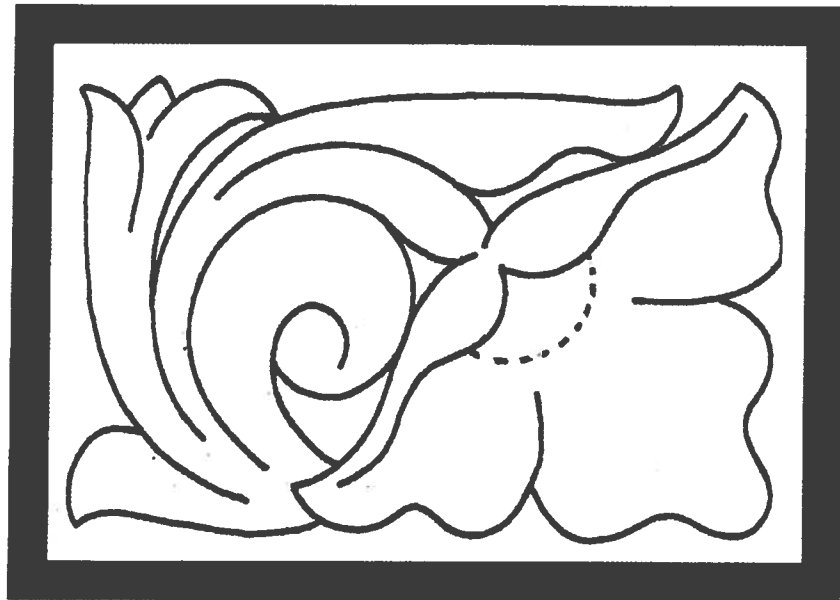


**Colorado
State
University**

Extension

MG2002C
Member's Manual



**Beginning Leather
Carving, Unit 2**

ACKNOWLEDGEMENTS:

Appreciation is expressed to the following for their helpful suggestions in evaluating this leathercraft unit:

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Revised and updated by Clare Shier, 4-H Leader, Boulder County

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Table of Contents

	Page
Introduction	1
Tools Needed	3
Choosing a Design	5
The Swivel Knife	10
Preparing and Tooling Leather	17
Using Other Leatherworking Tools	31
Making Decorative Cuts	34
Finishing Touches	37
Leathercraft Lacing	39
Carving Leather	46
References and Resources	47
Patterns	47



UNIT 2

BEGINNING LEATHER

CARVING

INTRODUCTION

This is the second unit in the 4-H Leathercraft series.

In unit 2 you will learn new techniques for carving and stamping leather with conventional designs. You will not do pictorial (framed pictures) or figure carving (realistic animals and human figures) nor use dyes or colors in unit 2.

THINGS YOU SHOULD LEARN

To use basic Leathercraft tools
More advanced lacing techniques
Design principles and their functional relationship to articles you make.

TOOLS YOU WILL USE IN UNIT 2

Modeling tool	Seeder
Camouflage tool	Backgrounder
Pear shader	Mallet
Veiner	Lacing needle
Swivel knife	Lacing punch
Beveler	Rotary or drive punch
	Snap setting tool

WHAT YOU SHOULD DO THIS YEAR

Participate in your 4-H club meetings.
Practice using basic leader carving tools.

Practice elementary sketching and design.

Select, carve and tool two or more articles. The following are suggested:
Billfold – Wallet or pocket

secretary

Eyeglass case

Small purse

Checkbook cover

Belt buckle

I.D. and picture case

Pocket saver

Swivel knife sheath

Key case

Knife sheath

Any article of your choice requiring the same tools and skills.

Share information learned through talks, demonstrations and displays.

Keep a record of project costs and experiences.

Evaluate your progress with your leader

Exhibit the following:

- A. Exhibit board, preferably pegboard, 12" x 18" x 1/8" or 1/4", preferably pegboard, to which you attach three samples and two completed articles:
Sample 1 showing: Use of swivel knife and camouflage tool.

Sample 2 showing: steps shown in sample 1 as well as use of pear shader, beveler and veiner.

Sample 3 showing: steps shown in samples 1 and 2 as well as use of the seeder, back-grounder and decorative cuts.

Two completed and laced articles using skills and tools studied in unit 2 (at least one with double loop lacing).

B. Completed record.

Label each sample (name the tools used, but do not put arrows to place of use) and fasten securely to exhibit board. Fasten the two articles securely, but so all tooling can be seen by the judge.

Put your name, address, age, county and unit on back of the exhibit board. Be sure name, address, age, county and unit are visible on front of record sheet.

EVALUATE YOUR WORK

Use the following check list to be sure you have completed the goals for this unit.

Yes

- 1. Record sheet
 - a. Attended club meetings
 - b. Gave a demonstration or talk
 - c. Listed skills which were developed
 - d. Included information on 2 completed articles

- e. Completed all parts of the record sheet.
- 2. Exhibit board (preferably pegboard)
 - a. size: 12"x18"x1/8" or 1/4" with name, age, address, county and unit on back.
 - b. Three samples: leather rounds or cut rectangles may be used:
 - Sample 1 showing: use of swivel knife in carving and use of camouflage tool.
 - Sample 2 showing: steps shown in sample 1 as well as use of pear shader, beveler and veiner.
 - Sample 3 showing: steps shown in samples 1 and 2 as well as use of seeder, back-grounder and decorative cuts.
 - Clear leather finish applied to sample 3 (optional for samples 1 and 2).
 - Samples attached to board without using glue, nails, masking tape, etc., but so all tooling can be seen by the judge. (Tying them on with lacing is the best.)
 - Each sample labeled.
 - c. Two completed articles:
 - Show good quality workmanship.
 - Designs are appropriate for size and shape of articles.
 - Both articles show lacing (at least one shows double loop lacing).
 - Clear leather finish applied to your two completed articles.
 - Attached to board without using glue, nails, masking tape, etc., but so all tooling can be seen by the judge. (Tying them on with lacing is best)

TOOLS AND MATERIALS NEEDED

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. Tools needed by each member
2. Tools the club members use occasionally and could share
3. How to care for your leather tools
4. How to make a leather tool kit

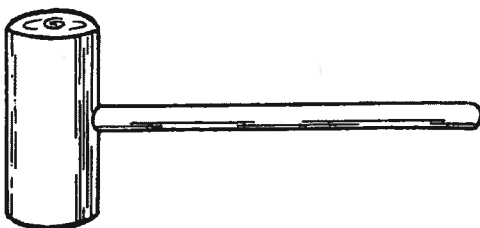
TOOLS AND MATERIALS YOU NEED FOR UNIT 2

The basic tools and materials you will need to start doing leather work include:

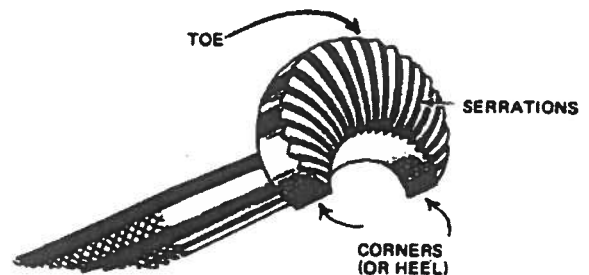
1. Pencil (soft lead)
2. Masking tape
3. Transfer film which is lightweight sheet plastic is used to transfer designs.
4. A stone (marble or other hard, smooth surface; for example a smooth piece of hard board or a hard smooth floor tile
5. Cutting knife or a straight edged razor blade
6. Ruler or straightedge
7. Clean bowl and sponge
8. Modeling tool



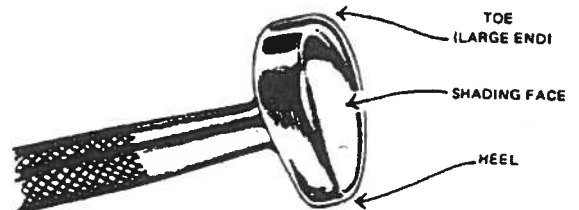
9. Mallet
A small inexpensive mallet will do. You can make your own mallet if you wish.



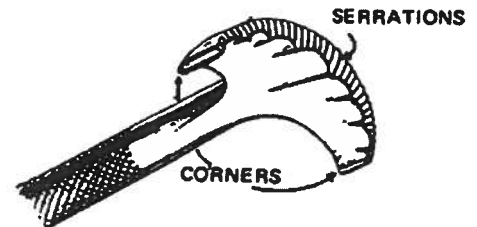
10. Camouflage tool



11. Pear Shader



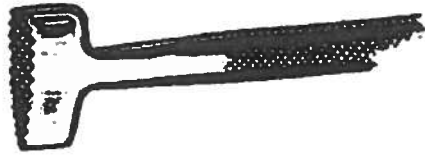
12. Veiner



13. Seeder



14. Backgrounder



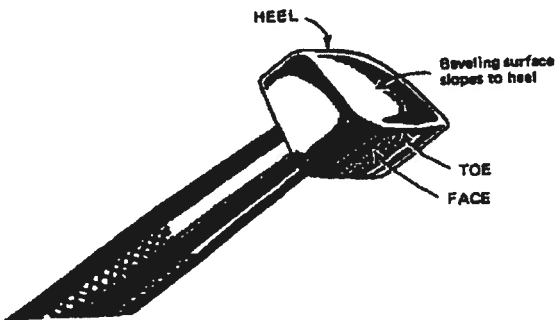
15. Lacing needle



16. Swivel knife



17. Beveler

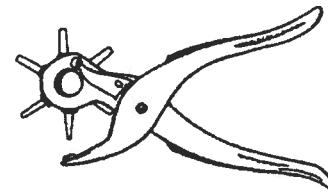


Small container of clear finish and sheep wool applicator, dauber or sponge as recommended.

OTHER TOOLS AND MATERIALS NEEDED OCCASIONALLY

Some tools and materials are used only once in a while. Perhaps one item could be purchased by the club and used by the members. These include:

1. Rubber cement
2. Rotary or revolving punch



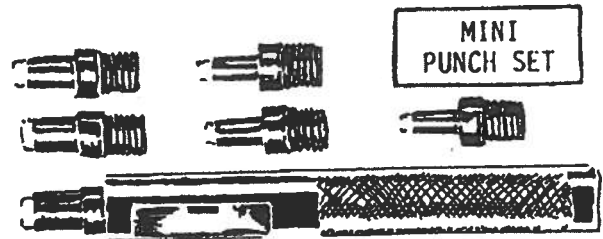
3. 4 prong thonging chisel
(Use single prong for corners)



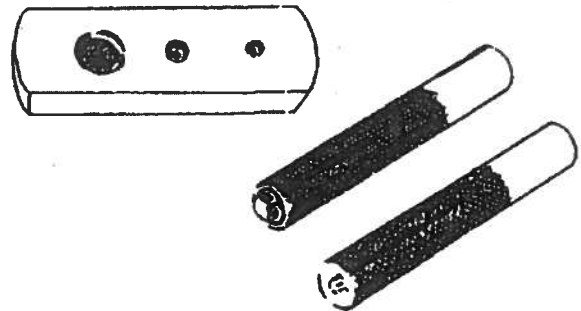
4. 4-in-1 Round hole punch



1. Drive punches



2. Snap setting tool (sigma snaps)



ORDER TO USE TOOLS

Leathercrafters prefer to use tools in different orders. Check with your leader or experiment with the following order to see if it will work for you.

<u>Step</u>		<u>Reference</u> <u>Page</u>
1.	Case the leather	16
2.	Transfer the design	18
3.	Cut the design with swivel knife	19
4.	Camouflage	20
5.	Shade with pear shader	22
6.	Bevel with modeling tool with beveler	24 24, 30, 31
		<u>Page</u>
7.	Use the veiner	26
8.	Use seeder	27
9.	Use background tool	28
10.	Make decorative cuts	32
11.	Apply clear finish	35
12.	Punch holes	37
13.	Lace Single and double loop	46-53

NOTE: This is the first of a series of lessons designed primarily to aid the beginner in leather carving to gain skill in the use of the basic tools. We do not contend that these instructions are the only correct methods, but rather that they are, in our opinion, good for the beginner.

CHOOSING A DESIGN

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. What to look for in designs for Leathercraft
2. Transferring designs onto leather

CHOOSING GOOD DESIGNS FOR LEATHERCRAFT ARTICLES

There are two types of design:

1. Structural design is made by the size, form, shape and space within the object. This is usually determined by what the article is to do or how it will be used.

Compare a billfold and a bookmark.

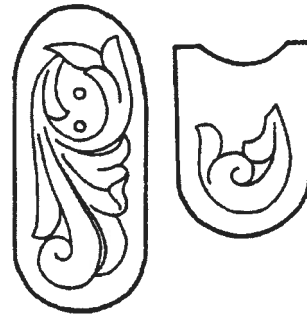
How do they differ in size and shape?

How do size and shape relate to what they are to do or how they will be used?

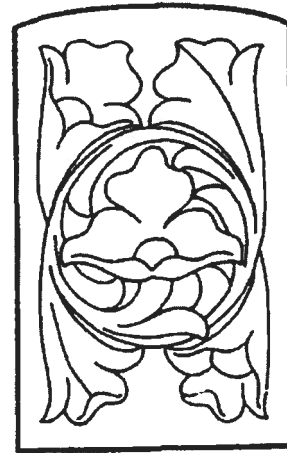
b. The design should fit the space and all parts of the design should be in proportion.

Select articles which are:

- a. Suited to their purpose.
Will a watchband be comfortable to wear?
Is the coin purse convenient to use? Will it hold enough for your normal use?
- b. Well-proportioned or the right size for the use.
Will the comb fit into the comb case without being too tight or too loose?
- c. Made of materials suitable for the use of the article.
Is a soft leather selected for moccasins or articles which will be used for clothing?
Is a heavy leather used for articles which receive heavy wear or will be tooled deeply?



c. The eye should move smoothly from one part of the design to another. Repeating a line or shape sometimes helps to develop this sense of rhythm.

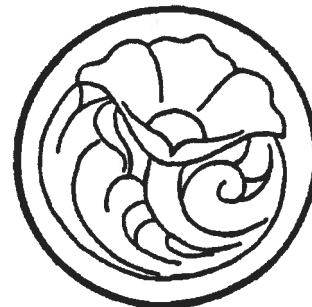
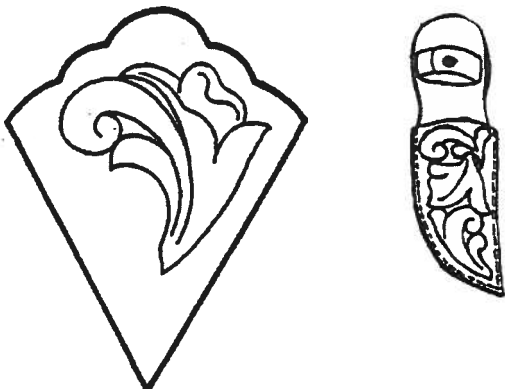


2. Decorative design is put on the surface of the structural design. It should strengthen the structural design.

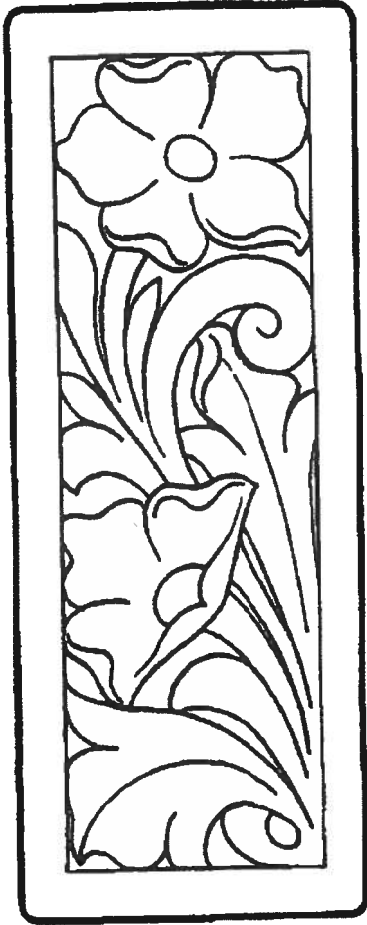
The following examples are given for your information, but are not necessarily used in this unit.

d. Every design needs a center of interest – something to catch the eye and hold attention.

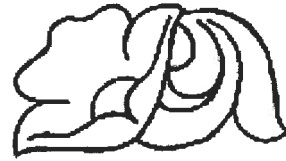
a. Decorative design lines should follow the structural design lines.



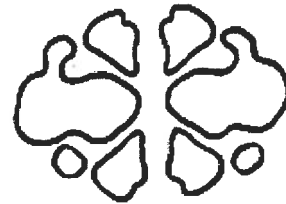
- e. The design should look as if all parts belong. There should be harmony in line, shape and composition.



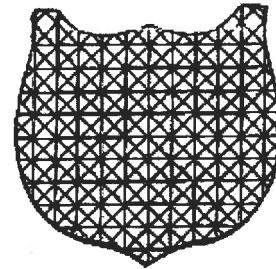
- b. Conventional or stylized. These are usually floral designs that have been changed and simplified from realistic appearance.



- c. Abstract. Abstract designs are the creation of the designer's imagination.



- d. Geometric. These designs are based on lines and geometric forms such as rectangles, circles and triangles.



Design motifs may be:

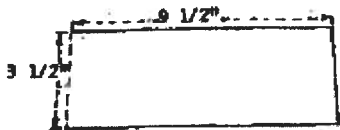
- a. Natural or realistic. A natural or realistic design looks as nearly like animals, flowers, people or landscapes as possible. You will use these design motifs in later units when you do figure carving and pictorial carving.



DEVELOPING DESIGNS FOR A SPECIFIC SPACE

Size and Shape

Draw an outline of a shape available for decorating. For illustrative purposes we will use the size and shape for a billfold back.



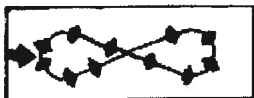
Flow of lines

Look at some billfold patterns on the market and determine the flow of lines used to develop them.

The oval form is used a great deal in developing designs for divided pattern billfolds or any small area.



The figure eight may also be used effectively.



The figure "S" flow line has been selected for the development of the billfold design illustrated here.



HOW TO CREATE A DESIGN ON TRACING FILM

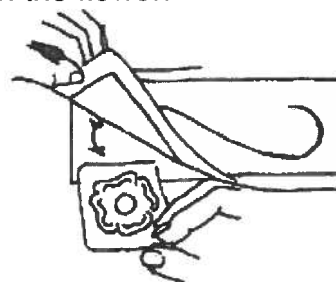
Place a piece of tracing film over the outline of the billfold. Remove from leather, and then sketch in the "S" on the tracing film.



2. Use a small piece of tracing film and make a pattern of the flower of your choice that will fit the design area.



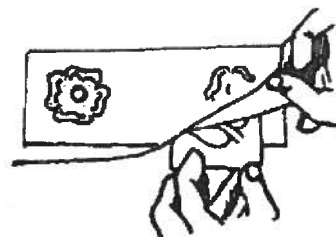
3. Place the flower pattern under the tracing film and on the curve of the "S." Trace in the flower.



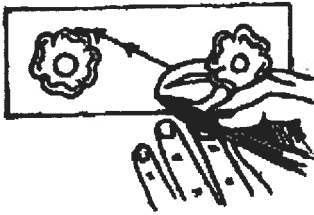
4. Move the flower pattern to the other end of the "S" and trace again. The design is now ready for leaves to be added.



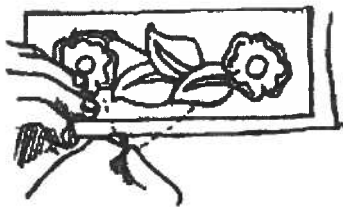
5. Use a small piece of tracing film and make a pattern of the leaf which will be best with your flowers. Place it under the tracing you are making.



6. Trace in the first leaf and remove the leaf pattern from under the design.



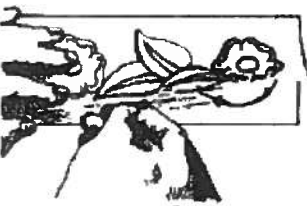
7. Turn the pattern over, place it a little further along the flow of the "S" and trace in a leaf.



8. Turn the pattern over again and place under the paper ahead of the last leaf drawn. Trace in the leaf. You may need to change a line to make the leaf fit into the design.



9. Sometimes a leaf will fit into a design area better if it is not turned over.



10. The arrow points to a blank area.



11. Fill in the blank. Then notice how four corners look empty.



12. Fill in the corners with just a portion of a leaf.

This is good on how to create a design. BUT this should not be done on leather. It should be created on tracing film and then the completed design traced onto leather. This is to avoid mistakes and designs that don't work or fit the size of the piece of leather.

The design may still need to be refined.

Study leathercraft designs.
Practice creating your own designs.

THE SWIVEL KNIFE

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. How to carve with a swivel knife
2. The parts of the swivel knife
3. How to care for a swivel knife

ITEMS NEEDED

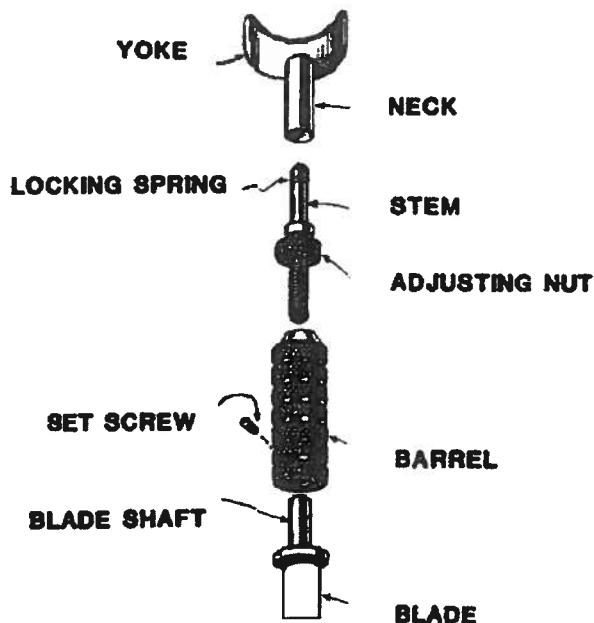
1. Swivel knife
2. Several pieces of tooling leather for practicing
3. Halfbacks (3 1/2"X4 5/8"), 3" rounders, practice pieces or enough leather for cutting the samples.

SWIVEL KNIFE

The swivel knife is the most important of all the leather carving tools. It is made so you can work efficiently in cutting very intricate designs.

Find these parts on the diagram of the swivel knife.

Yoke – provides a rest and pressure point for the index finger. This helps control the depth of the cuts.



Locking spring – supplies tension on the neck, holding it in place when pushed into position on the stem.

Adjusting nut – varies the length of the blade to fit different hands.

Blade shaft – inserts into the barrel and is held in place by the set screw.

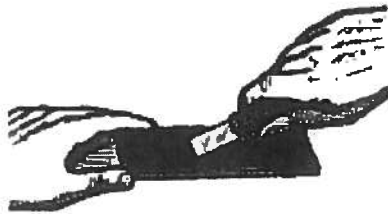
The blade, barrel and stem unit turns independently of the neck and yoke. The swivel knife blade is the “key” to all successful leather carving. The primary purpose of the blade is to cut the outlines of a design or pattern into the leather. Lines are cut to give depth to the design. With properly cased leather, the cuts should stand open so the stamping tools can be used easily.

STROPPING THE BLADE

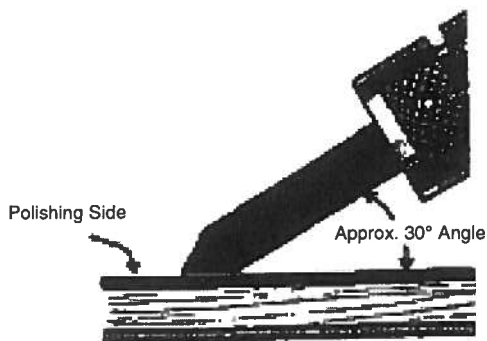
The beveled cutting sides of regular swivel knife blades should be stropped often during the cutting operations. Stropping the blade polishes the sides and keeps the blade cutting smoothly.

Use a rouge board or the smooth side of a leather strap rubbed with jewelers rouge to strop your blade.

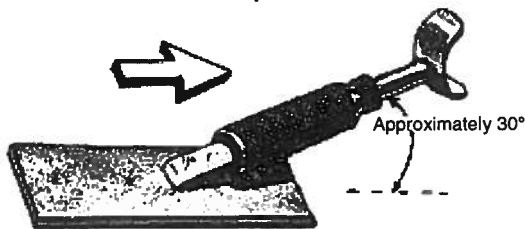
Insert the blade shaft into the barrel of the swivel knife and tighten the set screw with a small screw driver. Grasp the knife with the yoke pressed firmly against the palm of your hand.



Place the knife on the rouge board or strap at approximately a 30° angle. The beveled side of the blade must be flat against the polishing surface.



Hold the knife firmly in your hand and **PULL IN ONE DIRECTION ONLY**. Always **PULL** the blade across the polisher. Turn the blade over to strop the other side.



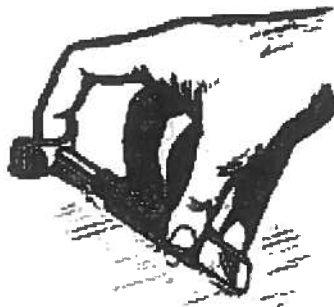
Strop your blade often on the polisher as you work.

CAUTION: Never push the blade when stropping; this destroys the fine cutting edge.

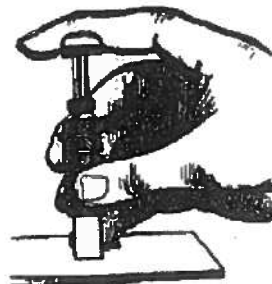
HOLDING THE SWIVEL KNIFE

Learn to hold the swivel knife correctly. The way you hold the knife will determine your success in cutting leather.

Lay the knife down with the blade at a 90° angle to the work surface. Place fingers as shown. Index finger in yoke; thumb at lower part of barrel; little finger against the blade; and second and third fingers on opposite side of barrel.



Tilt knife up into a vertical position. Move index finger forward and rest on yoke at first joint of finger. Move second and third fingers forward to more firmly grasp the barrel. The position shown is correct for holding the knife.

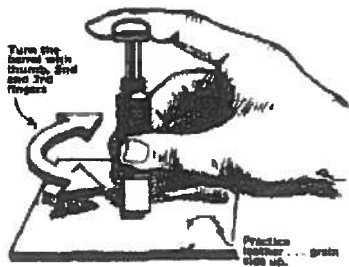


CAUTION: Do not set blade on metal or any hard or abrasive surface that might damage the cutting edge.

USING THE SWIVEL KNIFE

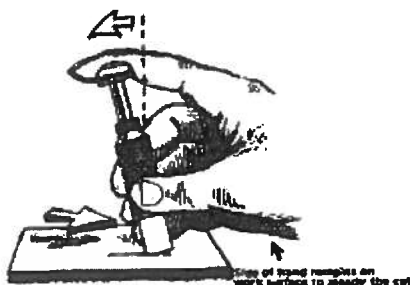
Learning to control the swivel knife takes patience and concentrated practice. Relax. Be comfortably seated, and be sure to have good light for freedom from eye-strain and lack of shadows on your working area.

Case a few practice pieces of leather. If you need to review casing leather, look on page 17. Hold the knife with the blade raised just above the leather. Keep the side of your hand on the work surface and turn the barrel of the knife back and forth with the thumb, second and third fingers. The little finger plays no part in turning the knife – it acts only as a pivot to aid in controlling the cuts.

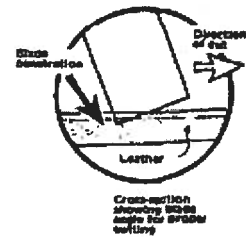


For easier and proper cutting, the knife must be tipped forward so only the corner of the blade cuts into the leather.

Tip knife forward and press the blade into the cased leather with pressure from the index finger on the yoke. Keep the finger, hand and wrist straight in line with the forearm, and apply additional pressure with the arm. This is how you control the depth of the cuts.



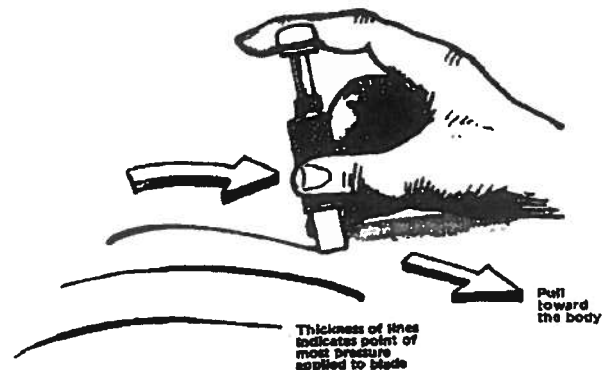
The cross-section shows the blade angle for proper cutting.



NOTE: Proper cutting depth for outlines of designs is approximately one-half the thickness of the leather.

Now, practice a few curved cuts. Apply downward pressure on the yoke and at the same time pull the blade toward you. Keep the side of your hand and little finger in contact with the working surface at all times. This helps steady the cutting movement. Use your free hand to hold or turn the leather to make cutting easier. Turn the leather as often as necessary to keep the cuts coming toward the body and to keep the cutting hand from a cramped or awkward position.

Experiment with different degrees of pressure with each cut until you are able to control the depth. Try to maintain an even depth throughout the cuts. Whenever possible, pull the blade toward the body as this ensures easier and more controlled cutting. Practice cutting freely; hesitation makes ragged cuts.

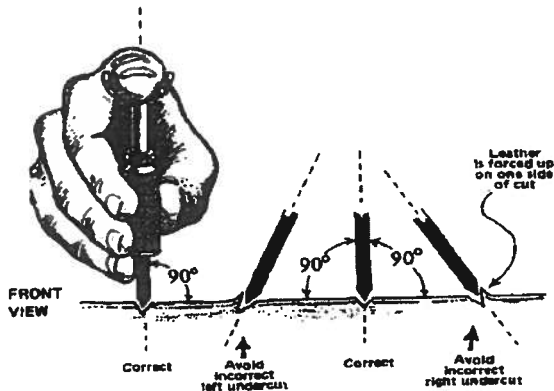


If the leather is cased properly and the blade is sharpened correctly it will glide smoothly and easily. If the blade does not pull easily, the leather may be too dry, or the blade may not be polished well and/or not sharpened enough. Examine the leather and the blade. Remember, leather must be moist for proper, easy cutting; the blade must be sharp and polished well.

A swivel knife that rotates easily is preferred for easy cutting.

Undercutting

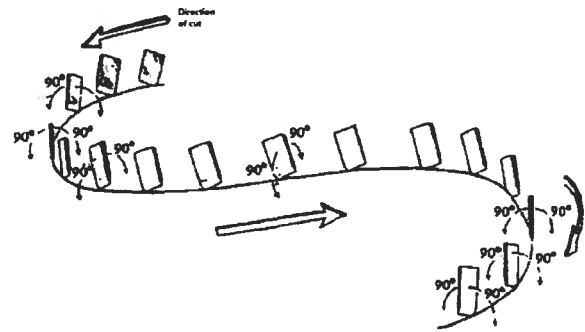
Undercutting is caused by leaning the hand to the left or to the right while cutting. This usually happens when you try to get a better look at what you are doing and tip the knife. The blade may "cut under" the surface of the leather on one side of the cut, leaving a thin, raised, undesirable edge.



Undercutting makes it difficult to use the stamping tools and distorts the design the same degree.

Cutting curves

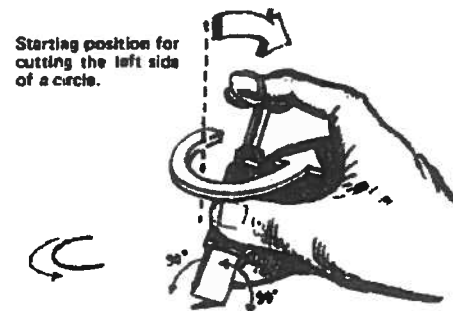
The next diagram shows the proper position of the knife blade while going around curves. Only the cutting part of the blade is shown. The flat of the blade always parallels the cut. The blade is tipped forward to obtain the correct cutting angle, but never leaned to the right or the left. It must always remain perpendicular to avoid undercutting.



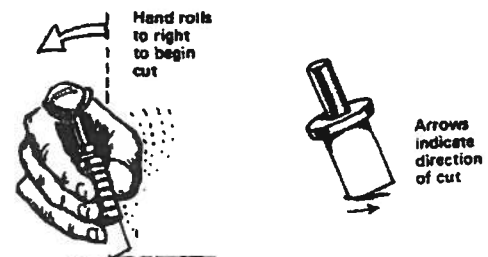
Cutting Circles

To make circular cuts, turn the barrel of the swivel knife with thumb and fingers. Hold knife in the regular position with blade parallel to the arm; pointing toward your body. Now turn the barrel clock-wise until the blade is at right angles to your body.

Use the starting position shown below for cutting the left side of a circle.

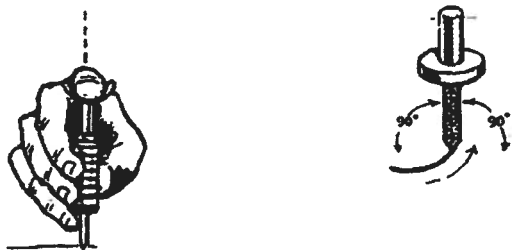


Slightly roll your hand to the right until the blade is tipped forward to the proper cutting position.

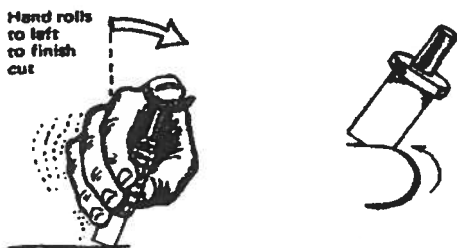


Apply pressure on the yoke and begin the cut. At the same time, begin turning the barrel and pull the blade to begin to return at once from the rolled position to the

straight up position. As one-fourth of the circle is cut, your hand must be in the normal upright position to keep the blade from undercutting.



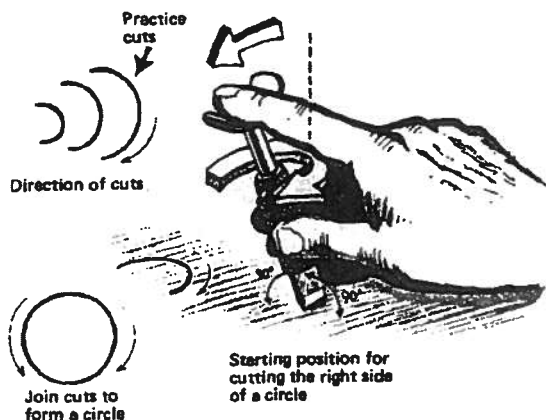
As the circle continues, your hand must begin rolling slightly to the left to keep the point of the blade in an upright cutting position. When the half-circle is completed, your hand should be in the position as shown.



Cutting and rolling movements are made simultaneously. A great deal of practice will be required to coordinate these movements.

Practice cutting different half-circle sizes. Once you have learned the skills, this will be easy.

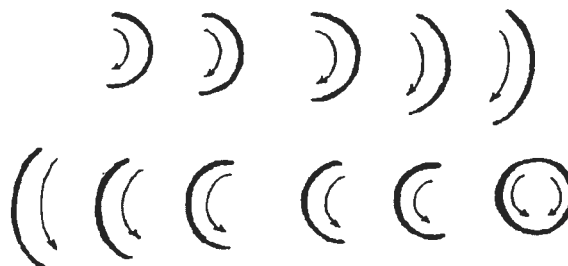
To cut the right side of a circle, reverse the steps shown. Start with a left hand roll and end with the hand rolling to the right.



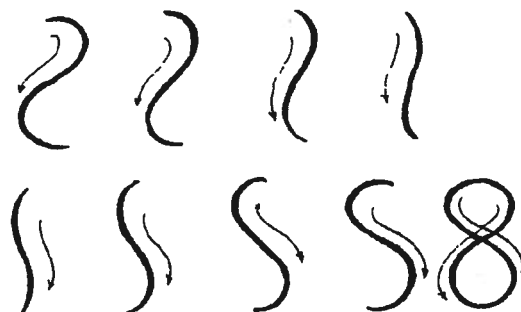
Even though you may prefer cutting or turning the knife in one direction, it is important to practice cutting in all directions.

Try some of the practice exercises.

Cutting Circles



Cutting Figure Eights



Cutting Flowing Lines



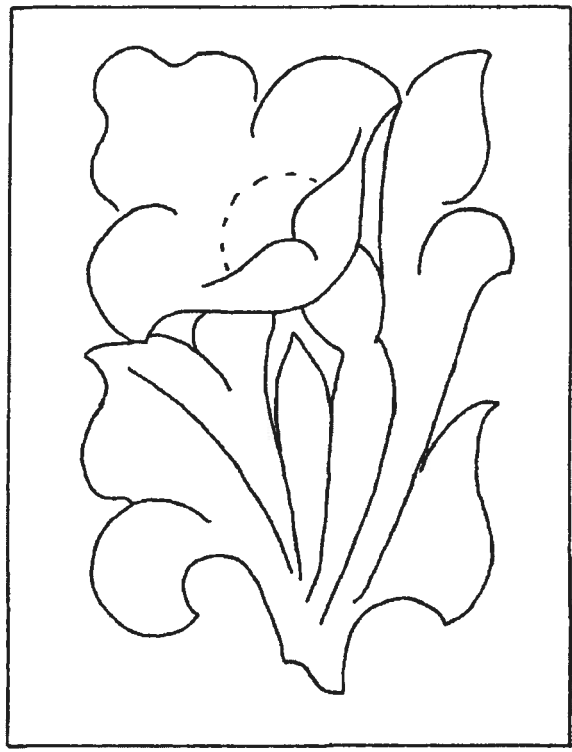
Make cuts with one, long flowing motion. Turn leather when necessary to aid in smooth cutting.



Make cutting strokes toward your body for maximum control. Do not double-cut any of the lines.

NOTE: Depth and length of cuts are made with one motion. Do not re-cut any lines to make them deeper or to correct their flow. Practice for good control!

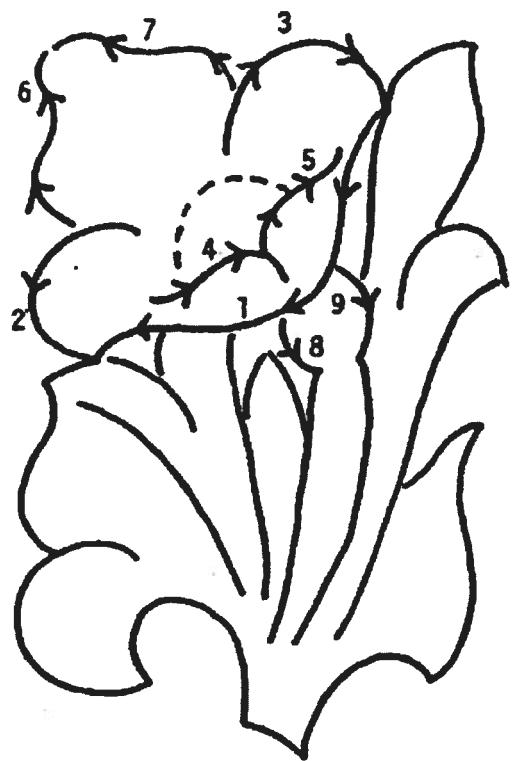
Cut the design. The pattern given will be used to illustrate the steps in cutting and tooling.



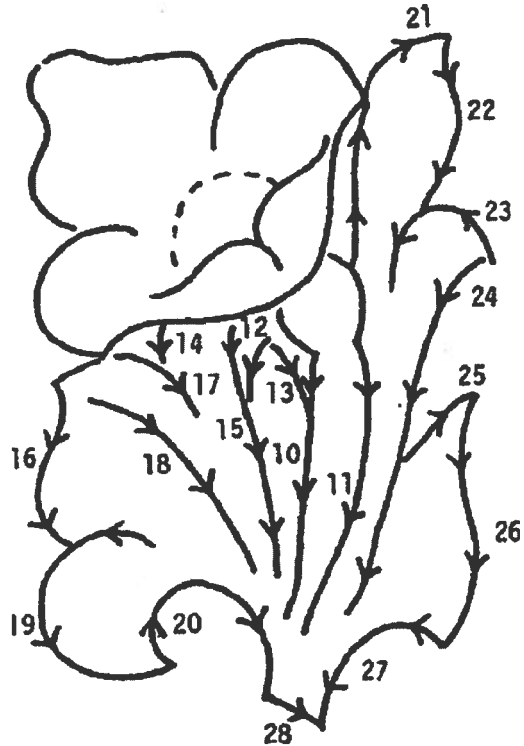
It is recommended that leather be carved in an order that is logical to the design development (as you would draw the design). This gives a better feeling for continuity of line and the total design concept (what your design is).

Usually, foremost or forward parts of the design are cut first, followed by parts that are further back. The following example shows a suggested cutting order and directions of cuts for this pattern.

Begin with the flower, cutting the front parts first, then the two side petals and finally the center back petal.



Then cut the remainder of the design, completing the stem first, and then working outward to complete the leaves.



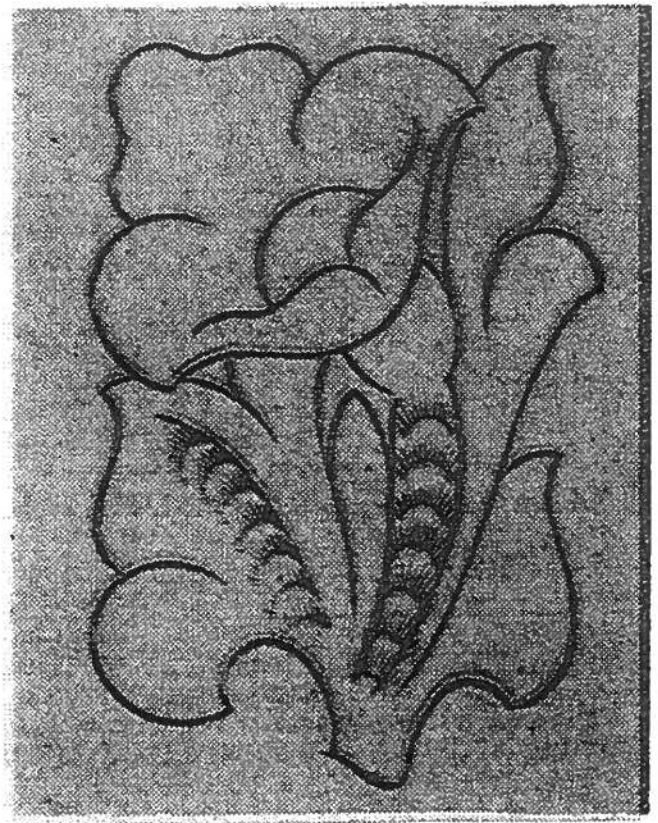
Make all the cuts toward the body as much as possible. When necessary, turn the leather, NOT your hand, so your hand and knife remain in the correct position. Do not be concerned if you stray slightly from the lines. Practice cutting with a flowing motion and you will soon learn to control the knife.

NOTE: Some instructors say you will have a nicer looking seeded area if you do not cut the seed pod. Just use the dashed transfer line as a guide for stopping the seeder. Experiment to see what you like best.

Practice using the swivel knife.

Save a sample of a design you have cut to mount on your exhibit board. You will also add camouflaging. This will be sample number 1.

Your sample should look like the illustration below, for swivel knife cuts only.



PREPARING AND TOOLING LEATHER

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. How to case leather for tooling
2. How to select and trace designs for leathercraft
3. How to transfer a design to leather
4. How to use basic tools

ITEMS NEEDED

1. Tools
2. Several pieces of tooling leather for practicing each step
3. Half backs (3 ½" X 4 ⅝"), rounders, practice pieces or enough leather for cutting the three samples

If you wish to purchase supplies for the entire project at one time, be sure to check all lessons for materials needed.

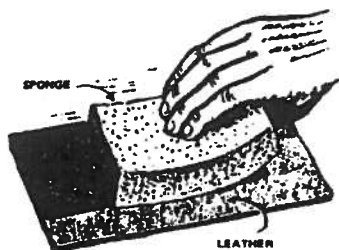
You may want to self-cut leather for the articles you make. Several ideas and patterns are on pages 48 through 56.

Simple kits are also available at most leather stores.

CASING THE LEATHER

Before you can work leather, you must **CASE** it. This is done by rubbing a damp (not wet) sponge over the flesh side (rough side) of the leather as evenly as possible. Then turn the leather over and dampen the grain side (tooling surface). The moisture penetrates better if warm water is used.

As you wet the leather, the fibers swell and soften. Vegetable tanned leather, properly moistened, is like modeling clay. you can mold it, model and shape it.



Your best guide to moistening leather is a "sense" gained through practice. The dampened grain side of the leather should return almost to its original color before any tooling is done. You can test the leather by holding it against your cheek. If it is dry, it will feel warm; if it is damp, it will feel cool, and will accept tooling.

NOTE: Some leathers will work better if casing is done at least an hour ahead of time and the article put in a plastic bag. Many leathercrafters case their articles and put them in a plastic bag in the refrigerator until they are ready to work on them. **DO NOT** leave the plastic bag at room temperatures or damp leather might mold. **DO NOT** leave cased leather in the refrigerator for more than a few days.

Your modeling tool (tracing point) will mark easily and smoothly and your stamping tool will imprint clearly and firmly into the leather ONLY when you have moistened the leather to the proper degree.

If some areas begin to dry, remoisten.

CAUTION: Always use glass, plastic, porcelain or enameled containers for water – NEVER use bare metal containers. The slightest contact with bare metal will produce dark stains on your dampened leather – stains that are almost impossible to remove. Check with your leader for cleaning techniques to use on leather.

DESIGNS FOR YOUR LEATHER PROJECT

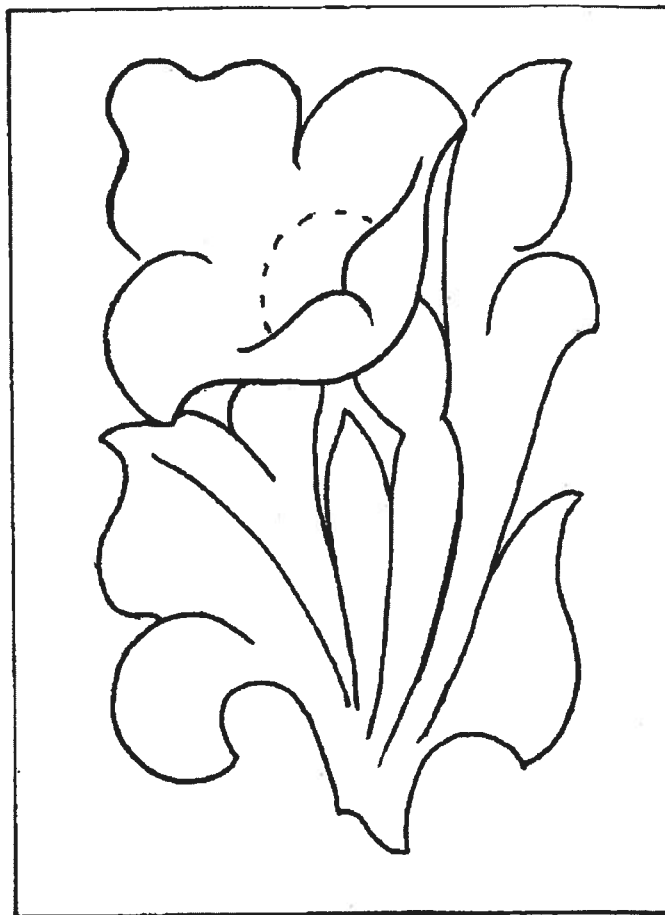
Decorative designs for beginning leather tooling are best if made up of curves – a flower with leaves, a leaf and stems or scrolls. Animals and other completely realistic type designs should be avoided by beginners.

STEP 1: TRACING A DESIGN

Decide what design you would like to practice on your leather.

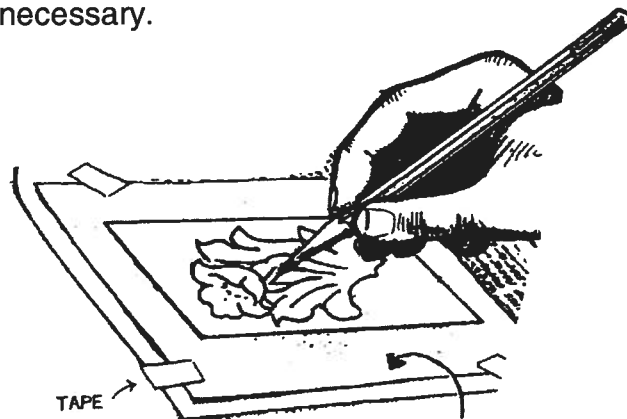
If lacing is to be done on the finished article, be sure to select a design which is $\frac{3}{8}$ " smaller on all sides than the piece of leather.

The following pattern will be used to illustrate the steps in tooling in this manual.



To trace the design, fasten plastic transfer film to the design with tape to make sure it does not move. (Place glossy side of transfer film down.)

With a pencil, carefully trace over all the lines of the design just as they are shown on the pattern. Draw the central or largest part first, and then fill in with smaller parts. Erase incorrect lines and redraw them if necessary.



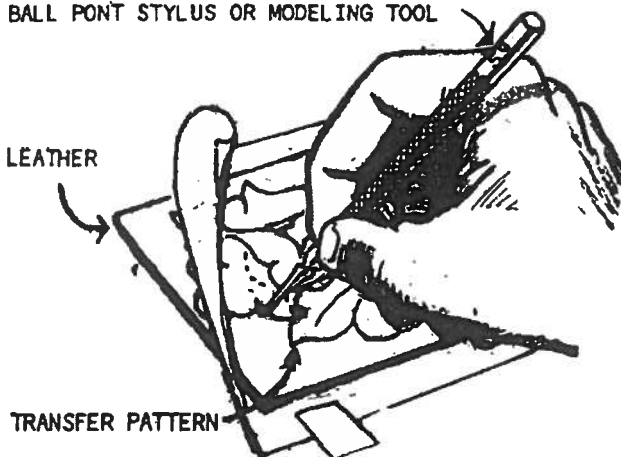
PLASTIC TRANSFER FILM
OR TRACING PAPER

STEP 2: TRANSFERRING A DESIGN TO LEATHER

Case the leather. Carefully place the pattern (pencil marks up) over the leather, center the design and tape in position using masking tape. Using the tracing point of the modeling tool (or any dull pointed instrument) trace all the lines of the design. Begin with the central or largest part, and then do the smaller parts. Press firmly, but not too hard (don't cut through the paper), and the lines will be transferred to the leather. Pull the tool toward you. **DO NOT PUSH.**

Before removing the pattern, lift one corner and check to see if you have traced all the lines.

BALL POINT STYLUS OR MODELING TOOL



Straight lines, such as borders, can be done best by marking only end points and making the lines by using a straight edge and joining the points directly on the leather.

CAUTION: Cased leather is highly sensitive to marks. Be sure your hands are clean – free of pencil lead and other foreign matter. Protect your leather from improper tool marks and fingernail scratches.

Trace a simple design and transfer to leather. In the next steps you will deepen the outline and camouflage on the same sample.

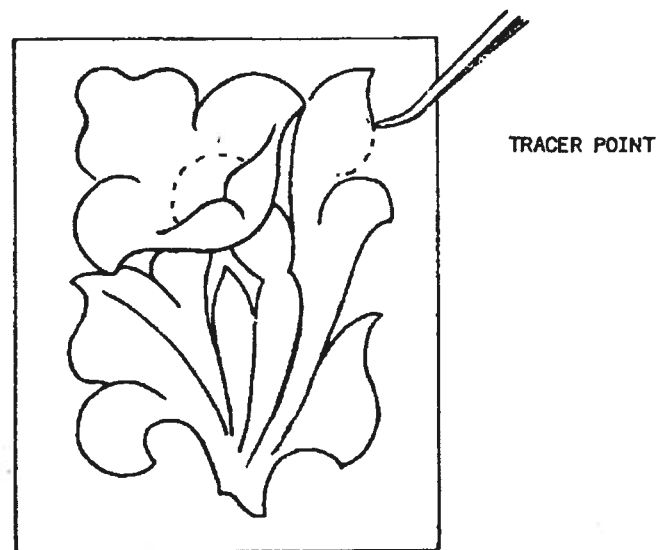
STEP 3: USING THE MODELING TOOL FOR DEEPENING THE OUTLINE OF THE DESIGN

The modeling tool has a barrel-shaped handle and two modeling ends for the various jobs it must do.



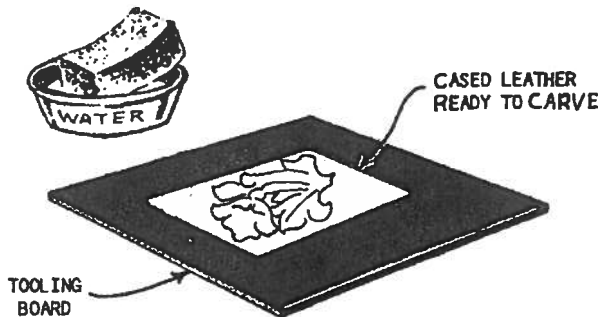
The fine pointed end (tracer point) is used for tracing as already described for line work and for small tooling detail.

Use the fine pointed end to deepen the design outline. Be sure your pressure is even so the lines will be uniformly deep.



TOOLING BOARD

Leather must be placed on a hard, smooth surface for stamping. A tempered Masonite board provides a good surface. The best working surface is a piece of marble at least $\frac{3}{4}$ " thick. It will stay glass-smooth for years.



CUTTING THE DESIGN

The pattern given will be used to illustrate the steps in cutting and tooling. Refer to pages 12-16 for directions on how to use the swivel knife.

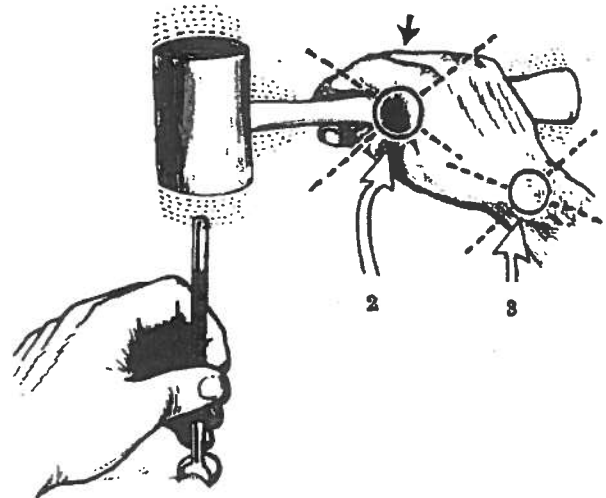
How to Use Stamping Tools

THE MALLET

No leather tool kit is complete without a well-balanced mallet, usually made of hard wood or rawhide.

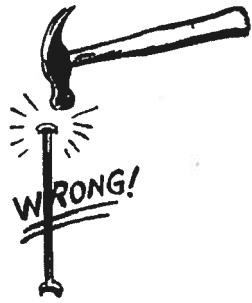
The mallet is used to strike the top of the stamping tool to obtain its impression in the leather.

The mallet is held as shown.



1. The mallet handle should be held securely, but in a relaxed manner. Do not grip the handle tightly. It is held with the fingers, rather than the palm of the hand.
2. The handle is held almost in the center for best balance. Held in this way, the fingers serve as a pivot (turning point) for striking the mallet against the tool when you want a light impression. Hold the mallet in the most comfortable position for you!
2. For deeper impressions, use the wrist as the pivot point. Hold the handle more tightly toward the end.

CAUTION: Never use a steel hammer on your leather stamping tools. Protective chrome plating will chip off; the tool will rust and burr over on top.



STAMPING TOOLS

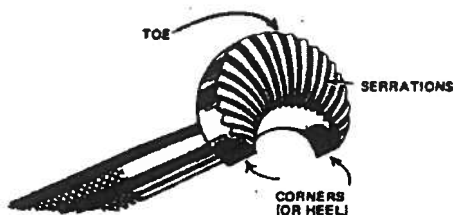
Stamping tools are designed to obtain specific effects in the development of a design. They can be used in many combinations to help you be creative and original.

Each basic tool is available with variations in size, serration pattern, curve and slope.

The stamping tool is generally held in a perpendicular or upright position when struck with the mallet, but this varies as will be described.

STEP 4: USING THE CAMOUFLAGE TOOL

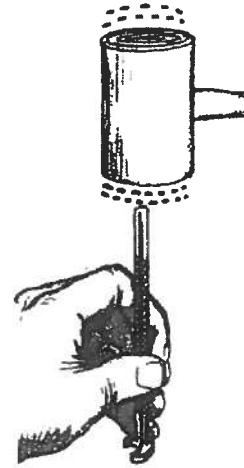
The camouflage tool is available in a wide variety of sizes and shapes to fit almost every stamping need. The camouflage tool is half-moon shaped with two sharp corners (or heels) and has a rounded, serrated face that slopes toward the toe. The serrations fan out from a central focal point into a sunburst effect.



The purpose of this tool is to texture certain areas of a pattern to add to its beauty and flow of design.

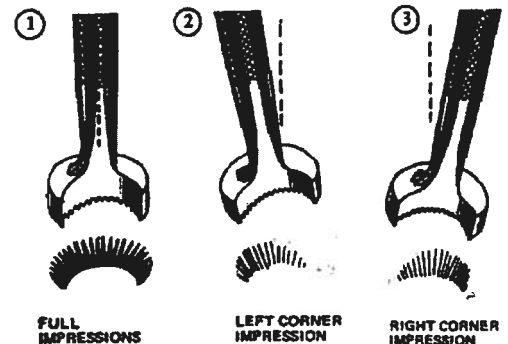
Hold the camouflage tool as shown with the fingers evenly distributed to steady the tool. The thumb may be placed high or low, whichever is most comfortable for you.

Hold the tool with the corners facing you. The side of your hand should rest on the work surface to aid in steadying and controlling the tool. The knurled shaft permits controlled turning of the stamp by rolling between thumb and fingers.



Always stamp the impressions away from you for better visibility and control.

The drawings show the impressions made by the tool when held in varying positions and struck by the mallet.



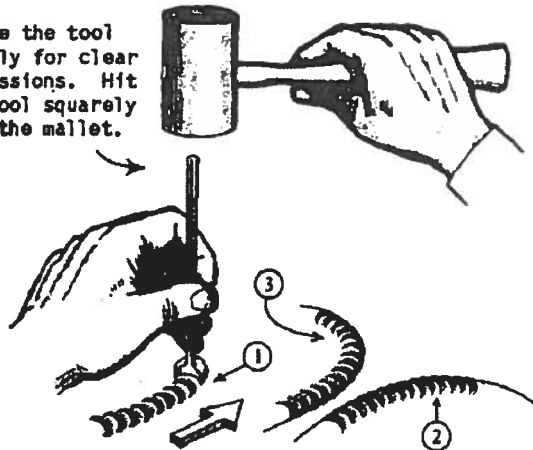
1. This is a full impression of the stamp. Hold the tool straight up and down, then strike sharply with the mallet so that all lines are equal in depth.
2. For a left corner impression lean the tool to the left. Hold securely with your hand so the tool does not slip when struck with the mallet. Impression should "fade" to nothing on the right side.

3. For a right corner impression lean the tool to the right. This firmly imprints the right corner of the tool and fades the impression on the left. Hold tool firmly.
4. Heel and toe impressions are made when the tool is tipped backward or forward. The tool is usually tapped lightly in this position.

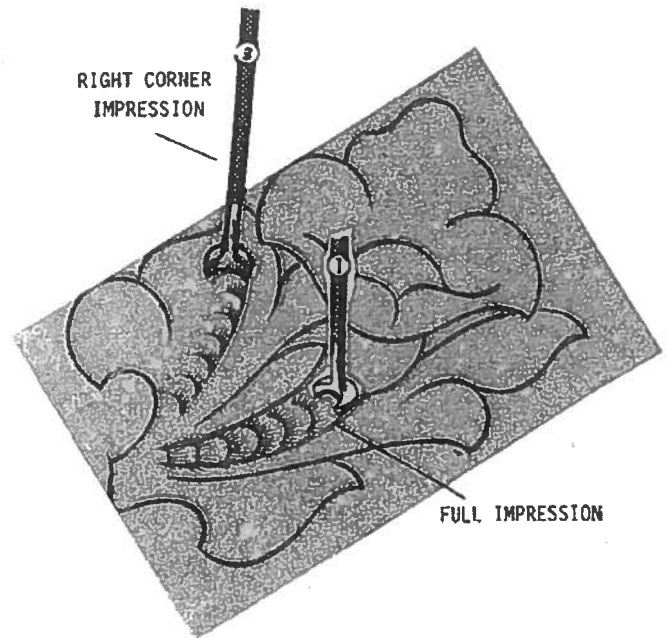
CAUTION: Check the moisture content of the leather before using the camouflage tool. (See information on casing on page 17.)

Practice making different types of impressions. Space the impressions evenly. After some experience with the tool, you will achieve a stamping rhythm so you can advance the impressions evenly and rapidly.

Strike the tool sharply for clear impressions. Hit the tool squarely with the mallet.



The next drawing shows the camouflage tool in use. As the contour of the design changes, turn the “cam” with each impression so the serrations follow the direction of pattern flow. When camming the leaf midrib, lean the tool so the corner impression is deepest at the midrib line. The impression should fade out at the other corner. Use toe impressions on stems and flower petals.

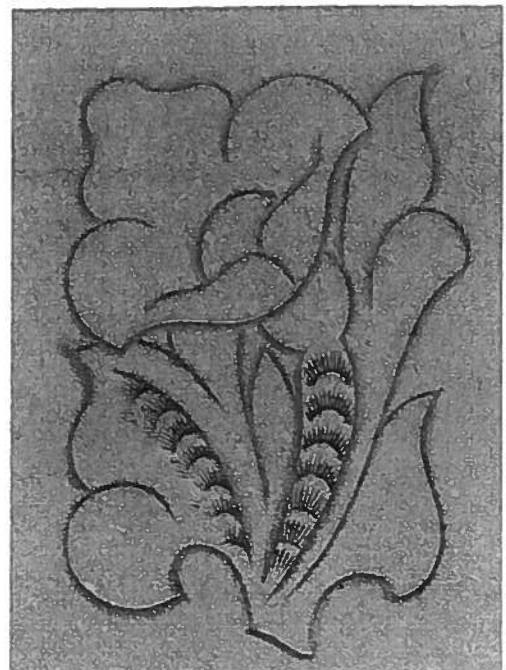


The design determines how the camouflage tool is used.

Practice using the camouflage tool.

Add camouflaging to the sample on which you transferred your design and cut with swivel knife.

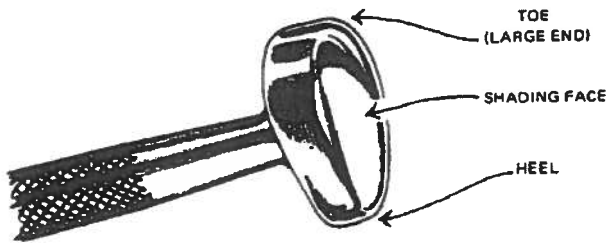
This is what it should look like.



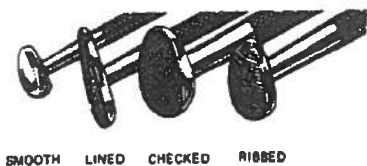
STEP 5: USING THE PEAR SHADER

The pear shader is a pear-shaped tool for making a three dimensional and lifelike effect in the design. The tool “shades” or “contours” areas within the design outline. The moisture content of the leather should be “just right.”

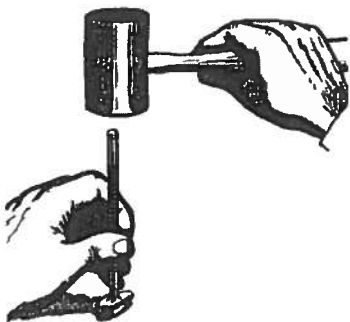
The Shading face of the tool is rounded in all directions so that sharp or blunt edges will not mar the leather.



There are many sizes, shapes and textures of pear shaders available for every shading need.



The shader is usually held in a straight up and down position.



The shading operation burnishes the leather to a rich, dark contrasting color. The depth of the impression and darkness of color are controlled by the force of the

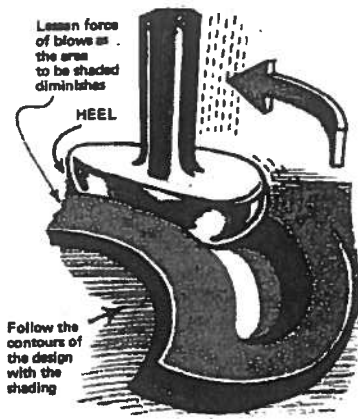
stroke of the mallet on the top of the shader tool. Strike the tool forcefully for deep impressions; lessen the force to diminish the impression and the color.

Uneven shading is caused by not moving the tool along the surface evenly between each stroke of the mallet. For smooth shading, a small change of position of the shader is necessary each time it is hit. This is called “walking” the pear shader. “Walking” is done by moving the shader about 1/16” as it springs up after being hit by the mallet. Move the tool along the surface of the leather in the direction shading is desired, using less force as the shading fades out. Keep your hand in a comfortable, relaxed position.

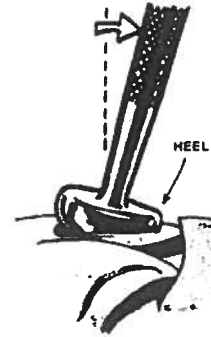
NOTE: Some craftsmen find it easier to “walk” the pear shader away from their body, others walk toward their body. Experiment to see what is best for you.

It takes practice to learn to shade smoothly. Start by developing a rhythm: hit-move, hit-move, hit-move, etc. Practice until you increase your speed. Soon you will be shading smoothly and easily.

The shading should conform to the general shape of the design. The shaders are “walked” to depress areas within design outlines, shaping flower petals, leaves, etc., in a realistic manner.



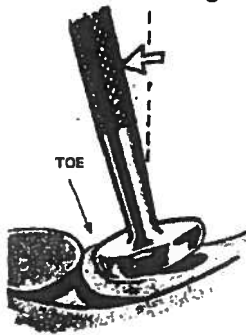
Shade small and pointed areas too small for the full width of the tool by tipping the shader back on its heel. Use only the narrow part to dish the area. Hold tool firmly when tipping to keep it from slipping.



The shader can be “walked” over a very large area and can be turned slightly in the fingers between strokes to broaden or lessen the width of the shaded area and to control the direction of shading.

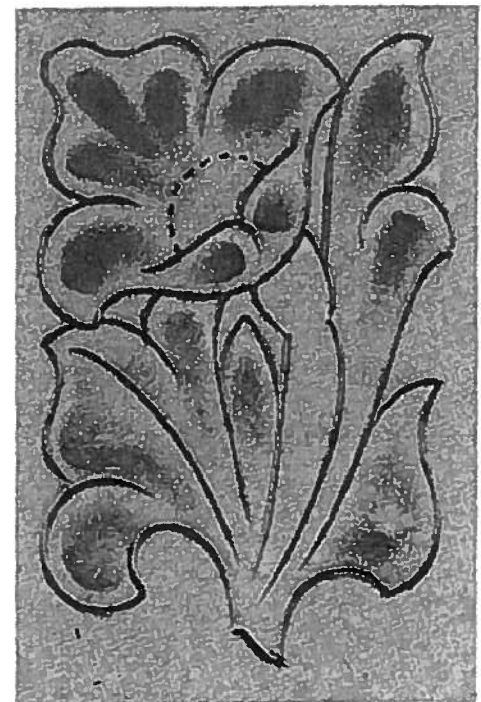
The result of shading should be a “dished” area of darker color with smooth contour. Turn the leather as you work. Shading should conform to the general shape of the design outline, but not touch it, and should diminish in depth and width at the end of each shaded area.

The toe of the tool can be used for shading small, rounded areas where the full length of the tool would be too long.

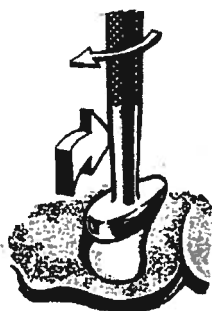


The picture which follows shows correctly shaded areas. See how the deep impressions fade to nothing.

Re-walk the shader over any “lumpy” shaded areas to smooth them out.



When an area wider than the tool is to be shaded, the tool can be turned slightly. A broader area is shaded with a minimum amount of stamping as the shader is used partially broadside.



SPECIAL HINT – Use of Modeling Tool

The modeling tool is a very versatile tool that can be used by beginners as well as advanced leathercrafters.

As an example the spoon end of the modeling tool can be used as an alternate for shading interior areas of the design.

Try shading a sample design using your modeling tool. Hold the modeling tool at a 45° angle. Do not tilt or rotate the spoon to the side. Apply pressure and carefully draw the tool toward yourself, depressing or “shading” areas within the design.

Shading with the modeling tool resembles shading with the pear shader when completed.

STEP 6: BEVELING WITH THE MODELING TOOL

Use the spoon end of the modeling tool for beveling or depressing outlines.

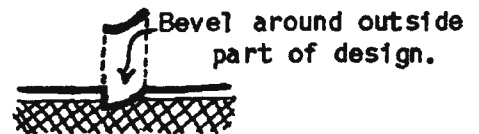


Be sure your leather is cased properly. Place the leather on your work table so the design is up. Hold the modeling tool like a pencil at about a 45° angle to your leather. Now, rotate the spoon slightly so that one edge can be used to follow around the outside of the design outline. Pressing firmly, draw the tool toward your body, following the curves in the line. The leather should be turned as you work so that all beveling is done by drawing the tool toward the body.



Each time you stop and start again, when beveling a line, place the tool behind the spot where you stopped. This will give a smooth flow to the line. Keep the pressure on the tool even. Do not push the tool backward as it will scuff the leather.

How do you know which side of the line to bevel down? Beveling compresses the leather on one side of the line, creating depth. Therefore, beveling is usually around the outside part of the design you want to appear raised.



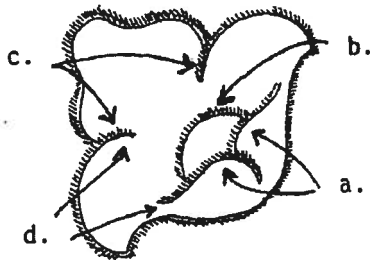
CROSS SECTION OF BEVELING

If in doubt, take a pencil and shade around the lines on the transfer pattern as you think they should be beveled. If it does not look right, erase and try again.

CAUTION: Beveling marks cannot be erased. Be sure where you want them by first pencil-shading on the transfer pattern.

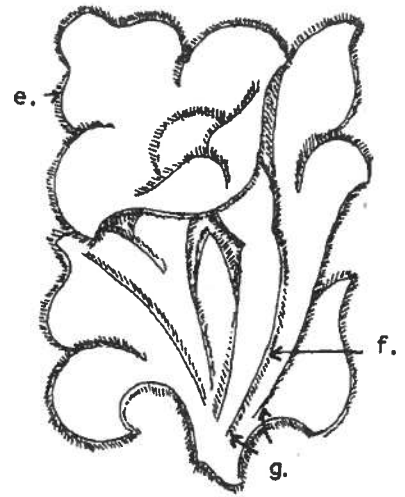
Bevel the objects in the design that you want to appear closest, first.

- a. These petals overlap the seed pod, therefore, bevel as shown to make them appear raised.
- b. Seed pod overlaps back flower petals, so it is beveled around next.
- c. Outside petals overlap center petal. Bevel as indicated by shaded lines.
- d. "Fade" beveling at ends of lines.



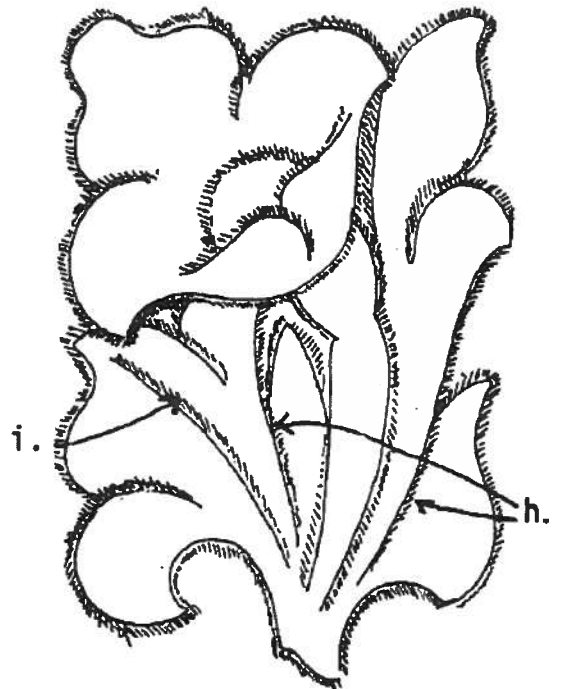
- e. Bevel around outside of flower to "raise" it from the background.
- f. Stem overlaps ends of leaf. Bevel as shown.

- g. "Fade" beveling at ends of lines.

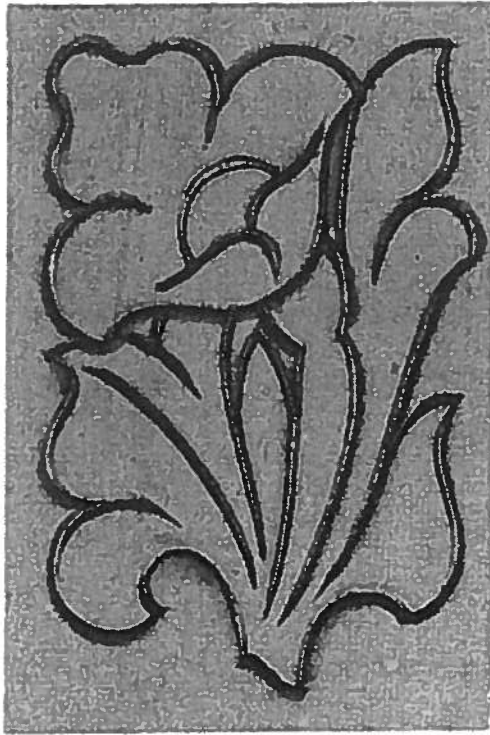


- h. Design lines usually indicate overlapping parts of design. Bevel on correct side of line to maintain the proper effect.
- i. Curved midribs of leaves are usually beveled on outside of the curve.

Complete beveling of minor parts of design.

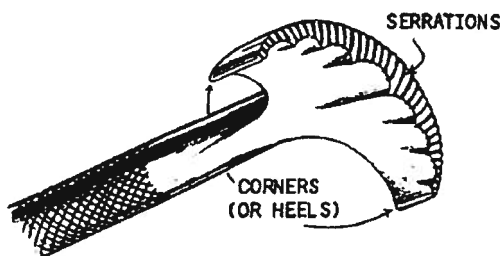


The photo pattern shows the correct sides of the lines on which to bevel.

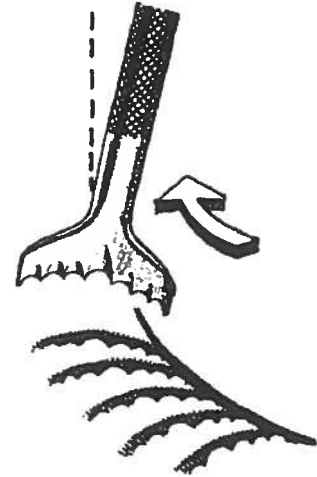


STEP 7: USING THE VEINER

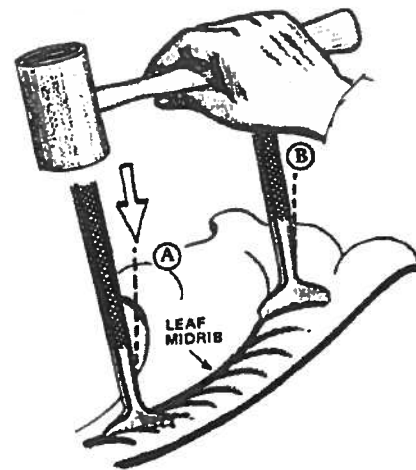
The veiner, as the name implies, is used for adding veins to leaves. It may also be used for other decorative and special effects. Veiners are available in several sizes, shapes and curves. The veiner has a medium radius with a scalloped inner edge and serrations on the stamping surface. When the impressions are placed close together, the effect is that of bark or overlapping scales.



Leaning the handle of the veiner governs the length of the tool impression.

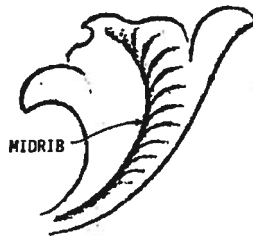


When veining leaves, the impressions should be spaced evenly. Leaning the tool toward the leaf midrib firmly imprints the corner of the tool along the rib. (Example A in illustration next page.) As the leaf widens, a broader impression is desired and the tool must be brought to more vertical position. (Example B in illustration.)

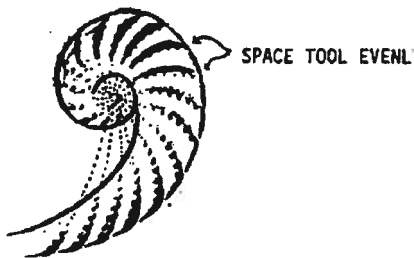


Strike the veiner squarely, with the mallet at right angles to the angle of the tool.

For the most graceful effects, veining impressions should never be at right angles to the midrib, but should angle toward the tip of the leaf. Follow the curve of the design, slightly turning the tool with each impression. The impressions should almost parallel the midrib near the tip of the leaf. The impressions of the tool away from the midrib should “fade out.”



Vein scrolls using the imaginary center of the scroll as your guide.



Place the veiner deliberately before each impression. Check angle and length of impression. Speed will come with practice and your veining will proceed smoothly and correctly.

Your sample might look like this.



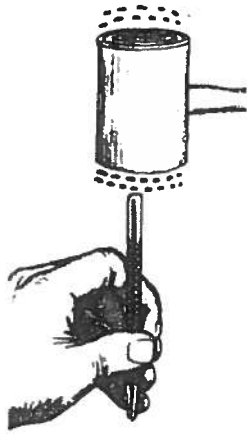
STEP 8: USING THE SEEDER

The seeder is used for making seed pods in the flower center.

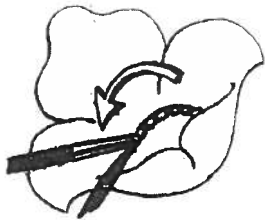


Hold the tool straight up and down and strike firmly to make a clear, clean impression.

CAUTION: Be careful not to strike the tool too hard because too much force will drive it through the leather. You can learn very quickly just how hard to hit the tool by practicing on a piece of scrap leather.



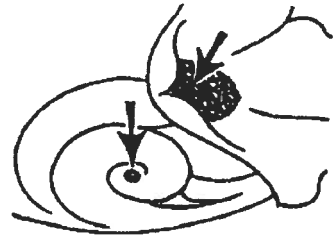
Begin stamping the outer row of seeds first. Stay within the outline and space your impressions as close together as a string of beads. Near the end of the row, adjust spacing so the last "seed" does not overlap the flower petal.



Stamp the second row of seeds as shown, stacking them close to the first row and keeping them as even as possible. Do not overlap.



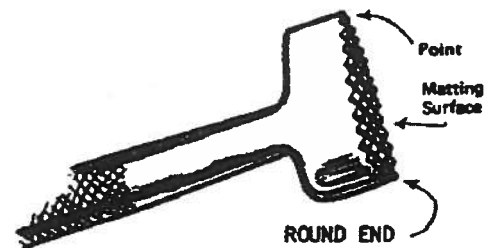
Fill in remaining area. Stamp seeds carefully. Only the serrated edges should touch or overlap. Place a seed in the center of a scroll.



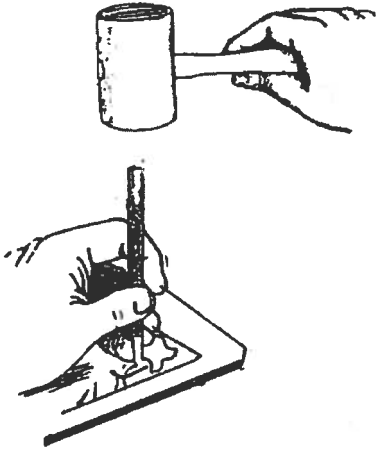
STEP 9: USING THE BACKGROUND TOOL

The background tool is used to mat down the background areas within and around the design. Backgrounding is one of the most important steps in leatherwork because it makes the design "stand out" in bold relief.

Background tools are made in a number of shapes and sizes. A practical background tool is one that can be used on both large and small areas. A small pointed end is needed for narrow areas.



Hold the tool straight up and down to the leather. The side of the little finger should rest on the leather to furnish a spring action which causes the tool to rebound after each tap with the mallet.



Neater backgrounding can sometimes be accomplished by first backgrounding around the edge of the design, then filling in the remainder.

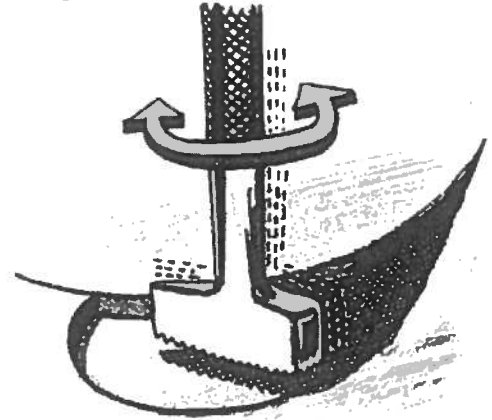


Move the background tool evenly and tap uniformly with the mallet to obtain a smooth background of consistent depth. Strike the tool hard enough to drive it just below the level of the design.

Work the background areas systematically, completing each area before moving to the next. This will help make them uniform in depth. Complete the background in a single sitting, if possible.

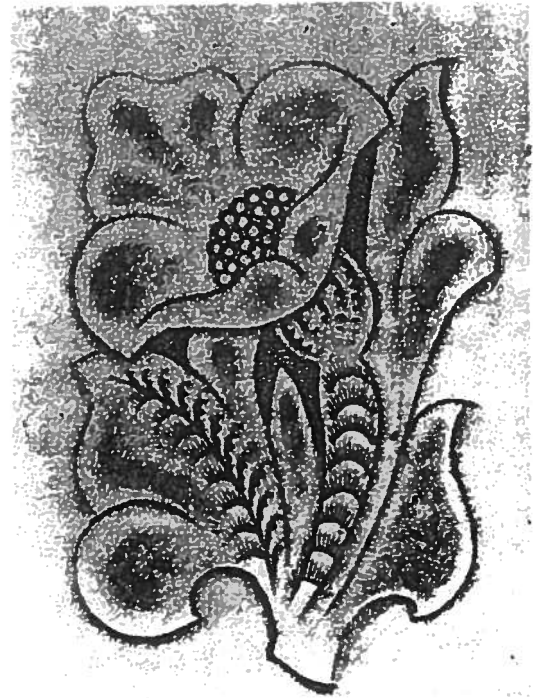
When the backgrounder is used to cover large areas, the tool should be “walked” with each indentation joining the preceding one. As the tool is “walked” turn the handle

in your fingers to prevent a “tool pattern” from forming.



CAUTION: The working end of most background tools is small. Therefore, the moisture content of the leather should be very low.

Your finished sample may look like this.



USING OTHER LEATHERWORKING TOOLS

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. How to use the beveling tool

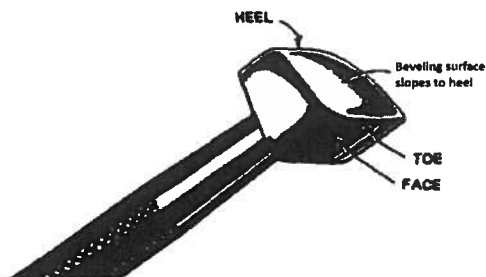
ITEMS NEEDED

1. Tools
2. Several pieces of tooling leather for practicing each step
3. Half-backs (2 ½"x4 ⅝"), 3" rounders, practice pieces or enough leather for cutting the samples.

BEVELER

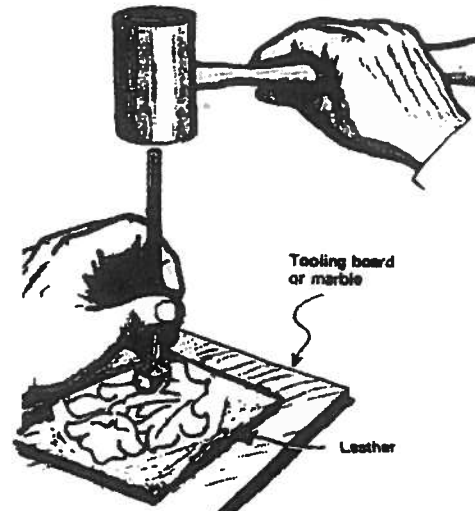
The purpose of the beveler is to bring the design into bold relief, creating a three-dimensional effect. Usually only one side of the swivel knife cut is beveled down. This is not a strict rule as some patterns require beveling on alternate sides of a cut or sometimes on both sides.

Bevelers are available in many sizes and textures for creating special and varied effects.



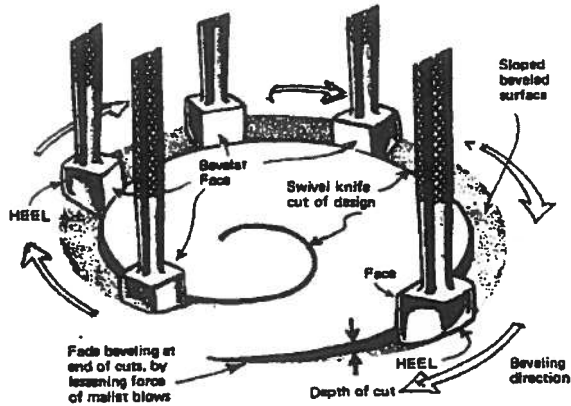
Get comfortably seated at your work. Have a good light with no shadows over your work area. Rest your hand holding the beveler on the work surface.

The beveling surface of the beveler slopes toward the heel. The deepest part of the bevel is usually next to the cut line of the design, with the sloping bevel fading toward the background areas. Hold tool straight up and down not at a slant.



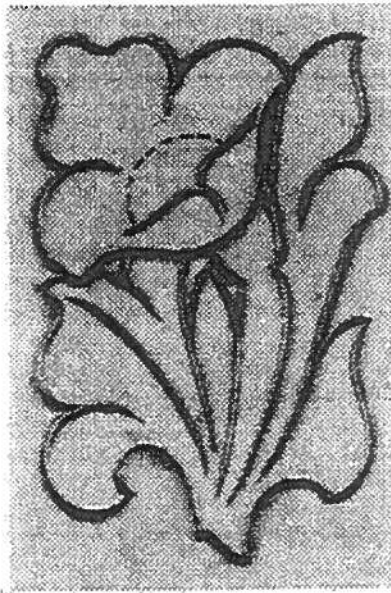
The face of the beveler should always face the cut line of the design and should generally face you. The toe of the bevel is placed directly into the cut. When the beveler is struck with the mallet the action compresses the leather on one side of the cut, creating depth. This also burnishes

(darkens) the leather and gives contrast to the design.

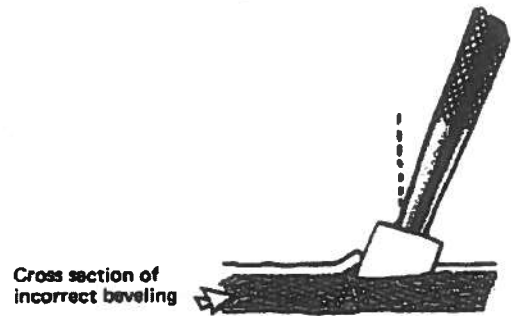


Beveling is usually around the outside part of the design you want to appear raised.

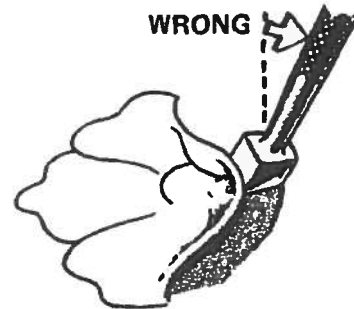
The picture below shows beveling done on the correct sides of the lines.



Remember to hold the beveler straight up and down. If you tip the beveler, the angle will be incorrect and push the cut edges of the design up.



When the beveler is held improperly, the heel of the tool will mark the leather and not "fade out" the beveling.

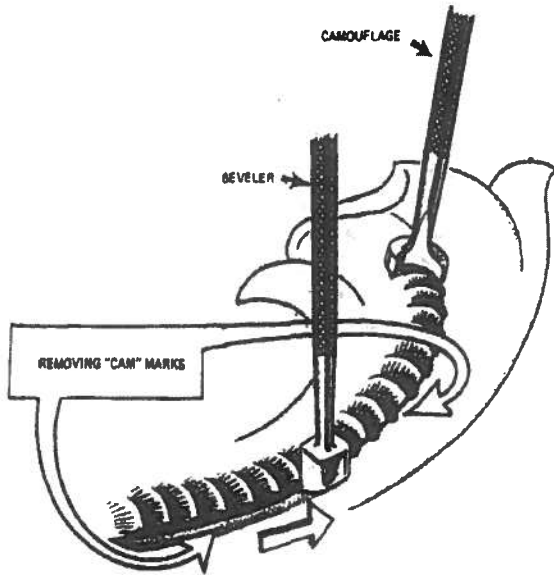


The beveler may be "walked" by moving it about 1/16" as it springs up after being hit by the mallet. "Choppy" beveling is caused by not moving the tool along the surface evenly between each stroke of the mallet.

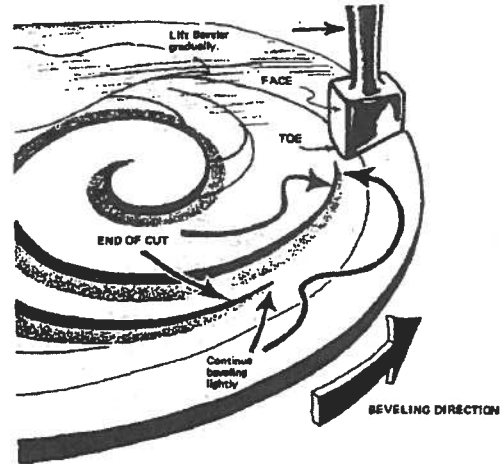
It takes practice to learn to bevel smoothly. Start by developing a rhythm; hit-move, hit-move, hit-move, etc. Increase your speed as you become familiar with the rhythm of the two movements.

Removing "Cam" Marks

If the camouflage tool is used prior to beveling, the corner impressions of the camouflage tool may leave serration marks on the opposite side of the cut design line. These marks can usually be obliterated with the beveling operation.



3. As you near the end of the cut, lessen the force of the blows with the mallet and gradually taper the beveling to lesser depths.
4. Do not stop beveling at the end of the cut, but continue slightly beyond the cut. Gradually lift the beveler and use lighter taps of the mallet, thus "fading" the bevel to nothing.



Practice using these tools: carving, camouflage, pear shader, beveler and veiner. This will be your sample 2.

"Fading" the Beveling

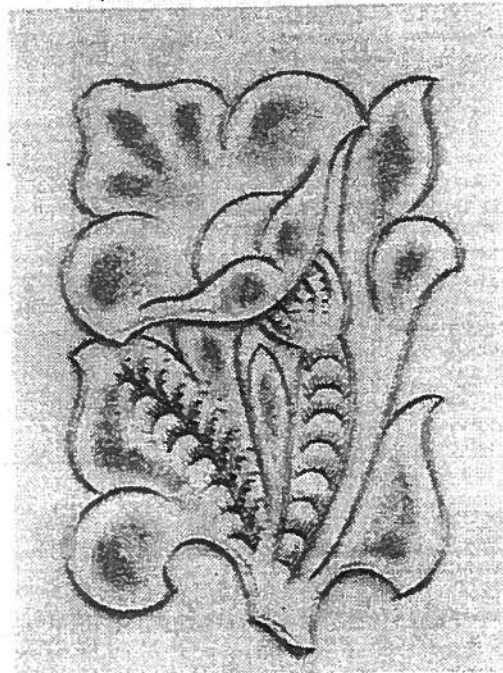
Beveling should "fade out" on lines of the design that do not join other cuts. On such lines, cutting depth should also "fade out." The knife blade should gradually be withdrawn as the cut is ended. The beveling should taper slightly beyond the cut. Only an unusual design would require an abrupt stop to beveling at the end of a "faded" line.

Study your design to see how deeply you should bevel.

On the design shown:

1. Begin at center of scroll, beveling lightly.
2. At first quarter turn of scroll, begin beveling deeply. Continue heavy beveling around remainder of scroll.

Your sample should look like this.



MAKING DECORATIVE CUTS

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. How to make decorative cuts

ITEMS NEEDED

1. Scrap of leather for practice
 2. Swivel knife
 3. Sample of a completely tooled design with all steps completed up to this point.
-

DECORATIVE CUTS

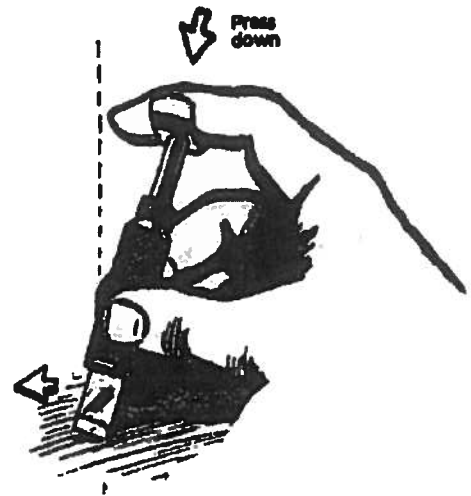
Decorative cuts are made to decorate or make the design more attractive. Decorative cutting is done after all other carving and stamping has been completed. It is usually the final step in adding ornamental detail to your design. Good decorative cutting adds greatly to the attractiveness of a carved design. The cuts should flow with the design, adding grace and beauty.

Decorative cuts are usually begun much the same way as cutting half circles. The main difference is that once the cut is begun, it turns sharply, but gracefully, the gradually diminishes in depth. The cut fades into a hairline as the knife blade is withdrawn from the leather. These cuts are usually made in a series, one succeeding shorter than the next. The tail ends of the cuts go toward a common center, where they would eventually meet if they were continued.

Case some practice pieces and have them ready to cut. Proper moisture content is very important for good decorative cutting. It may be necessary to slightly dampen the grain surface of the leather for good

results. Avoid applying too much moisture at this point.

For a right cut, roll your hand to the right to bring the blade into proper cutting position. Begin with a heavy downward pressure to make the cut "pop open."



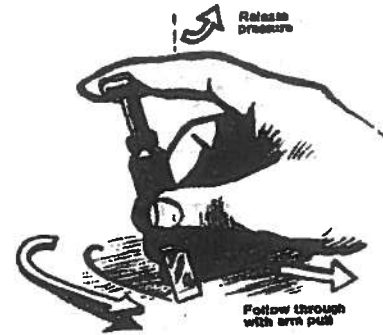
Begin the turn immediately, straightening your hand to almost normal position as the blade turns toward your body. Continue with a heavy downward pressure.



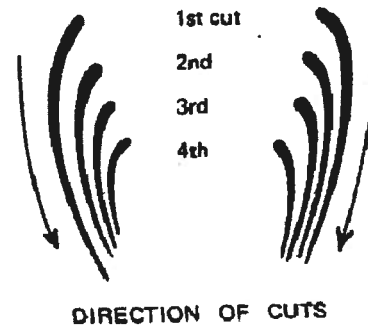
As the cut begins to straighten, pull your hand and arm toward you to steady and control the cut. Gradually diminish the pressure on the yoke.



Continue the cut in one graceful flowing movement. At the same time, lessen the depth of the cut with each motion of progress. Fade the cut to a hairline and continue the follow-through motion as the blade is lifted from the leather.

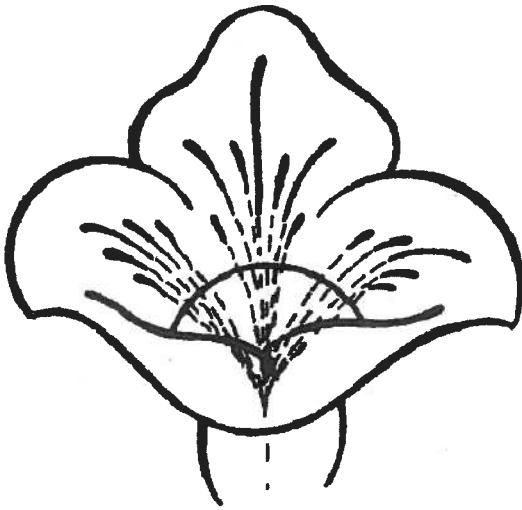


Practice the exercises shown. Make the long cuts first. Practice rights and lefts to get the feel of the motion and flow of decorative cutting. Then, practice for control so cuts will be successively shorter and graduated toward each other at the ends of each cut.



A good floral design is composed of graceful, flowing lines. Flower stems, leaves, scrolls, etc., should all originate from these flowing lines. Decorative cutting accents these flowing lines.

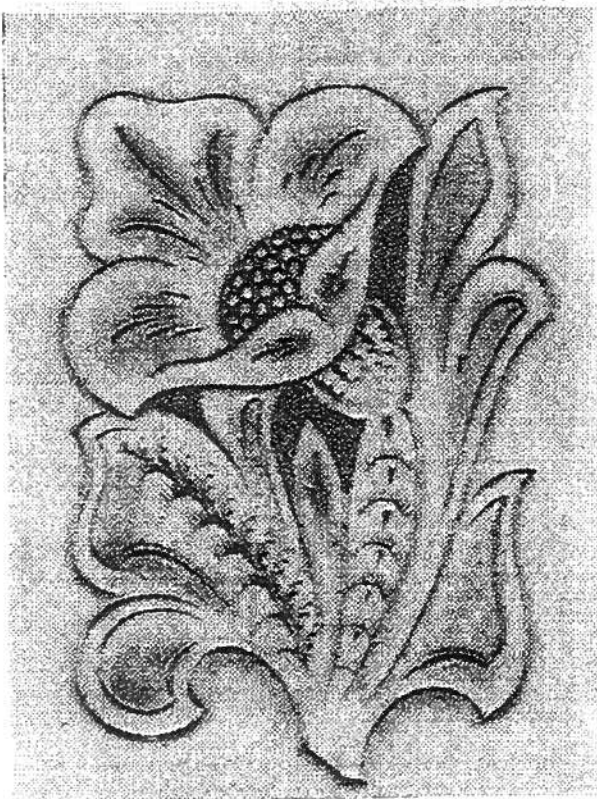
The drawing illustrates the correct use of decorative cutting. The cuts have been extended by dotted lines to show the proper flow of direction. All lines should converge into the center of the stems and become a part of the flow of the design. Always keep this design flow in mind when you cut.



The illustration shows the pattern completely carved and stamped with decorative cuts added.

Practice making decorative cuts.

Carve and tool one sample completely. Include seeder, backgrounder and decorative cuts. Save this sample to mount on your exhibit board. This will be sample number 3. See page 37 for further finishing instructions.



FINISHING TOUCHES

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

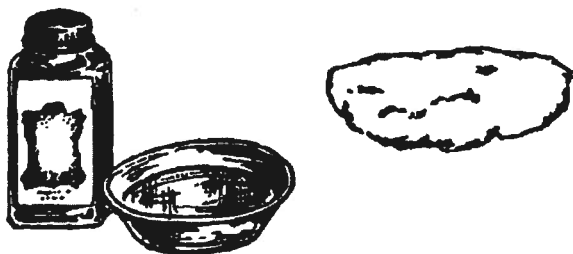
1. Leather finishing
2. Caring for leather articles

APPLICATION OF LEATHER FINISHES

Leather finishes are applied to protect the leather and preserve the qualities and appearance of genuine leather. Before applying clear finish, there are several points which you should know.

1. All tooling of the design must be completed before clear finish is applied.
2. Be sure the surface area is dry, clean and free of any dirt, dust or other matter. Check with your leader on how to clean leather, if it is soiled.
3. Remove all loose wool from sheepwool applicator or dauber so it does not get into the finish. If a sponge or soft cotton cloth is used, be sure that it is clean.
4. Leather finishes must be applied prior to assembly of the article. It is difficult to get a smooth, even coat over a curved structural surface.

Care should be taken in applying finishes to leather to be sure only a very light coating is applied.



For best results, pour some clear finish into a small glass or ceramic container such as a bowl or dish.

Soften the sheepwool applicator, dauber or sponge by rubbing a small amount of leather finish into it.

Apply clear finish to leather surface with a smooth circular motion or according to printed instructions on container. Be sure to cover the entire surface. Two or three very light coats of finish are best. Apply smoothly and evenly. Allow each coat to dry and buff before applying the next coat.



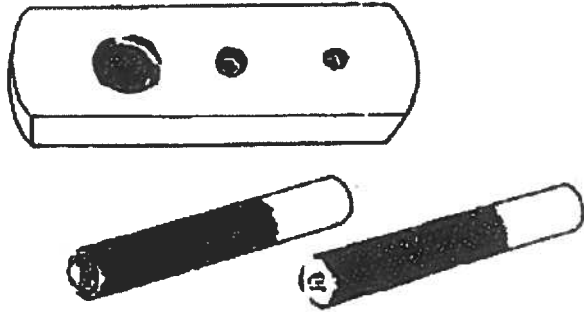
If wax is used to finish the leather, apply a thin coat. Thick coats turn white and fill up the cuts and tool impressions. When dry, polish to a high luster with a soft cloth.

Apply clear leather finish to sample 3 and the two exhibit articles you make for this unit. Finish is optional on samples 1 and 2.

See page below for other finishing touches.

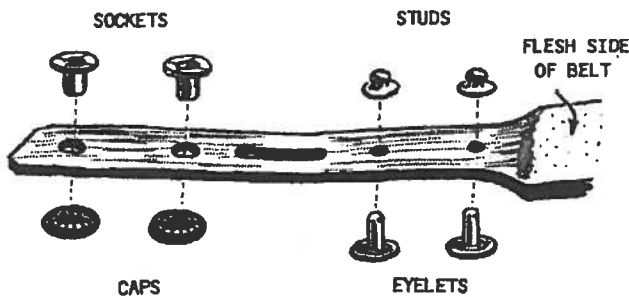
SETTING SNAP FASTENERS (Segma Snaps)

Many different snap fasteners and tools for installing them are available from leather dealers. Perhaps your club would like to buy a multipurpose tool which could be used on different snap fasteners.



The illustration shows how to set snaps on a belt. The same procedure is used on a key case, pocket of a billfold or any other article.

Be sure to arrange the parts properly so the snap will work right.

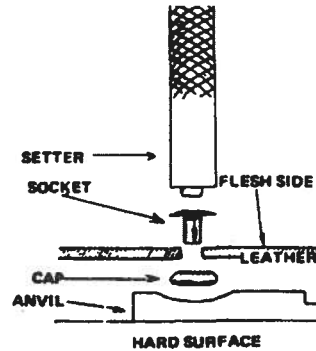


Setting the Cap and Socket

Place anvil on a hard work surface with concave snap cap side up. Position cap in place. Center snap hole in leather over the

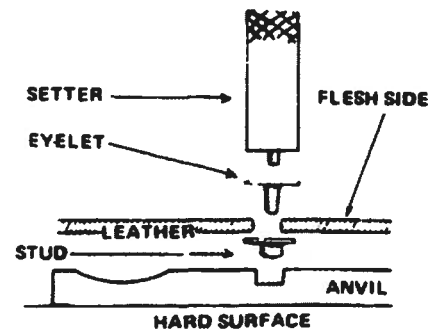
cap and insert socket through hole in leather into opening in cap.

Insert prong of setter in opening of socket. Strike setter sharply with mallet, but do not overdo it.



Setting the Stud and Eyelet

To set the stud and eyelet use large opening for belt snaps and small opening for glove snaps. Place stud in proper opening. Align hole in leather over stud and insert eyelet through hole in leather and into opening in stud. Place prong of setter into opening in base of eyelet. Strike setter sharply with mallet.



NOTE: If you are using belt snaps with finished backs, use a rivet setter. Be sure the eyelet is straight. If crooked, the eyelet might bend and not set properly.

LEATHERCRAFT LACING

TALKS OR DEMONSTRATIONS TO GIVE

Suggested Topics:

1. Punching holes for lacing
2. Splicing lace using the dry-splice technique
3. The single loop stitch
4. The double loop stitch

ITEMS NEEDED

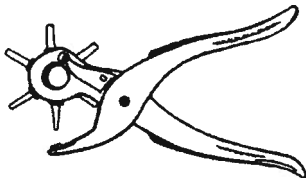
1. Item to be laced
2. Lacing and lacing needle
3. Tools for measuring, marking and hole punching

LACING

Review pages 39-44 on kinds of lacing to use, how to punch holes with a thonging chisel, how to thread the lacing needle and life-eye needle, how to do simple lacing and how to splice lacing with cement in Unit 1 manual.

REVOLVING PUNCH

The revolving punch is made like pliers but is modified to punch holes in leather. One jaw has a revolving head with round tubes of different diameters projecting from it. The opposing jaw has a small anvil. This design allows you to punch different size holes with one tool.



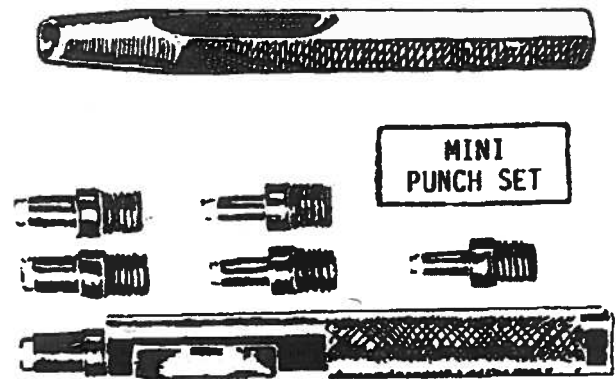
To use, the desired hole size is selected and turned into position so the proper tube meets the anvil on the opposite jaw. The punch is centered over pre-marked locations on the leather and the handle squeezed firmly.

This is a good tool for punching single holes, one at a time. It is sometimes difficult to punch larger size holes in thick or multiple layers of leather.

If lacing holes are to be punched for 3/32" lace, the #1 size corresponds to 3/32" diameter.

DRIVE PUNCH

Drive punches are also used for punching round holes one at a time. These come in various sizes as individual tools or sets.



Choose the correct size. Then use the punch in combination with the mallet and end grain of wood block in the same way illustrated for the thonging chisel on page 40 of Unit 1 manual. Do not use on a surface which will dull or chip the cutting edges of the punch. Multiple tube punches are available. These speed up the process when you are punching multiple round holes for 3/32" lacing. The same procedure is used as described for the thonging chisel.

SINGLE LOOP LACING

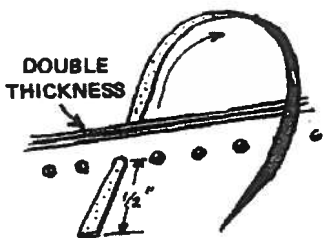
(Also called Single Cordovan or Single Buttonhole Stitch)

Single loop lacing is best suited for lacing the edges of the lightweight leathers or a single thickness of leather.

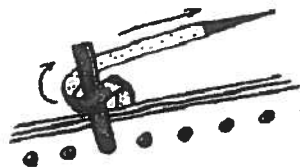
HOW TO MAKE LACE SLIDE THROUGH HOLES MORE EASILY

1. Put the end of the stylus through each hole to enlarge it slightly.
2. Coat the lace with leather cream or beeswax to lubricate it. Rub it in well. This also helps preserve the lace.

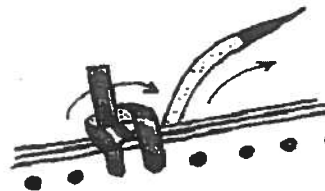
Begin at top of article. Push lace through front side. Leave about 1/2" at end.



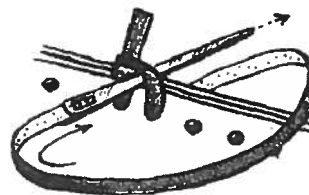
The front side of the article must face the person lacing. Fold end up and loop lace around as shown. Hold with fingers until the first stitch is tightened.



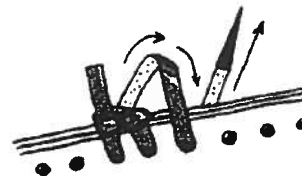
Lace through second hole. Be sure smooth side of lace faces you. Pull up snugly.



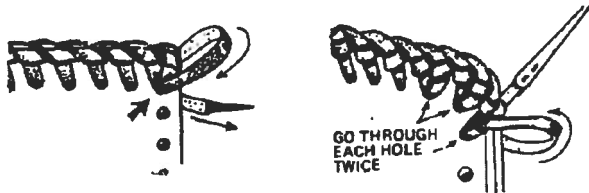
Push needle under lace as shown, with the flesh side up. Do not twist lace. Pull up snugly.



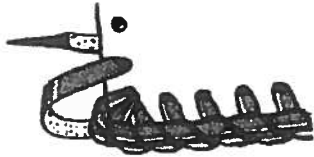
The first two stitches should be snug, but not tight. They will need to be adjusted when you get completely around the article. Continue lacing in this way until you reach a corner hole.



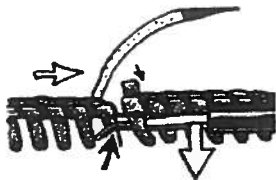
More stitches are required at corners for the lacing to lie flat. Lace through corner hole or holes more than once, as shown. Other methods for lacing corners are also permissible. All corners must be done consistently.



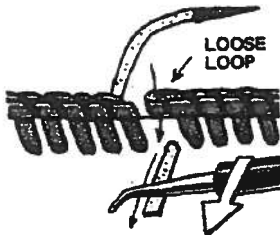
Each stitch must go under the loop as previously described. Lace to the beginning point.



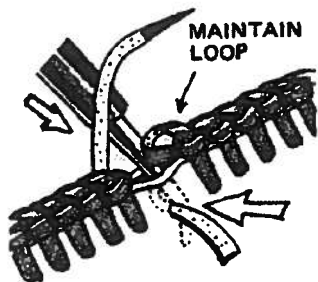
Lace through last hole and under loop. Insert stylus end of modeling tool under beginning end of lace.



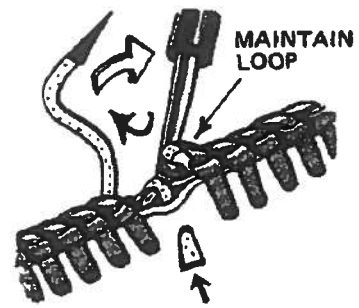
Pull end of lace out of loop with end of modeling tool. Maintain the loose loop.



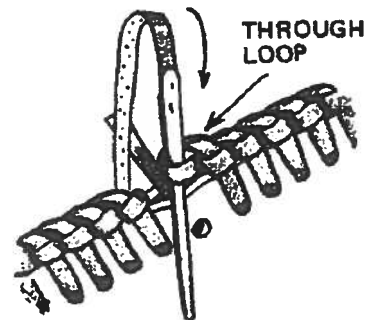
Insert stylus between the leathers and hook it over the end of the lace.



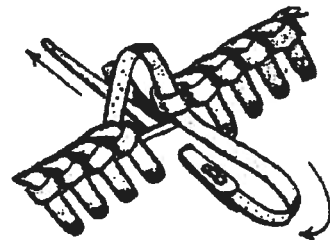
Carefully pull up stylus and gradually pull end of lace out of the hole, up between leathers.



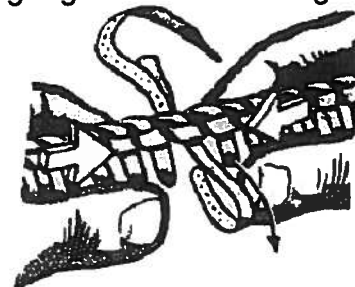
Carefully push needle down through the loose loop.



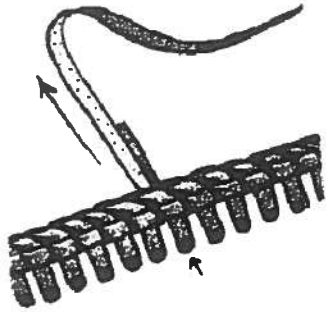
Push needle through hole and up between the leathers. Be sure lacing does not twist.



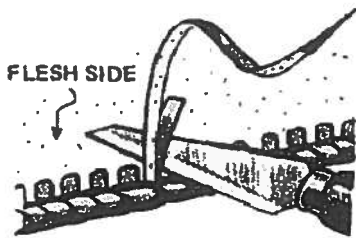
Adjust the stitches by pushing and working the lacing together with the fingers.



Pull lacing up snug and adjust so all the stitches appear even.



Carefully cut off ends from the flesh side. Tap lacing flat with mallet or roll under a wooden dowel.

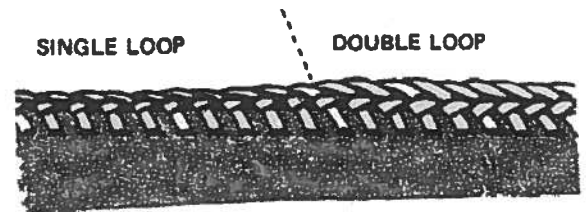


NOTE: When lacing only one thickness of leather, glue ends to the back of the article.

DOUBLE LOOP LACING
(Also called Double Cordovan or Double Buttonhole Stitch.)

Double loop lacing covers a wider area and is used on heavier leather than single loop lacing. It is used especially where two thicknesses of leather require more lacing to cover the edge.

On special articles where variations of thickness of leathers occur, the lacing can be joined continuously from one kind of stitch to another. The stitching can also be reversed as thicknesses of leathers decrease.

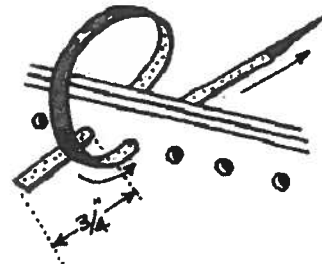


Use the following formula to determine the amount of lacing you will need for the double loop stitch.

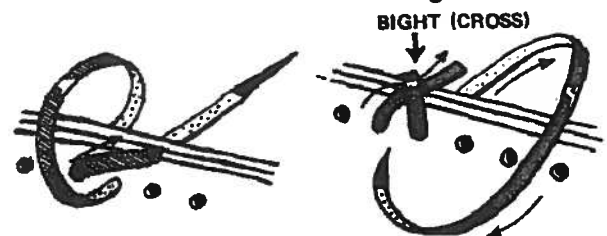
<u>Style</u>	<u>Edge Distance</u>	<u>Amount Required</u>
Double loop	1/8"	7 1/2 x distance
	3/16"	8 1/4 x distance
	1/4"	9 x distance

Add 10 Percent to the above formulas for splicing and ending lacing.

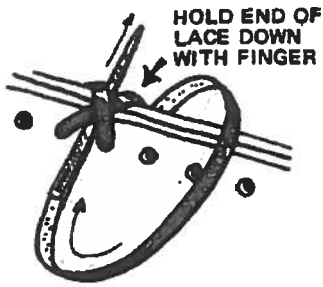
The front side of the article must face the person lacing. beginning with flesh side of lace up, pull needle and lace through first hole. Leave about 3/4" of the lacing end and go on to lace the next hole.



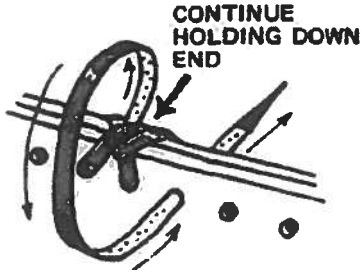
Pull stitch tight, lacing over end you left free. This forms a cross or "bight."



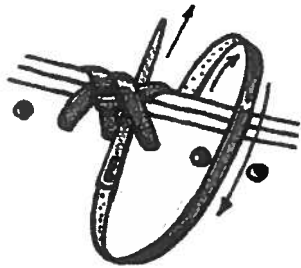
Push needle under cross or bight. Hold end of lace down on opposite side.



Pull stitch under bight snug, but not tight. Lace through next hole.



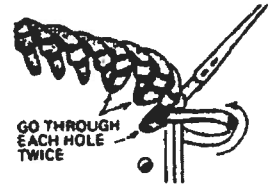
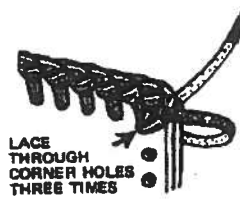
Follow same procedure, making cross or bight. Once again, go under bight and pull stitch snug.



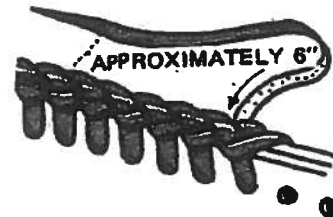
Lace through next hole. The end of lace can now be released as it is locked in place.



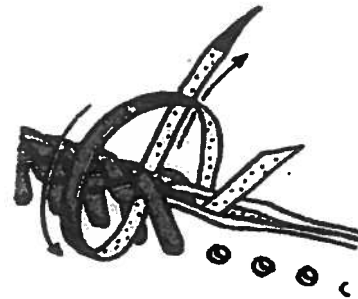
When lacing corner, stitch it three times or lace 2 times in each of the 3 corner holes. Be sure to go through bight on corner stitches.



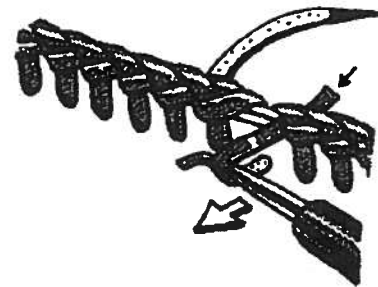
Lace until only five or six inches of lacing remain. You will have to splice with a new length of lace.



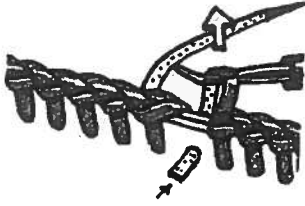
Follow the instructions given later. Remember to push the needle under the bight for a double loop stitch.



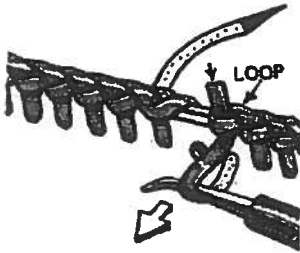
Continue lacing to starting point. Use modeling stylus to pull end of lace free of stitches.



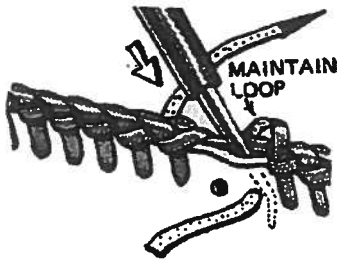
From back side, pull the end of lace out of the hole.



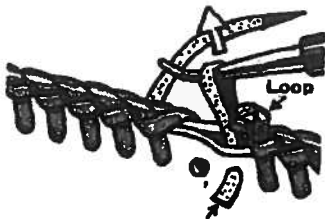
From front side, pull end of lace out of the loop.



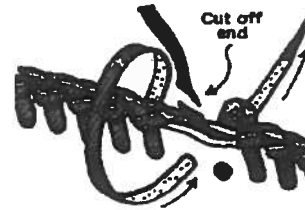
Push stylus down between leathers and hold it over the end of the lace.



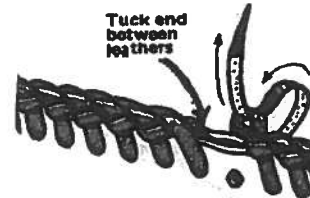
Pull end of lace out of hole and up between leathers. Two empty holes should appear on front side; one on the back.



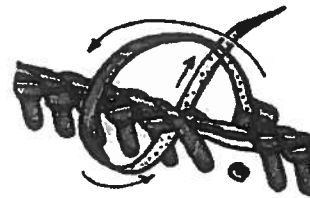
Cut off end of lace you have pulled out and tuck the end of the lace between the leathers. Lace through the next hole.



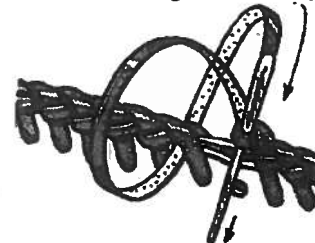
Pull stitch tight and lace up through loop from back side. All holes on back side should be filled.



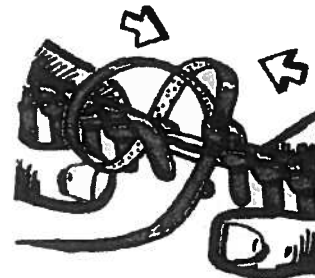
Lace under bight. Do not pull this stitch tight.



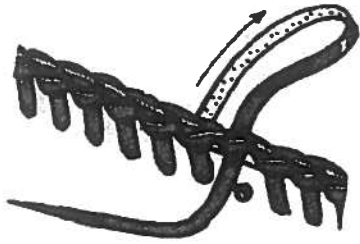
Carefully cross over, as shown. Push needle down through the loop.



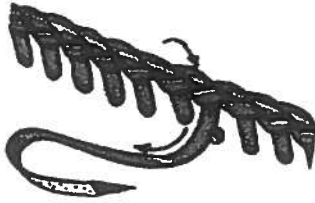
Pull needle through. Push laced edges together to adjust starting loops for easier completion.



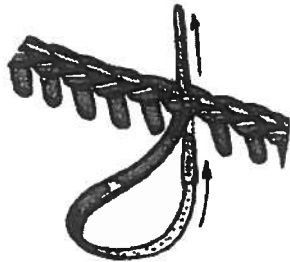
Pull any slack out of the first loop and adjust lacing with fingers to make all your stitches appear equal.



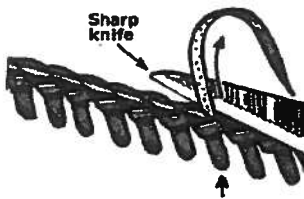
Pull the end of the lacing down tight. Make sure all stitches appear even and equally spaced.



Push needle through last hole as shown. Bring it up between the leathers and out between lacing.



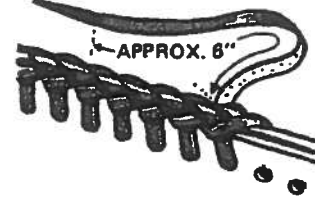
Carefully cut off the end of this lacing. Tap lacing flat with mallet or roll flat with wooden dowel.



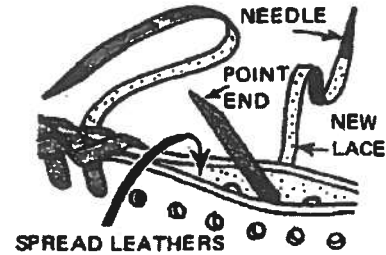
DRY SPLICING

In unit 1 you learned how to cement two pieces of lacing together to make a wet splice. A quicker and more convenient way of splicing when lacing two or more thicknesses of leather with single or double loop lacing is called dry splicing.

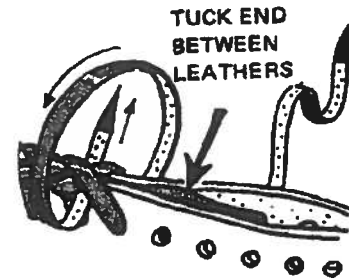
Approximately 5" to 6" of lacing is required to make the splice.



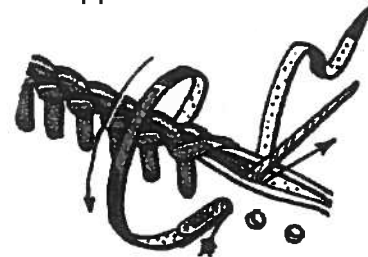
Insert newly threaded needle down between leathers, three to four holes from lacing; pull out back side. Leave 3/4" at end.



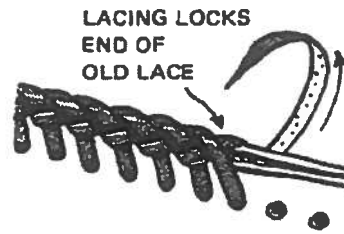
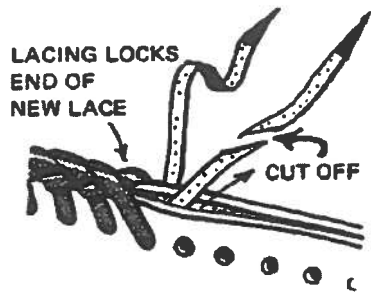
Tuck end of lace between leathers and continue lacing your article with the old lace.



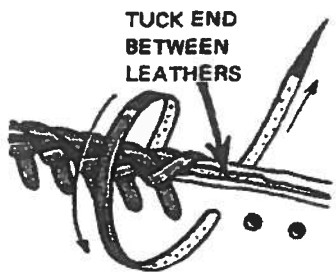
Lace with the old lacing up to the new lace. Push the needle up between the leathers in the hole opposite the new lacing.



Pull the old lace up tight, cut off the end at an angle, allowing about 3/4" to remain.



Now begin lacing the rest of your article with the new length of lace. Tuck the end of the old lacing between the leathers and lace over it with the new lace so it is caught and will not show.



Continue lacing and lace over ends to lock them in place.

NOTE: When lacing only one thickness of leather, glue ends to the back of the article.

Punch holes or use articles which have been punched. (See Page 39 for instructions on punching in Unit 1 manual.) Apply clear leather finish to tooled articles.

Use lacing on both exhibit articles, double loop lacing on at least one. Single and double loop lacing are sometimes used on the same article.

CARVING LEATHER

Now that you have had practice in carving and tooling leather, select the articles to make that will express your skills and be interesting and useful to you.

Make two or more articles. Exhibit two that have some lacing; at least one with double loop lacing. The following are suggested.

Belt

Billfold – wallet or pocket secretary

Checkbook cover

Eyeglass case

I.D. And picture case

Key Case

Knife sheath

Pocket saver

Small purse

Swivel knife

Sheath

Any Article of your choice requiring the same tools and skills

Keep your record up to date and complete it according to the requirements in your county.

Make two or more articles, both with lacing. Include at least one with double loop lacing.

Apply clear leather finish to the articles you make before they are laced.

Attach the two articles to your exhibit board.

REFERENCES AND RESOURCES

LOOK FOR IDEAS

Your local hobby, craft or leathercraft supply house is an excellent source of ideas, assistance and supplies. Look under the following headings in the yellow pages of your telephone directory.

Craft Supplies
Hobby Supplies
Leathercraft
Leather Goods
Leatherworking.
Tandy/Leather Factory

For free instructional videos go to the following sources:

The Tandy/Leather Factory main website is:

<http://www.tandyleatherfactory.com>

YouTube:

<http://www.youtube.com/tandy>

Facebook:

<http://www.facebook.com/pages/Tandy-Leather-Factory/>

Also check: www.leathercraftlibrary.com for e-books.

A leathercraft catalog is always helpful. Look in your library for leathercraft books which have pattern ideas.

Your 4-H leader has a Leader's Guide for 4-H Leathercraft that lists helpful reference books and visual aids.

START YOUR OWN LIBRARY

You may want to start your own leathercraft reference library. Your leader may have some suggestions or look at:

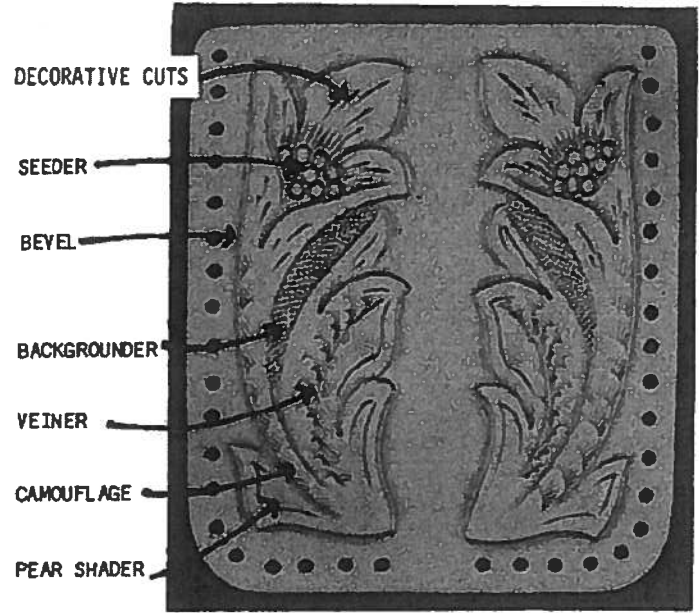
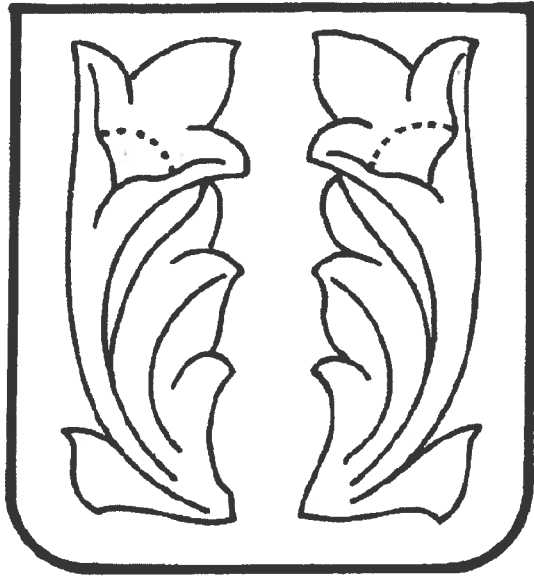
Crafttool Tech – Tips by Al Stohlman
How to Carve Leather by Al Stohlman
How to Lace
Ken Griffin's Scrapbook
Leathercrafting: Procedures and Projects

PATTERNS

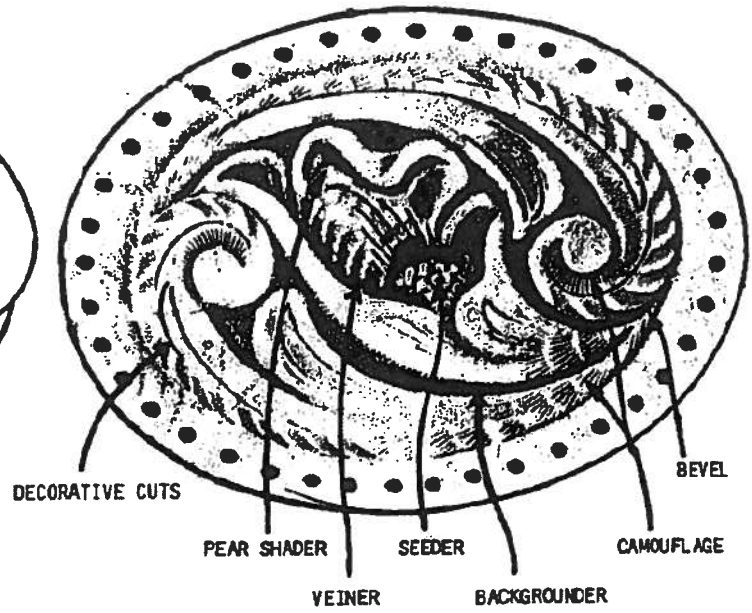
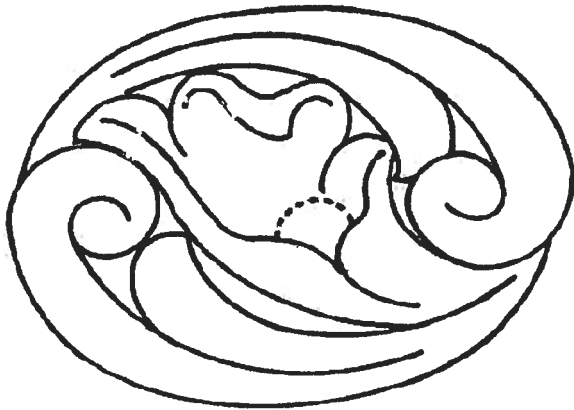
NOTE: The patterns which follow were listed as suggested articles for this unit. Other patterns may also be used. It will be easiest for you to purchase materials in kit form from your leathercraft supply store. Check to see if your kit comes with thread or lacing. If leather lace is not provided, you

may have to buy it. You must use lacing – not thread – to finish your articles in this unit. Although the photo carve pattern may show the use of a variety of tools, it is sufficient to use only the basic tools and skills studied in this unit.

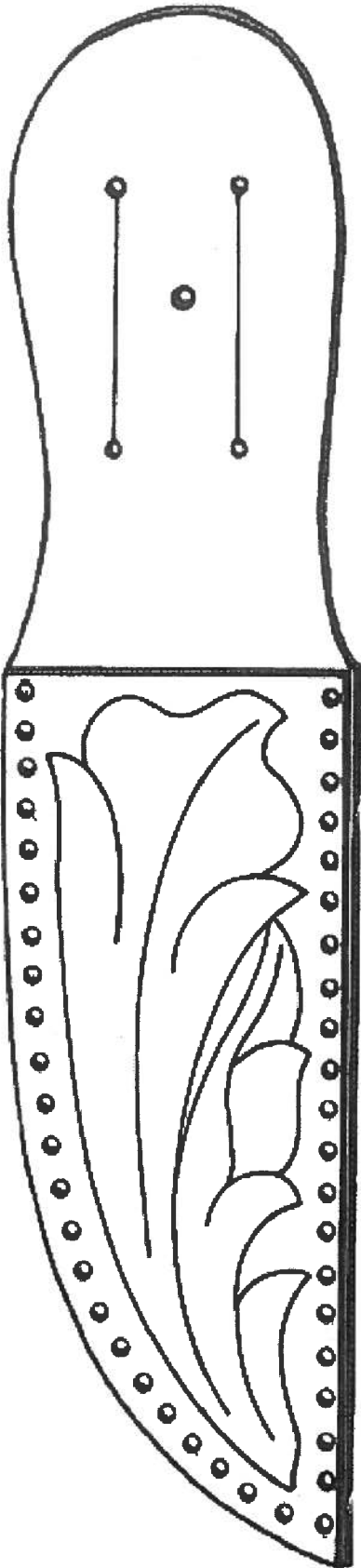
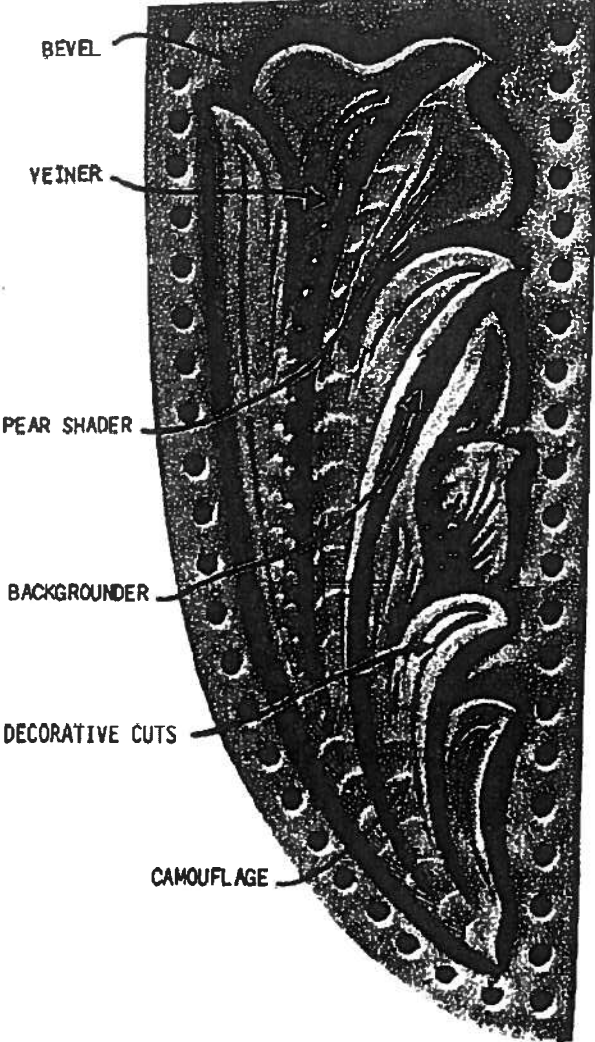
SWIVEL KNIFE SHEATH



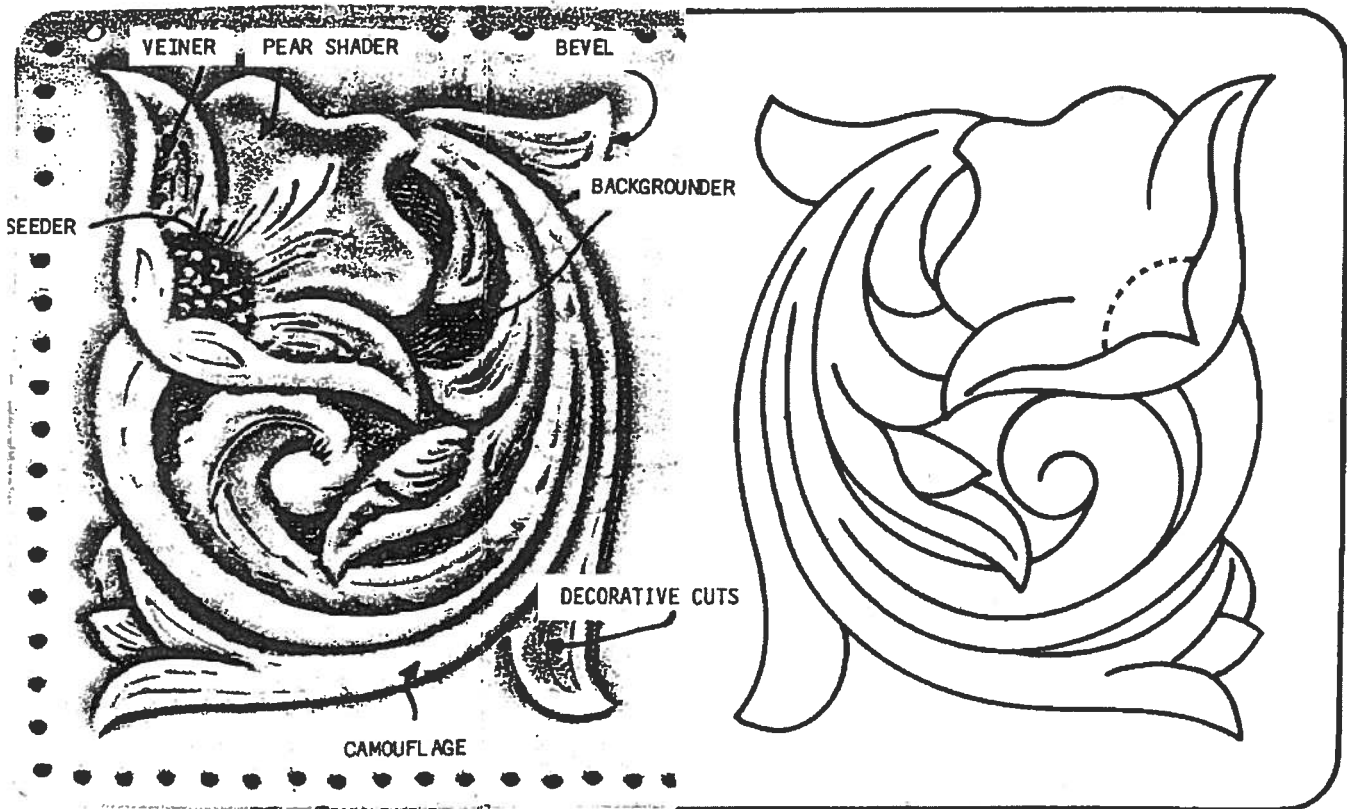
BELT BUCKLE



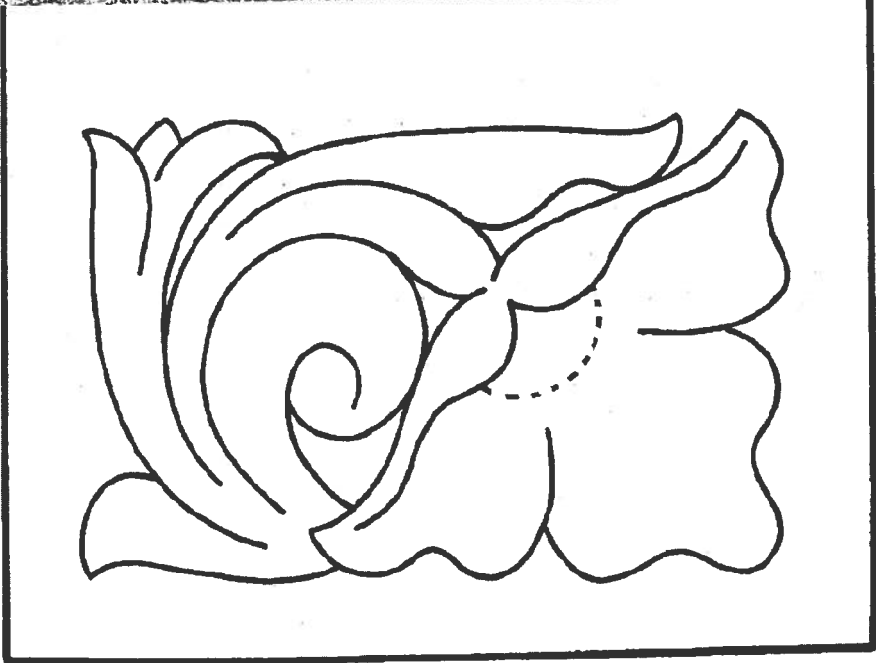
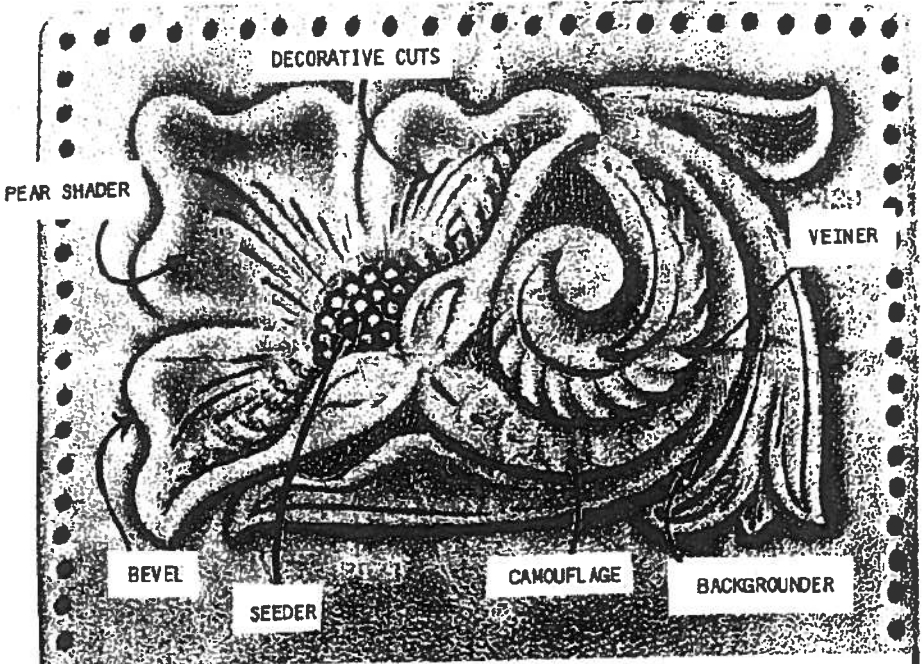
KNIFE SHEATH



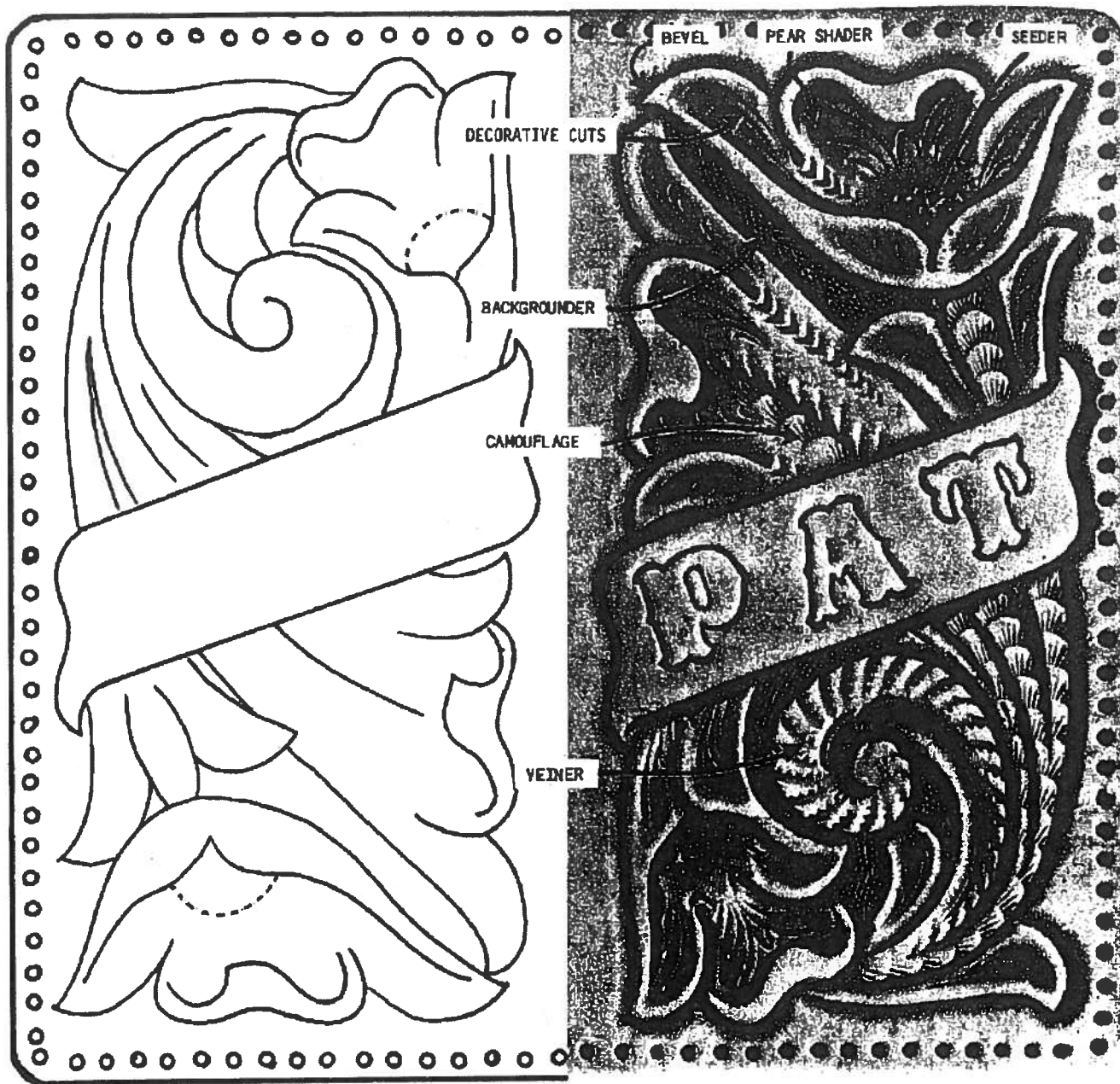
I.D. CASE



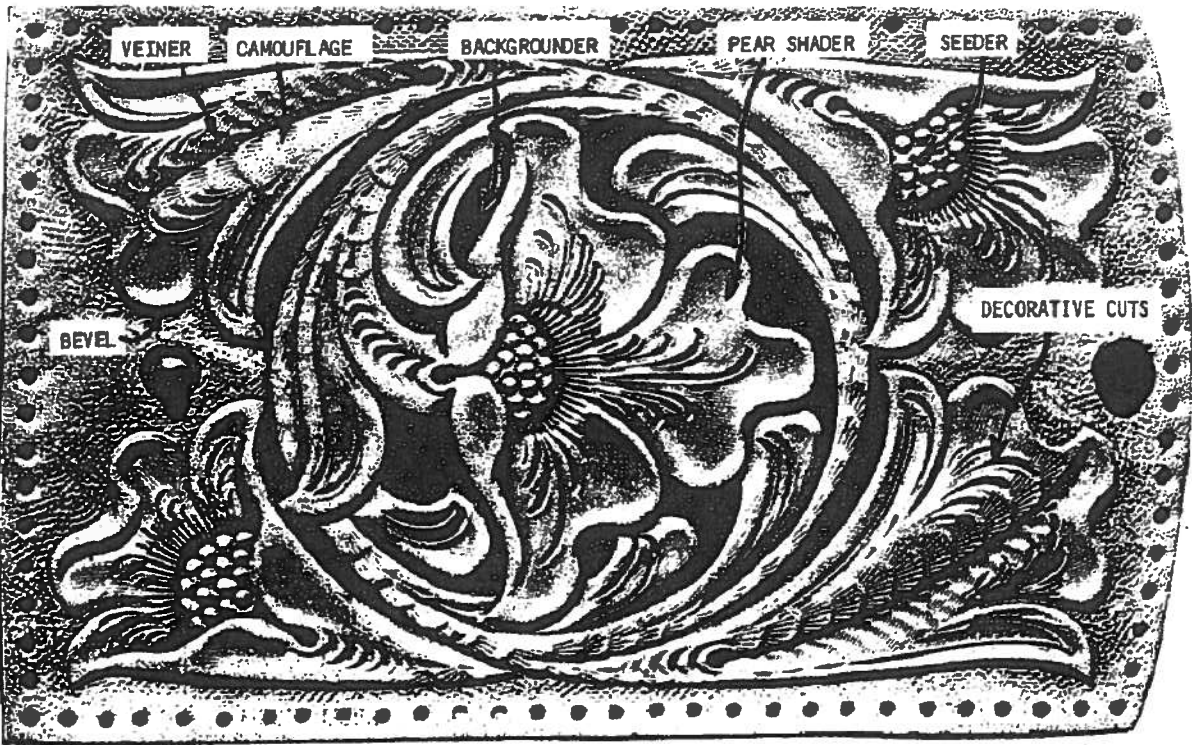
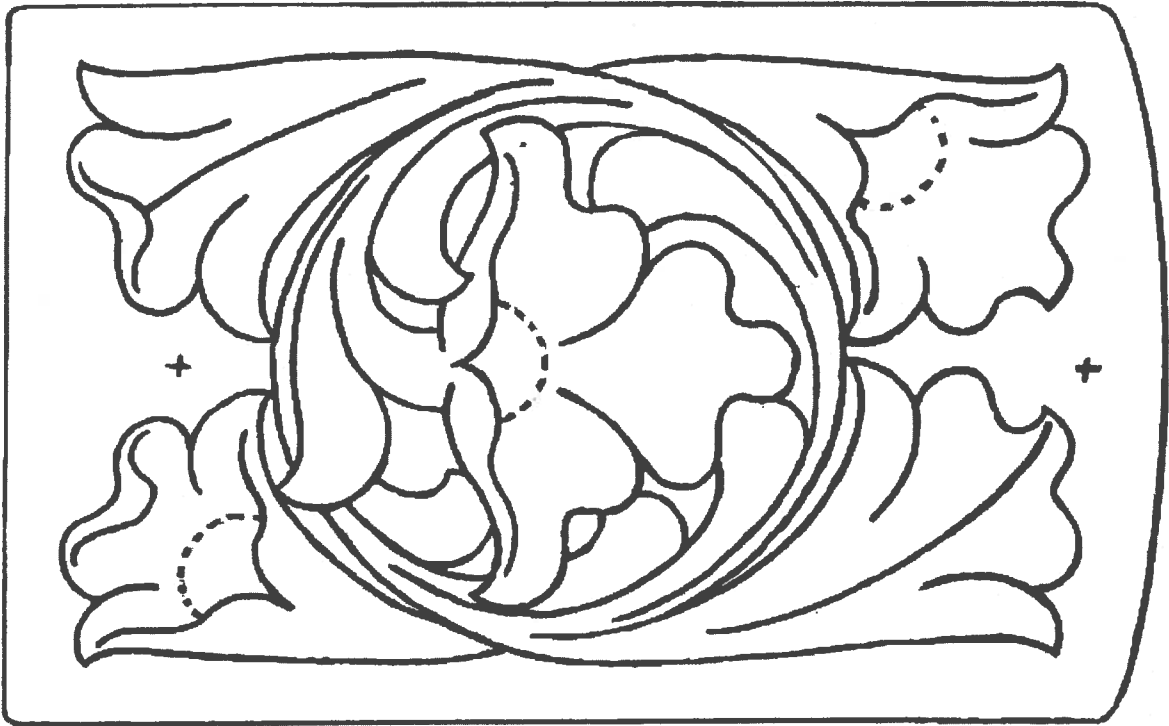
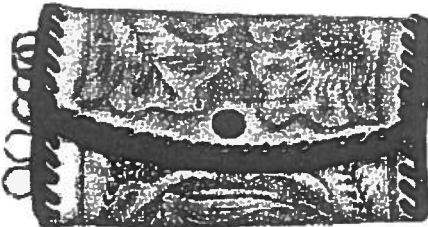
FRENCH CLUTCH PURSE



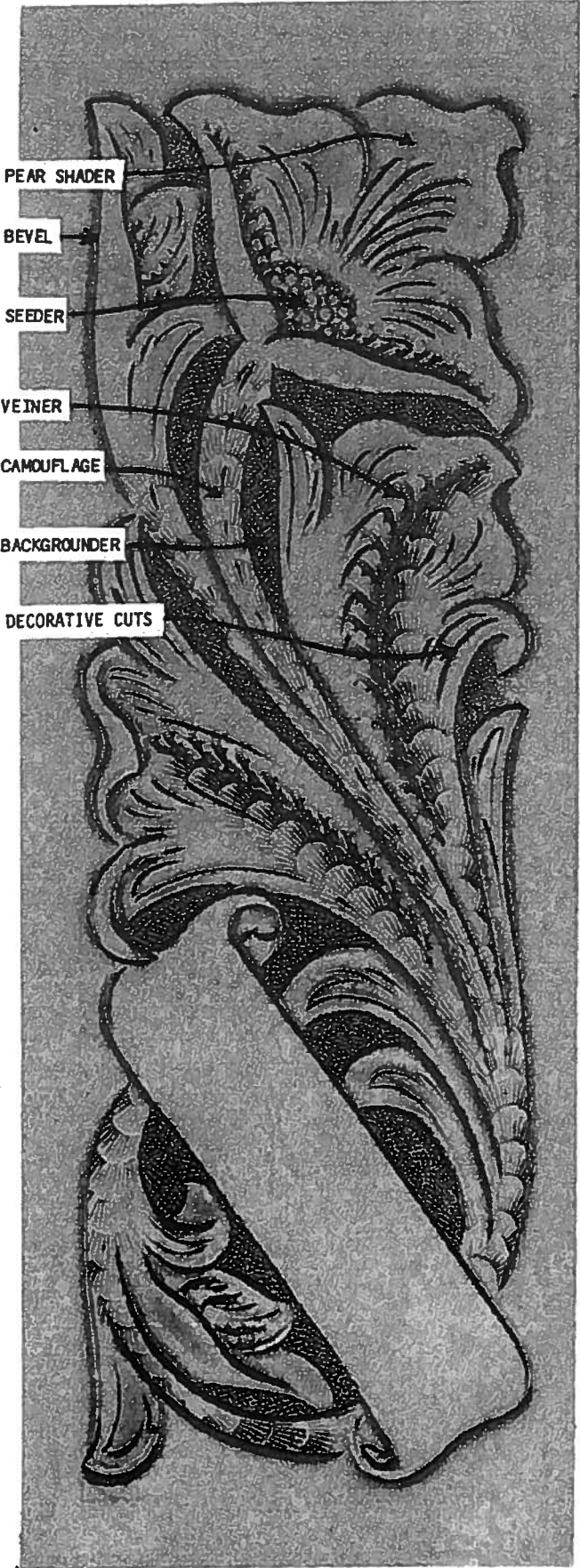
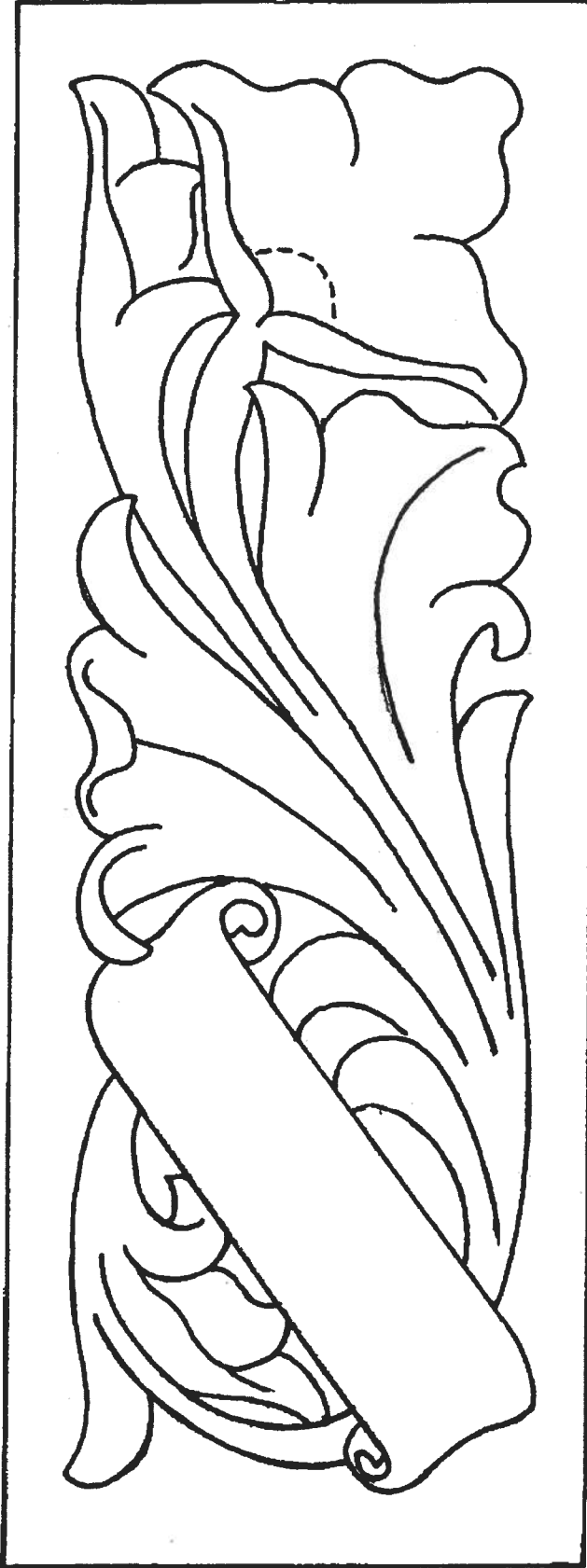
CHECKBOOK COVER



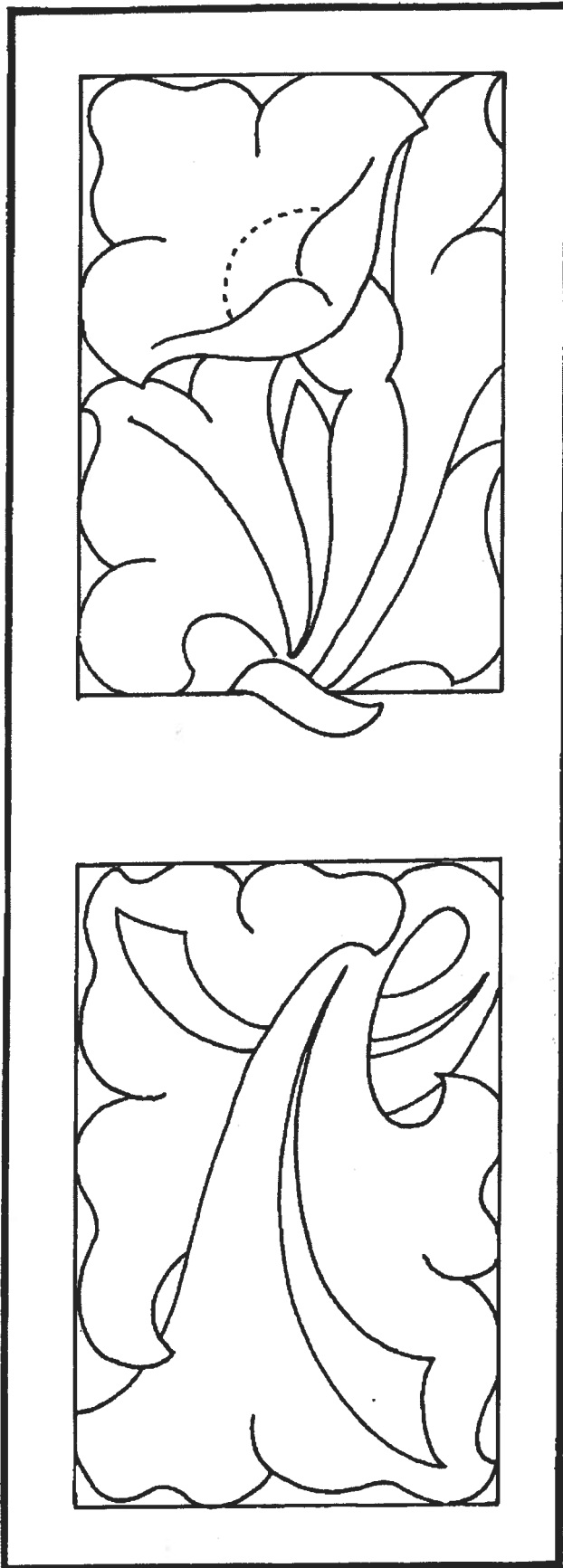
6-HOOK KEY CASE



BILLFOLD



BILDFOLD



PEAR SHADE

BEVEL

SEEDER

VEINER

CAMOUFLAGE

BACKGROUND

DECORATIVE CUTS

