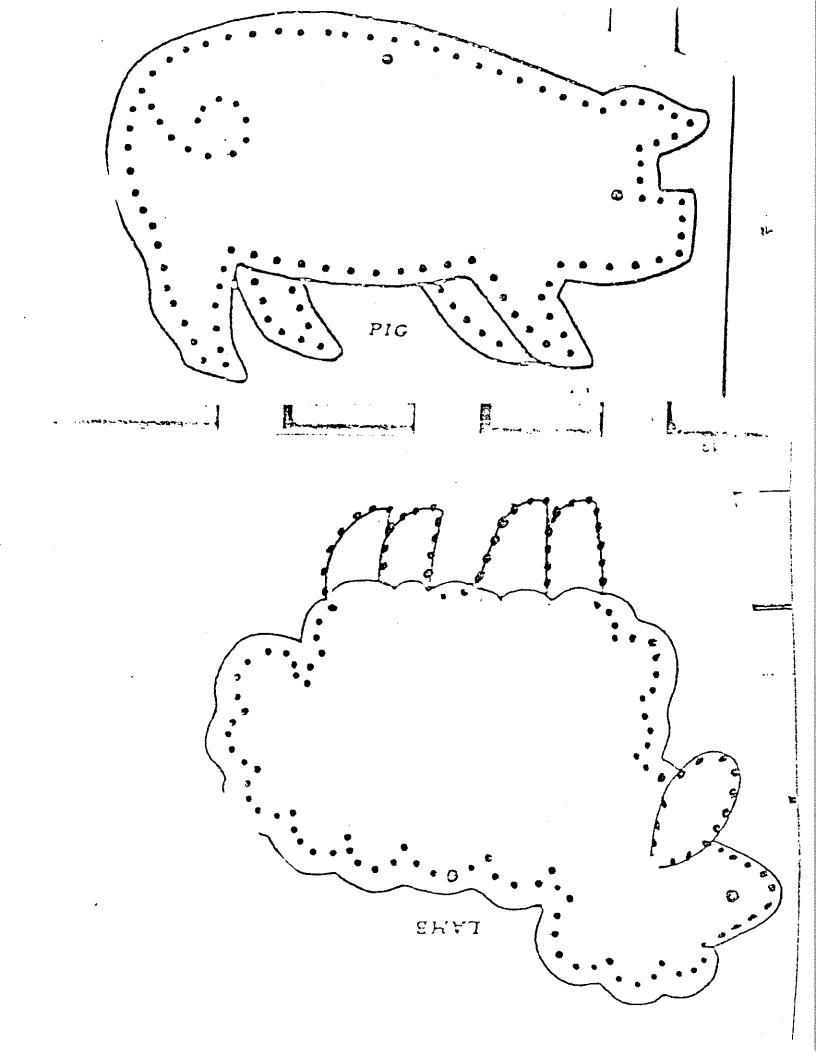
Teddy's Alphabet

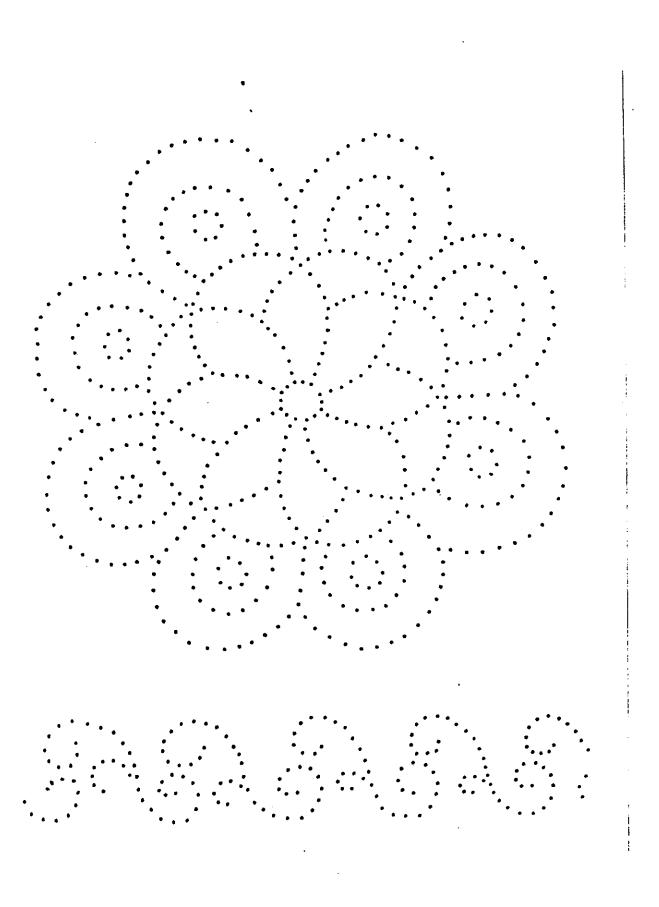




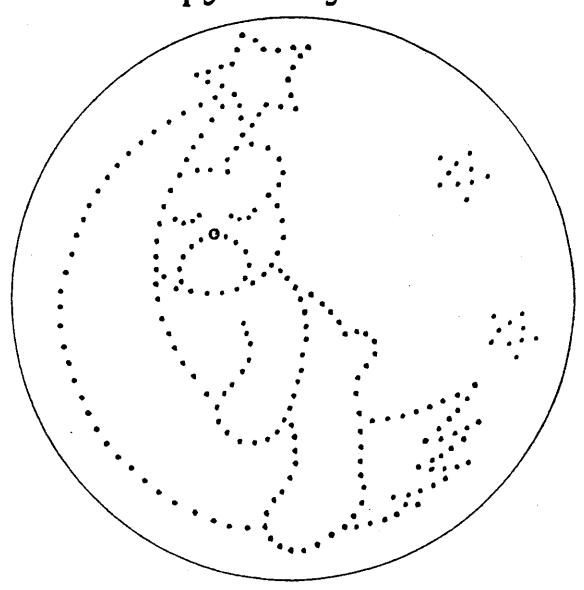
.

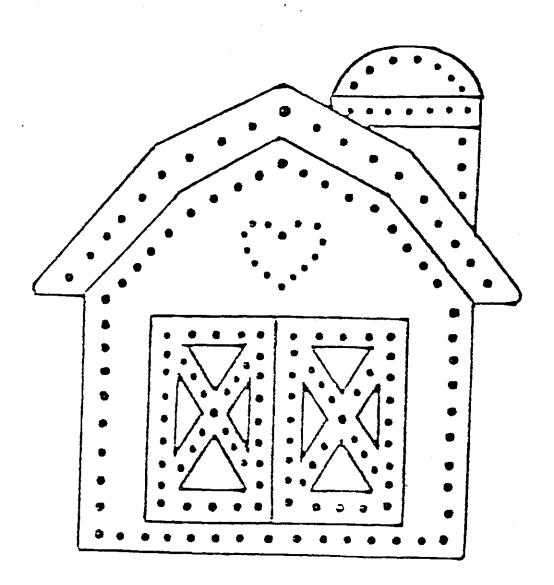


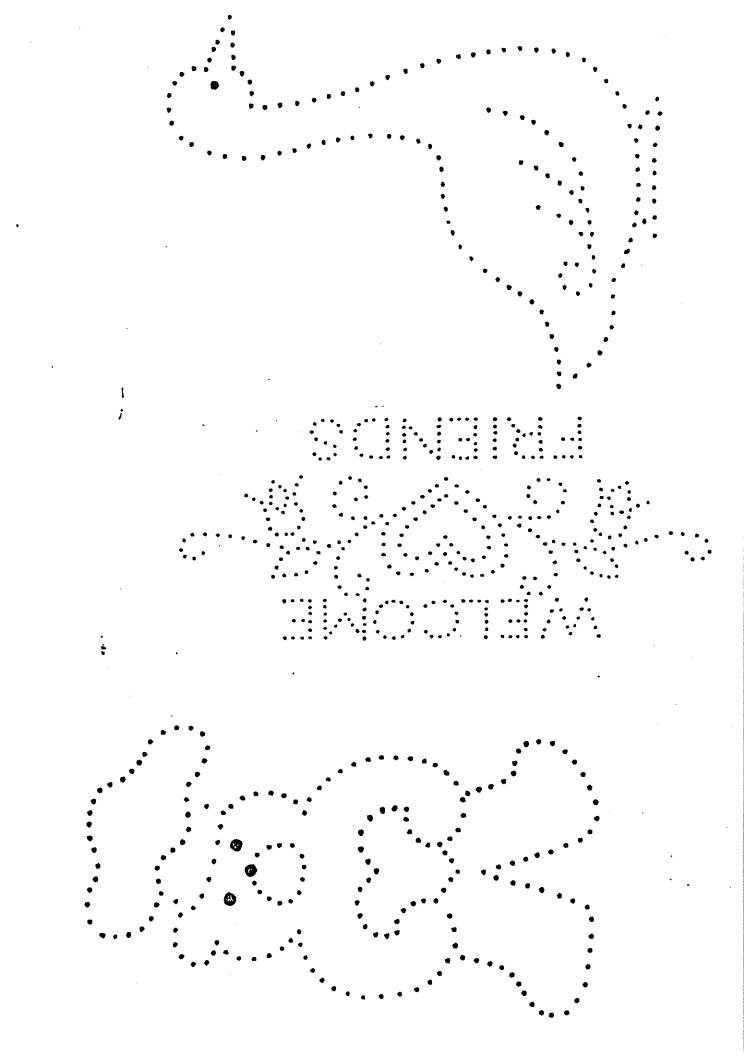


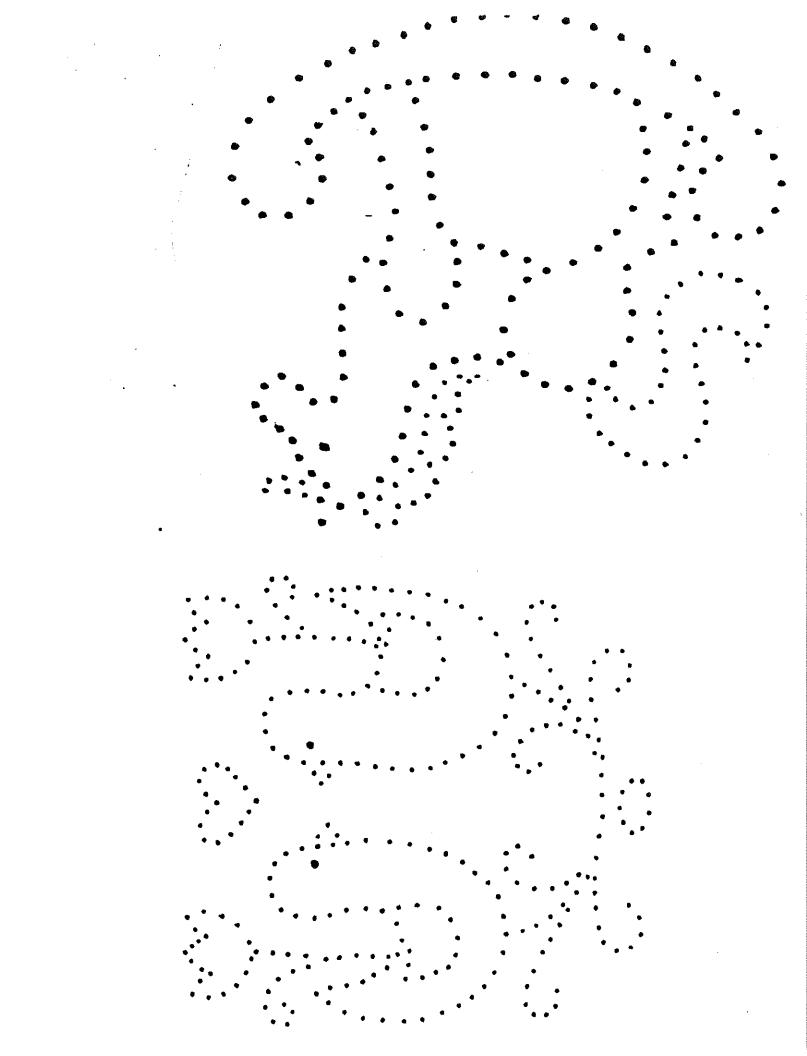


Sleepy Teddy Pie Pan









This unusual frame is made from a 12" wood hoop and a cardboard wreath design. We used a navy and white pillow-ticking fabric to cover the padded cardboard shape and make the ruffle.

