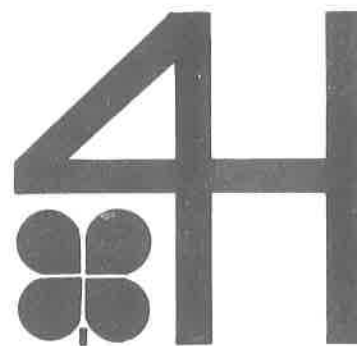


Leader's Guide



# ADVENTURES IN LEATHERCRAFT



Division of Agricultural Sciences  
UNIVERSITY OF CALIFORNIA

4-H-5012

REPRINTED SEPTEMBER 1979

## 4-H ADVENTURES IN LEATHERCRAFT

### Leader's Guide

As a leader in the 4-H Leathercraft project, you will find it helpful to have:

1. An interest in young people.
2. An interest in the project.
3. Some personal experience in leathercraft.

If you do not have an art or crafts background, this should not deter you from being a Leathercraft project leader. There are many helpful sources listed in this guide and in the 4-H member's manuals that can adequately guide you in your leadership role. There are many excellent leathercraft teaching films and additional references listed in the back of this guide that can help your youth have more interesting meetings and become more accomplished in leathercraft.

As a 4-H leader in this project you can:

1. Give enthusiastic leadership to a small group of members interested in this project.
2. Prepare yourself before each meeting so club members will learn as much as possible.
3. Explain and demonstrate skills needed in this project.
4. Help members plan their projects, check their progress, assist them in solving problems or in completing records.

An older member who has had several years experience in leathercraft and is enrolled in Junior Leadership could help you. Allow him to choose definite responsibilities and/or jobs to perform so he can realize satisfaction in reaching his goals.

#### Consider the Member's Interest

The success of a 4-H project depends on its appeal for the 4-H Club member and its closeness to his own interest and abilities.

Since you have volunteered to work with these boys and girls, you are interested in them and in understanding their needs, developing their interests, and helping them achieve success within the limits of their abilities. This is why it is so important to assist youth in selecting the proper Leathercraft Unit, options and articles to make according to their present ability and interest.

Use the 4-H "Project Selection Guide" to explain to youth and parents the possible goals and learning experiences associated with each unit.

#### Consider the Objectives of the Leathercraft Project

Help youth to have fun while learning:

1. Leathercraft skills.
2. To appreciate the natural beauty and usefulness of leather.
3. The principles of good design.
4. To become creative and original.
5. To strive for quality in their craftsmanship.

This project is of equal interest to boys and girls from urban or rural homes. It complements many other projects where leather is used, as in livestock and horsemanship, clothing, and home furnishings.

Interest and enthusiasm is best if a group of members are enrolled rather than a single individual in a club.

The nine units offered in the "4-H Adventures in Leathercraft" series each have a different learning goal, require different skills, and some require considerable time, advanced skills, and much expense. Again we emphasize the need for the leader to guide the member in selecting the proper unit and articles to make.

#### 4-H LEATHERCRAFT LITERATURE

The possible goals, learning experiences, and specific options and articles made are reviewed in detail in each of the project manuals. You should also consider the member's manuals as a part of your leader's guide in the Leathercraft project. In order to do a good job, you will need to become thoroughly familiar with the contents of the units you will be teaching.

##### Units

##### Publications Used With Unit

Unit 1 - Leather Tooling	Unit 1 Manual and Leathercraft Record
Unit 2 - Basic Leather Carving and Stamping	Unit 2 Manual and Leathercraft Record
Unit 3 - Advanced Leather Carving and Stamping	Unit 3-9 Manual and Leathercraft Record

The Unit 3-9 manual contains guidelines for all advanced units in this series. After a member gains sufficient skills in Unit 3-type experiences, he is ready to select the unit from 4-9 that most interests him and is within his ability to complete satisfactorily.

Unit 4 - Pictorial Carving and Color	Unit 3-9 Manual and Leathercraft Record
Unit 5 - Leather Garments and Accessories	Unit 3-9 Manual and Leathercraft Record
Unit 6 - Home Furnishings and Accessories	Unit 3-9 Manual and Leathercraft Record
Unit 7 - Original Design in Leathercraft	Unit 3-9 Manual and Leathercraft Record

This particular unit can help a club member become more creative and original in planning or developing any of the other advanced units.

Unit 8 - Saddles and Accessories	Unit 3-9 Manual and Leathercraft Record
Unit 9 - Leathercraft, Self-determined	Unit 3-9 Manual and Self-determined Project Guide

In addition to the above literature, the 4-H member's Project and Activity Plan and Review Sheet (part of the Progress Review Form) is a useful tool when helping youth plan their project or evaluate their progress.

#### SELECTING LEATHER ARTICLES

As a project leader you will want to assist members in deciding what articles to make. While the suggested articles to make are outlined in each unit manual, beginners should be encouraged to select simple, easy to make articles for their first projects. Articles requiring greater skill and technique should be made as a member progresses.

A member may make articles from either a pre-cut kit or design a pattern and any needed motif and cut his own articles from leather. Of course, the latter requires more tools and greater skill. It is hoped that as youth gain skill, they will want to design and create their own articles. At least they should be encouraged to adapt

patterns and create designs as they progress in their skills.

The Unit 1 and Unit 3 manuals both have information on design principles that can be helpful to youth in selecting or making patterns and designs. Other references listed in the back of this guide offer many patterns and designs.

## PROJECT TRAINING MEETINGS

It is up to you to decide how many project training meetings you will hold and what you will teach at each meeting. Your decision will be based upon the number of members enrolled, where they are now in leathercraft skill and experience, their interest and desire, and the time and facilities available.

The Unit 1 Manual is a very elementary unit that is divided into lessons. In teaching younger members to tool and lace leather, you will probably need to take one lesson at a meeting and go step by step as outlined in the manual. The attention span is usually shorter for nine year old youth and a variety of teaching methods, such as demonstrations, films, and practice sessions together, are essential to reinforce learning and to keep interest high. (See the section on teaching suggestions which follows.)

The Unit 2 Manual teaches the basic steps in carving leather. This manual is divided into several chapters and the leader will have to judge how far and how fast the youth can go, depending on their ability, interest, and available time. You are advised to follow the step by step procedure in each chapter so youth will first read and understand the chapter, discuss the review topics and questions, at the end of each chapter, and practice each new step on scrap leather before they actually work on leather articles. If the members acquire the 3 $\frac{1}{4}$ " rounders, they can use the pattern in the manual and easily follow the instructions and compare their practice samples with those illustrated.

The Unit 3-9 Advanced Leathercraft Manual assumes youth have acquired the basic skills taught in Units 1 and 2. It provides only guidelines for each of the advanced units of work and assumes participants will acquire any specific references needed to develop or create advanced leather work articles of their choice. Youth in Unit 3 may need help to learn the more advanced techniques and needed assembly skills. However, those youth with high interest and those who are reasonably skilled will not need as close supervision as youth in Units 1 and 2. This is particularly true of skilled youth in Units 4 to 9. They will probably do most of their work at home. However, project meetings occasionally even for these youth are desirable to check their progress and to encourage them. Working together at a project meeting also helps youth learn from each other and makes 4-H more interesting.

The one Leathercraft Record is designed to be used with all units from 1 to 8. Beginning members will need some help at project meetings to encourage them to keep their records up to date and accurate. Remind youth to keep track of costs when they purchase leathercraft supplies. They should enter these costs in their Record at the time of purchase.

You will also want to decide if your group should all meet together or if it should be broken down on the basis of experience. This may depend on numbers, available space, or individual help required by certain youth. Facilities needed:

About four square feet of table space per person is satisfactory. Tables should have a wood top suitable for cutting leather if necessary. Plywood or masonite panels should be placed on table tops to protect them. A single board about 18" x 24" for each person is adequate. Water should be available for the various leather processes.

## TEACHING SUGGESTIONS

For beginners it is wise to present only one or two topics at each meeting. There are some suggested topics for talks and demonstrations suggested with the lesson information in the Unit 1 and Unit 2 Manuals. You may wish to explain the needed topics or have a youth give a talk or demonstration on a topic he has mastered.

### Look Ahead

At a meeting, assign one or two members to give a report or demonstration on a particular topic at the next meeting. This will make your job easier and also give them leadership experience.

Use the demonstration technique yourself in teaching members how to do a certain skill. Be sure you have materials and tools on hand to carry out the demonstration.

Allow plenty of time at each meeting for discussion on procedures and experimentation, and for practice with new tools and using new skills.

Your club may wish to start a leathercraft library. You may wish to obtain some teaching films to add variety to your meetings. See the list of films in the resource section at the end of this publication.

Your club may enjoy a tour to a local leathercraft or hobby shop, or leathercraft manufacturer if one is available. Or, your club might be interested in a tour of a fine leather goods department store to study present day design in leather articles. You can point out the fact that the better designed articles stress the inherent beauty of the leather surface.

## TOOLS AND MATERIALS

It is also possible that your club may wish to purchase some of the seldom used tools as a club project (e.g. snap setters, revolving punch, edge beveler, thonging chisels, or swivel knife holder used to sharpen knife). If your club members cut their own patterns and articles, you may wish to purchase calfskin or cowhide by the full or half hide to get a square foot cost that is less than if members purchase individually. If so, have members draw all patterns first, then lay these patterns out together to decide the size of hide to purchase.

## HELPFUL LEATHERCRAFT REFERENCES AND RESOURCES

### References and Resources

Figure Carving	By Al Stohlman. Featuring a new method of instruction. Dozens of figures and dye charts.	\$2.00
General Leathercraft	By Raymond Cherry. All new from cover to cover, twenty new pages; new photo-carve patterns and designs by Ken Griffin. Tells you how to design and make your own projects, including camera cases, etc.	\$2.25
Gick Lacing	254 photo illustrations cover four most popular lacing styles: double cordovan, triple cordovan, new top plait, and saddle stitching.	\$ .75
How to Carve Leather	By Al Stohlman. Both floral and figure carving patterns for belts, billfolds, purses, etc. Featuring the ABC's of figure carving and the dye chart method.	\$3.50
How to Color Leather	By Al Stohlman. Contains 90 step-by-step illustrations, eight full color pictures, full page color wheel, and five color and dye mixing charts. Explains cross-dyeing figure coloring, high-lighting, shading, etc. 34 pages in full color.	\$2.00
How to Make Holsters	By Al Stohlman. Holster construction and holster pattern making for revolvers and automatics.	\$1.50
Ideas for Leather Belts You Can Make	36 pages of designs and techniques. #1939.	\$2.00
Ken Griffin's Scrap Book	A jumbo-size book of new designs and patterns. Pages are 18" x 15" with full-size tracings and photo-carve patterns.	\$3.50
Leathercraft Manual - Belts Galore	By Al Stohlman. 28 chapters to help you turn out profitable belts; 70 full-size tracing and photo-carve patterns.	\$2.00
Lucky 7 Text Book	Shows in complete detail the seven steps involved in carving a billfold. Gives wallet designs by seven professional western craftsmen. Includes 26 additional patterns; also, tips on lining, skiving, and use of tools, including saddle stamps.	\$1.50
Make It With Leather	New magazine. Issued bi-monthly. Every issue contains (1) do-it-yourself patterns, plans, and techniques; (2) tips and hints; (3) how to sell your leather work; (4) success stories about other craftsmen.	Per year \$4.95
Purse Construction and	Step-by-step photo illustrations show you how to make the five most popular style handbags: round bottom gusset, all-round gusset, square bottom, accordion gusset, and center-fold gusset.	\$1.50
Saddle Instruction Book	Contains complete photo-illustrated instructions and full-size photo-carve patterns for: saddle seat, skirting, fenders, etc., plus tapadero, covered stirrup, breast collar, halter, bridle and reins, etc.	\$2.50

## Helpful References and Resources, (Cont.)

Today's Leather	Detailed instructions for making every kind of leather garment. #1936.	\$1.00
Teacher's Guide - Leatherwork Manual	By Al Stohlman, A. D. Patten, and J. A. Wilson. Contains history of leather, preparation of leather, use of leather tools, dyeing and finishing leather with step-by-step illustrations. 160 pages. #1891.	\$5.00

### 16 mm Sound and Color Films: (Available from Tandy's, free for groups.)

- a. "Beginners' Leathercraft," 13 1/2 minutes.
- b. "The Art of Leathercraft Carving," by Joey Smith, 23 1/2 minutes.
- c. "The Art of Figure Carving," by Al Stohlman, 17 minutes.

### Super 8 mm Color Cartridge Instruction Films: (All 4 1/2 minutes; available from Tandy Leather stores.)

- a. 0801 Introduction to Leather (\$20.00)
- b. 0803 Making Tools for Leather (\$20.00)
- c. 0807 Simple Lacing Techniques (\$20.00)
- d. 0809 Dyeing and Preserving Leather (\$20.00)
- e. 0830 Garment Leathers (\$20.00)
- f. 0831 Cutting Garments (\$20.00)
- g. 0832 Straight Seams (\$20.00)
- h. 0833 Curved Seams (\$20.00)
- i. 0834 Fasteners Film (\$20.00)
- j. 0835 Finishing Techniques (\$20.00)
- k. 0836 Decorative Features (\$20.00)  
Films 8030 through 8036, Leather Garment Color Instruction films, super 8 mm., may be purchased separately for \$20.00 each or as a set for \$126.00.
- l. 0840 Awareness and Design of Leather (\$12.50)
- m. 0841 Creative Approaches and Processes in Leather, I (\$12.50)
- n. 0842 Creative Approaches and Processes in Leather, II (\$12.50)
- o. 0843 Ideas in Leather for the Elementary (\$12.50)

Additional instructional aids available through Tandy Leather stores. Various leatherwork overhead projector transparencies may also be obtained from the Tandy Leather stores. (These relate to the Teacher's Guide - Leatherwork Manual.)

*NOTE: Prices subject to change without notice.*

## Other Sources of Help

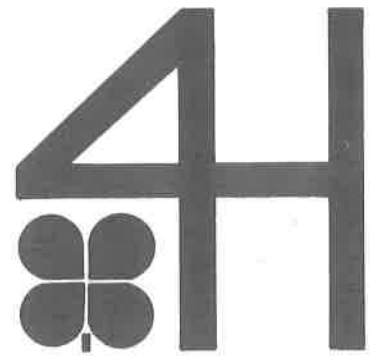
Your local hobby craft supply or leathercraft supply house is an excellent source of ideas, assistance, and supplies. A supply catalog is always helpful. Your 4-H leader has a Leader's Guide for "4-H Adventures in Leathercraft" that lists helpful reference books and available visual aids.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

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# ADVENTURES IN LEATHERCRAFT

Unit 1 Member's Manual

LEATHER  
TOOLING



Division of Agricultural Sciences  
UNIVERSITY OF CALIFORNIA

4-H-5009

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## 4-H ADVENTURES IN LEATHERCRAFT

Objectives of this project include helping youth:

- Learn leathercraft skills.
- Appreciate the natural beauty and usefulness of leather.
- Learn the principles of good design.
- Become creative and original.
- Learn to strive for quality in their craftsmanship.

This project is of equal interest to boys and girls from urban or rural homes. It complements many other projects where leather is used, as in livestock and horsemanship, clothing, and home furnishings.

Interest and enthusiasm is best if a group of members are enrolled, rather than a single individual in a club.

The nine units offered in the "4-H Adventures in Leathercraft" series include:

- Unit 1 Leather Tooling
- Unit 2 Basic Leather Carving and Stamping
- Unit 3 Advanced Leather Carving and Stamping
- Unit 4 Pictorial Carving and Color
- Unit 5 Leather Garments and Accessories
- Unit 6 Home Furnishings and Accessories
- Unit 7 Original Design in Leathercraft
- Unit 8 Leather Saddles and Accessories
- Unit 9 Leathercraft - Self-Determined

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## UNIT 1 LEATHER TOOLING

This unit is designed for members with little or no previous leathercraft experience. It helps youth learn to tool and lace simple leathercraft articles. PARTICIPANTS DO NO LEATHER CARVING AS A PART OF UNIT 1.

### Learning Goals

#### Learn:

- To appreciate the development of the art of leathercraft.
- To select the leather and tool for a particular need.
- To prepare leather for tooling.
- The basic principles of good design.
- To transfer a design and use basic tools in beautifying and assembling an article.

### Learning Experiences

Participate actively in your 4-H Club meetings.  
Practice simple lacings, finishings, and assembly of leather articles.  
Keep a record of project costs and new skills gained.  
Care for your tools.  
Share information you learn through talks, demonstrations, and displays.  
Evaluate your progress with your leader.  
Select and tool three or more of these suggested articles:  
(Include two that have some lacing as well as tooling.)

comb case	knife sheath
bag tag	watch band
coin purse	book mark
key case	coaster

- or an article of your choice requiring the same tools and skills  
(Be careful to avoid articles exceeding your ability.)

Exhibit - Prepare an exhibit to consist of the following:

1. Exhibit Board - 12" x 1/8" x 1/4" board, preferably peg board, which includes:
  - Samples of basic skills.
  - Three completed articles from above list. (No carved articles to be on this display.)
2. Fasten each sample of basic skill and article to the exhibit board (lacing is a good method, but do not glue or nail); label each sample and article; on each article label, indicate if made from kit or if cut and designed by you. On back side of exhibit board, be sure to put your name, address, and county.
3. Completed record sheet.  
(An exhibit evaluation guide is included in the back of this book.)

A 4-H Club member may enroll in Unit 1 and Unit 2 and progress as fast as his interest and ability allow. His exhibit, however, must be in one or the other unit - not both.

## Preparation for Lesson 1

These and other topics for 4-H member talks can be assigned to members ahead of time to make Lesson 1 more interesting:

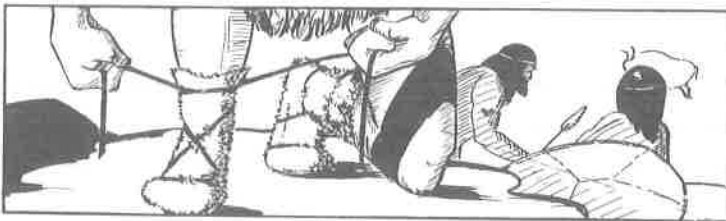
1. Suggested goals and experiences offered in Unit 1.
2. The history of leathercraft.
3. The tanning process.
4. Kinds of leather.
5. Factors affecting the quality of leather.
6. Opportunities in leathercraft.
7. Others.

### LESSON 1

#### LEATHERCRAFT FROM THE BEGINNING OF TIME

I pledge my hands to larger service ---

LOOK AT YOUR HANDS! They are very special and very clever. They can create beauty and usefulness. Some of the first hands to work with leather were those of the caveman. He bound the hide of an animal about his foot to reduce bruises and sore feet.



Gradually he learned the value of leather for other clothing, helmets, shields, tents, and water bags.

Primitive men began to unravel the mystery in a skin or hide as they learned how to keep it from rotting and becoming too stiff. They cleaned the skins with flint knives and put the skins out in the sun to dry. Their women softened the dried skins by pounding them with stones.

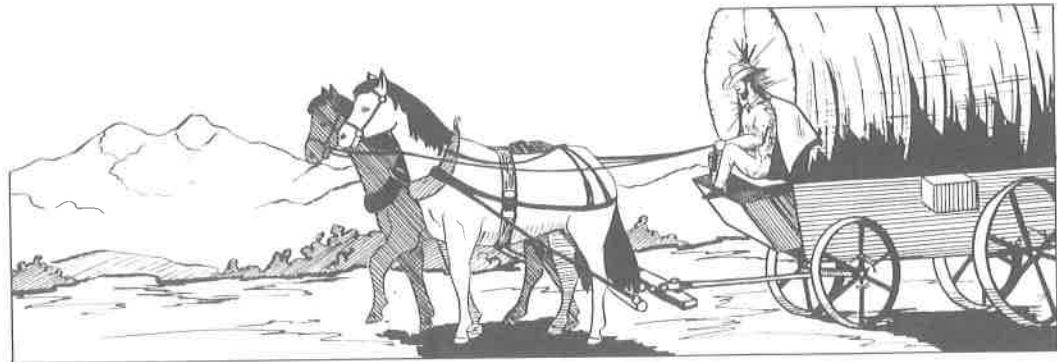
The ancient Hebrews were the first to use oak bark in making leather. Modern excavations in Egypt have unearthed leather articles like these sandals that are more than 33 centuries old and still usable. We know the Egyptians and Romans used leather and valued it highly.



The American Indians knew nothing of bark tanning, but they showed the early colonists how to make "buckskin tan" (a very soft leather).



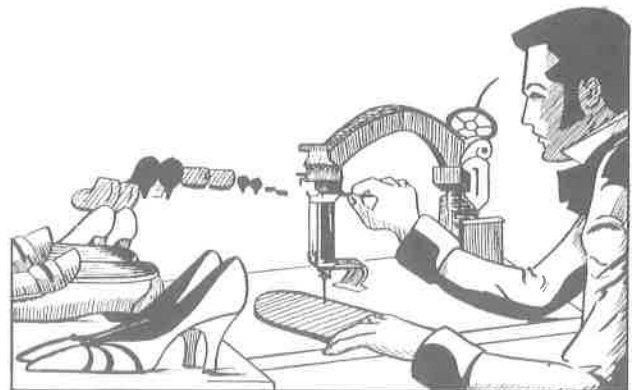
As the colonists moved west, their wagons were pulled across vast distances by oxen or horses harnessed in leather.



During the early part of the eighteenth century, American leather workers discovered the bark of hemlock and chestnut trees would work as well as oak bark for tanning leather. This was important since hemlock trees were plentiful in the new country.

The shoe-pegging machine of 1852 lifted the ancient art of leather-making into a huge industry.

Today American shoe factories turn out 5,000 pairs of shoes every minute.



Toward the end of the 19th century, an American chemist discovered that chromium salts acting on hides produced a leather different from the bark tanning method.

### Tanning Leather

The larger the animal, the larger the pelt.



Hides come from large animals such as cattle and horses.



Skins come from smaller animals such as calves, goats, and sheep.

Pelts which are sent to the tanner must be treated in some way to prevent decomposition. This is usually done by salting (or drying) them. Basic steps in the tanning process include:

1. Soaking in chemical to loosen the hair.
2. Dehairing by hand or machine.
3. Cleaning, washing, and drying.
4. Soaking in a preservative (tanning).
  - a. Vegetable tanning (bark extracts). Leathers by this process are used for tooling and carving.
  - b. Chemical tanning (chrome salts). Leathers by this process are used for shoes, billfold insides, bag linings, garments, and small tooling articles.
5. Coloring and finishing.

### KINDS OF CRAFT LEATHER

The craftsman may use a wide variety of leather today. Different leathers come in almost any color desired. Many have been embossed\* so the grain will imitate other and more expensive leathers. Here are a few of the most common leathers used in craft work.

\*Embossed means there are portions raised above the surface for more depth or ornamental effect.

Alligator. Genuine alligator comes in several different shades of brown and mahogany. It may be used for billfolds and handbags, but cannot be tooled. Skins may range up to 14" wide and 60" long.

Calfskin. This is an ideal tooling leather for billfolds, ladies' purses, etc. It comes in all colors. The size of the skins will range from 10 to 14 square feet.

Cowhide. This leather may be tooled if it is not embossed. It is ideal for belts and projects that must withstand hard wear. The size of the hides may range from 20 to 25 square feet.

Lambskin. This leather comes in the form of suede or many different embossed grains such as alligator, ostrich, and fancy designs. It is used for lining, purses, and belts. The skins may vary in size from 7 to 9 square feet.

Lizard. Genuine lizard may be had in all colors. It is not toolable and is used for billfolds and purses. The skins are small, ranging in size from 9 inches wide to 17 inches long.

Morocco. Genuine Morocco goatskin may be obtained in most colors. It is used for billfolds, linings, book bindings, etc. Skins vary from 7 to 10 square feet. Morocco grain may be embossed on other leathers.

Ostrich. Genuine ostrich is expensive, but it works up beautifully into billfolds, purses, and book covers. It comes in russet, brown, and black. The skins range in size from 10 to 14 square feet.

Pigskin. Genuine pigskin may be tooled, but this is not advisable. It comes in either natural or black. It may be used for letter cases or purses. The skins range in size from 12 to 20 square feet.

Elkhide or Deerskin. It is used for moccasins and belts. It generally comes in only natural and brown. The hides may vary in size from 18 to 22 square feet.

Sheepskin. This leather comes in the form of suedes, many different embossed grains, and tooling sheep. Tooling sheep does not tool as well as calfskin, but the cost is less than half. It can be used for suede purses, linings, book marks, book covers, etc. It may be obtained in all colors. The size of the skins may range from 7 to 9 square feet.

Skiver. This is a thin split of leather which is generally used for linings. It is available in all colors and comes in sheepskin, calfskin, and cowhide. Skins may vary in size from 6 to 12 square feet.

Steerhide. This is the best tooling leather next to calfskin. It may be used in making all projects. It comes in natural or two-tone colors and in different weights. The size of the hides may vary from 20 to 28 square feet.

Suedes. They have many uses and come in all colors. Most suedes are made from sheepskin or calfskin. The skins will average from 7 to 9 square feet.

### Factors Affecting the Quality of Leather

The price a specific hide or skin will bring is determined by the quality of leather that can be made from the hide or skin. The tanner values the hide on the basis of its freedom from certain defects.

#### Hide Defects on the Live Animal

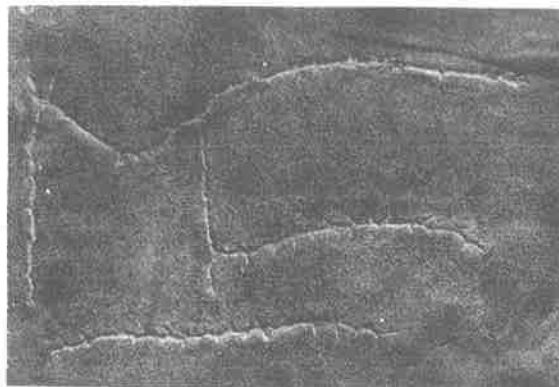
The principal defects of this type are brands, cuts and scratches from nails and barbed wire, grubs, warts, sores, and damage by ticks and certain diseases.

These defects in leather can be minimized if ranchers and livestock feeders will seek to control the damaging insects and make sure their livestock is handled

gently when corralling or transporting. Corrals and chutes must be kept free of nails and other sharp objects. 4-H Club members can well demonstrate the proper care and handling methods that can increase leather quality.

### Hide Defects That Occur During Butchering

A great many hides are down-graded because of butcher defects, most of which can be prevented by careful skinning, proper curing and storage.



The hide pictured here shows a large indiscriminate brand and grub holes. The brand, unusually large, covers an area about 1 by 2 feet of the most valuable part of the hide. The grain or hair side, with grub holes marked, is shown on the left. The flesh side of the same hide on the right shows how a brand burns through, forming scar tissue and rendering the leather useless.

## LESSON 2

### TOOLS NEEDED

Before buying your leather tools, study this lesson with your club and consult your leader and parents. You may be able to purchase all the club's tools at a saving.

#### Suggested Topics for Talks

1. Tools needed by each member.
2. Tools the club members use occasionally and could share.

#### Suggested Topics for Demonstrations

1. Simple tools you can make.
2. How to care for your leather tools.
3. How to make a leather tool kit. See page 39.

#### Tools You Will Need for Unit 1

Here are a few simple tools you will need to start doing leather work:

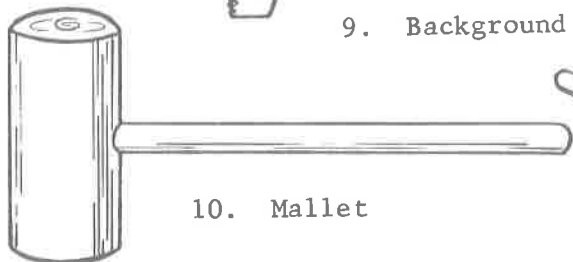
1. Pencil (soft lead).
2. Masking tape or paper clips.
3. Tracing (transfer) paper (or lightweight sheet plastic called transfer film).



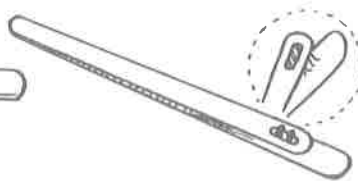
4. A stone (marble) or other hard smooth surface; for example, a smooth piece of hard board or a hard floor tile.
5. Cutting knife.
6. Ruler or straight edge.
7. Clean bowl and sponge.



9. Background tool



10. Mallet



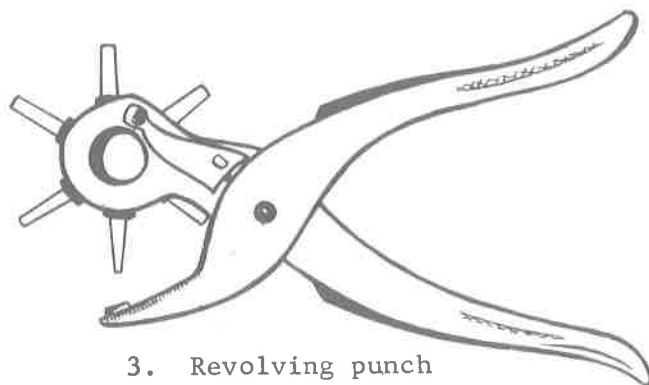
11. Lacing needle

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

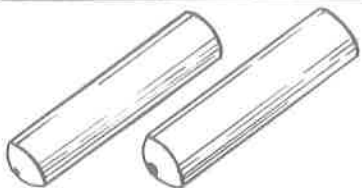
#### Other Tools Needed Occasionally

These tools are used only once in a while and one of each could be purchased by the club:

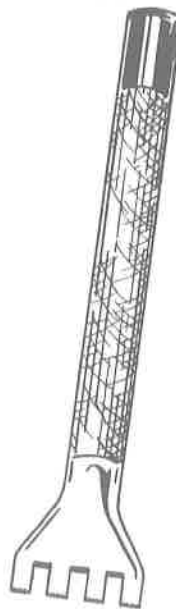
1. Rubber cement.
2. Small can of Neat-lac or other finish and sheepwool applicator or dauber.



3. Revolving punch



4. Snap setting tool  
(and snap fasteners)



5. Thonging chisel  
(use single prong  
for corners)

### Items You Need for Lesson 3

Now you are ready to purchase or make your tools. When shopping, get several scrap pieces of tooling leather for practicing each step. Also purchase enough leather that may be cut into three 3" x 3" squares or three 3" rounders for lacing samples. It would be well to purchase at least seven yards of lacing at this time, too.

In addition, you will need a 12" x 18" x 1/8" or 1/4" board (preferably peg board) to which you may attach your leather samples and the articles you wish to exhibit.

Later you will want to choose leather articles that you can tool. Several ideas and patterns are at the back of this manual. Simple kits are also available at most leather stores.

## LESSON 3

### DESIGNING, TRACING, AND TRANSFERRING PATTERNS

#### Suggested Demonstration Topics

1. How to choose designs that are suitable and artistic.
2. How to case leather for tooling.
3. How to select and trace designs for leathercraft.
4. How to transfer a design to leather.

#### Choosing Good Designs for Leathercraft Articles

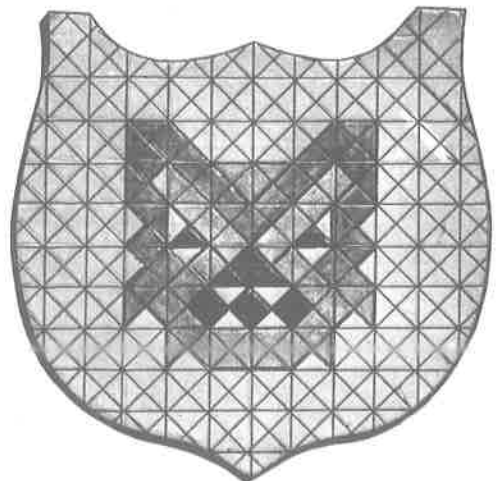
1. There are two types of design:
  - a. Structural design is made by the size, form, shape, and space within the object and relates to function and use. For example, we often describe an article by its shape and size. These terms apply to structural design.

A well designed article should be chosen first on the basis of function and how well it does the job or fulfills the intended use - comfortable (as applied to a watchband), convenient (as applied to a coin purse). If the article does not meet the functional requirements, it will soon be discarded and become of little value or use. If the structural design is poor, no amount of surface enrichment can improve it. So an article or object should be 1) suited to its purpose; 2) well proportioned; 3) suited to the materials.

- b. Decorative design is surface enrichment of a structural design and should strengthen the structural shape.

Some objects are beautiful in themselves and require little or no application of decorative design. Example: an embossed billfold of Morocco leather, edged with leather lacing.

All articles exhibited in Unit 1 require some tooling.



2. Good design is an orderly arrangement of lines, shapes, colors, textures (called art elements) created for some specific purpose or function, that meet an intended need and in addition, beauty is added in the finished product.

3. Design Motifs

A decorative design is made up of motifs or units of decorative design. There are four classes of motifs. Pattern is a combination of these units and they contribute to the textured look of surfaces. If patterns are small and closely spaced, they appear as texture.

- a. Natural or Realistic - Resemble close forms of nature such as animals, flowers, people, and landscapes. This class is not as acceptable to use in wearing apparel and illustrious objects. They are best reserved for pictures, paintings, or portraits.
- b. Conventional or Stylized - This group includes designs which have been modified from their natural form. The modification can range from a simple change to many changes, until it becomes almost abstract.
- c. Abstract - This group is the creation of the designer's imagination and shows little or no relation to objects around us. Indian and modern designs make much use of the abstracts.
- d. Geometric - These are based on lines and geometric forms such as rectangles, circles, triangles. They use some of the same forms as the abstracts.

Motifs can express ideas that suggest different feelings, moods, or even the character of the piece.

4. Placement of Motifs and Decorative Design

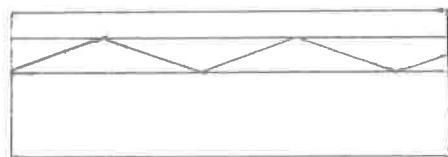
The structural design of an article has a certain shape, size, and form. Any decorative design that is applied should, in most cases, relate to the overall shape.

The structural shape can be strengthened visually by repeating in the decorative design some of the lines of the article's shape. For example:

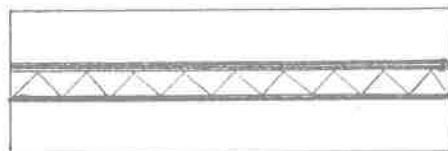
A rectangle has four straight sides. To emphasize this shape, repeat a straight line either across the ends . . .



← across the top or one long side . . .

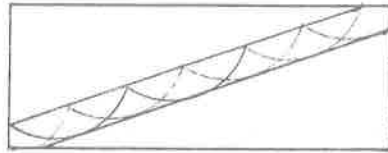


← across one end . . . →



← through the center.

Avoid:



diagonal lines.

Avoid:



a design in one corner that has no relation to the corner's shape.

Avoid:



one design in each corner unless they relate to the corner's shape and are tied together to make a unit.

The rectangle may be long and narrow, like a belt or watchband, but placement of design motifs should follow the same principle.

The eye needs to flow rhythmically over the whole so it seems to be unified and the design placement should prevent spottiness.

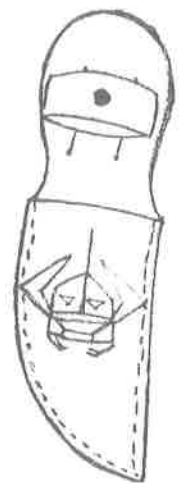
Since leathercraft makes best use of the curved line, the curved line can be combined with some straight lines on rectangular articles to add some variety and interest. If the structural shape has rounded lines, repeat some of the curved lines in the design chosen.

### Design Choice and Placement Quiz

- What is the structural design of these knife sheaths?
- Would you judge the structural design as good? Yes \_\_\_ No \_\_\_ Why?
- What class of motif is used on Sheath A?  
On Sheath B?
- Which sheath has decorative design that is most pleasing and relates to shape?  
Why?



A



B

## 5. Art Elements

Every design makes use of one or more of these elements:

- Line
- Direction
- Shape
- Form
- Texture
- Color
- Value
- Space

To create a pleasing, unified design, there must be a careful arrangement of these elements.

There are only three ways to combine these:

- a. Identical - repetition.
- b. Similar - harmony.
- c. Totally different - contrast and often discord.

Variety is created by contrast. Accent or contrast can be achieved by introducing opposite or nearly opposite qualities of elements, such as curved lines with straight lines; lines that go in two different directions; shapes opposite, such as triangle and round; different sizes - large and small; value - light and dark; change in color and texture. Like salt, some like a lot of contrast, some like a little. Two types: muted and strong. There is need of some contrast or element of discord or conflict, but there is also a need of dominance.

Dominance (or Emphasis) - How do we get dominance in design? One element must be repeated more than others to make the idea stand out. We can get dominance by allowing:

- One line to dominate
- One direction to dominate
- One shape to dominate
- One motif to dominate
- One color to dominate
- One value to dominate
- One texture to dominate
- One basic theme or idea, or feeling, to dominate, and arrange spaces so they are related or connected.

Unity ties together a design through repetition of one characteristic. A design becomes dull and monotonous if too much unity is used. There needs to be a balance between unity and variety. When there is more variety than necessary, a design becomes cluttered and chaotic.

## 6. Design Principles

We must also make use of the principles of balance, emphasis, proportion, rhythm, and scale.

Balance - gives repose to a composition. There are three types:

- a. Symmetrical or formal.
- b. Informal or asymmetrical.
- c. Radial - design radiates from a center.

Rhythm - is the graceful quality of movement. It can be obtained through many ways. It can be solved through the repetition of shapes; a line or shape is repeated many times, with a space between each repetition. It can also be achieved through a progression of sizes in lines or shapes - each shape gradually growing smaller or larger, which moves the eye across the design. However, both the above methods can become dull and monotonous if they are not accomplished carefully. This means variety should be introduced into the design to give it life and sparkle. This could be done by alternating the colors of the shapes or lines. Rhythm can also be achieved through a continuous line movement, or what is sometimes called continuous, related movement. A continuous line moves the eye along its width until the end or focal point is reached.

In any case, rhythm is an orderly arrangement of line and shape resulting in a movement which is pleasant to view.

Proportion - is the relationship of spaces in a design. A square is less interesting than a rectangle. In making a division in space, it should not be too evident that a space is divided into halves, thirds, or quarters, but the divisions should not be so unusual they are difficult to appreciate.

Scale - the relationship of size to one another. The size of an article will determine the scale of motif. Large items can use bolder, larger designs. Small objects should have small motifs or space divisions.

In making your own designs, you might make the designs in three sizes and try them out on the article. Let your eye tell you which is best.

## Basic Steps in Tooling Leather

Before handling your leather, always make sure:

1. Your hands are clean.
2. Your fingernails are clipped and sharp jewelry removed to avoid scratching or marring the leather.

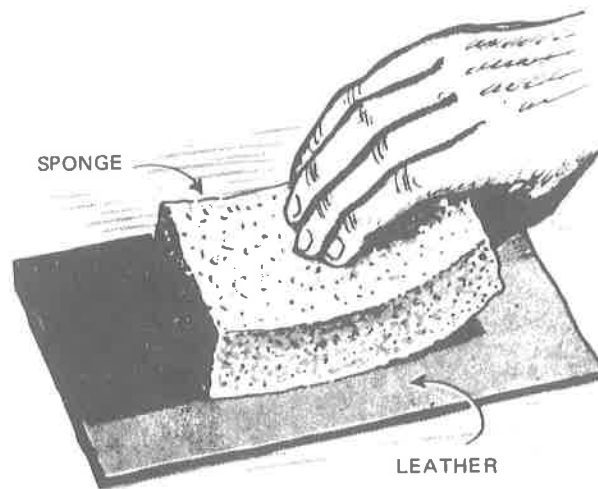


### Preparing the Leather for Tooling

Before you can work leather, you must moisten it. You can do this either with water or a commercial preparation. 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 through practice. Your modeler (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.

When the dampened Grain side of the leather has almost returned to its original color, it is ready to carve. You can also try testing 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 that's when you can begin tooling the leather. With practice you will soon know instinctively when to begin tooling.



How do you wet the leather? By CASING it, which means simply rubbing a DAMP (not wet) sponge to the flesh side as evenly as possible. Then, turn the leather over and dampen the Grain side (tooling surface). When it begins to return to its natural color, begin tooling.

If some areas begin to dry, wipe your sponge over these areas to keep them damp enough to tool. If your leather is too dry, it will be too hard for you to tool.

CAUTION: Always use glass, porcelain, or enameled containers for water - NEVER use metal containers. The slightest contact with these will produce dark stains on your dampened leather - stains that are almost impossible to remove. Be careful to keep all filings or steel dust from grinding wheels, etc., completely away from your leather. Unnoticed by you until you have dampened your leather, such particles will mar or stain your leather.

Now cut and prepare your scrap leather.

## Step 2

### Designs for Your Leather Project

Decorative designs used for leather tooling are best if made up of curves - a flower with leaves, a leaf and stems, or scrolls. Avoid completely realistic or naturalistic motifs.

### Tracing Your Design

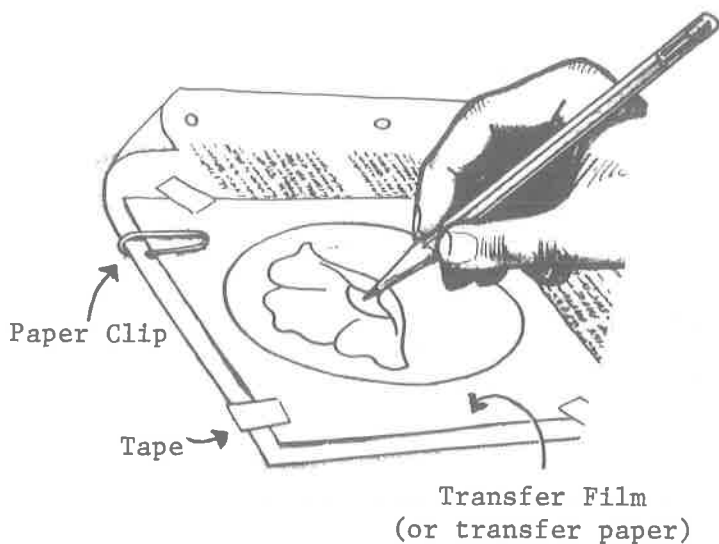
Now decide what design you would like to practice on your scrap leather. To trace your design, fasten the tracing paper to the design with paper clips or tape to make sure it does not move. Trace the outlines with a pencil. If there is lacing to be done, be sure to leave 3/8 inch border between your design and the edge of the leather.

### Transferring Your Design to Your Leather

Center and fasten the design with masking tape to the leather. Using tracing point or modeler, trace the design. (Don't cut through the paper.) Trace over all lines before removing the pattern. Straight lines, such as borders, might best be done by marking only end points and making the lines by joining the points with the straight edge directly on the leather. (See illustration 1, page 15.)

### Things To Do

Trace a simple design and transfer to scrap leather. Save your tracing sample to mount on your exhibit board.



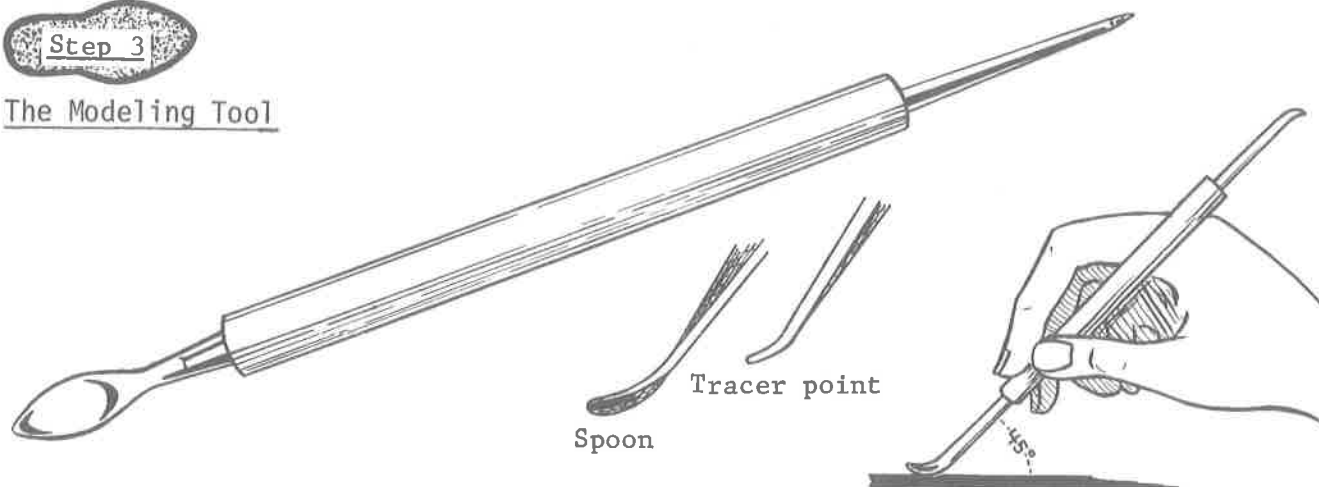
#### HOW TO MAKE A TRANSFER PATTERN

Place a piece of Transfer Film (glossy side down) or Transfer Paper over the Transfer Pattern and tape or clip it in position. With pencil, carefully trace over all of the lines of the Transfer Pattern Design just as they are shown on the pattern. Draw the flower first, then fill in with the stems and leaves. Erase incorrect lines and redraw them if necessary. The Tracing Pattern is now ready to transfer to the cased 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.



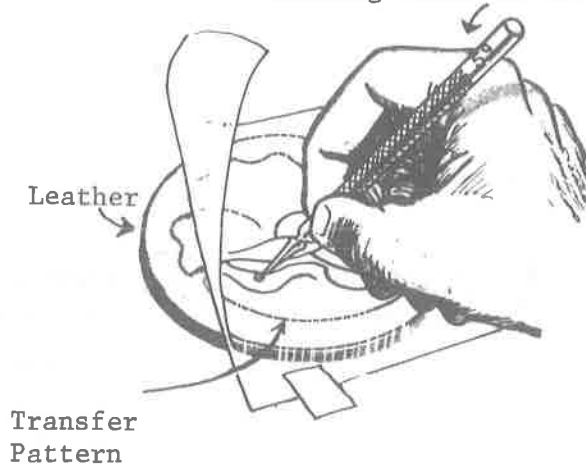
#### The Modeling Tool



#### Description

The modeling tool has a barrel-shaped handle and a modeling point on each end for the various jobs it must do.

#### Ball Point Stylus or Tracing Point on Modeler



#### HOW TO TRANSFER THE PATTERN

Carefully place Transfer Pattern (pencil marks up) over the leather and tape in position. With a Ball-Point Stylus (or any dull pointed instrument) re-trace all the lines of the design, beginning again with the flower, then with the stems and leaves. Press firmly, but not too hard, and the lines will be transferred beautifully to the leather. Before removing tape, lift one corner of the pattern and check to see if you have traced all the lines.



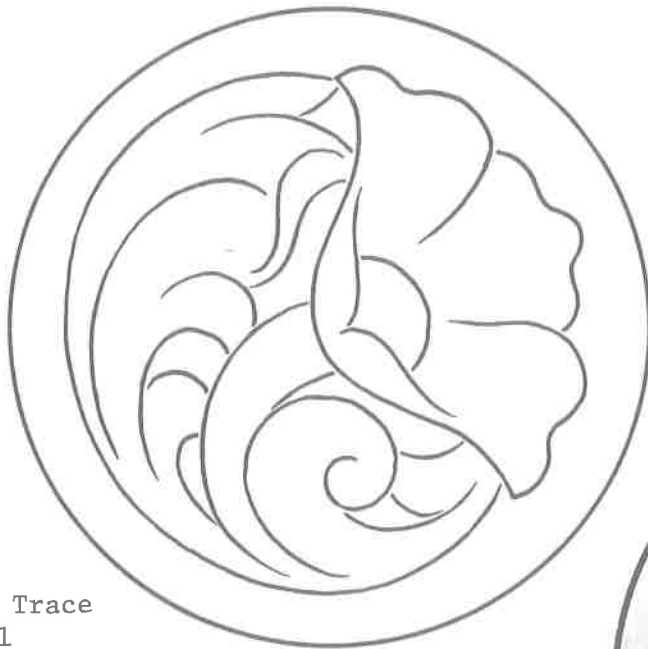
## Purpose

The fine pointed end is used for tracing, line work, and small tooling detail. The spoon end is used for beveling, embossing, and depressing outlines.

## How to Use

First, make sure your leather has sufficient moisture. Practice using the modeling tool on a scrap piece of leather.

Place the leather on your work table so the design is up. Hold the modeling tool like a pencil at a 45° angle to your leather. Draw the lines toward your body, following the curves in the line by turning the barrel with your fingers. The pressure on the tool should be even. Avoid pushing it backwards and scuffing the leather.



Illus. 1  
Pattern: Trace  
and Tool

The leather should be turned after each mark so the next mark, or depression, will be made toward the body. Each time you stop in making a line, be sure to place the point behind the point at which you stopped when starting again. This will permit you to continue the line in the same smooth flow.

Lines cannot be erased - BE CAREFUL.

## Things To Do

Practice modeling (tool and bevel) on your scrap leather.

Save your modeling sample to mount on your exhibit board.



Illus. 2  
Tooling with Tracer Point

Step 4

The Background Tool and Mallet

Description

No leather tool kit is complete without a well-balanced mallet, usually made of hard wood or rawhide. The simple background tool used in this unit has a small end so it can be used to complete any of the designs suggested in these tooling projects.

Purpose

The mallet is used to tap the background tool, which in turn depresses the background to make the design stand out.

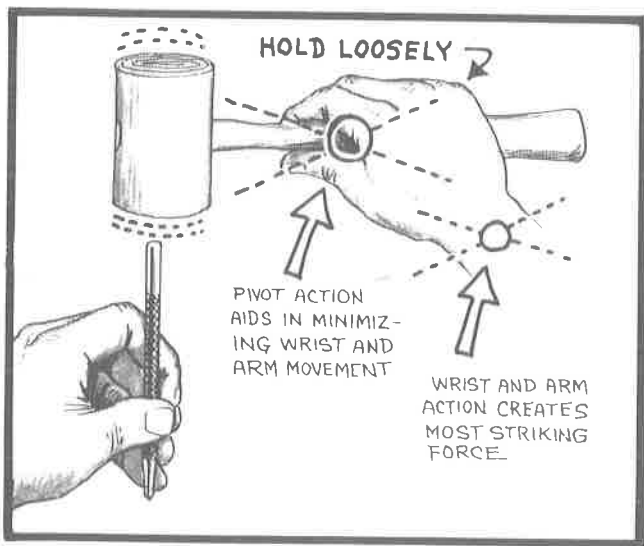
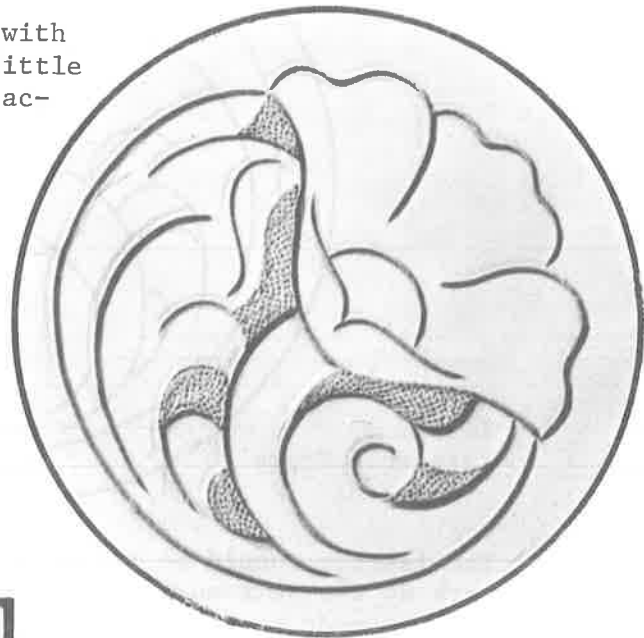
How To Use

Hold the tool straight up and down to the leather with the third and index fingers, and the side of the little finger resting on the leather to furnish a spring action, causing the tool to rebound after each tap with the mallet.

Move the background tool evenly and tap uniformly with the mallet to obtain a smooth background of consistent depth.

Work the background areas systematically, completing each area before moving to the next. Complete the background in a single setting possible, while moisture is constant, for appearance.

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



Things To Do

Practice using the background tool on scrap leather. See sample above. Save your background sample to mount on your exhibit board.

## LESSON 4

### FINISHING TOUCHES

#### Suggested Demonstrations to Assign for This Lesson

1. Leather finishing
2. Care for leather articles
3. How to set snaps and snap buttons
4. Others

#### Application of Leather Finishes

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

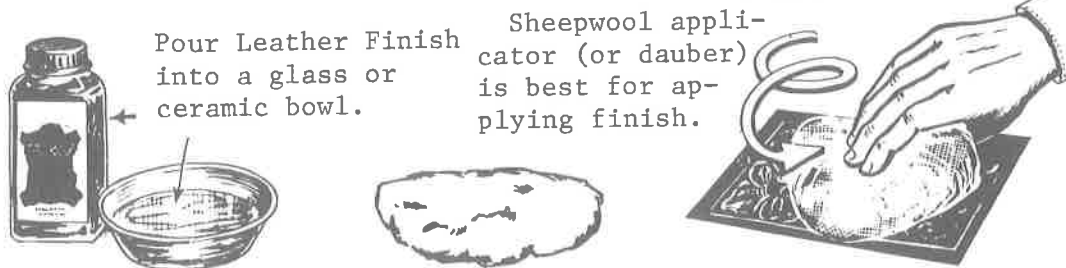
1. All tooling of the design must be completed before finisher is applied.
2. Be sure the surface area is clean and free of any dirt, dust, or other matter.
3. Remove all loose wool from sheepwool applicator or dauber so it does not get into finish.
4. Leather finishes must be applied prior to assembly. It is difficult to get a smooth, even coat over a curved structural surface.

#### Method of Application for Plain, Natural Tooled Surfaces

Care should be taken in applying finishes to leather to be sure only a very light coating is applied. For best results, pour some finish into a small glass or ceramic container such as a bowl, dish, etc. Soften the sheepwool applicator by rubbing into it a small amount of leather finisher. Dip applicator lightly in the finish and rub briskly on unprinted waste paper.

Apply finisher to leather surface with a smooth circular motion. Be sure to cover the entire surface. A very light coat of finish is best. Apply it smoothly and evenly. Do not try to go back over the finished surface after the first coat is applied.

Move applicator in circular motion.



For best results, and to be sure you apply only a thin coating of finish, use a glass or ceramic container for the finish.

Remove all loose wool from the sheepwool applicator. Rub a small amount of finish on applicator to make it easier to work with.

Always apply finish by moving applicator in circular motion. Don't go back over any part of project after finish is applied.

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.

#### Things To Do

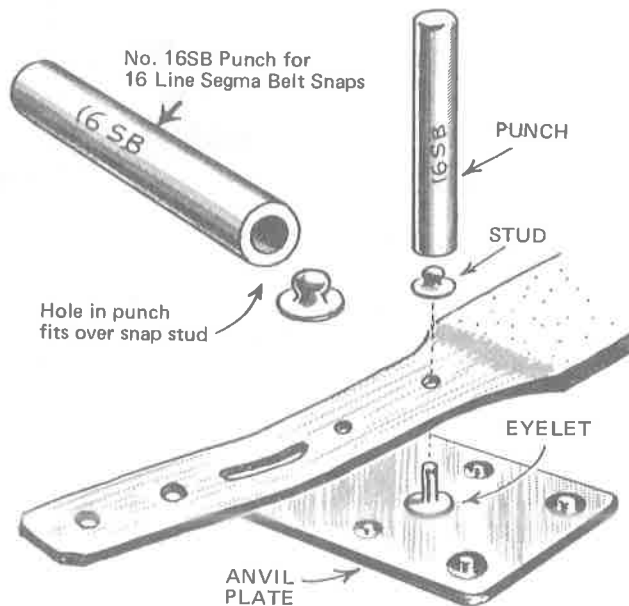
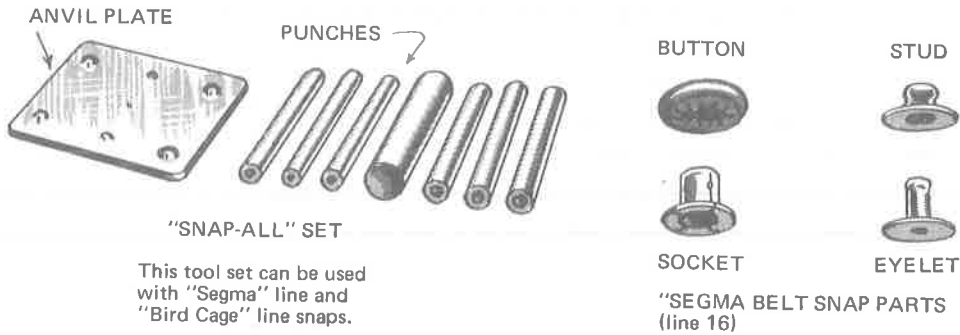
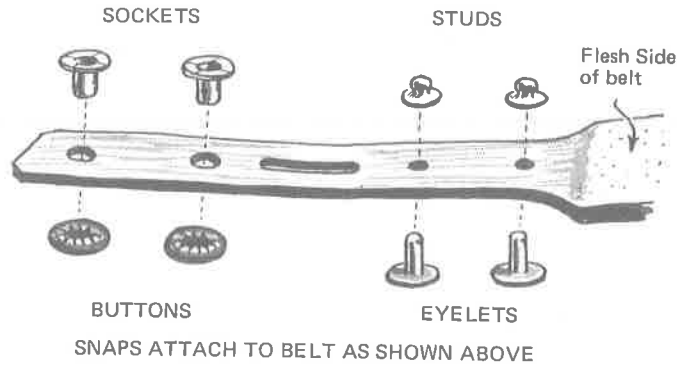
Apply a leather finish to the practice samples (tracing, modeling, background) you have made in the first three lessons and also to three or four scraps you will use in learning to lace.

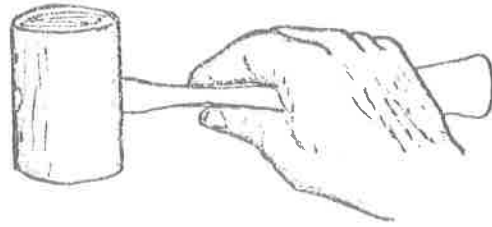
## Setting Snap Fasteners

A wide assortment of snap fasteners and tools for installing them is available from leather dealers. The function of the snap fastener determines the type and size for a specific article.

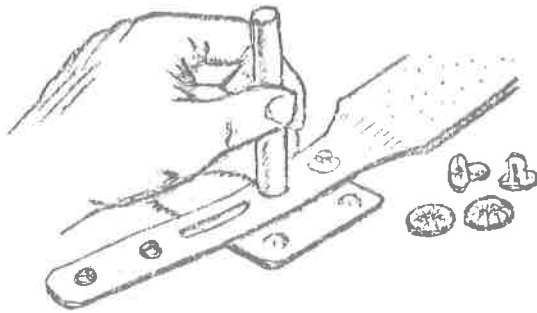
A snap setting tool which will accommodate various snap fasteners is preferable to one which sets only one or a limited number. It is less expensive to buy one multi-purpose tool than several tools of limited use. Such a tool might belong to your 4-H Club.

The illustrations below show the process of setting snaps on a belt. The same procedure is used on key cases, pocket of a billfold, or any other article.



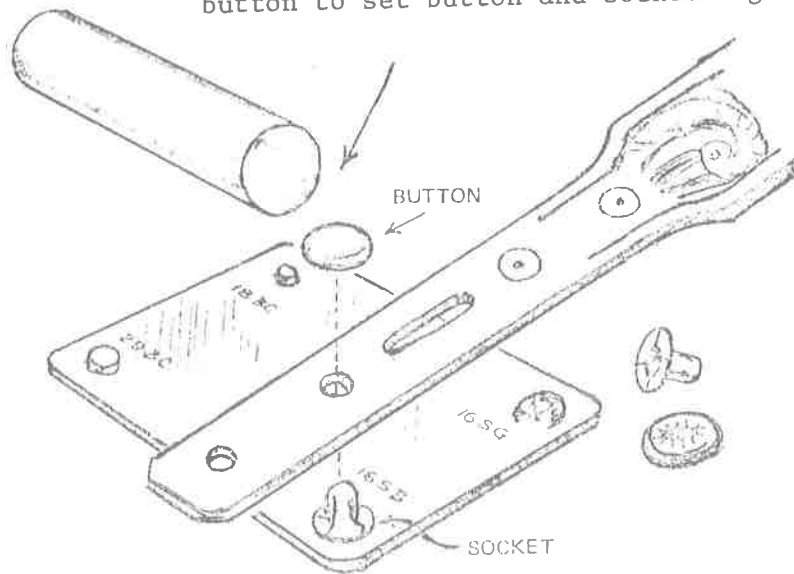


Hold punch straight up and down. Strike sharply with mallet to set snap.



Place snap eyelet over small anvil, in center of anvil plate. Place belt over eyelet (through hole as indicated) and set stud on top of eyelet. Set the proper numbered punch over stud and strike firmly with mallet.

Use large punch with concave surface on top of snap button to set button and socket together.



Place socket over matching numbered anvil plate (see chart on back of Snap-All tool set). Push belt over socket; set button on top of socket and set concave punch over button. Strike firmly with mallet to set parts.

### Materials Needed

1. Snap-button outfit
2. Revolving punch
3. Scrap leather for practice

### Things To Do

1. Set a snap button on scrap leather for practice. Save your sample to mount on exhibit board.
2. Prepare an exhibit board to include samples of the practice steps you have completed on leather scraps and three articles you will make. You will have three or four more samples of ways to lace from Lesson 5.

### Exhibit Board

Follow the exhibit instructions outlined on page 1 of this manual and check yourself on the exhibit Evaluation Guide included in the back of this manual.

## LESSON 5

### LEATHERCRAFT LACING

Each 4-H member will need three rounders or three 3" x 3" squares of leather and seven yards of lacing to complete this lesson.

Here are some suggested demonstrations that can be assigned ahead to 4-H members to make this lesson more interesting:

1. Punching the holes for lacing.
2. The Whipstitch.
3. The Running Stitch.
4. The Double Loop Stitch.
5. Splicing lace.

### Lacing

Goat lacing is the best to use and will come in a variety of shades from tan to dark brown and black. It can be purchased by the yard or by the spool. It is cheaper to buy it by the spool.

The amount of lacing required is:

Whipstitch	3½ times the distance to be laced.
Running Stitch	1½ times the distance to be laced.
Double Loop	8 to 8½ times the distance to be laced.

The most common lacing used is 3/32 of an inch in width, though other popular widths are 1/16, 1/8, and 3/16.

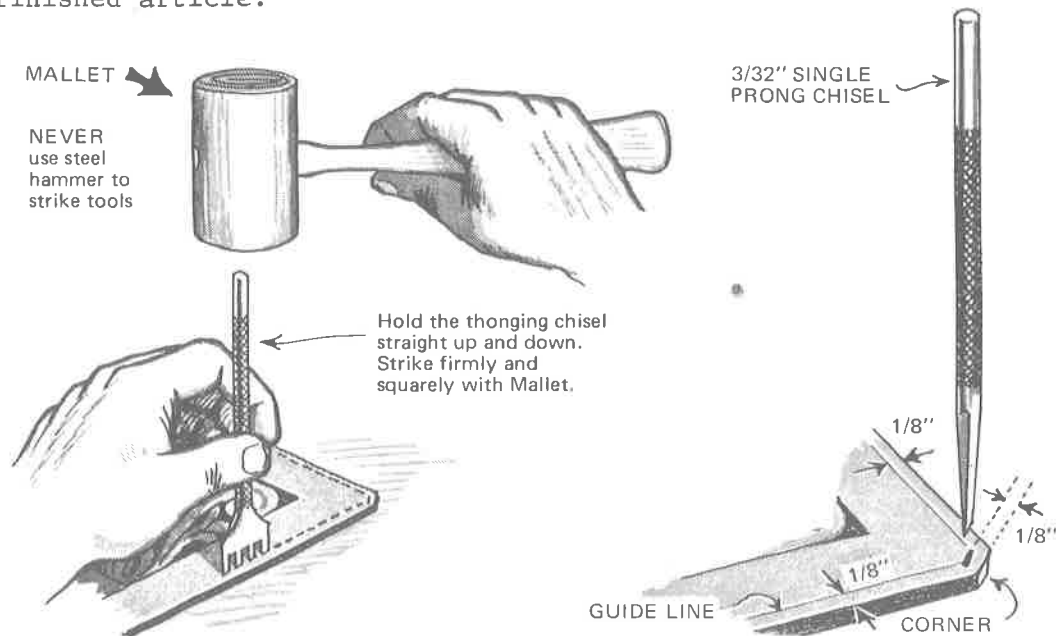
### Punching the Holes

In preparation for punching the lacing holes, you will need a piece of soft wood to place under your article (which should be placed tooled side down). With a pencil, mark a guide line for your punching tool 1/8 of an inch from the edge of the article that is to be laced. Then, with a razor blade or sharp knife, cut off the corners so they are very slightly rounded.

## Thonging Chisels

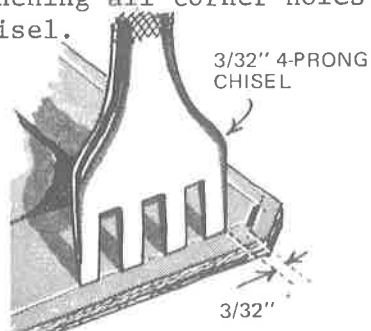
Thonging Chisels are also called Lacing Punches. When cutting your own leather articles, you need to punch precisely spaced lacing holes. The illustrations below describe this process in detail.

A carefully drawn guide line will aid in precise alignment of holes. Unevenly spaced holes cause unsightly, irregularly laced edges which detract from the appearance of the finished article.

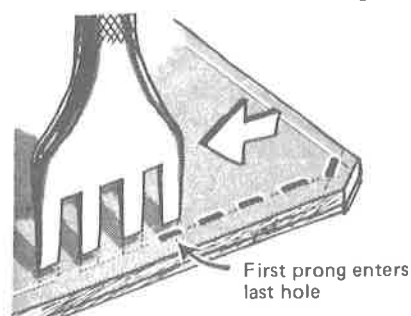


Thonging Chisels (Lacing Punches) are made in single prong and multi-prong punches. The single prong is used for corner slits, curves, etc. The multi-prong is faster and more accurate for straight lines.

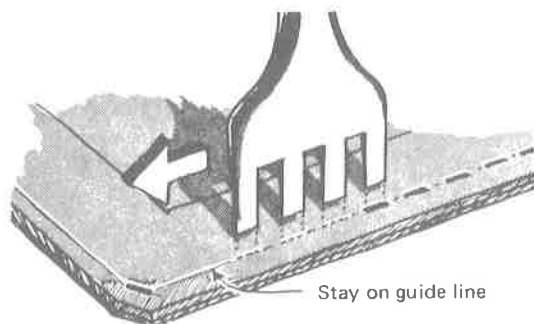
Begin by punching all corner holes. Punch all holes to a uniform depth on the thonging chisel.



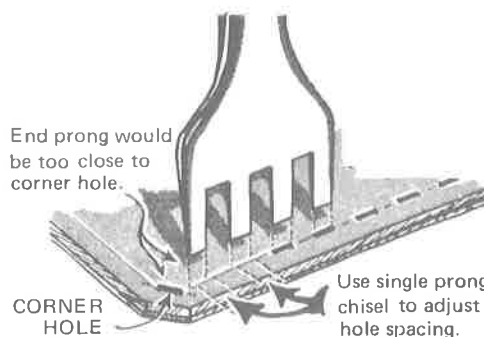
After punching the corner holes, begin next holes with the multi-prong chisel. Space the first hole (from corner) same width as the punch blade (3/32").



To properly align succeeding holes, place first prong in last hole; punch again.

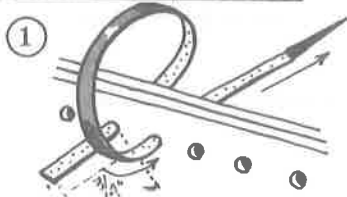


Continue punching to the next corner.

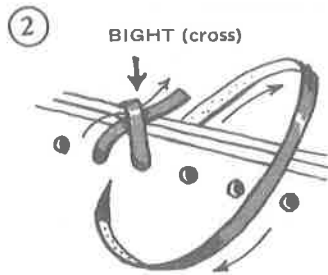


If holes do not come evenly spaced at next corner, adjust the space by using the single prong chisel.

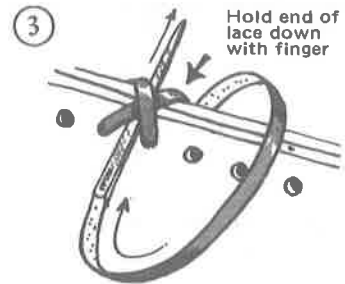
## The Double Loop Stitch



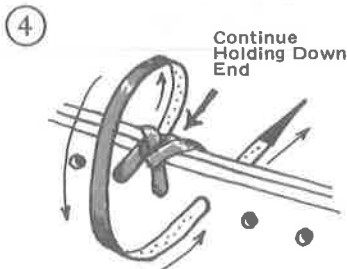
Beginning with the flesh side up, pull needle and lace through first hole. Leave about 3/4" of the lacing end and go on to lace the next hole.



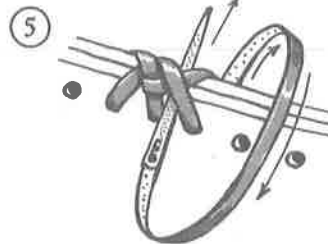
Pull stitch tight, lacing over end you left free. This forms cross or 'bight' on opposite side.



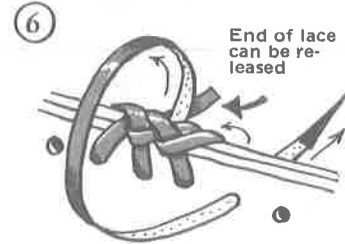
Push needle under cross or bight. Hold end of lace down with finger.



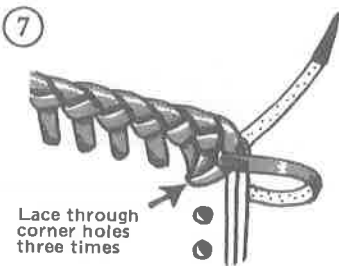
Pull stitch under bight snug but not tight. Lace through next hole.



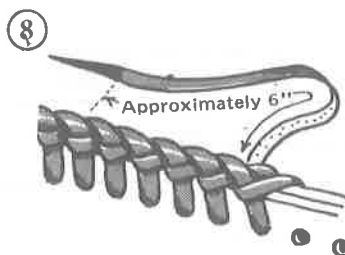
Follow same procedure as in Steps 1 and 2, making cross or bight. Once again, go under bight; pull stitch snug.



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



Lace through corner holes three times



Lace until only 5" or 6" of lacing remains. You will now have to splice with a new length of lace. (See splicing instructions, type II.)

## Formulas for Styles of Edge Lacing

Style	Edge Distance	Amount of Lacing Required
Running Stitch	1/8"	1 1/2 x distance to be laced.
	3/16"	1 1/2 x distance to be laced.
	1/4"	1 1/2 x distance to be laced.
Whip Stitch	1/8"	3 1/2 x distance to be laced.
	3/16"	3 3/4 x distance to be laced.
	1/4"	4 x distance to be laced.
Double Loop Stitch	1/8"	7 1/2 x distance to be laced.
	3/16"	8 1/4 x distance to be laced.
	1/4"	9 x distance to be laced.

Note: Add 10% to above formulas for splicing and ending lacing.



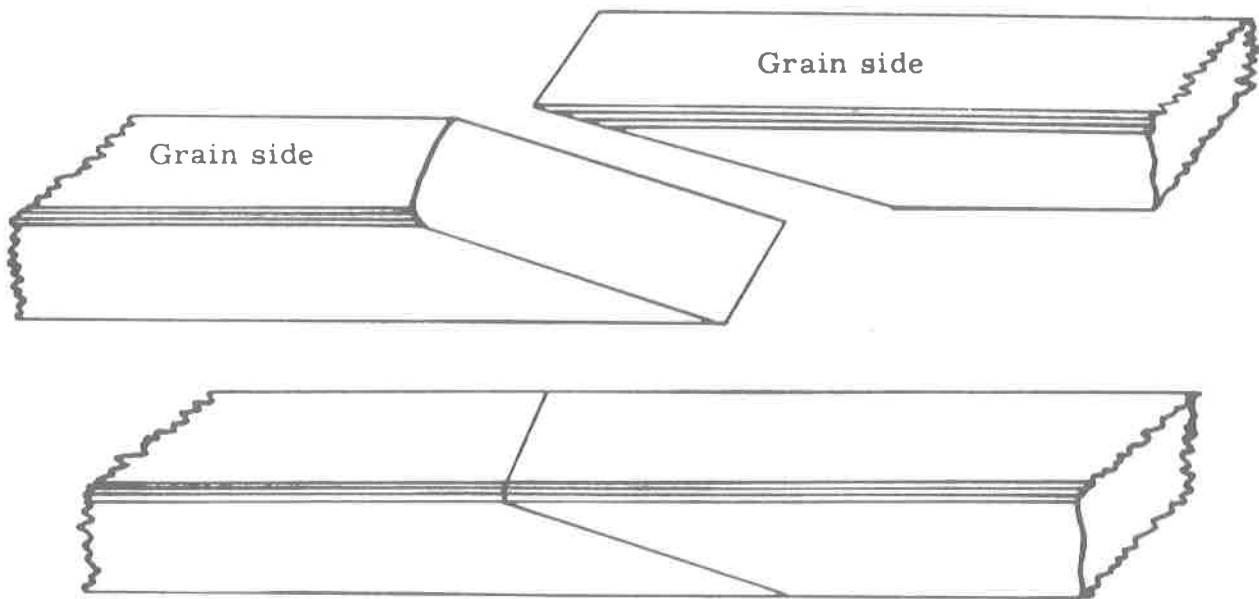
## Splicing Lace

### TYPE I

This method is used when you have a single thickness of leather.

Joining a new piece of lacing to the old piece is called splicing. Remove the needle from the end of the lacing now being used. Then, with a razor blade or sharp knife, thin the end on a slant about  $\frac{3}{4}$  inch back. Cut off a new piece of lacing four or five feet in length, then one end as you did the other piece. Be careful to thin the smooth side of one lacing and the rough side of the other. Thus, when the two ends are glued together, the splice is the same thickness as the lace.

With rubber cement, put a few drops on the thinned end of one piece of lacing and lap the other piece over it. Press together and allow to dry completely. Continue lacing as before. Be sure enough cement is used to cover both ends well so they won't fray.



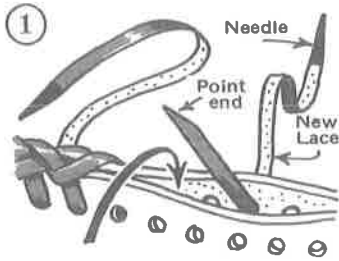
## Things To Do

1. Punch holes around three pieces of rounders or three 3" x 3" squares.
2. Make a sample of each of the three different ways of lacing shown in Lesson 5. Label and mount these on your exhibit board.
3. Show a sample of splicing lacing (using glue). Mount on piece of leather and place on your exhibit board.
  - a. Cut on diagonal.
  - b. Cemented (or spliced).

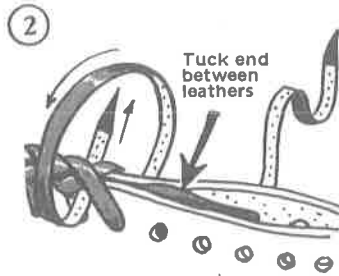
TYPE II

The following method is best when joining several thicknesses of leather.

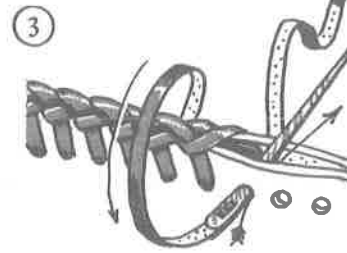
Splicing Instructions



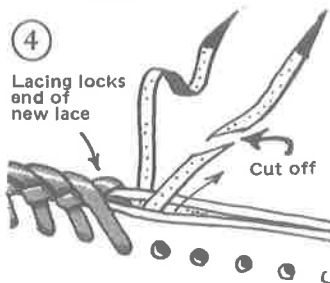
Insert newly threaded needle down between leathers, 3-4 holes from lacing; pull out back side. Leave 3/4" of end.



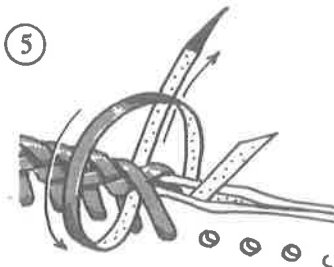
Tuck end of lace between leathers and continue lacing your project with the old lace.



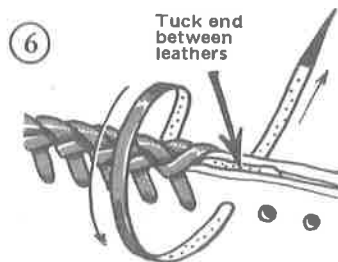
Lace with old lacing up to the new lace. Push needle up between the leathers again through first hole after the new lace.



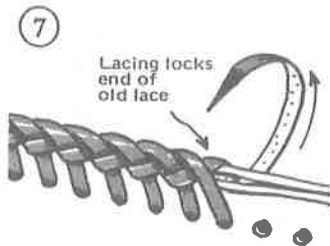
Pull old lace up tight, cut off end at an angle, allowing about 3/4" to remain.



Begin lacing the rest of your project with the new length of lace. Push needle under bight as before for double loop stitch.

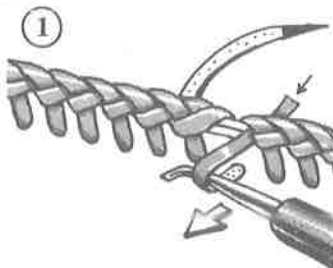


Tuck end of old lacing between leathers and lace over it with the new lace so it is caught and won't show.

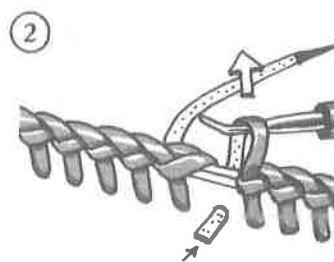


Continue lacing and lace over ends, as instructed, to lock them in place.

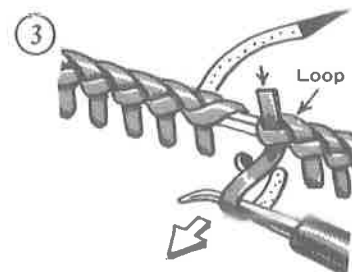
How to Finish Out Your Double Loop Stitch



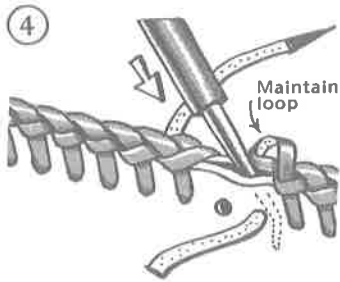
Use modeling stylus to pull end of lace free of stitches.



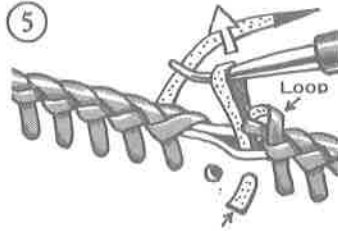
From back side, pull end of lace out of hole.



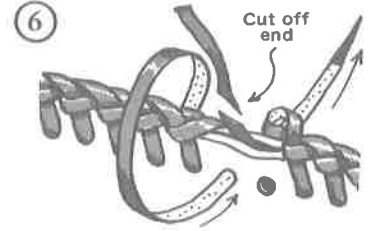
From front side, pull end of lace out of the loop.



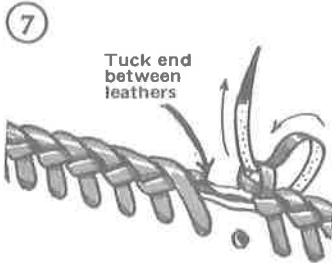
Push stylus down between leathers and hook it over the end of the lace.



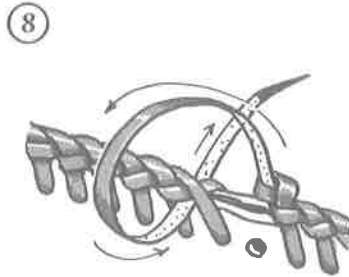
Pull end of lace out of hole and UP between leathers. Two empty holes should appear on front side; one on the back.



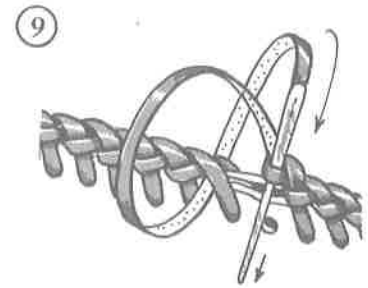
Cut off end of lace you have pulled out and tuck the end of the lace between the leathers. Lace through the next hole.



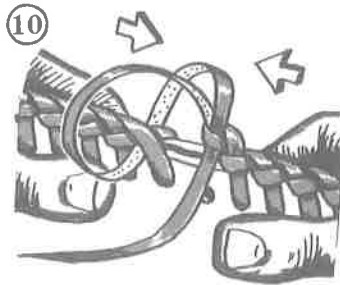
Pull stitch tight and lace up through loop from back side. All holes on back side should be filled.



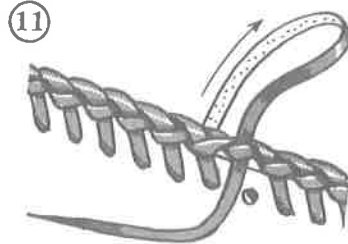
Lace under bight. Do not pull this stitch tight.



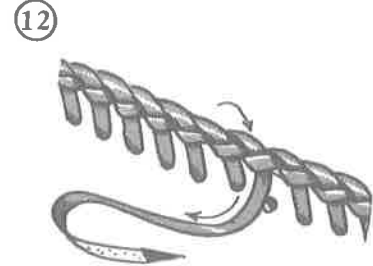
Carefully cross over, as shown. Push needle down through the loop.



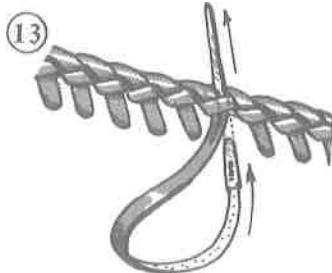
Pull needle through. Push laced edges together to adjust starting loops for easier completion.



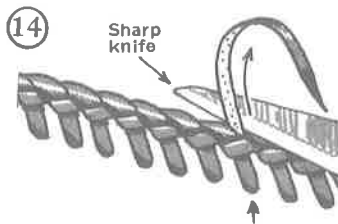
Pull any slack out of the first loop and adjust lacing with fingers to make all your stitches appear equal.



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.

## LESSON 6

### AN ADVENTURE IN TOOLING LEATHER

Now that you have had some practice in using your tools, select the articles below that will express your skills and prove interesting and useful to you.

Make at least three of the articles listed below and mount them on your exhibit board. Two must have lacing and tooled designs.

- |               |                 |
|---------------|-----------------|
| 1. comb case  | 5. knife sheath |
| 2. bag tag    | 6. watch band   |
| 3. coin purse | 7. book mark    |
| 4. key case   | 8. coaster      |
- or an article of your choice using the same tools and skills  
(Be careful to avoid articles exceeding your ability.)

Review these articles, designs, etc., on the following pages, then purchase the kits or leather (as you wish).

Proceed to complete each article, being careful to follow all instructions.

Keep your record book up to date and complete as required in your county.

After you have completed Unit 1,  
plan to enroll in Unit II and learn  
to carve leather.

## INSTRUCTIONS AND PATTERNS FOR ARTICLES

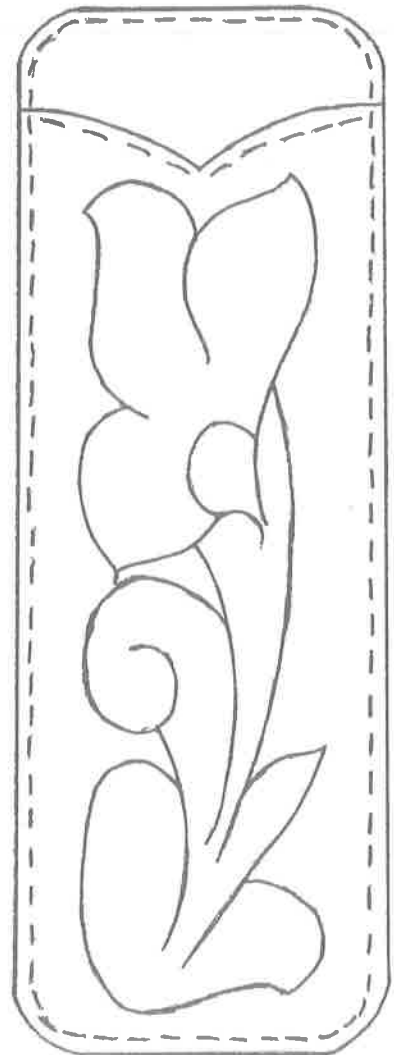
### COMB CASE

#### Material

1. Two pieces of leather 5-3/4" x 2" (or whatever size needed for comb).
2. Lacing.
3. Or purchase kit.

#### How to Make

1. Cut out pattern according to size needed. (Make pattern from heavy paper or cardboard.) Notice that the top piece, on which the design is placed, is shorter than the piece in back. The comb can be slipped in place more easily this way.
2. Place pattern on leather and cut out leather. Use ruler so your edges will be straight.
3. Select or make design and trace this on both sides of the case. Be sure leather is of the proper dampness.
4. Tool design on both sides.
5. Put finish on leather.
6. Punch holes for lacing.
7. Lace pieces together using the Whip Stitch or Double Loop Stitch.

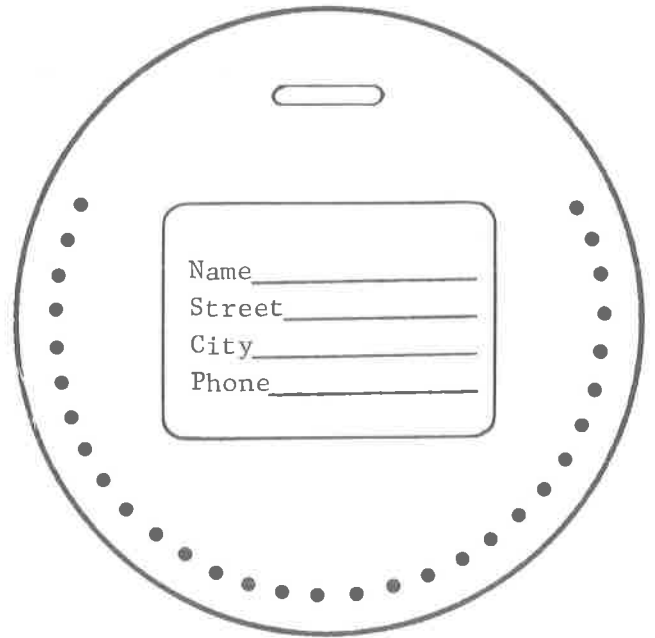
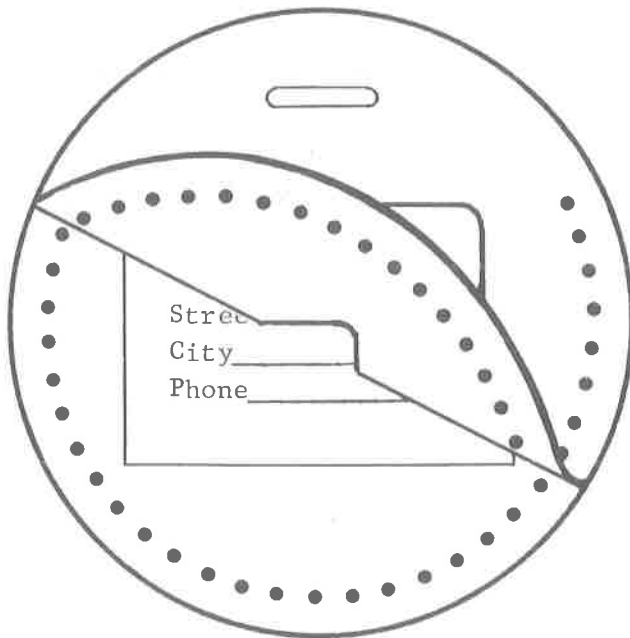
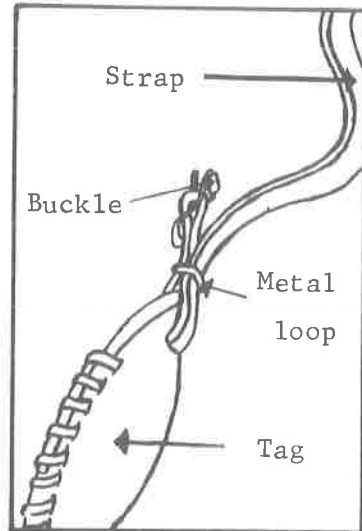


## BAG TAG

Purchase kit or follow instructions.

### How to Make

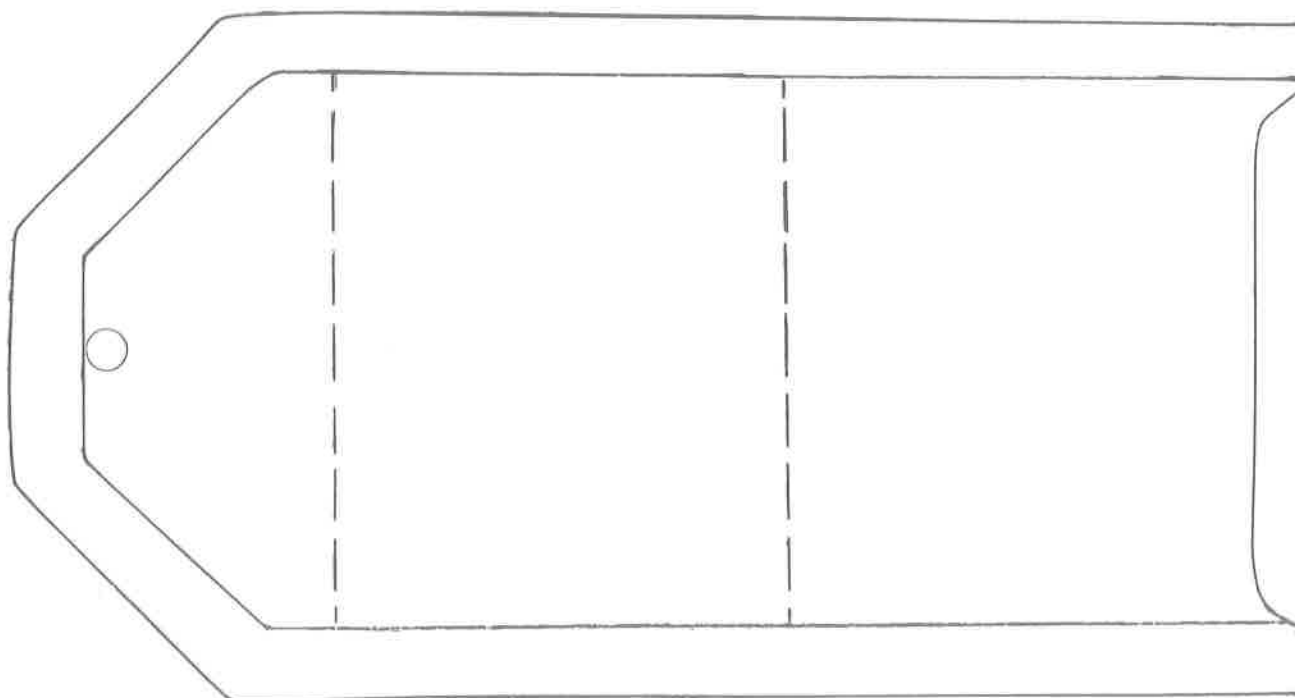
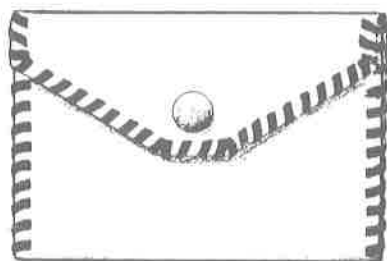
1. Tool design.
2. Place back and front pieces rough sides together.
3. Use Whip Stitch, Running Stitch, or Double Loop Stitch.
4. Line up slot and lacing holes at top. Start lacing at top hole to right of slot. Hide end of lacing inside. Lace completely around tag. Finish by hiding stitch inside.
5. Slip metal loop on strap and enter strap through slot in tag. Bring tip of strap up through metal loop and pull down snugly against tag. This joins strap to tag and leaves ends of strap free to be attached to luggage. (See illustration.)



## COIN PURSE

### How to Make

1. Make a pattern according to size desired. Mark the folds on your pattern and mark the places your snaps will go.
2. Place pattern on leather and cut out leather. (Use straight edge.)
3. Select or make design and trace on leather.
4. Tool design of your own choice.
5. Put finish on leather.
6. Insert snaps.
7. Punch holes for lacing, then lace.



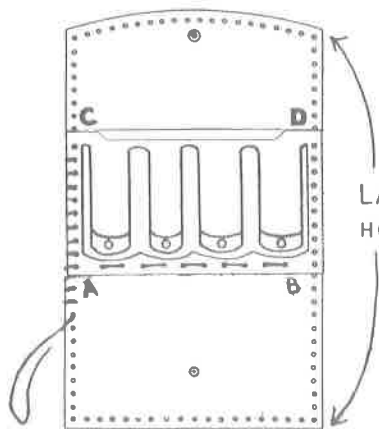
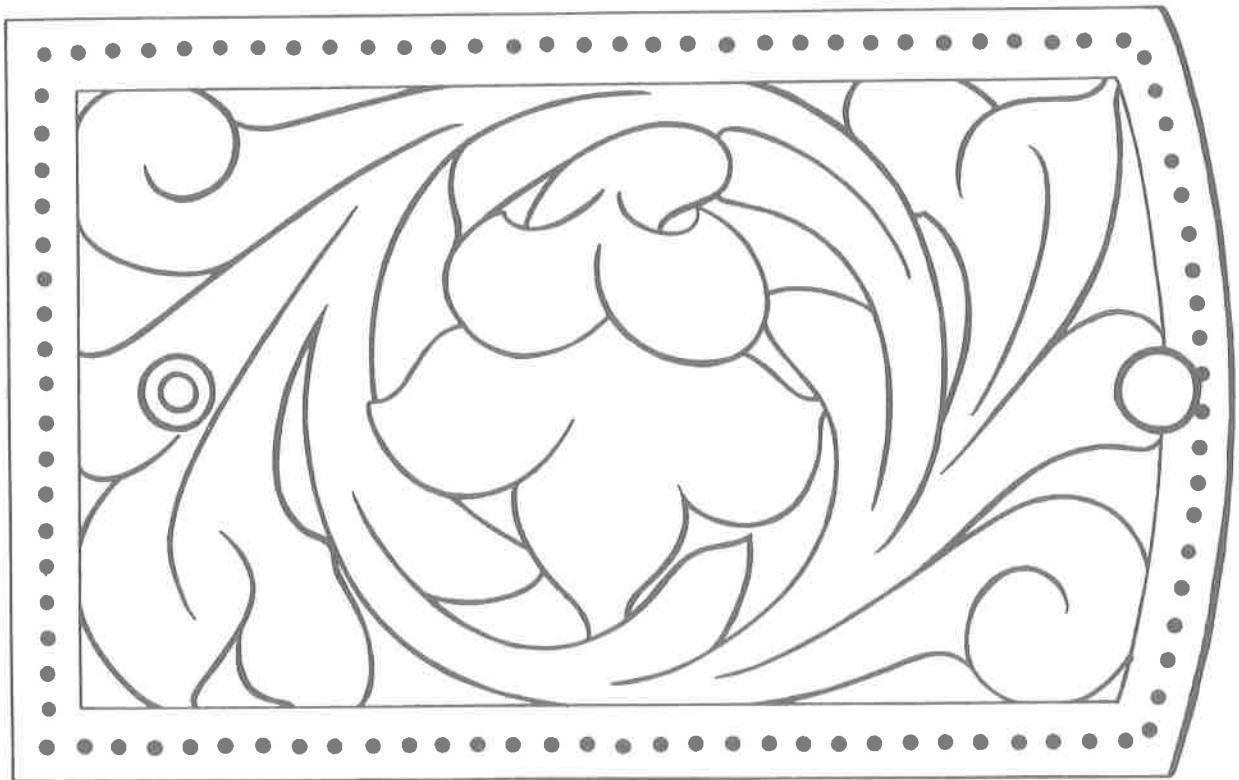
## SCOTCH COIN PURSE

### How to Make

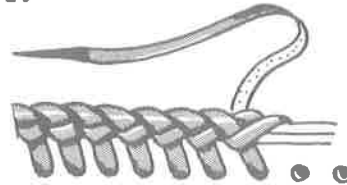
1. Use a sponge to dampen leather.
2. Spread the leather to be decorated grain or smooth side up on a smooth board. Dampen the entire piece. Do not get leather soaking wet.
3. Use tracing paper to trace design outlines from pattern. Clip tracing to damp leather.
4. Trace the outline of the design on leather with tracing tool. If leather becomes dry, dampen it again. When it turns back to its natural color, resume work.
5. Use modeling tool to add shading or deep burnished color to leather. Use on flower petals, leaves, etc.
6. Use background tool to stamp down background areas.
7. Place the coin holder on the cover as indicated by dotted lines on pattern. Be sure holes A and B, C and D, of both pieces correspond. Next, lace across the pocket from A to B with a Running Stitch. Tuck the ends of the lacing underneath the pocket and then cement.
8. Using the Whip Stitch or Double Loop Stitch, start two holes down from point C and lace around the entire purse, connecting the coin partition at the sides with the body of the purse.



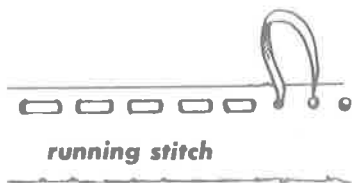
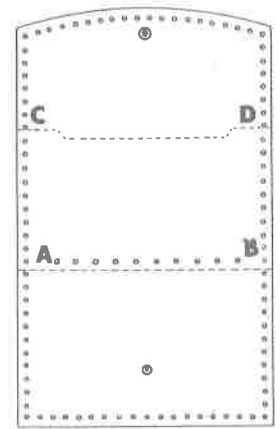
PATTERN FOR SCOTCH COIN PURSE



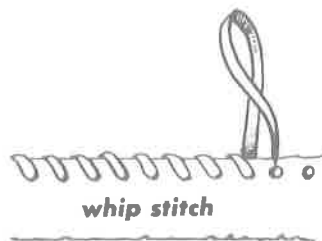
LACE THROUGH CORNER HOLES TWICE.



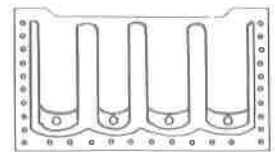
Double Loop Stitch



running stitch



whip stitch



coin holder ↗

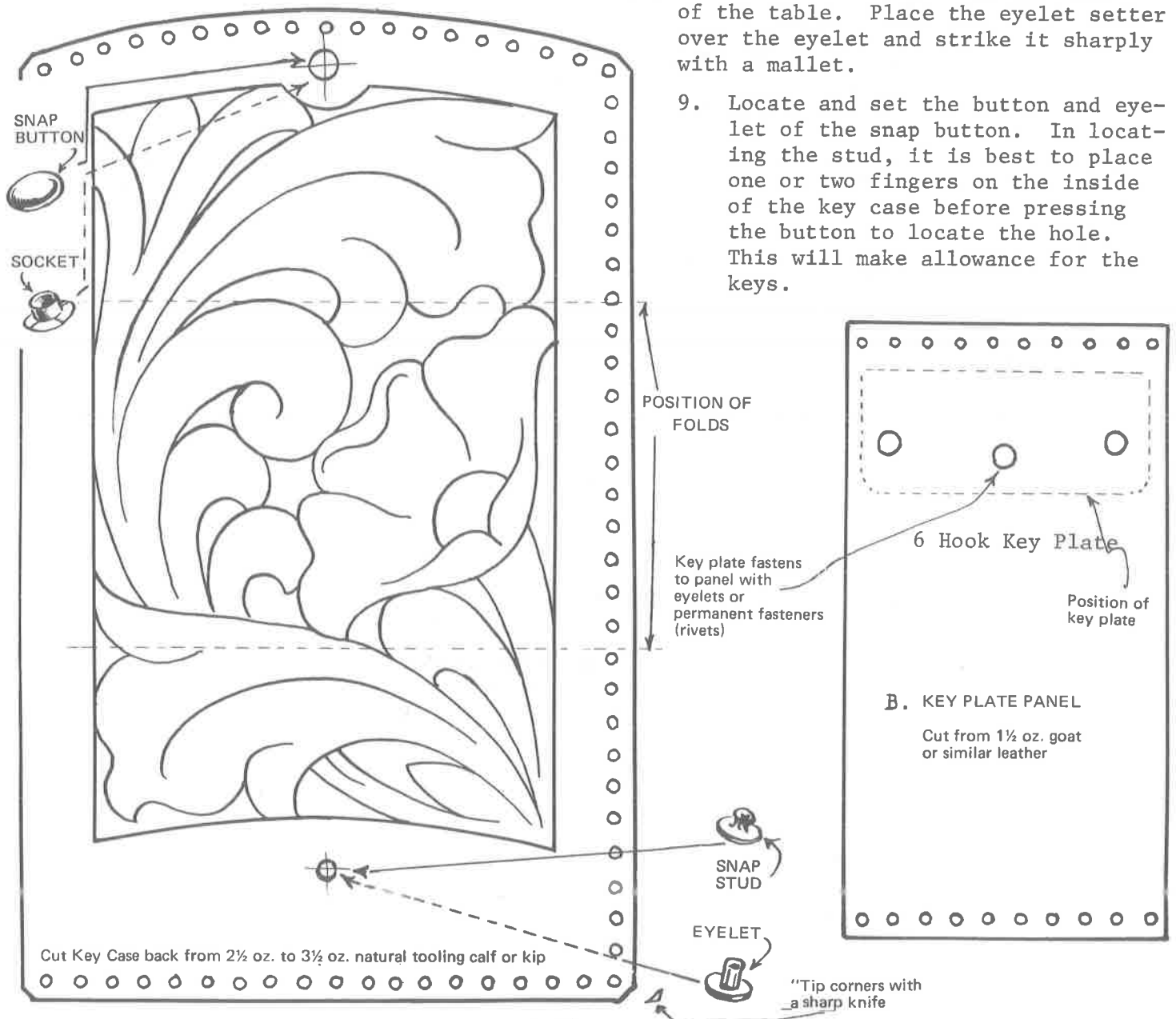
# KEY CASE

Purchase kit or follow instructions.

## How to Make

1. Make pattern to size shown below. Lay on leather and cut out. (Cut to shape of pattern on this page if you wish.)
2. Dampen leather.
3. Select or make design and trace on leather.
4. Tool design.
5. As soon as article is dry, clean and add finish to leather.
6. Cement the top edge of the inside piece "B" in position.
7. Punch holes for lacing and lace around entire key case, using either the Whip Stitch, Running Stitch, or Double Loop Stitch.
8. Center the key plate on the inside piece to within 1/8" of the lacing. Mark the location of the holes and punch them. Insert the eyelets up through the leather and key frame. Turn the inside part so it can be placed on the edge of the table. Place the eyelet setter over the eyelet and strike it sharply with a mallet.

9. Locate and set the button and eyelet of the snap button. In locating the stud, it is best to place one or two fingers on the inside of the key case before pressing the button to locate the hole. This will make allowance for the keys.

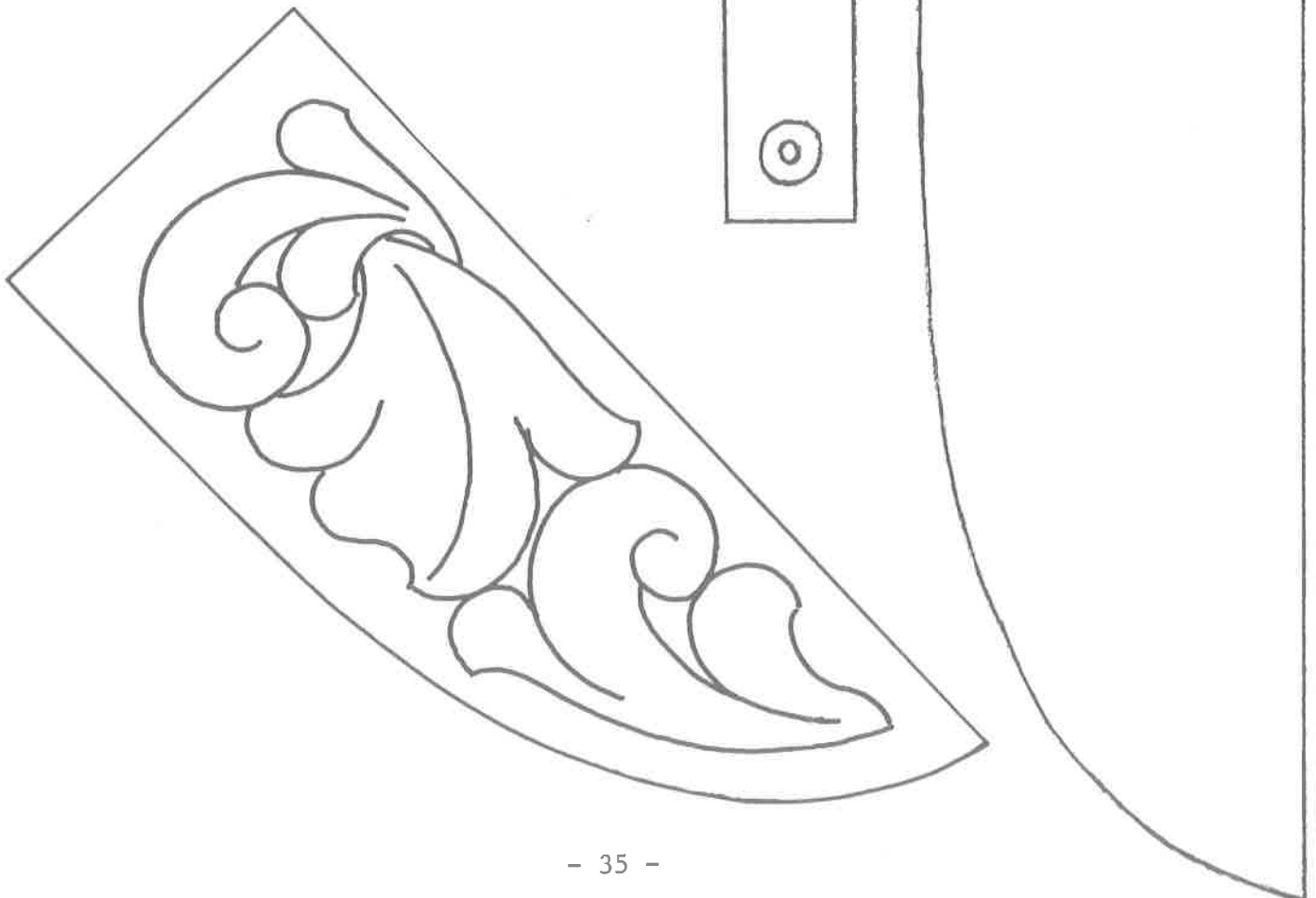


## KNIFE SHEATH

Purchase kit or cut leather and follow pattern and instructions here. Sheath should be cut to proper size for intended knife.

### How to Make

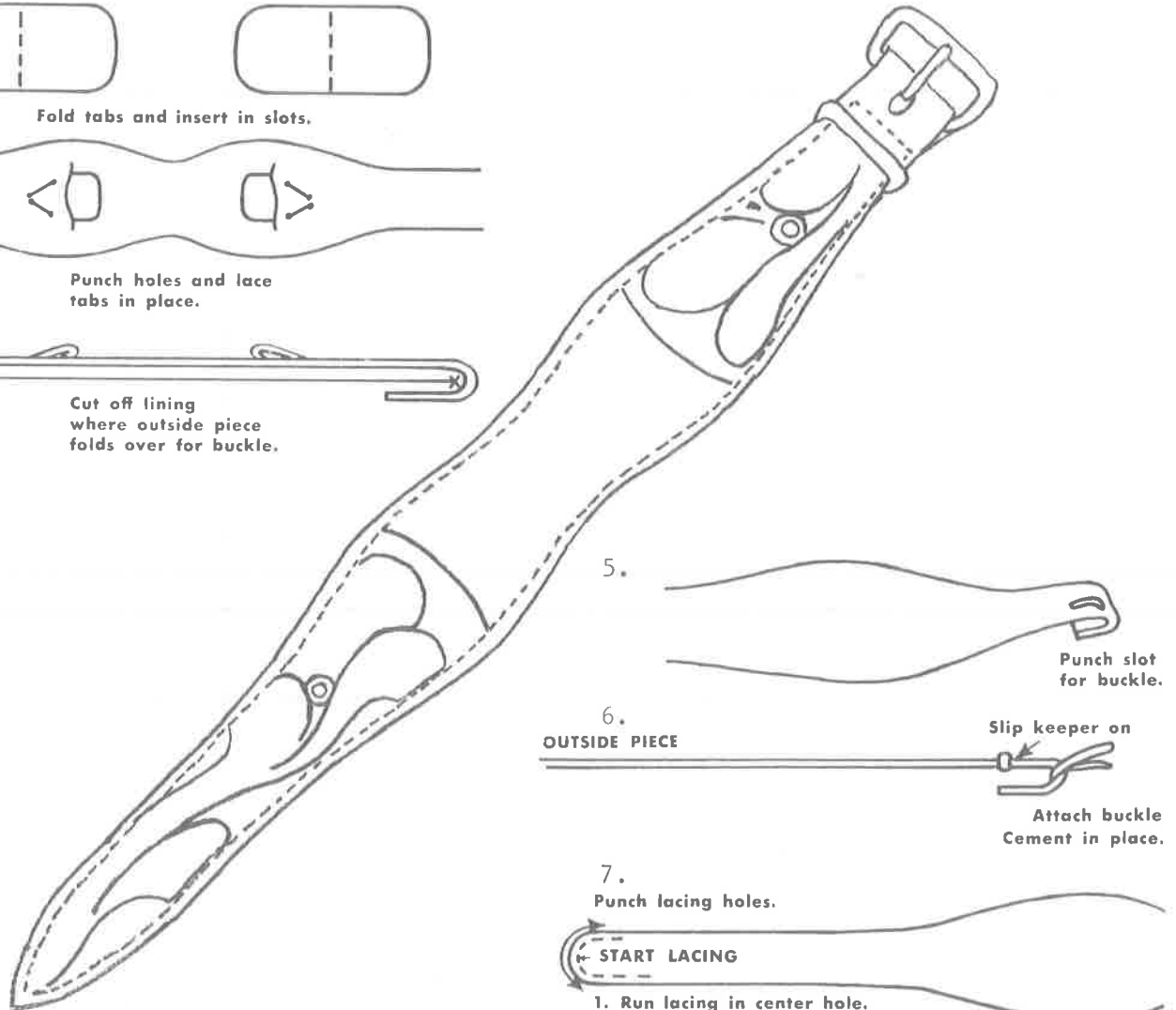
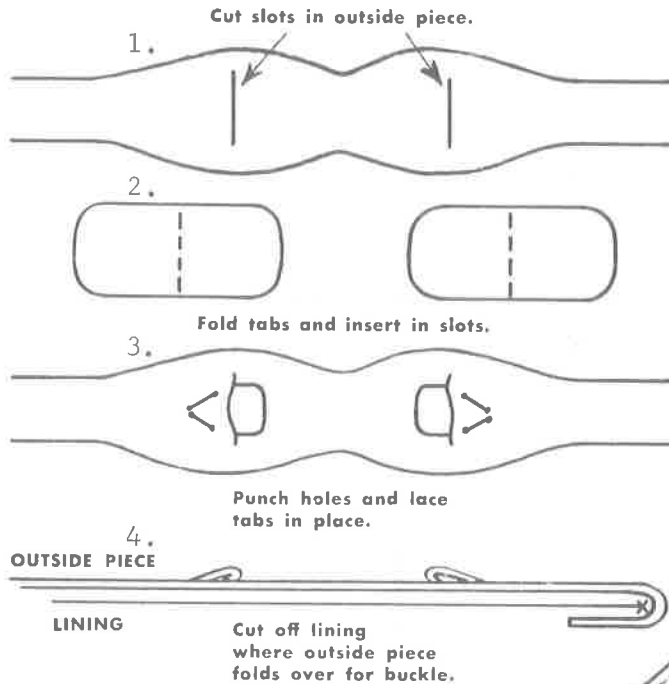
1. Make or select patterns and design.
2. Dampen the leather.
3. Do all tooling before assembling.
4. Using rubber cement, cement front piece to grain side of sheath back. Cement just around edges except at top.
5. Punch lacing holes on dotted line. Punch rivet hole in sheath and also in exact center of knife handle strap.
6. After measuring handle strap to fit knife, mark and set snap buttons and rivet strap to sheath back.
7. Clean and polish leather. Apply a finisher.
8. Lace front to back using Double Loop Stitch or Running Stitch.



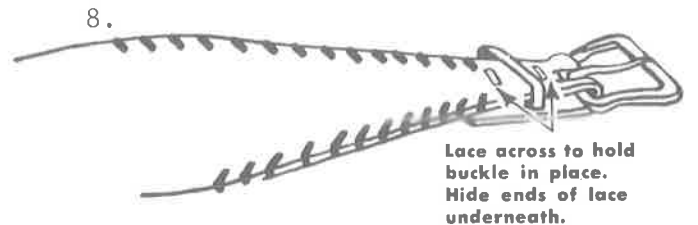
# WATCH BAND

## How to Make

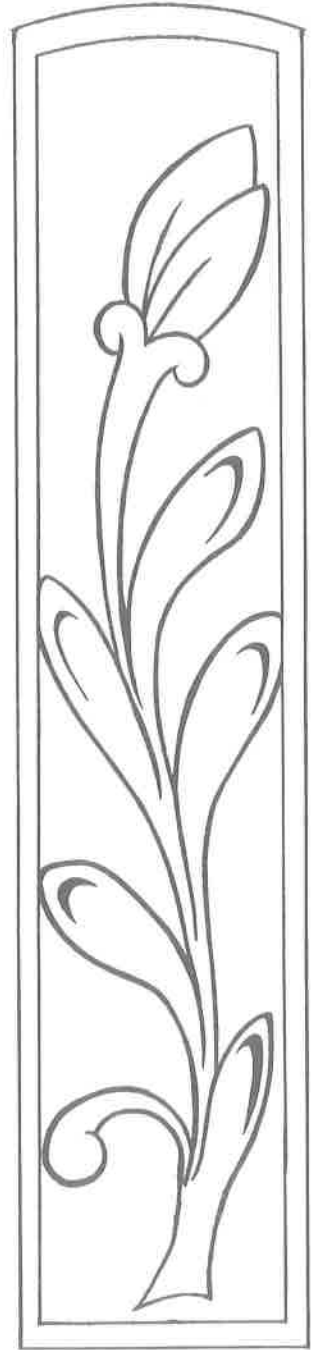
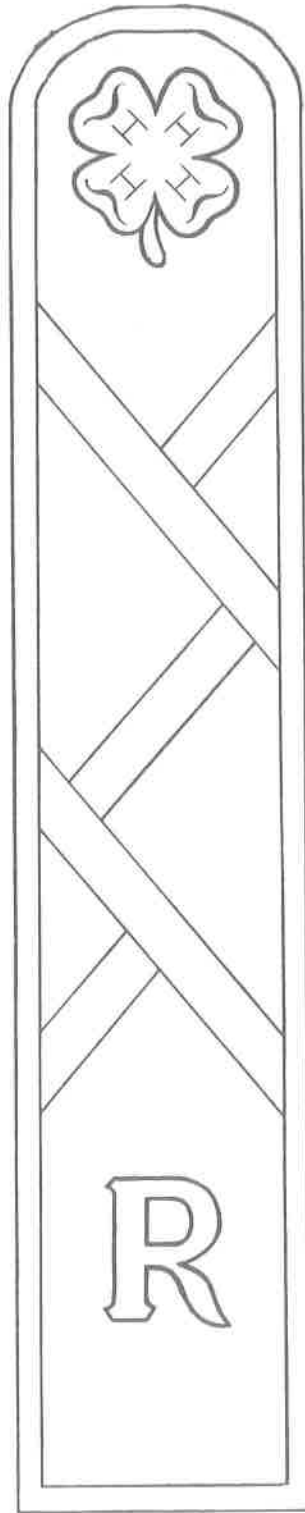
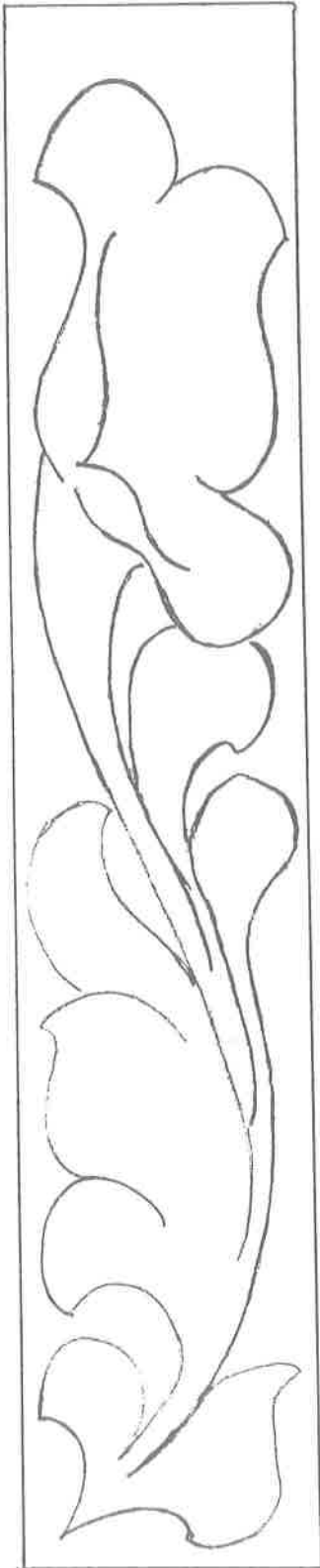
1. Tool design on watch band blank.
2. Measure distance for attaching watch.



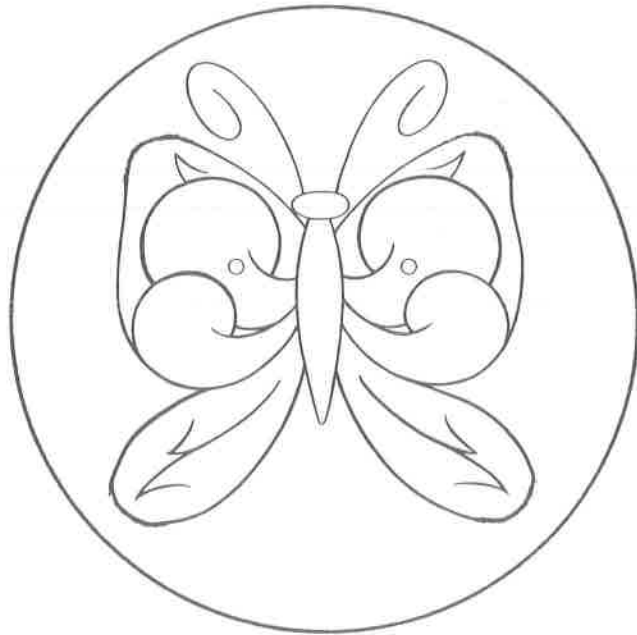
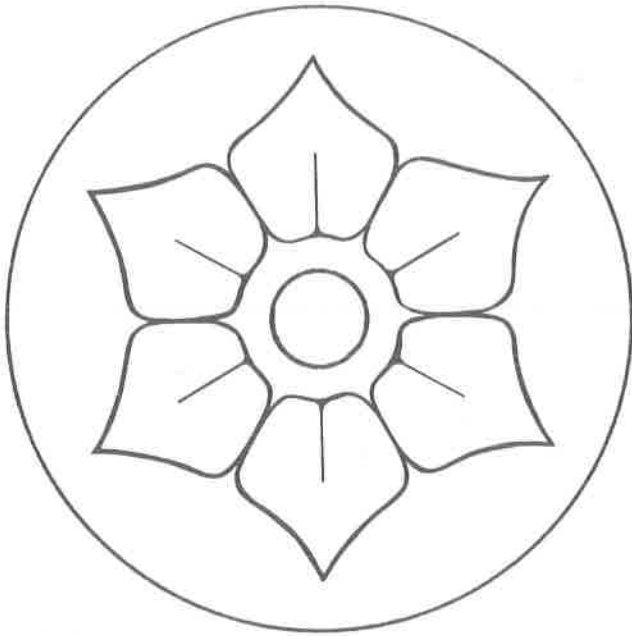
1. Run lacing in center hole.
2. Pull lacing halfway through.
3. Lace around one side.
4. Use other end of lace and lace around other side



BOOK MARK DESIGNS



COASTER DESIGNS

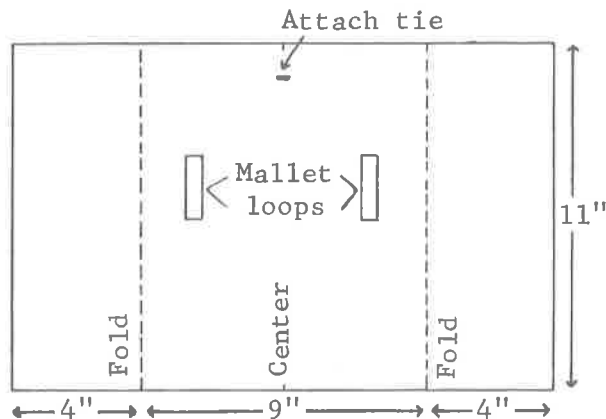


## INSTRUCTIONS FOR MAKING A LEATHER TOOL KIT

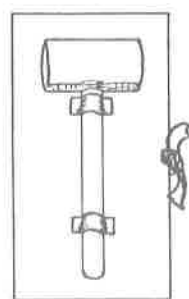
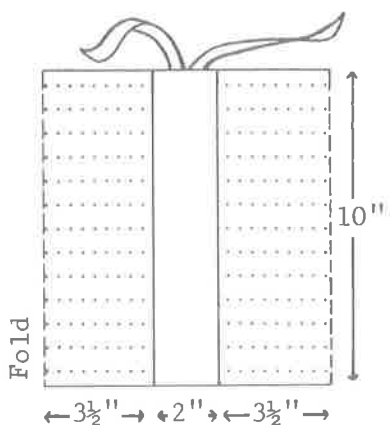
### Material Required

1. Heavy denim or canvas 11" x 17".
2. Approximately 15" x 1-1/2" extra for ties and loops, or one package of 1/2" twill tape.

### How to Make

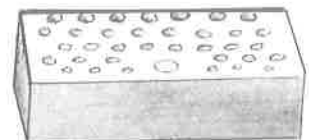


1. Make a hem by turning the edge of the fabric 1/4" twice across ends and along each side.
2. On the right side of the hemmed fabric, attach two short pieces as indicated on the diagram, about 2" from the edge, for loops through which the handle of the mallet can be slipped.
3. Fold the fabric toward the center so 3-1/2" pockets are formed at each end.
4. Stitch at intervals of approximately 3/4" to form small pockets for individual tools. Vary the size of these to fit tool requirements.
5. To make ties: Turn edges of strip 1-1/2" wide to center; fold again and stitch both sides to form tie. Twill tape may be used instead. Stitch 8" tie close to the end where mallet loops are.



FINISHED KIT

Make your own holder from a block of wood 4" x 8" x 4". Drill 3/8" holes for tools, plus one larger hole for swivel knife.



UNIT 1  
LEATHERCRAFT EVALUATION GUIDE

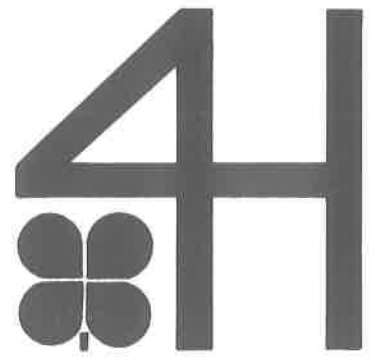
Following is a check list to be completed to help you to know when unit goals are met and to serve as an evaluation form for exhibit judges:

	<u>Suggested Score Card</u>	<u>Your Score</u>
1. Record book		
a. Meeting attendance record	5	
b. Demonstrations and/or talks	5	
c. Completeness of record book; skills developed listed	10	
d. Three articles completed	7	
2. Exhibit board to include:		
a. 12" x 18" x 1/8" or 1/4" exhibit board (preferably peg board) with name, address, and county on back.	1	
b. Basic steps shown on scrap leather:		
(1) Sample showing tracing (transfer a design).	1	
(2) Sample showing use of modeling tool.	1	
(3) Sample showing use of background tool.	1	
(4) Sample showing a snap button attached.	1	
(5) Sample showing Whip Stitch lacing.	1	
(6) Sample showing Running Stitch lacing.	1	
(7) Sample showing Double Loop Stitch lacing.	1	
(8) Lacing samples should be laced all the way around the scrap leather to show joining.	1	
(9) Leather finish applied to all samples.	1	
(10) Show a sample of splicing lace in two steps as shown in your manual:		
(a) Cut on diagonal		
(b) Cemented (or spliced)	1	
(11) Fasten each practice piece to the exhibit board. Lacing is good, but do not glue or nail.	1	
(12) Label each practice sample and article.	1	
3. Completeness, design, and quality of workmanship con- sidered on the articles below:		
List here the three other finished articles attached to your exhibit board, two of which must have lacing and tooled designs. (Label; indicate if kit, self-cut, or designed.)		
a. _____	20	
b. _____	20	
c. _____	20	
Total Possible Score	100	



To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.





Unit 2

Member's Manual

# ADVENTURES IN LEATHERCRAFT

BEGINNING  
LEATHER  
CARVING



Division of Agricultural Sciences  
UNIVERSITY OF CALIFORNIA

4-H-5010

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## 4-H ADVENTURES IN LEATHERCRAFT

Objectives of this project include helping youth:

- Learn leathercraft skills.
- Appreciate the natural beauty and usefulness of leather.
- Learn the principles of good design.
- Become creative and original.
- Learn to strive for quality in their craftsmanship.

This project is of equal interest to boys and girls from urban or rural homes. It complements many other projects where leather is used, as in livestock and horsemanship, clothing, and home furnishings.

Interest and enthusiasm is best if a group of members are enrolled, rather than a single individual in a club.

The nine units offered in the "4-H Adventures in Leathercraft" series include:

- Unit 1 Leather Tooling
- Unit 2 Basic Leather Carving and Stamping
- Unit 3 Advanced Leather Carving and Stamping
- Unit 4 Pictorial Carving and Color
- Unit 5 Leather Garments and Accessories
- Unit 6 Home Furnishings and Accessories
- Unit 7 Original Design in Leathercraft
- Unit 8 Leather Saddles and Accessories
- Unit 9 Leathercraft - Self-Determined

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## UNIT 2

### BASIC LEATHER CARVING AND STAMPING

This is the second unit in the "4-H Adventures in Leathercraft" series. We will assume participants already have gained basic skills in selecting leather and designs, tracing, tooling, and lacing as outlined in Unit 1. Unit 2 then becomes a new and enriching experience as you learn the skills and techniques necessary to carve and stamp leather.\*

#### Learning Goals

##### Learn:

- To use basic leather carving tools.
- To advance your skills in the selection of leather and in construction.
- To advance your knowledge of design principles and their functional relationship to articles you make.

#### Learning Experiences

- Participate actively in your 4-H Club meetings.
- Practice using basic leather carving tools.
- Practice elementary sketching and design.
- Share information learned through talks, demonstrations, and displays.
- Keep a record of project costs and experiences.
- Evaluate your progress with your leader.

Select and carve three or more of these suggested articles:  
(Include two that have some lacing as well as carving.)

- billfold - wallet or pocket secretary
  - eye glass case
  - dog collar
  - small purse
  - check book cover
  - I.D. and picture case
  - book mark
- or an article of your choice requiring the same tools and skills  
(Be careful to avoid articles exceeding your ability.)

Exhibit - Prepare an exhibit to consist of the following:

1. Exhibit Board - 12" x 18" by 1/8" or 1/4" board, preferably peg board, which includes:
  - Samples of basic steps.
  - Three completed articles from above list. (Two of these must show your lacing skill.)
2. Fasten each sample of basic skills and articles to the exhibit board. (Lacing is a good method, but do not glue or nail.) Label each sample and article. On each article label, indicate if made from a kit or if cut and designed by self. On the back side of exhibit board, be sure to put your name, address, and county.
3. Completed record book.  
(An exhibit evaluation guide is included in the back of this book.)

\*A 4-H Club member may enroll in Unit 1 and Unit 2 and may progress as fast as his interest and ability allow. The exhibit, however, must be in one or the other unit - not both.

## Tools You Will Need for Unit 2

In addition to the basic tools used in Unit 1, the following tools are essential for Unit 2:

Swivel knife

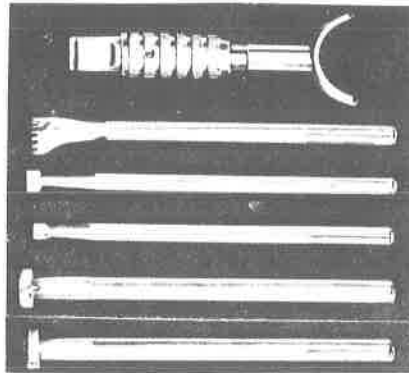
Veiner

Beveler

Seeder

Camouflage

Shader



It would be well to read all the chapters in Unit 2 before buying your tools. You could then decide on the articles you want to make and better select the particular tools you will need. Some of the tools that are not used very often might be jointly owned by the club.

Suggested demonstrations for Chapter 1:

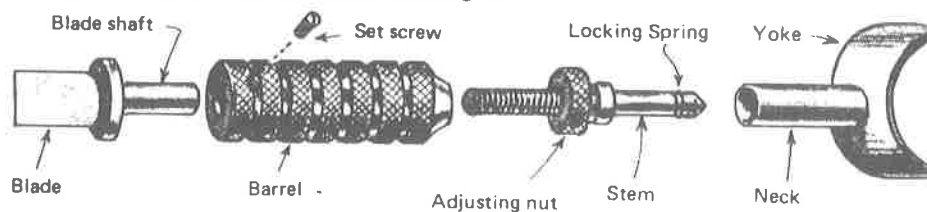
1. How to sharpen a swivel knife.
2. How to carve with a swivel knife.

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.

## CHAPTER 1

### THE SWIVEL KNIFE

The Swivel Knife is the most important of all the leather carving tools. It has been designed to enable the leather worker to attain the maximum degree of efficiency and skill in cutting the most intricate designs.



The exploded view above shows all of its working parts. When assembled, the yoke provides a rest and pressure point for the index finger to control the depth of the cuts. The adjusting nut varies the length of the knife to fit different hands. The blade shaft inserts into the barrel and is secured by the set screw. The blade, barrel, and stem unit turns independently of the neck and yoke. The locking spring supplies tension on the neck, holding it in place when pushed into position on the stem.

Study the following pages carefully. Learn to use this tool! It is the most important leather working tool you will ever hold in your hand.

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. The reason for cutting the lines is to give depth to the design. With properly cased leather, the cuts should prominently stand open, facilitating the use of the stamping tool operations that follow. It is of paramount importance that the blade be correctly sharpened. The sharpened angle must be correct so the cut in the leather will not be too wide or too narrow. The blade must be smoothly stropped so it glides easily through the leather to perform its function to the greatest degree of efficiency.

# HOW TO SHARPEN THE SWIVEL KNIFE



Straight



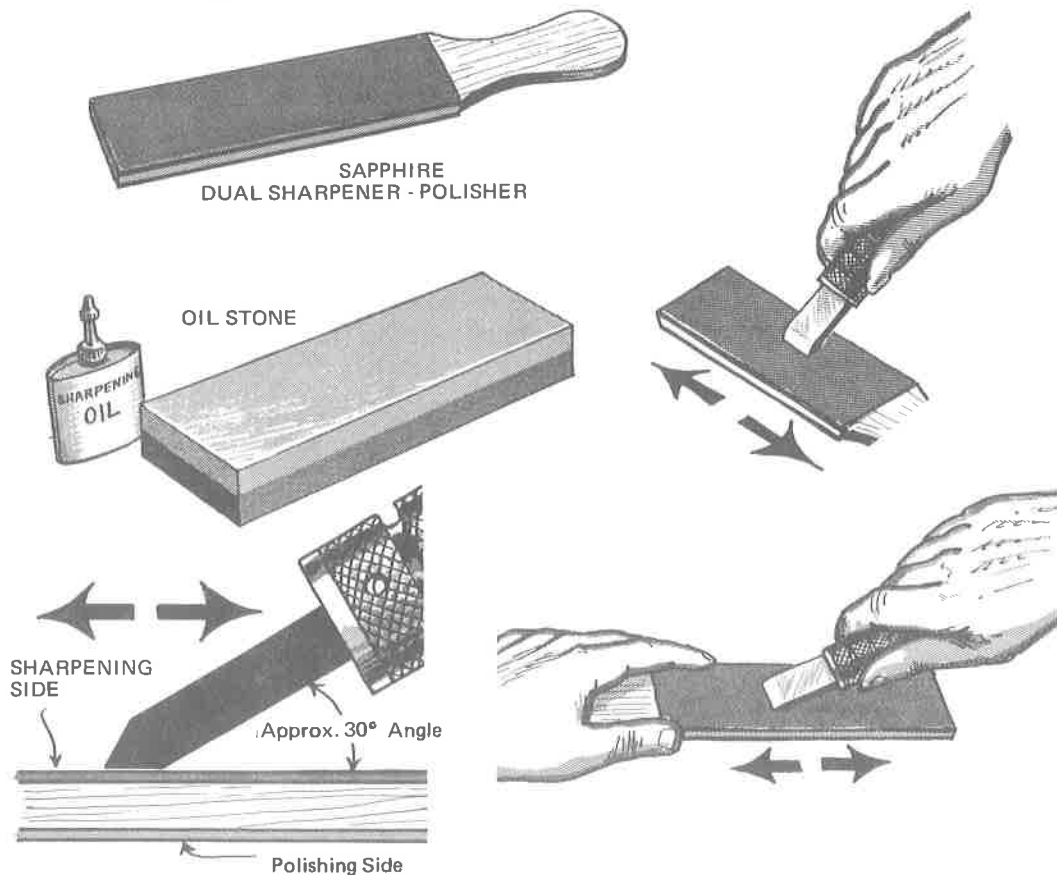
Hollow ground



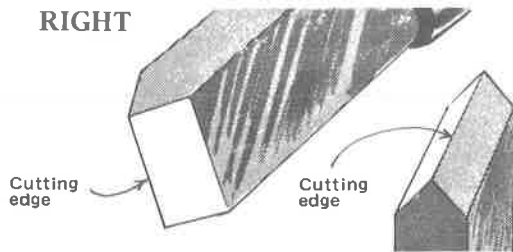
1/4" angle

There are many types and widths of swivel knife blades available to the leather worker for a variety of cutting purposes. Have your leather dealer show and/or explain their uses to you.

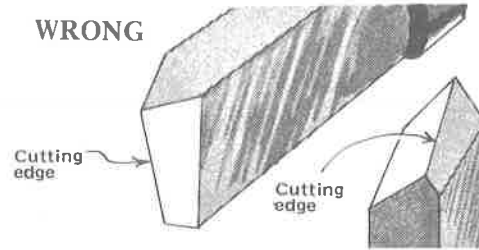
To sharpen the blade, use a fine grit oil stone, or the Sapphire DUAL SHARPENER-POLISHER stick. Insert the blade shaft into the barrel of the swivel knife and tighten the set screw with a small screw driver. Grasp the knife as shown. . .the yoke should be pressed firmly against the palm of your hand. Place the blade on the Sharpener at the correct angle; maintaining this angle is important throughout the sharpening movements. DO NOT rock or roll the blade when sharpening, lest the cutting corners become rounded. Hold the knife firmly and flat. . .at the correct angle.



There are two generally accepted methods of sharpening the blade (see preceding page)...use the method that is easiest and produces the best results for you. Hold the blade firmly against the Sharpener and apply plenty of pressure. . .especially if the blade is very dull or rough. Move the blade briskly back and forth across the Sharpener. Complete one side, then turn the blade over and sharpen the other side. Hold it **FLAT** and **FIRM**! The beveled sides of the blade should be perfectly flat and even. The cutting edge should be in the center of the blade. Considerable work may be required to even the beveled edges. Be persistent and as accurate as possible, as this is perhaps the most important part in leather carving. A properly sharpened blade will produce easier and smoother cutting. . .less fatigue. . .better results and more leather carving enjoyment.



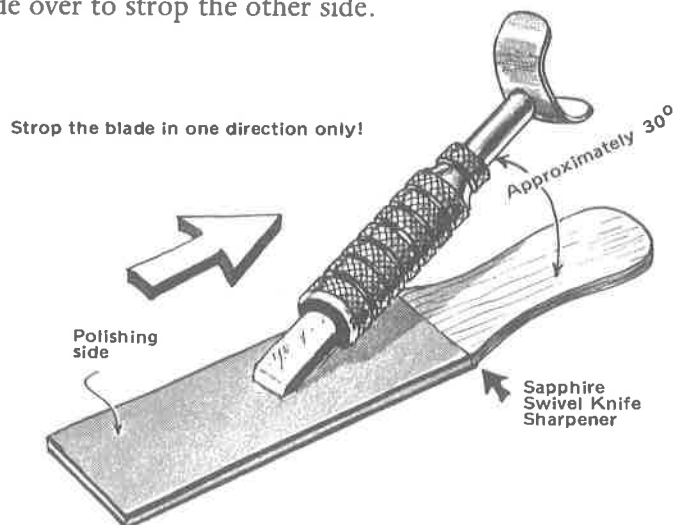
This blade was sharpened correctly. The beveled sides are sharpened flat and even. The cutting edge is straight and in the center of the blade.



This blade has the beveled sides unbalanced and uneven. The knife was held at different angles on each side. The angles are wrong and the cutting edge is not in the center of the blade. Resharpen the blade.

## STROPPING THE BLADE

When using the regular swivel knife blades, the beveled cutting sides of the blade should be stropped often, during the cutting operations. **STROPPING** the blade polishes these sides and keeps the blade cutting smoothly, reducing "drag". Use a rouge board or the **POLISHING** side of the Sapphire Swivel Knife Sharpener to strop your blade. Hold the knife at the same angle as you do for sharpening. 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**. **NEVER** push the blade when stropping; this destroys the fine cutting edge. Always **PULL** the blade across the polisher. Turn the blade over to strop the other side.

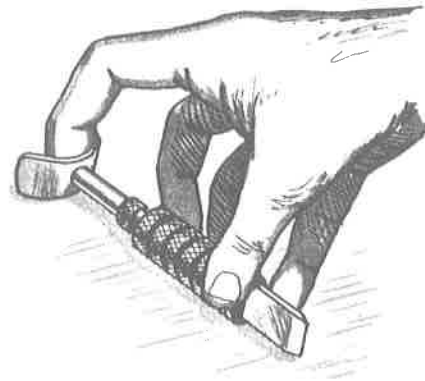
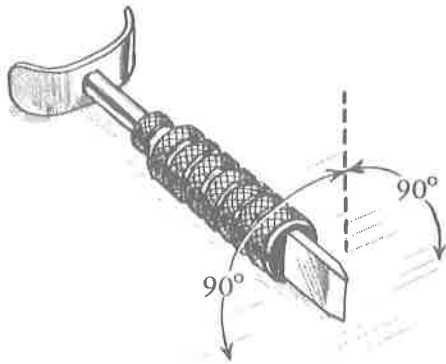


We cannot overemphasize the importance of keeping your blade sharp. As you work your projects, strop your blade often on the Polisher.



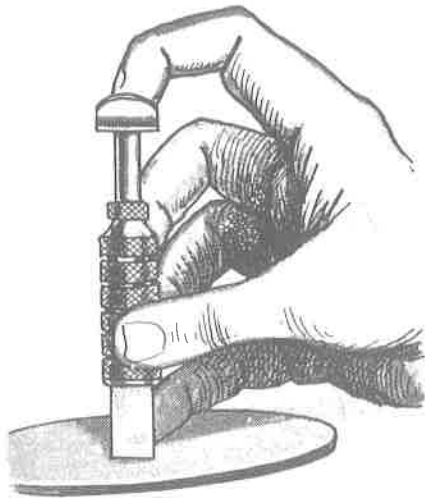
## HOW TO HOLD THE SWIVEL KNIFE

Learn to hold your swivel knife correctly. The way you hold the swivel knife will determine your success in cutting leather. Follow the simple steps below for aid in learning how to hold the swivel knife properly.

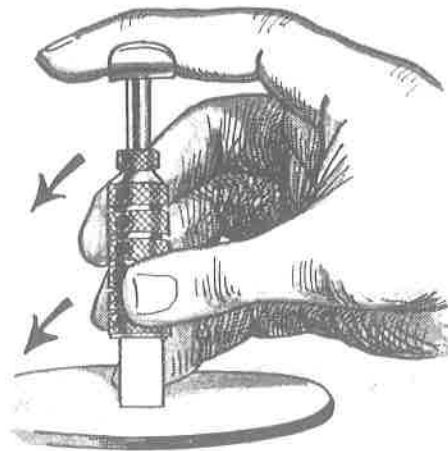


Place the knife on your work surface as shown. . .with the length of the blade straight up and down, at 90° angle to the work surface.

Place fingers as shown. Index finger in yoke; thumb at lower part of barrel; little finger against the blade; and 2nd and 3rd fingers on opposite side of barrel.



Since the knife is merely held in the tips of the fingers, it is not in position to be used. Move index finger forward and rest on yoke at first joint of finger, as shown at right.

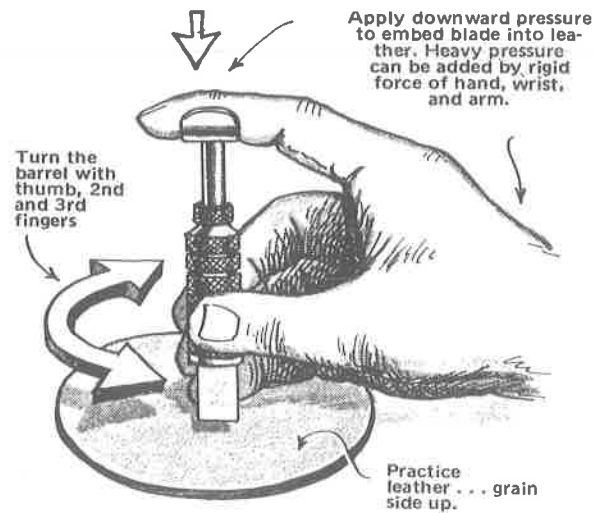


Move 2nd and 3rd fingers forward to more firmly grasp the barrel. Knife is now in correct position for use.

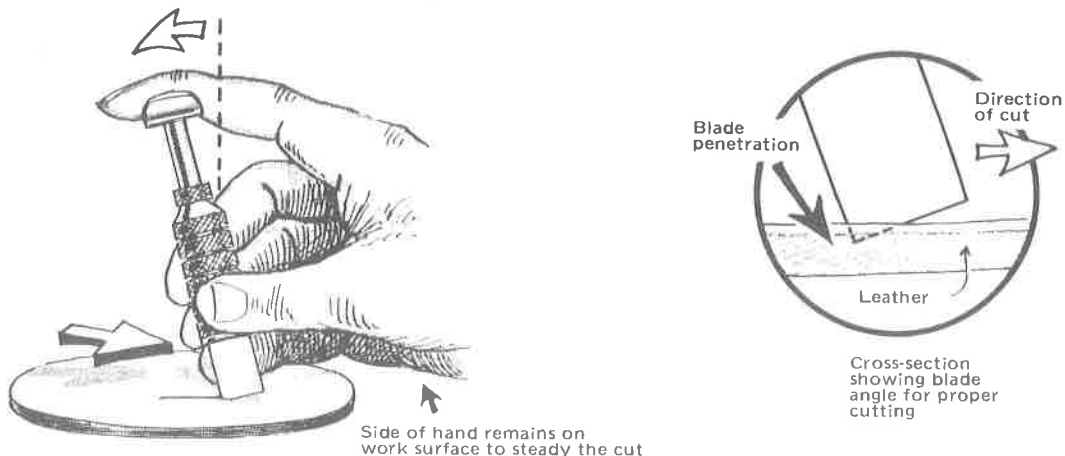
**CAUTION:** DO NOT set blade on metal, or any hard or abrasive surface that might damage the cutting edge.

## HOW TO USE YOUR SWIVEL KNIFE

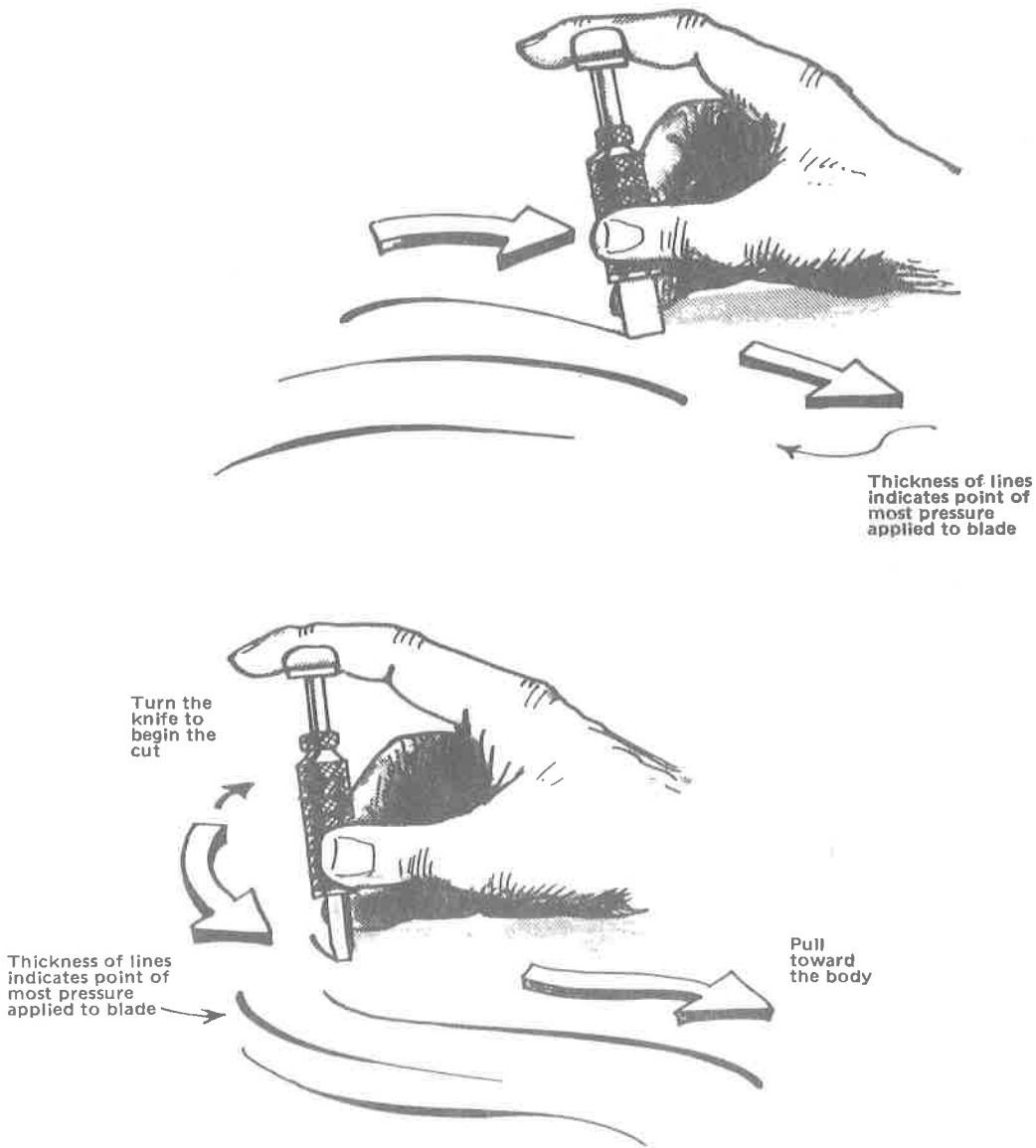
As soon as you have learned how to control and use your swivel knife for freehand carving, you will begin to enjoy the real thrill and rich satisfaction which leather carving offers. You can cut straighter lines, more graceful curves and scrolls in leather with your swivel knife, than you can draw free-hand with pencil and paper. To achieve control of the swivel knife takes patience and concentrated practice. Relaxation is your key to successful control. Many students "try too hard"... become tense and strained which makes swivel knife control difficult if not impossible. Learn to relax. Be comfortably seated, and be sure to have excellent light for freedom from eye-strain and lack of shadows in your working area.



CASE a few practice pieces of leather. If necessary review the instructions for CASING LEATHER. Now that you have learned to hold the knife properly, raise the blade slightly from the leather (keep side of hand on 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. 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.



Practice a few light curves. Experiment with varying degrees of pressure with each cut to practice controlling the depth. Try to maintain an even depth throughout some of the cuts. (NOTE: Proper cutting depth for outlines of designs is approximately one-half the thickness of the leather.) Keep the side of the hand and little finger in contact with the working surface and/or leather 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. Practice cutting freely; hesitation makes ragged cuts.

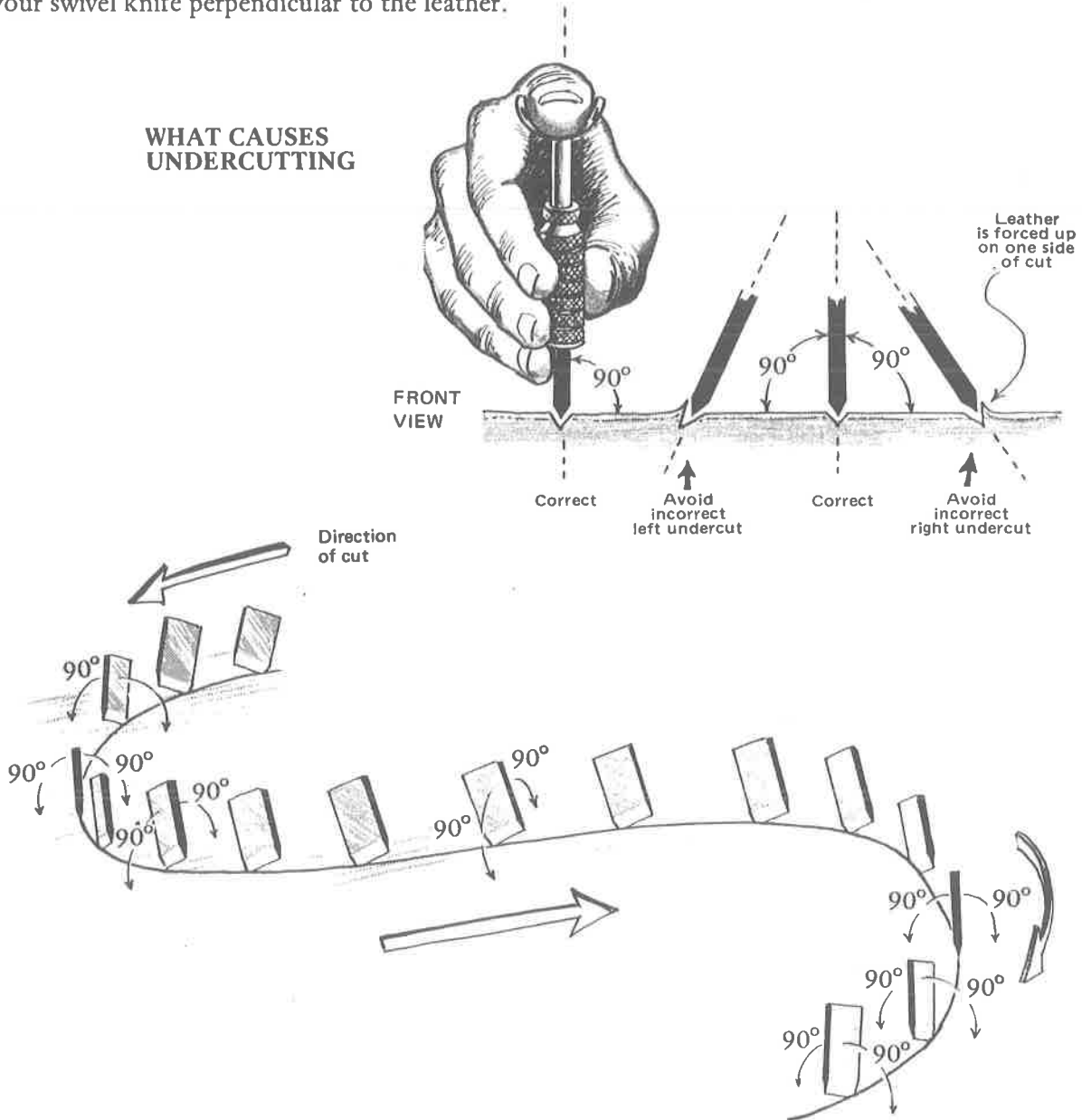


For easiest cutting, your knife must be tipped forward so that only the corner of the blade cuts into the leather, as shown. Make a few straight, simple cuts to get the feel of the technique. Hold the knife properly as shown. Apply downward pressure on the yoke and simultaneously pull the blade toward you. Whenever possible, pull the blade toward the body as this ensures easier and more controlled cutting. 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 thoroughly polished and/or not sharp enough. Examine the leather and the blade. Remember, leather must be moist for proper, easy cutting; the blade must be sharp and polished well!

UNDERCUTTING is caused by leaning the hand to the left or to the right while cutting. This usually happens when the student tries to get a better look at his cutting operation. Often the blade "cuts under" the surface of the leather on one side of the cut, leaving a thin, raised, undesirable edge. This makes it difficult to use the stamping tools in the operations that follow. It also distorts the design to some degree, depending upon the detail of the design.

See illustration for examples of correct cutting and incorrect undercutting. Always hold your swivel knife perpendicular to the leather.

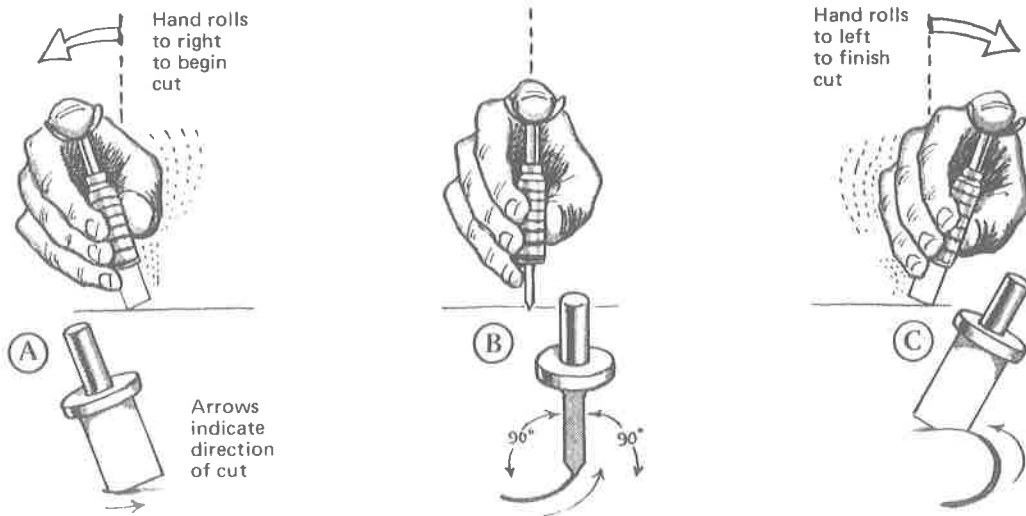
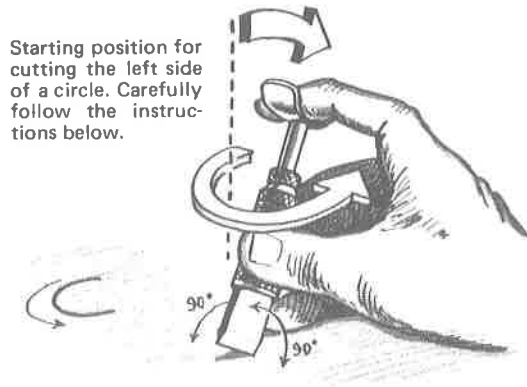
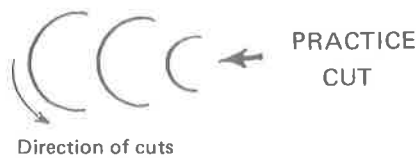
### WHAT CAUSES UNDERCUTTING



The diagram above illustrates the proper position of the knife blade while negotiating curves. All swivel knife parts have been omitted. . .and only the cutting part of the blade is shown, to more clearly illustrate the proper function of the blade. 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. . .but must be tipped forward to the proper cutting angle.

To make circular cuts, turn the barrel of the swivel knife with thumb and fingers. Hold the knife in the regular position with the blade parallel to the arm; pointing toward your body. Now turn the barrel clockwise until the blade is at right angles to your body. Slightly roll your hand to the right until the blade is tipped forward to the proper cutting position. (See sketch below and Front View, Step A). Apply pressure on the yoke and begin the cut. Simultaneously begin turning the barrel and pull the blade to begin cutting circle. Your hand must begin to return at once from the rolled position. . .to the straight up position. . .and as one fourth of the circle is cut, your hand must be in the normal upright position to keep the blade from undercutting (see Front View, Step B below.) 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. Completed half circle and position of hand and blade is shown in Front View, Step C below.)

### CUTTING CIRCLES

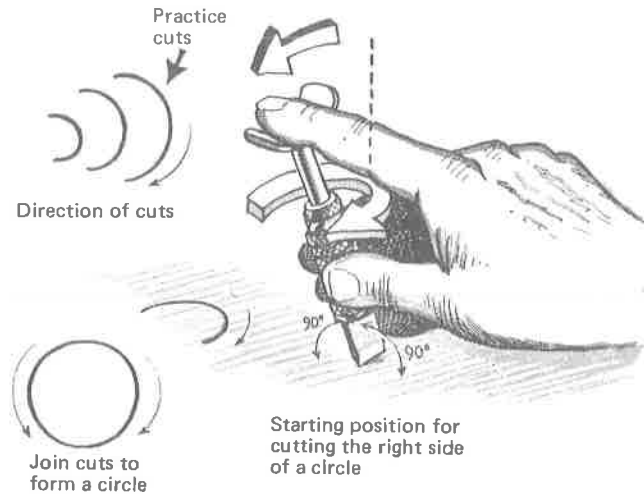


FRONT VIEW: showing position of hand and blade for cutting the left side of a circle.

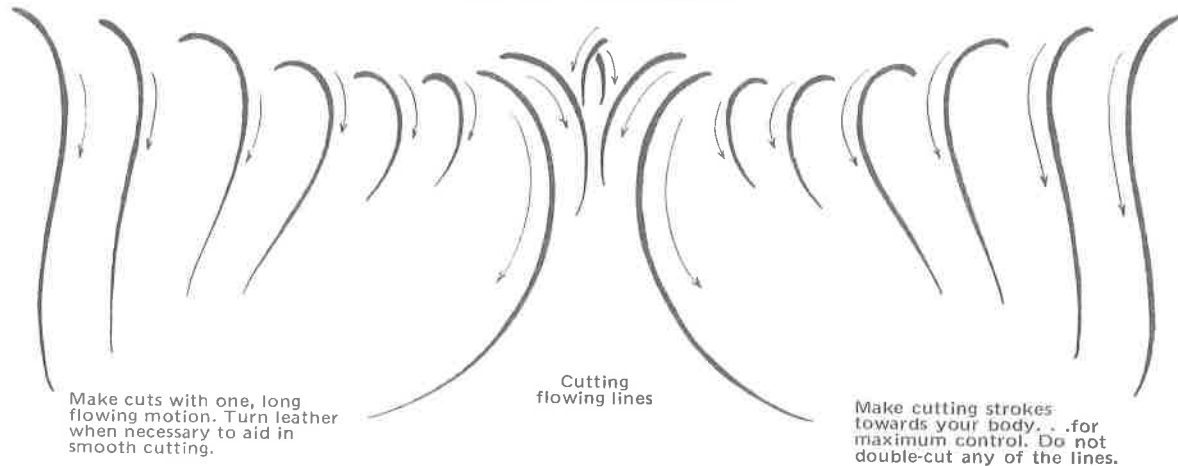
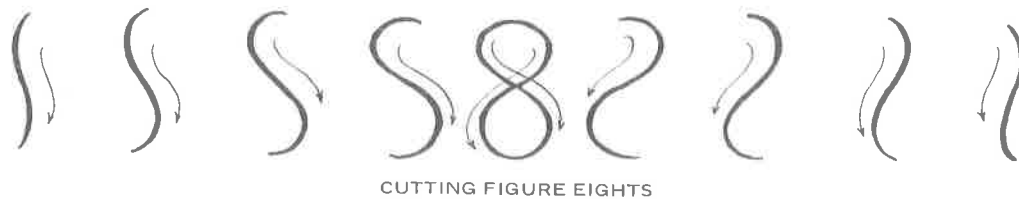
Cutting and rolling movements are made simultaneously. A great deal of practice will be required to coordinate these movements. Once acquired, cutting half circles will be effortless. Practice cutting different half-circle sizes. NOTE: Never go over cuts a second time.

To cut the right side of a circle. . .simply reverse the steps as illustrated in front view above.

In most instances, the student favors cutting or turning the knife in one direction. He will usually practice in that direction. It is important, however, to practice cutting in all directions. . . and especially in the direction that is most difficult. It is obvious that this will require the most practice. Proficiency with the swivel knife can only be obtained with practice!



### PRACTICE EXERCISES



#### 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 this control!

## HOW TO CUT THE DESIGN

Usually, foremost objects are cut first. . . as in this case; the flower. Then cut the large leaf and the stems. As previously instructed and to facilitate cutting, make all cuts toward the body as much as possible. Turn the leather whenever necessary to keep the hand from becoming cramped or strained.

When cutting this first design, do not be overly concerned if you stray from the lines. Do not try to recut any of the lines. Practice cutting with a flowing motion and soon the cuts will be easily controlled. . . the knife blade will go where you want it to go. Begin cutting as in Figure 1.

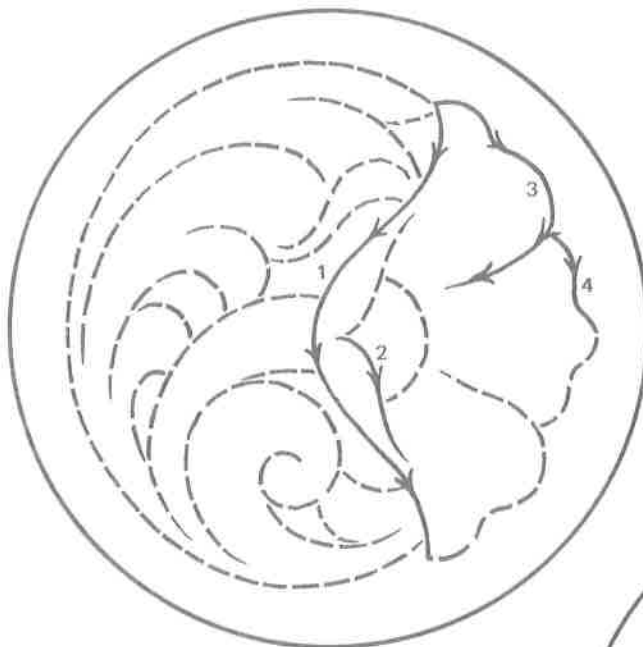


FIGURE 1

Arrows indicate direction  
of swivel knife cut.

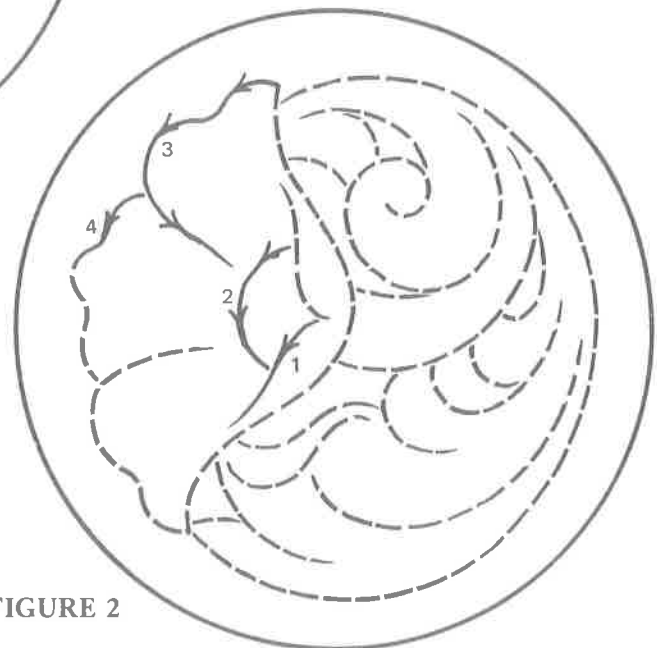


FIGURE 2

Turn the leather so your design appears as shown above. Small arrows indicate the direction of the cuts; the numbers indicate their sequence. You will note the base of the flower is cut first; next the small center petal; then the outside petal edges. . . all while the hand and the knife blade are in position, requiring the least amount of effort. (See Figure 1)

Now turn the leather again. Complete cutting the flower. . .first the center petal, the seed pod and then the outer petals as indicated by the numbers and the arrows. When necessary, turn the leather NOT your hand, so that your hand and knife will remain in correct position. With practice, you will acquire speed and control.

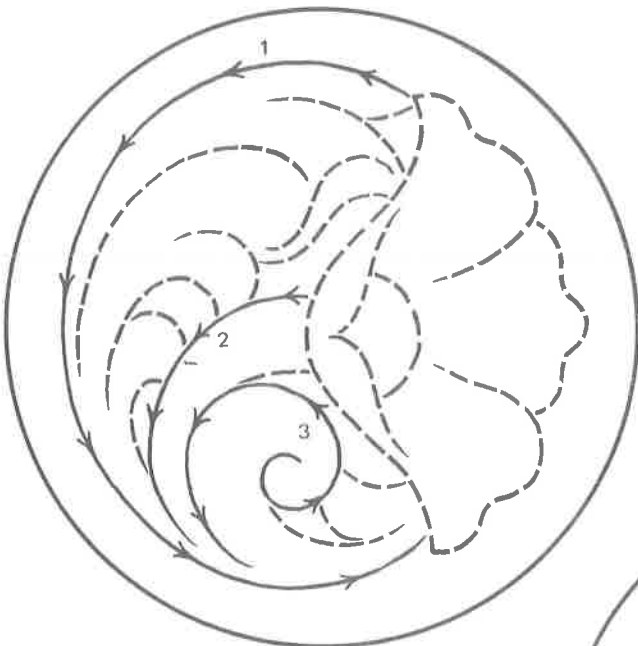


FIGURE 3

Arrows indicate direction of swivel knife cut.

**BE SURE BLADE IS SHARP!  
STROP IT OFTEN ON THE  
POLISHER.**

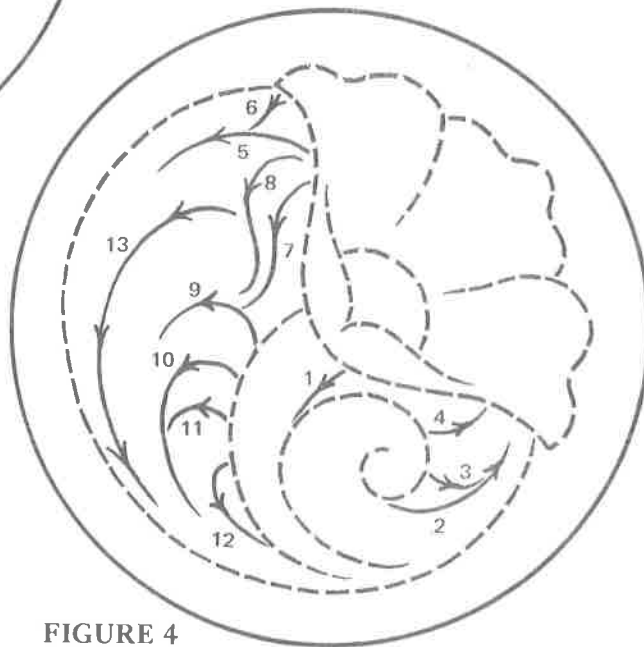


FIGURE 4

Turn the leather again and make the sweeping cut No. 1. Continue making the swivel knife cuts following the numerical order shown in Figures 3 and 4.



## THE SWIVEL KNIFE

### Review Topics

1. What is the most important of all the leather working tools?
2. What is the purpose of the swivel knife?
3. Why is it important to keep the swivel knife blade sharpened at all times?
4. What equipment is necessary to the sharpening and polishing of the swivel knife blade?
5. At what angle should the swivel knife be held when in contact with the sharpening and polishing surface?
6. To what depth should the swivel knife blade penetrate the leather during the carving process?
7. Why is it best to make the swivel knife cuts in the direction of the body?
8. What is the cause of undercutting?
9. What determines the width of the swivel knife cut?

### Things To Do

You will need several small pieces of scrap leather for practicing skills in this unit. In addition, obtain several pieces of leather about 3" square or, preferably, rounders (3¼" circles) to illustrate the use of each basic tool in Unit 2. The use of the eight basic tools can be shown and labeled on one or as many pieces of leather as you need.

1. Case, or moisten, a piece of scrap leather and practice cutting circles, figure eights, and flowing lines. You may need to refer to the Unit 1 manual to review how leather is properly moistened and prepared for tooling or carving.
2. When you have developed some control with the swivel knife, transfer a simple pattern to a piece of leather. A rounder would be a good size. Then carve the design with the swivel knife. If you wish, you may use the floral design for the rounders and follow the instructions outlined in this chapter. Save your sample to display this skill on your exhibit board.

\* \* \* \* \*

The next chapter will help you gain skill in using the following stamping tools:

Camouflage  
Pear shader  
Beveler

Veiner  
Seeder

The background tool used in Unit 1 is effectively applied here in the carving unit as well. To add attractiveness, you will also practice making decorative cuts with the swivel knife.

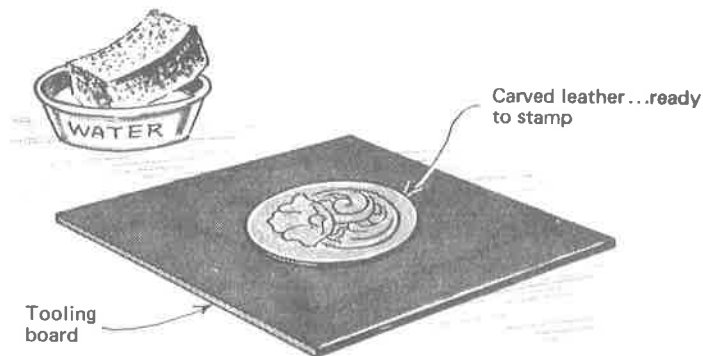
## Things To Do

1. Carefully read this chapter.
2. Discuss the review topic questions at the end of the chapter.
3. Practice using each tool on scrap leather first.
4. Make a sample illustrating the function of each tool. If you wish, use the floral design for the rounders and follow the instructions in this chapter. Save a sample showing the use of each tool. Later you can label these samples and mount them on your exhibit board.

## CHAPTER 2

# GETTING TO KNOW YOUR OTHER LEATHER WORKING TOOLS

Now you are ready to develop the design with STAMPING tools. To stamp leather it must be placed on a hard, smooth surface. 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.

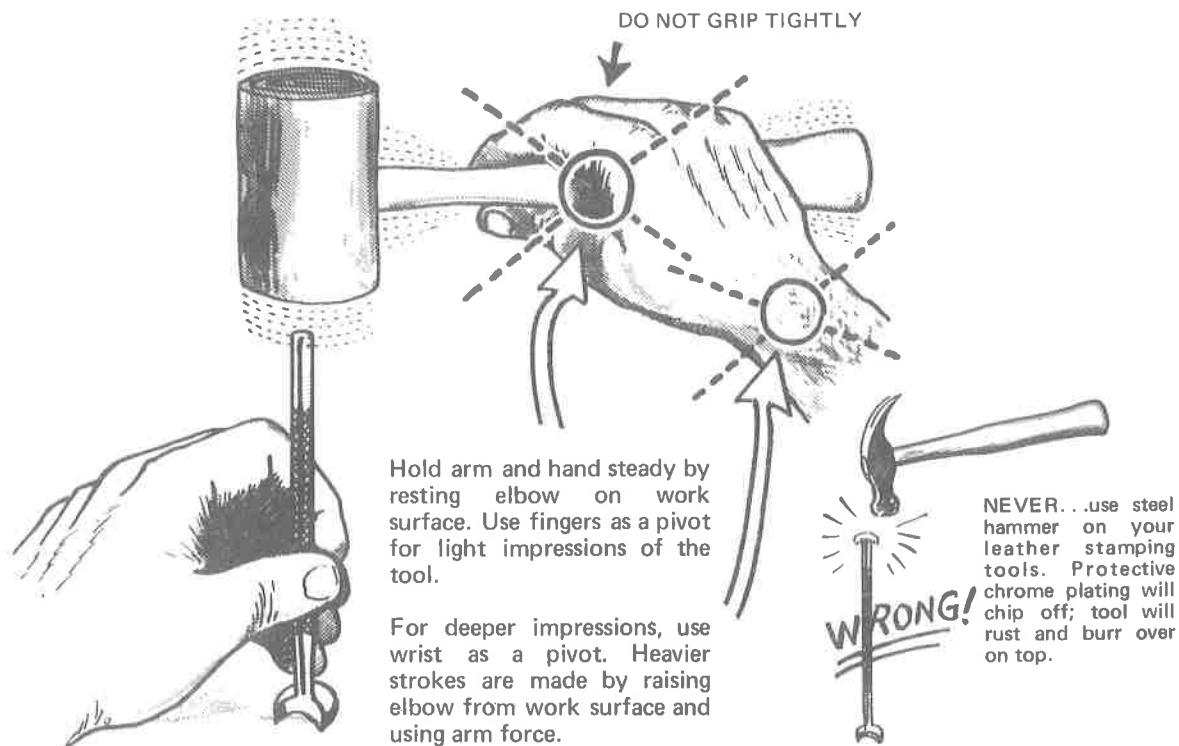


STAMPING tools are designed to obtain specific effects in the development of the design. Six of the most used Stamping tools are described on the following pages. They can be used in countless combinations to enable you to be creative and original in your development of a design. However, each basic tool is available with variations in size, serration pattern, curve and slope.

## THE MALLET

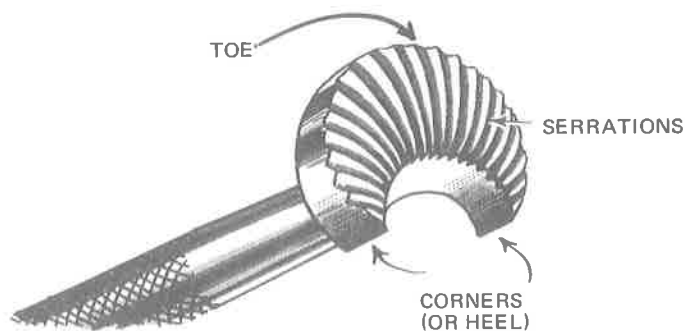
The MALLET is used to strike the top of the stamping tool to obtain its impression in the leather. CAUTION: Never strike stamping tools with metal faced hammer. This will cause permanent damage to tools.

The stamping tool is generally held in a perpendicular or upright position when struck with the mallet. The mallet is held as shown in the illustration. 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. Note, also, the handle is held almost in the center for best balance. Held in this manner, the fingers or wrist serve as a pivot (a turning point) for striking the mallet against the stamping tool. The elbow should rest on the work surface during most of the striking action. When deep tool impressions are desired, hold the handle more tightly toward the end. Lift the elbow from the bench for more force. In any case. . .hold the mallet in the most comfortable position for you!

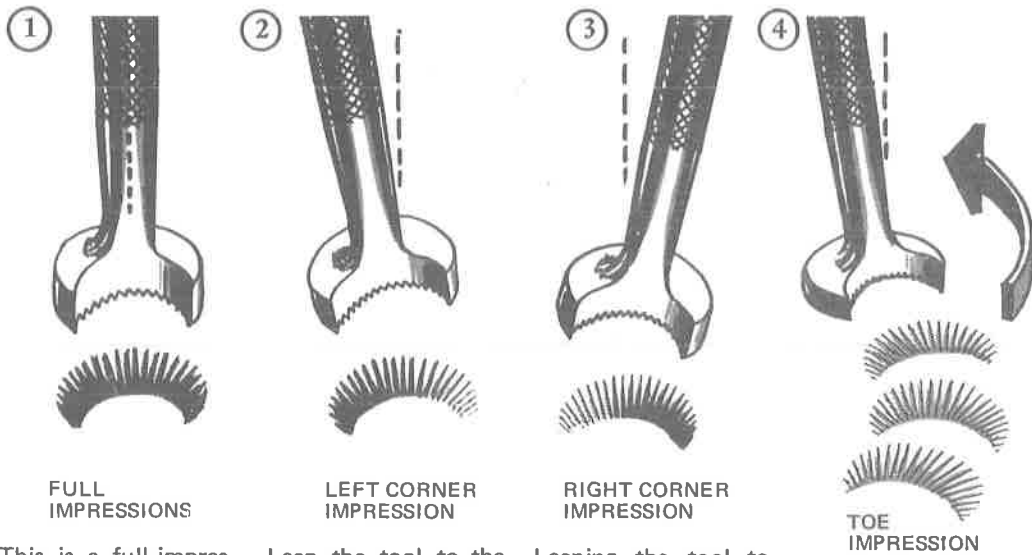


## THE CAMOUFLAGE

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 generally fan out from a central focal point into a sun-burst effect. The purpose of this tool is to texture certain areas of a pattern to add to its beauty and flow of design.



The moisture content of the leather should be "just right". The drawings below show the impressions made by the tool when held in varying positions and struck by the mallet.



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.

Lean the tool to the left. Hold securely with hand so tool does not slip when struck with the mallet. Impressions on right side should "fade" to nothing.

Leaning the tool to the right fades the left corner impressions and firmly imprints the right corner of the tool. Hold tool firmly.

Here the tool is tipped forward on the toe so that the corners do not dig in. The tool is usually tapped lightly in this position.

PHOTO PATTERN

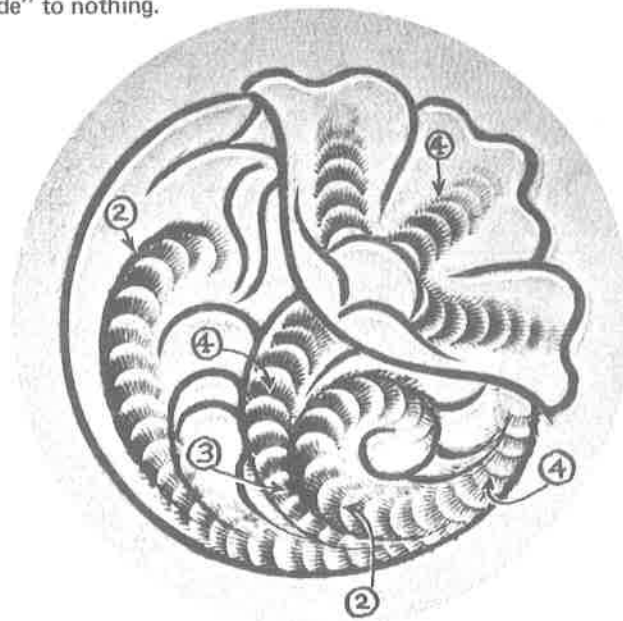
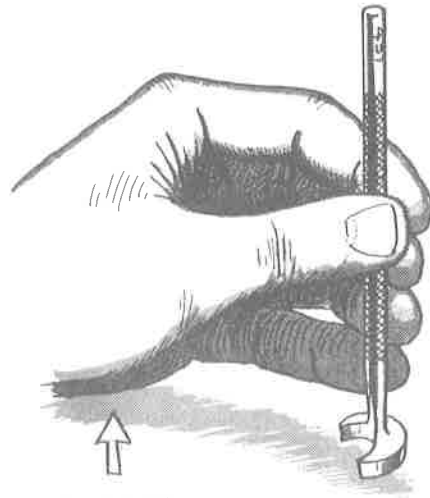


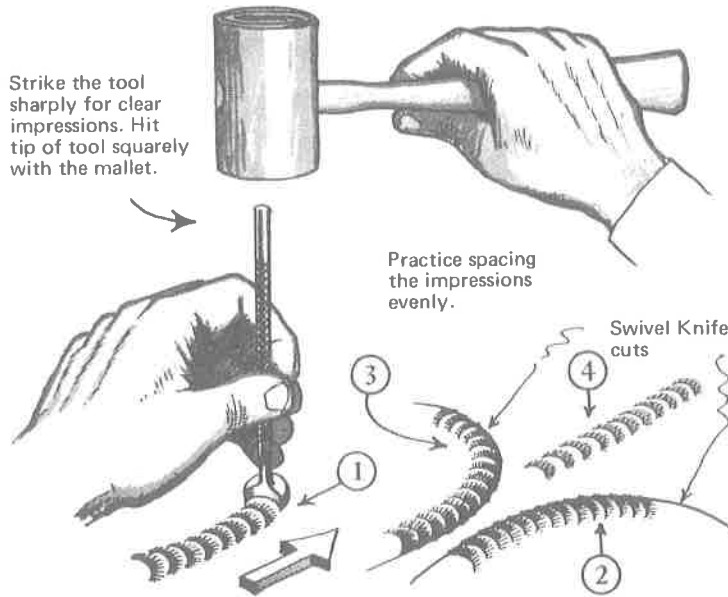
Photo above shows by number tool impressions created by the Camouflage tool of corresponding number in the illustrations at top of the page.

THE PHOTO PATTERN is a photograph taken of carved and/or stamped leather reproduced in actual size, showing position and use of tools. It is presented as an aid to the leather worker when other forms of instruction or visual and physical aids are not available. An important part of leather work is learning to "read" Photo Patterns.



Steady hand  
by resting on  
work surface.

Hold the Camouflage as shown, with the fingers evenly distributed to steady the tool. The thumb can be placed high or low, whichever is most comfortable for you. Hold stamp with the corners facing you, as shown above. The side of hand and left arm 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.

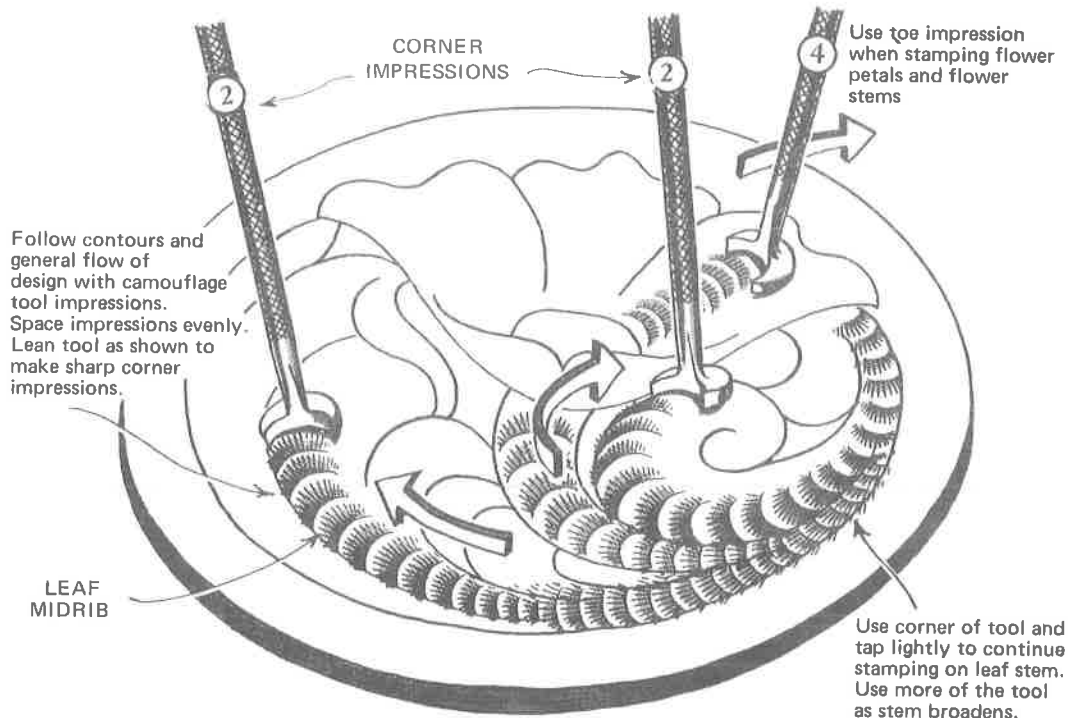


Strike the tool  
sharply for clear  
impressions. Hit  
tip of tool squarely  
with the mallet.

Practice spacing  
the impressions  
evenly.

Swivel Knife  
cuts

Always stamp the impressions away from you, for better visibility and control. Practice the exercises shown above. . .using the four techniques on the preceding page. Space the impressions evenly! After some experience with the tool, you will achieve a stamping rhythm enabling you to advance the impressions evenly and rapidly.



The drawing above shows the Camouflage tool in use. As the contour of the design changes, turn the "Cam" so that the serrations are parallel to the direction of the pattern flow. Take particular note of this on the scroll. Notice how the tool must be slightly turned with each impression. When stamping around the scroll and the leaf midrib, lean the tool so that the corner impression is deepest at the cut line. The impressions should fade out at the other corner. Use toe impressions on stems and flower petals.

## THE PEAR SHADER

The PEAR SHADER is a pear-shaped tool for making a three-dimensional and life-like effect in the design. The tool "shades" or "contours" areas outlined by the swivel knife. The shading face of the tool is rounded in all directions so that sharp or blunt edges will not mar the leather. The moisture content of the leather should be "just right". (Slightly on the dry side).

The shading should conform to the general shape of the design. The Shaders are "walked" to depress areas away from cut lines, shaping flower petals, leaves, etc. in a realistic manner. 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 Shader tool top. Strike the tool forcefully for deep impressions; lessen the force to diminish the impression and the color.

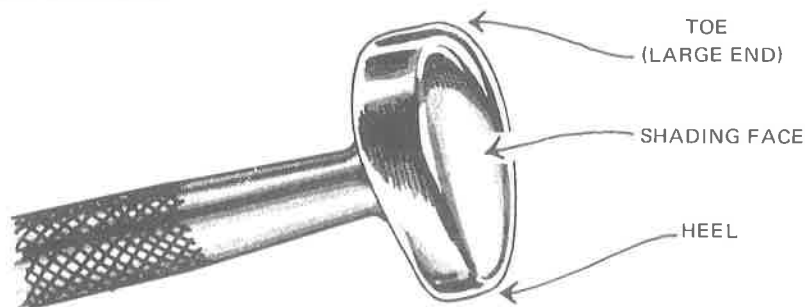


PHOTO PATTERN

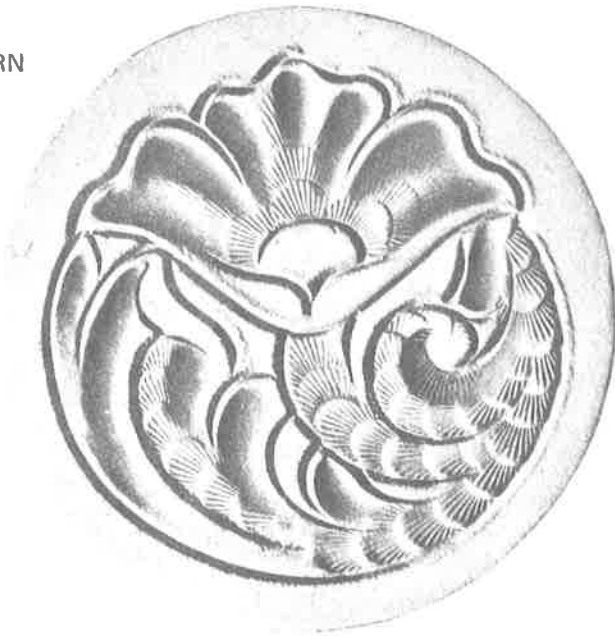
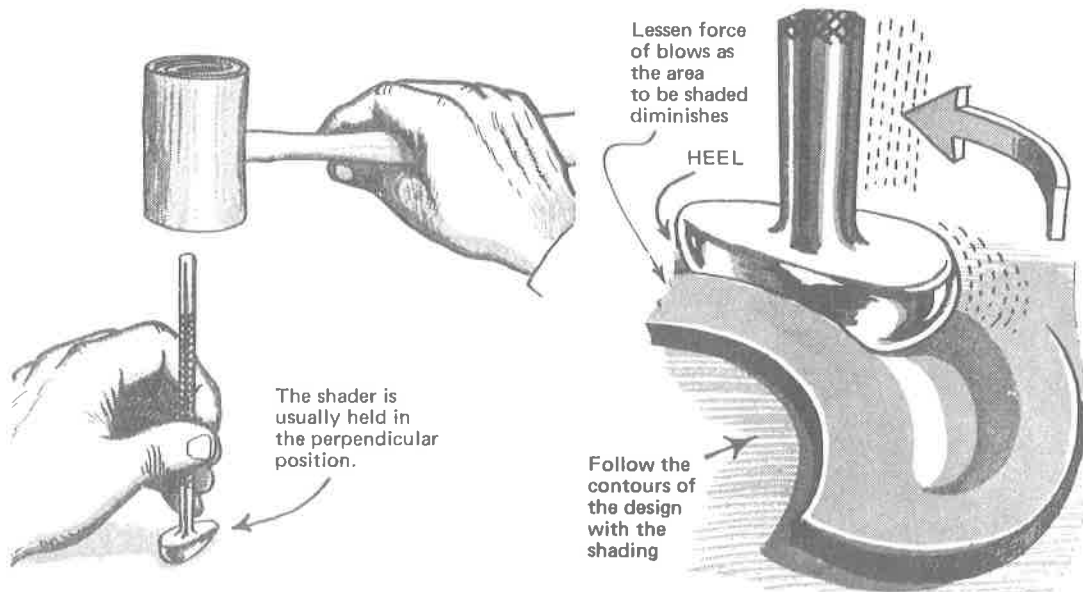


Photo shows the correctly shaded areas. Note how the deep impressions fade to nothing.

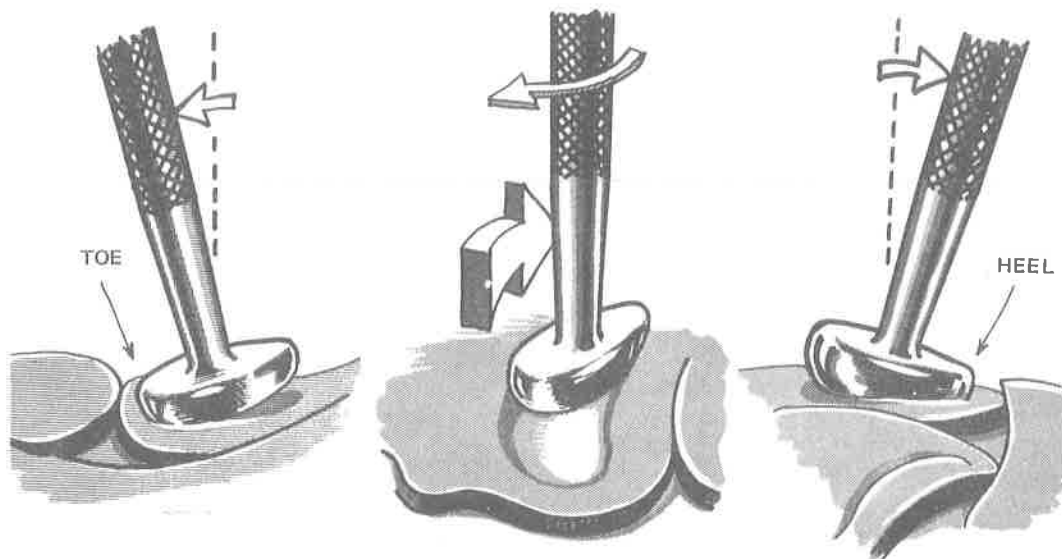
For smooth shading, a small change of position of the Pear Shader between strokes of the Mallet is necessary. This is called "walking" the Pear Shader. Uneven shading is caused by not moving the tool along the surface evenly between each stroke of the Mallet.

"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 direction shading is desired, using less force as the shading fades out. Keep your hand in a comfortable, relaxed position.



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

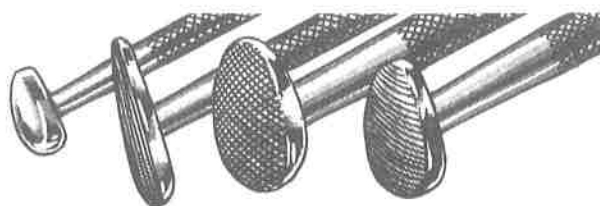
The Shader can be "walked" over a very large area and can be turned slightly in the fingers between strokes to broaden or lessen the width of the shaded area and to control the direction of the shading.



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

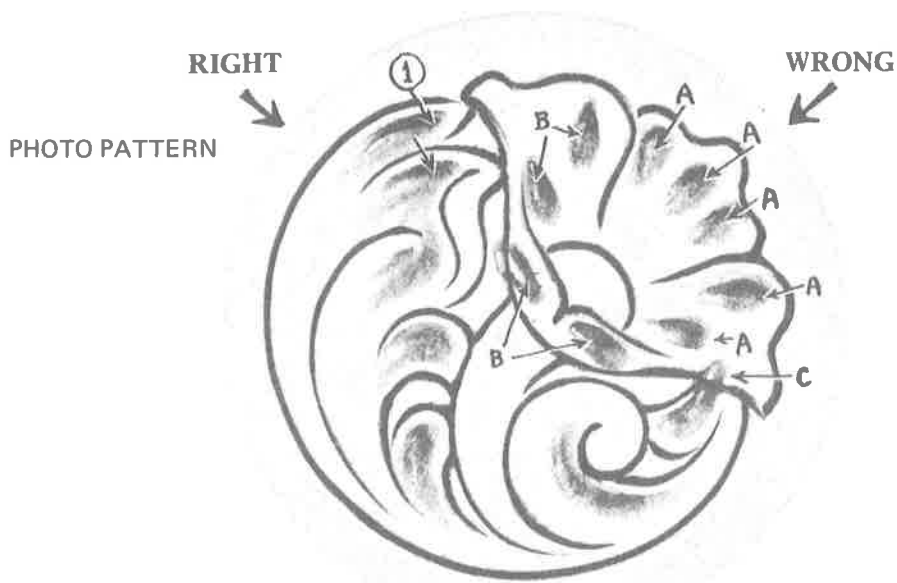
Shade small and pointed areas too small for the full width of the tool by tipping the Shader back on its heel. Use only the narrow part to dish the area. Hold tool firmly when tipping to keep it from slipping.



SMOOTH    LINED    CHECKED    RIBBED

There are many sizes, shapes and textures of Pear Shaders available for every shading need





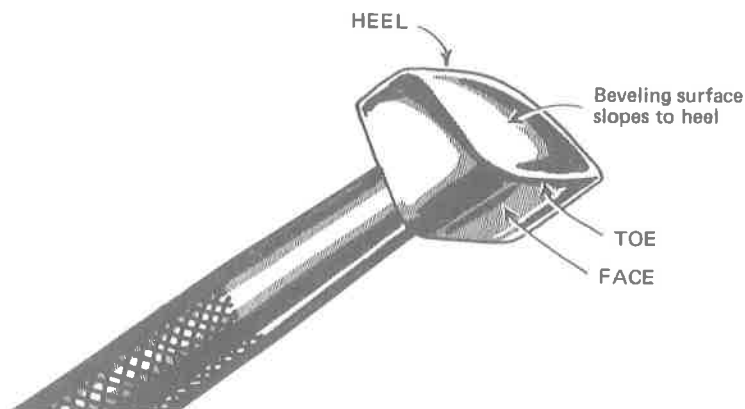
In this Photo Pattern, the left half of the design and the scroll have been shaded correctly. At the top of the leaf, No. 1 shows use of the heel of tool in pointed areas. The tool was then turned about and walked over the remaining areas. The deepest part of the shading is at the tips of the leaves, gradually fading away.

All lettered shaded areas have been stamped incorrectly. At "A", the tool was merely struck with the mallet. Walking was not done. Shadings marked "B" have not been walked and the tool is turned in the wrong direction. Small flower petals, "B", were shaded too heavily. Shading is out of bounds at "C".

## THE BEVELER

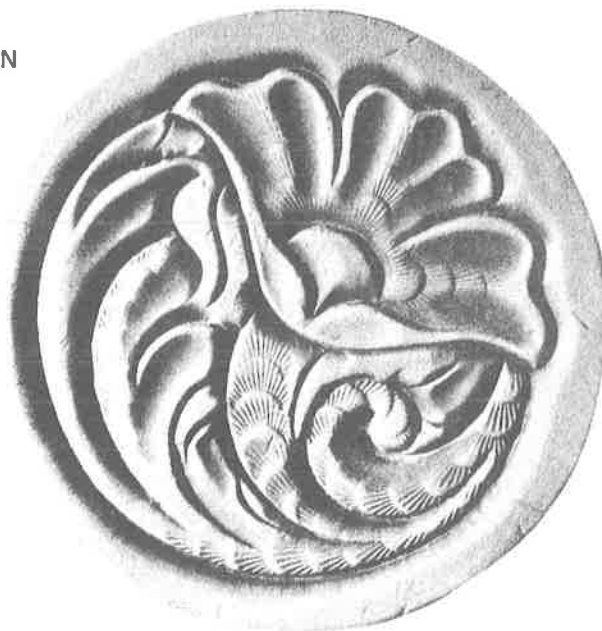
The purpose of the BEVELER is to bring the design into bold relief, creating a three-dimensional effect. Usually only one side of the swivel knife cut is beveled down. This is not a strict rule; some designs require beveling on alternate sides of a cut or sometimes on both sides.

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



The face of the Beveler always faces the cut line of the design. Keep the face of the bevel generally toward you. Turn the leather to keep the tool in this position. 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 action at the same time burnishes (darkens) the leather and gives contrast to the design. The moisture content of the leather should be "just right" (slightly on the dry side) for beveling.

PHOTO PATTERN

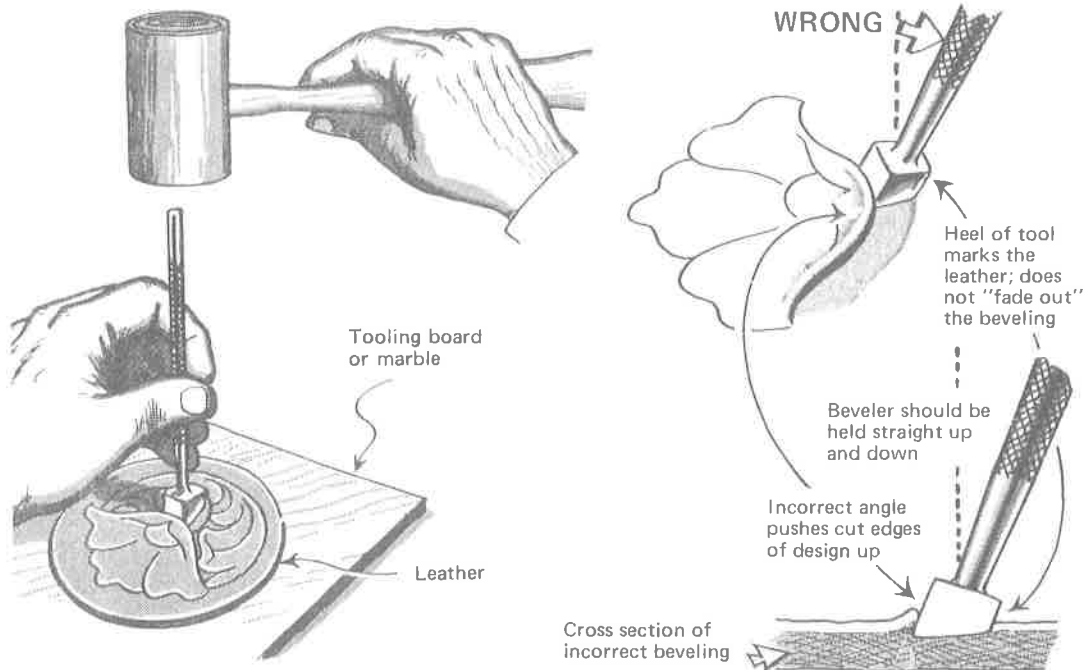


This Photo Pattern shows all the lines properly beveled, following the stamping operations of the "Cam" and Pear Shader tools.

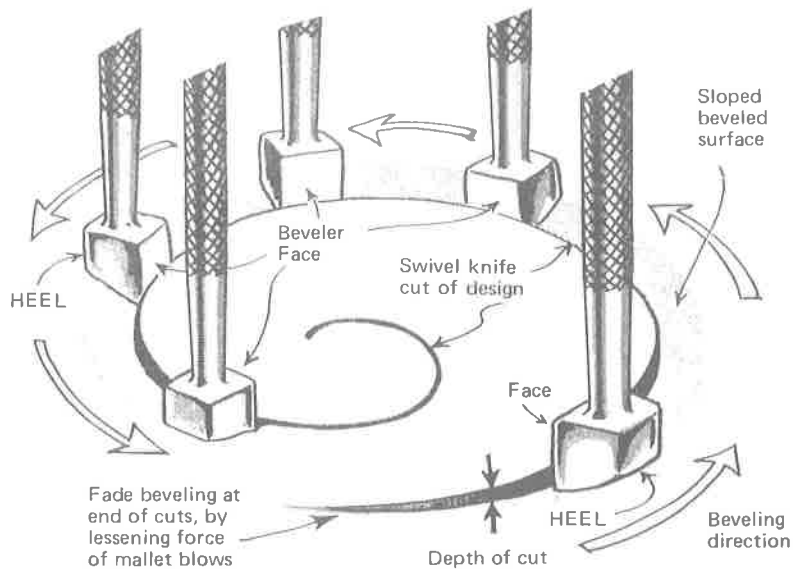
PHOTO PATTERN



This Photo Pattern shows only the beveling, properly executed, to clearly illustrate the correct sides of the lines on which to bevel.



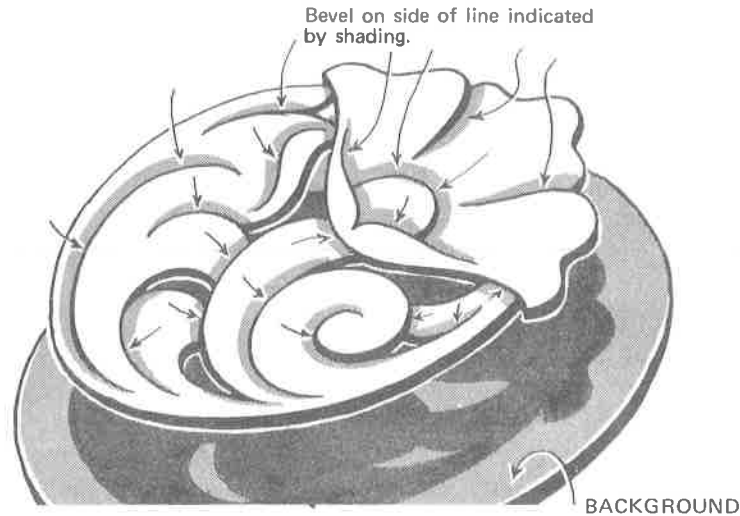
**HOW TO HOLD THE BEVELER.** Hold the Beveler straight up and down as shown in the illustration above. Get comfortably seated at your work area. Have a good light with no shadows over your working area. Rest your arm and hand holding the Beveler on the work surface, as well as the elbow of your mallet hand. Hold the face of the Beveler towards you.



For smooth beveling, "walking" the Beveler, as you learned with Pear Shader is necessary. "Choppy" beveling is caused by not moving the tool along the surface evenly between each stroke of the Mallet.

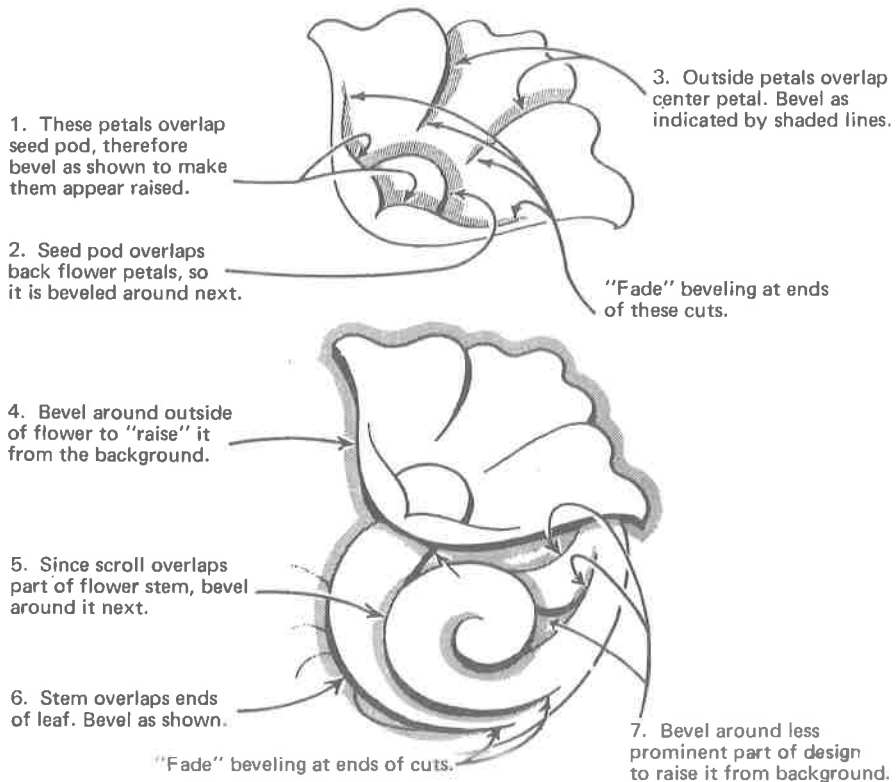
It takes practice to learn to bevel smoothly. Start by developing a rhythm: move-hit, move-hit, move-hit, etc. Increase your speed as you become familiar with the rhythm of the two movements. Practice! Soon you will be beveling with ease!

A common question is "Which side of the line do I bevel down?" A Transfer Pattern is not always clear on this point. Usually the bevel is around the outside part of the design you want to appear raised. 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. A good rule to follow: **BEVEL AROUND THE FOREMOST OBJECTS FIRST!**



The drawing above shows the design distinctly separated from the background to emphasize that all background areas must be beveled down and away from the design. This includes areas inside the design, as well as the surrounding background area. To add depth and contour to the rest of the design, it must be beveled as indicated by the shaded areas. The instructions below are added to further clarify any of your questions.

**BEVEL FOREMOST OBJECTS OF THE DESIGN FIRST**



TURN LEATHER AS OFTEN AS NECESSARY TO MAKE YOUR BEVELING EASIER.

TURN-BACK OF END OF LEAF

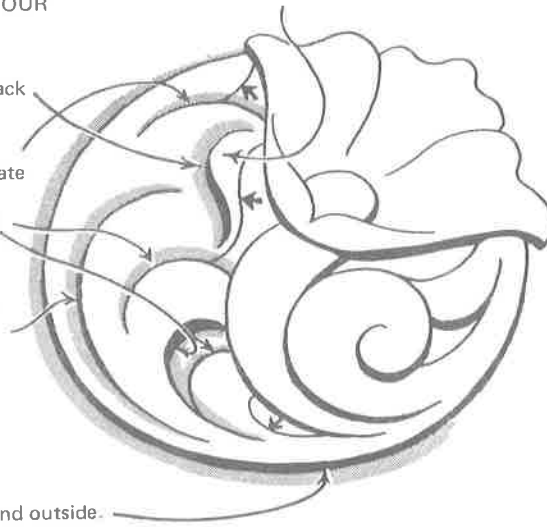
8. To make the leaf turn-back appear raised, it must be beveled as shown.

Cuts of design usually indicate overlapping parts of design. Bevel on correct side of line to maintain proper effect.

9. Curved midribs of leaves are usually beveled on outside of the curve.

10. Complete beveling of minor parts of design as indicated by small arrows.

11. Complete beveling around outside.



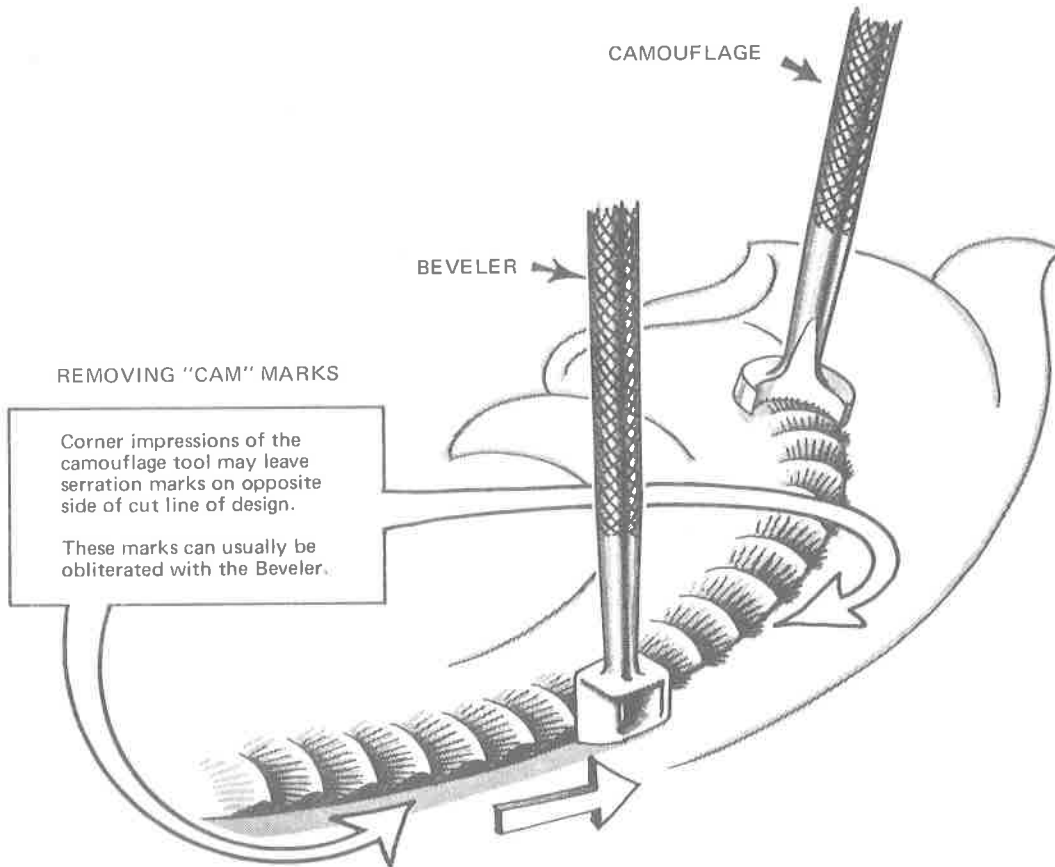
CAMOUFLAGE

BEVELER

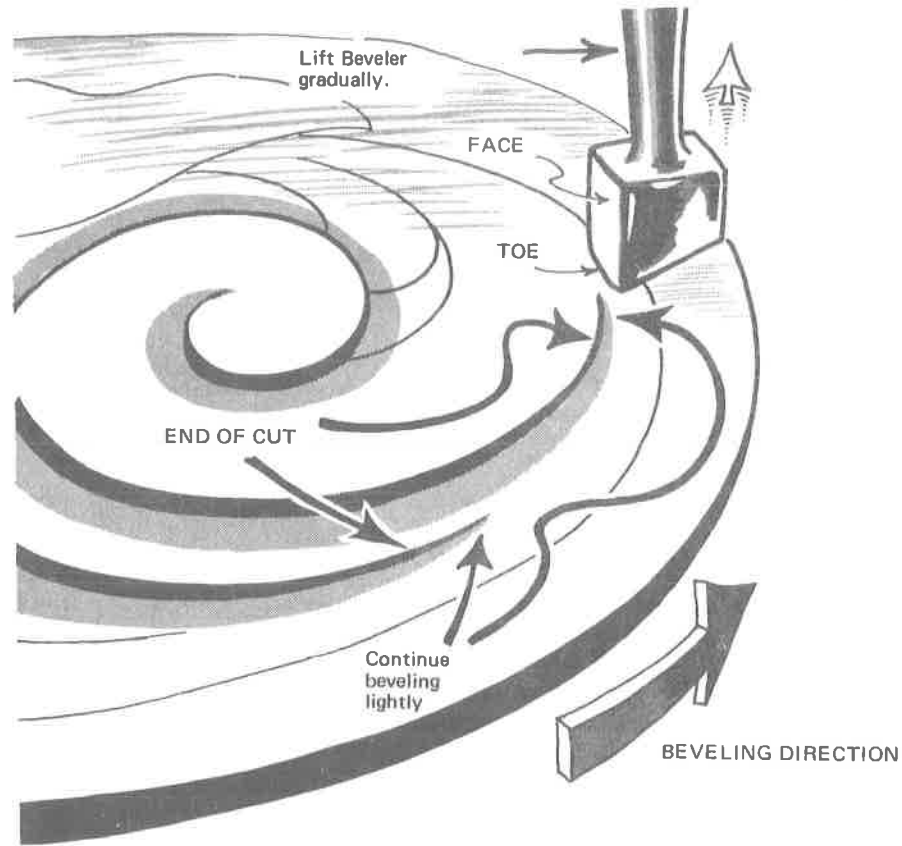
REMOVING "CAM" MARKS

Corner impressions of the camouflage tool may leave serration marks on opposite side of cut line of design.

These marks can usually be obliterated with the Beveler.



"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. Never begin beveling at the end of a "faded" line. See illustration on the next page.



Begin at center of scroll, beveling lightly. At first quarter turn of scroll, begin beveling deeply. Continue heavy beveling around remainder of scroll. As you near end of the cut, lessen the force of the blows with the Mallet and gradually taper the beveling to lesser depth. 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.

## 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. It 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.

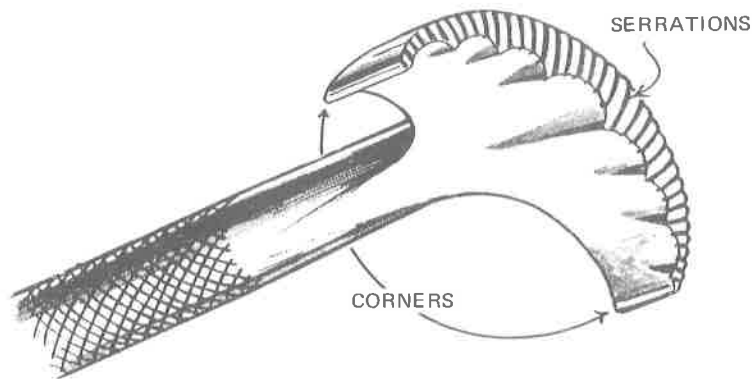
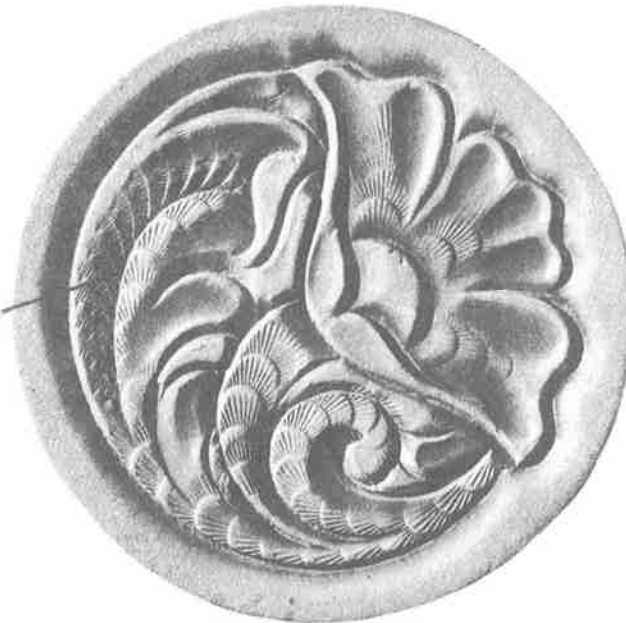
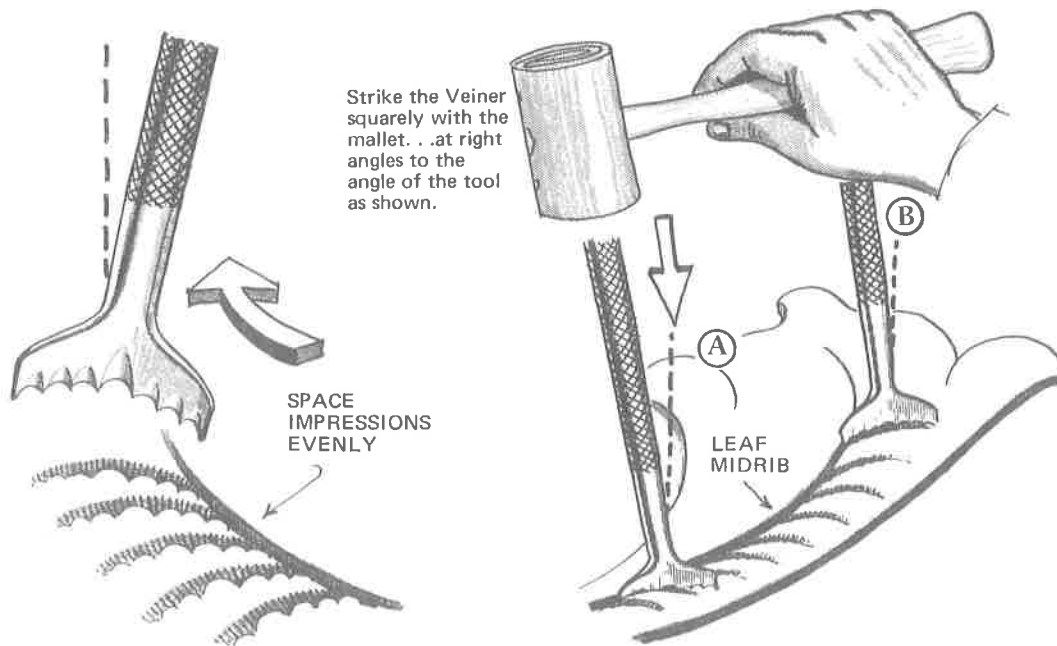


PHOTO PATTERN

VEINER TOOL IMPRESSIONS



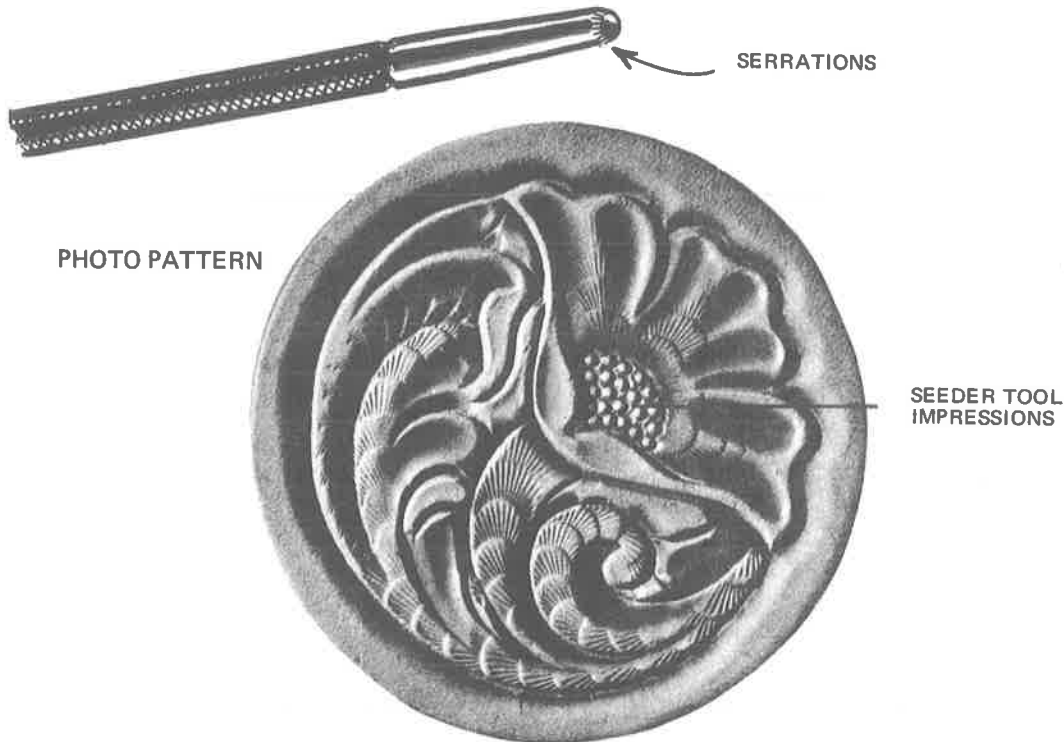
For the most graceful effects, veining impressions should never be at right angles to the midrib, but should angle towards the tip of the leaf, as shown in the Photo Pattern. Follow the curve of the design, slightly turning the tool with each impression until they almost parallel the cut of the midrib near the tip of the leaf. 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.



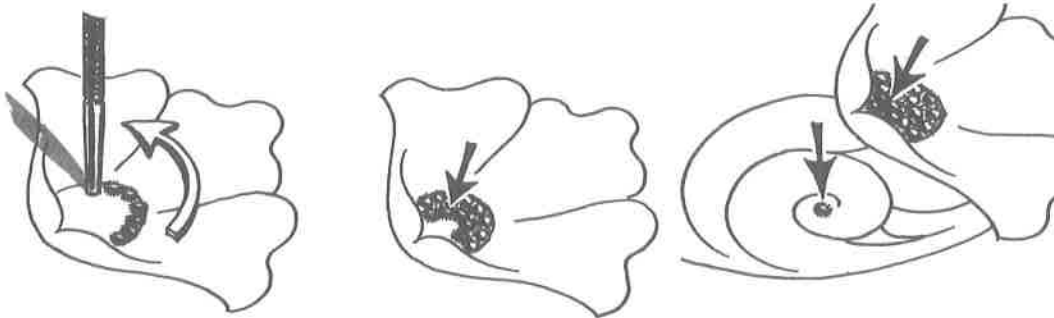
The angle of the handle of the Veiner governs the length of the tool impression. When veining leaves, the impressions should be spaced evenly. The deepest part of the impressions are made by leaning the tool to a greater degree, as illustrated. (Example A). As the leaf widens, a broader impression is desired and the tool must be brought to a more vertical position. (Example B). The impressions of the tool away from the midrib should "fade out". Full tool impressions are seldom used when veining leaves.

## THE SEEDER

The SEEDER is used for making seed pods in the flower center. Moisture content of your leather should be almost dry. Hold the tool straight up and down as shown in the picture and strike it firmly to make a clear, clean impression. **NOTE:** 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.



Study this Photo Pattern for correct placing of the centers in a flower pod. Note that none of the Seeder impression overlaps the petal lines.



Begin stamping the outer row of seeds first. Stay within the cut-line and space your impressions as close together as a string of beads. Near end of a row, adjust spacing so that 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.

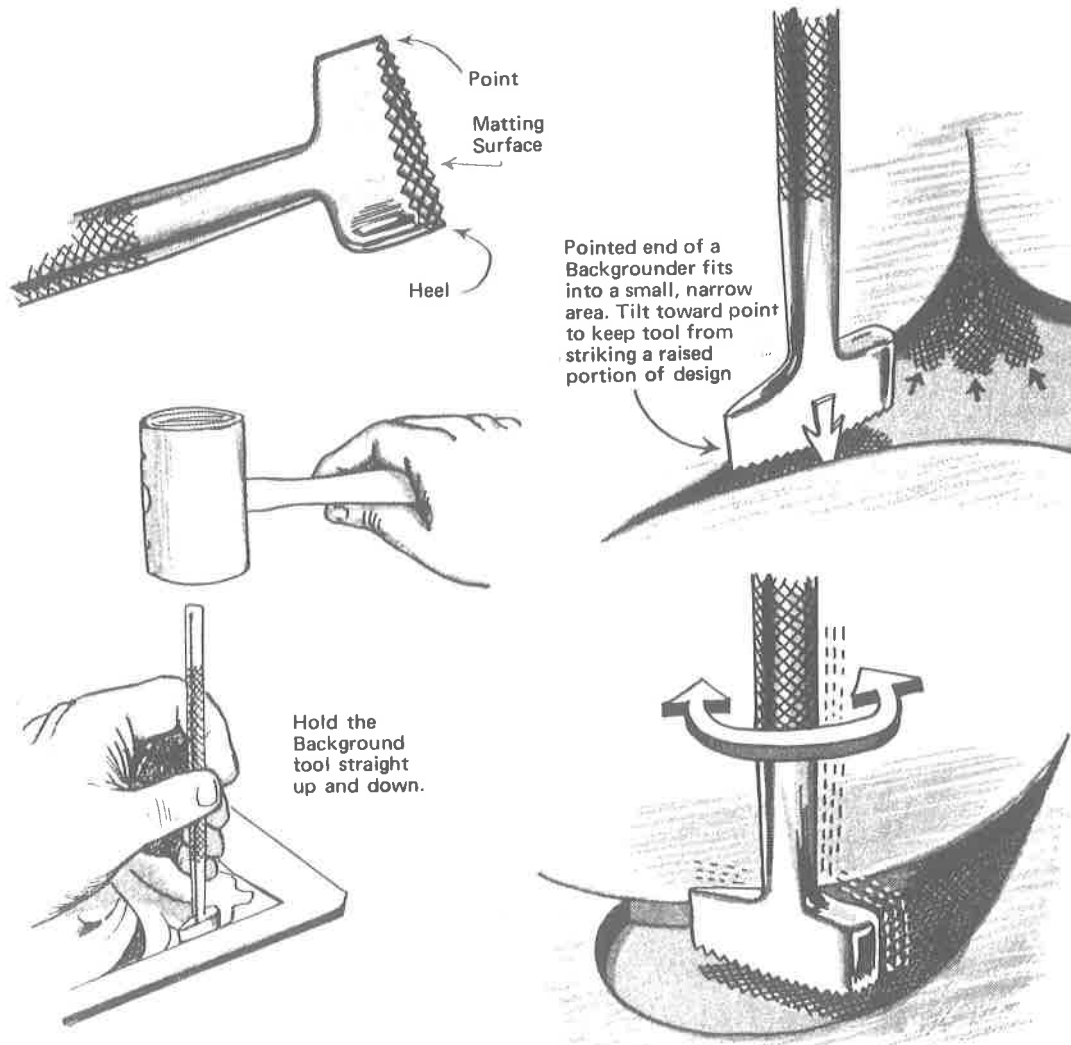
Fill in remaining area. Stamp seeds carefully. Only the serrated edges should touch or overlap. Place a seed in center of scroll.



## THE BACKGROUND TOOL

The purpose of the BACKGROUND TOOL is to mat down the background areas within and around the design. Backgrounding is one of the most important steps in leatherwork because it makes your 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. Carefully fit the tool into the area before striking it with the Mallet. In very small areas, the tool can be leaned toward the point keeping the heel from touching a raised portion of the design.



The Background Tool is used in much the same way as the Beveler in that it should be made to "walk" with each indentation joining the preceding one. Moisture content of your leather should be "just right" (slightly on the dry side). Hold the tool straight up and down as shown and strike it firmly with uniform blows of your mallet. Strike the tool hard enough to drive it just below the cut line of the design. Each section of the background should be uniform in depth; therefore it is best to finish one area at a time. A little practice will help you determine just how hard to strike the tool for various depths.

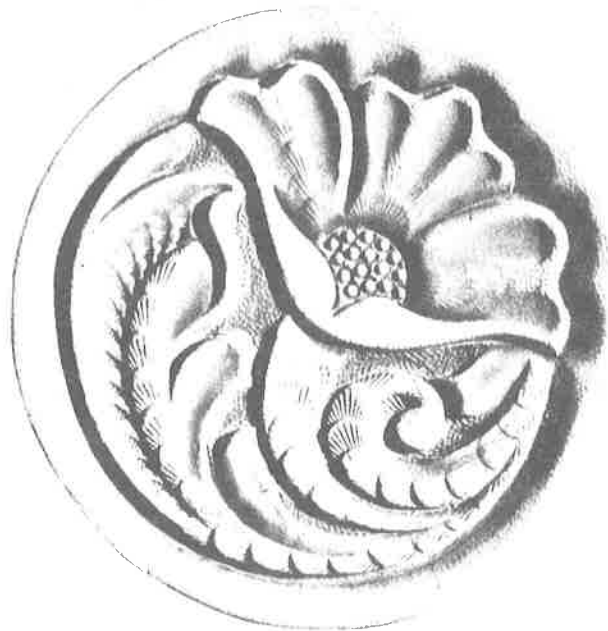
When the Backgrounder is used to cover large areas, the tool should be "walked". As the tool is "walked", turn the handle in the fingers to prevent a "tool pattern" from forming.

PHOTO PATTERN



This Photo Pattern shows the correct use of the Background tool. Note the depth of the impressions is even over each separate area. The effect is an over-all impression. "Patterns" are avoided by slightly turning and "walking" the Backgrounder between strokes of the Mallet.

PHOTO PATTERN

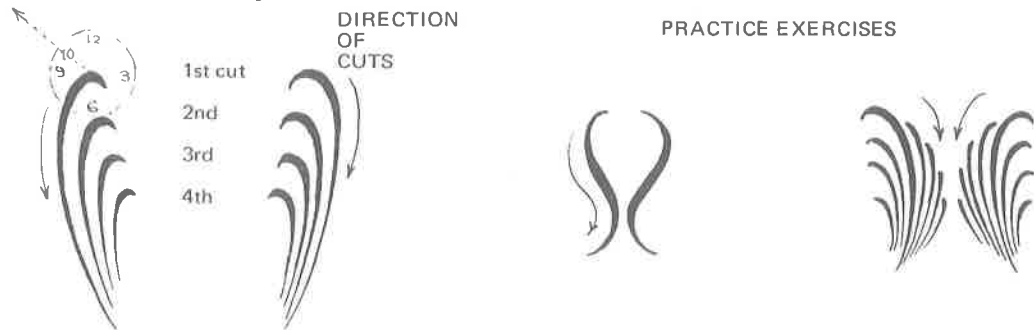


The use of six basic tools are shown on this Photo Pattern. Study the different effects made by each tool. Notice how the impressions of one tool can be used to enhance those of the other tools creating a harmonious design.

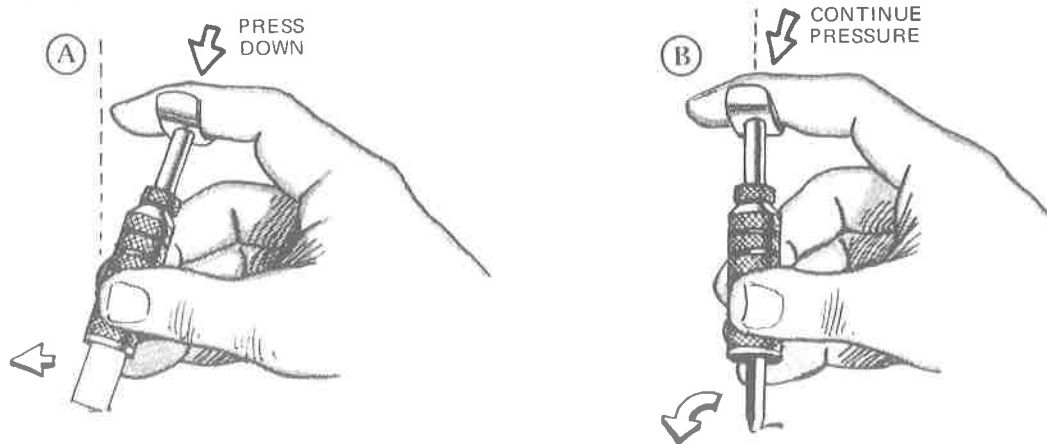
# HOW TO MAKE DECORATIVE CUTS

**DECORATIVE CUTS.** . .as the name implies. . .are cuts you make to decorate or make your design more attractive. Before attempting them on your carved design, familiarize yourself with their nature by practicing the cuts with your swivel knife. Decorative cutting is done after all other carving and stamping has been completed. It is normally the final step in adding ornamental detail to your design. Good decorative cutting adds greatly to the attractiveness of a carved design. Decorative Cuts should “flow” with the design, providing grace and beauty.

Decorative Cuts are usually begun much the same as when cutting half circles. One of the prime differences is that once the cut is begun. . .it turns sharply, but gracefully, and gradually diminishes in depth. . .fading into a hair line as the knife blade is withdrawn from the leather. These cuts are usually made in a series, one succeedingly shorter than the next. The tail end of these cuts graduate towards a common center, where they would eventually meet were they to be continued to that end. Follow the instructions below and practice the exercises presented. Case more practice leather pieces; 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 to achieve correct results with Decorative Cuts. Avoid the tendency of applying too much moisture at this point.

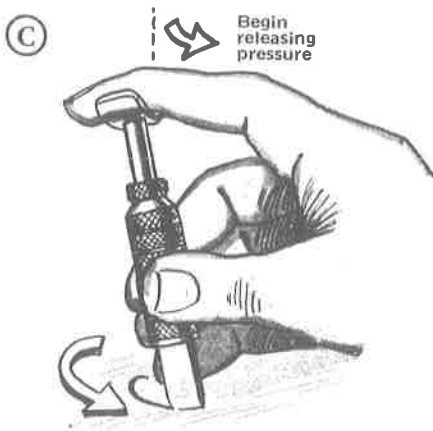


As indicated on the PRACTICE EXERCISES above, make the long cuts first. Practice rights and lefts. . .first for motion and flow to get the feel of decorative cutting. Then, practice for control. . . to make the cuts successively shorter. . .and gracefully graduate towards each other at the ends of each cut.

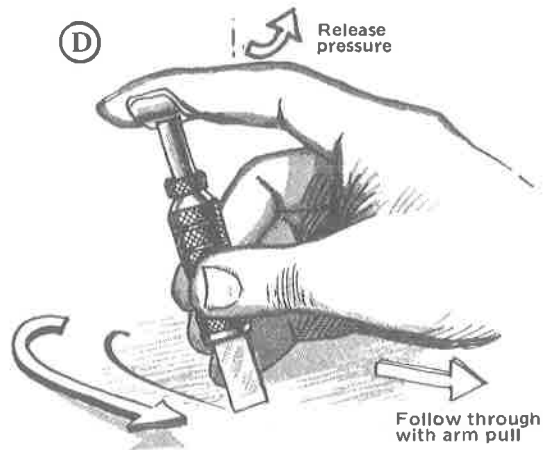


Your hand must be rolled to the right (for right cut) to bring the blade into proper cutting position. Begin with heavy downward pressure. . . to make the cut “pop open”. The blade should be pointed at 10 o’clock as illustrated.

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

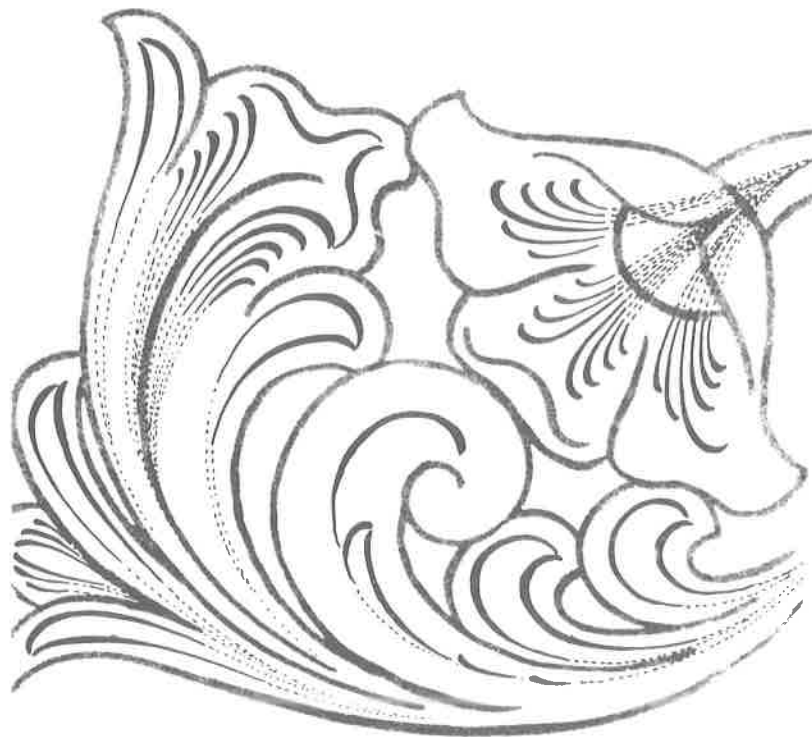


As the cut begins to straighten, pull your hand and arm toward you to steady and control the cut. Gradually diminish the pressure on the yoke.



Continue the cut in one graceful flowing movement, simultaneously lessening the depth of the cut with each motion of progress. Fade the cut to a hair-line and continue the follow-through motion as the blade is lifted from the leather.

A good floral design is composed of graceful, flowing lines. Flower stems leaves, scrolls, etc., should all originate from these flowing lines. Decorative Cutting further enhances or accents these flowing lines. The drawing below is presented to illustrate the correct use of Decorative Cutting. The Decorative Cuts shown have been extended (by dotted lines) to better illustrate their proper flow of direction. You will note that all lines eventually converge into the center of the stems and become a part of the flow of the design. When properly executed, Decorative Cutting becomes an integral part of the design. . .pleasing to the eye and professional in appearance. By thoroughly understanding the purpose of Decorative Cutting, . . . your diligent practice should rapidly develop a professional quality. Always keep in mind, while cutting, the flow of design!

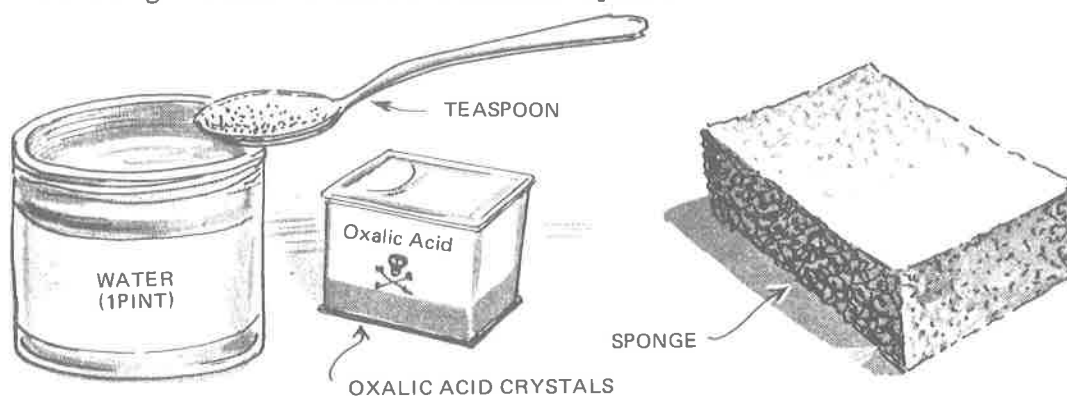


After all carving and stamping is completed, apply a light coat of Leather Finisher with the sheepwool applicator. Do not saturate the applicator. Wipe off excess on top of container before applying finish to leather surface. Apply finish with a light, circular motion over the entire leather grain surface.

A light application of Leather Finisher not only protects your beautiful hand-carved pattern, but adds long-lasting sheen and beauty. NOTE: Be sure to apply finish to projects before assembling them.

Oftentimes, when carving the leather, it becomes stained and smudged with finger marks and other foreign matter. Before dyeing the background, the leather should be cleaned. You can prepare your own cleaner by purchasing a small amount of Oxalic Acid crystals from your leathercraft dealer and preparing the cleaner as shown below.

Dissolve one teaspoon of Oxalic Acid crystals in a pint of warm water and shake well. When thoroughly dissolved, apply to the carved leather with a damp sponge. Use a light, scrubbing motion to clean stubborn spots.



After cleaning thoroughly, wash sponge and bathe grained surface with clean water to remove surface accumulation of cleaning solution.

CAUTION: Use only recommended formulations. Stronger solutions have a tendency to burn the grained surface and give leather a coarse, dead texture.

## GETTING TO KNOW YOUR OTHER LEATHER WORKING TOOLS

### Review Topics

1. Why should a metal-faced mallet or hammer never be used on a stamping tool?
2. What are the six (6) basic types of stamping tools?
3. What is the sequential order of the stamping tool in use?
4. What is the purpose of the camouflage tool?
5. What is the purpose of the pear shader?
6. Which side of the swivel knife cuts should be beveled?
7. What is the cause of choppy beveling?
8. What effect is achieved by the use of the veiner?
9. What is the danger in striking the seeder too hard?
10. What is the purpose of the background tool?
11. Why is it often necessary to add moisture to the grained surface of the leather before making the decorative cuts?

## Selecting, Carving, and Stamping Your Leather Articles

If you have practiced carefully the use of each tool and have made and labeled the sample pieces, you now have a good general knowledge of the way designs and tools function to add beauty and value to leather work. Now let's put the knowledge to work.

Select and obtain the articles you wish to make from the list below: (Plan to make at least three articles with two of them involving some lacing.)

billfold - wallet or pocket secretary	check book cover
eye glass case	I.D. and picture case
dog collar	book mark
small purse	

- or an article of your choice using the same tools and skills

(Be careful to avoid articles exceeding your abilities.)

At this point it would be good to review the section on design in the Unit 1 manual to aid in selecting patterns and beautifying your chosen leather articles. You may design and cut your own leather articles or obtain a kit and patterns from your local leathercraft or hobby shop.

## Questions and Answers

Question: How wet should my leather be?

Answer: The amount of moisture required will vary with the thickness of the leather, the moisture content of the atmosphere, and the length of time you wish to wait before starting the carving. In general, an overcoat of moisture should be applied with a sponge until the leather takes a darkened appearance. It should then be allowed to turn back to near its natural color before starting the carving operations.

Question: I frequently do my leather carving after I get home at night. How can I cut down on the noise I make?

Answer: A solid table will help. However, a marble slab on top of a pundo board is a good solution.

Question: How do I get the rich brown color in my shading and beveling?

Answer: A marble slab, proper moisture content of the leather, and a firm lick with the mallet will give the shading and beveling the desirable rich brown color.

Question: May I re-wet the leather if it dries before I finish?

Answer: Yes, but the entire piece of leather should be wet each time to prevent water marks and excessive stretching in the one area. The leather should never be thoroughly saturated after the carving has been started; otherwise, the cuts will have a tendency to close up.

Question: How deep should I cut with the swivel knife?

Answer: The depth will vary according to individual preference and the thickness of the leather, but from one-third to one-half the thickness of the leather is usually considered to be the proper depth of the cuts.

Question: How do I keep the swivel knife from dragging?

Answer: Your knife probably needs polishing on a rouge strap. Leather bleach or leathers with a high acid content may also cause the knife to drag.

## Suggestions for Demonstrations or Talks

- Casing leather (outlined in Unit 1 manual).
- Using the swivel knife, or decorative and ornamental cuts.
- Sharpening the swivel knife.
- Using basic stamping tools.
- Selecting patterns and designs for leatherwork.
- Principles in leathercraft design (outlined in Unit 1 manual).
- Leathercraft lacing (outlined in Unit 1 manual).

### Preparing Your Exhibit

The exhibit is usually specified in the exhibit or fair premium list for the particular fair at which you will be exhibiting. Generally the exhibit requirements for this unit will include:

1. The completed record book.
2. The exhibit board, including:
  - a. Samples showing use of basic tools.
  - b. Three articles you have made (at least two of them showing your lacing skill).

The check list on the following page will help you prepare and evaluate your own exhibit.

UNIT 2

LEATHERCRAFT EVALUATION GUIDE

Following is a check list to be completed to help you to know when unit goals are met and to serve as an evaluation form for exhibit judges:

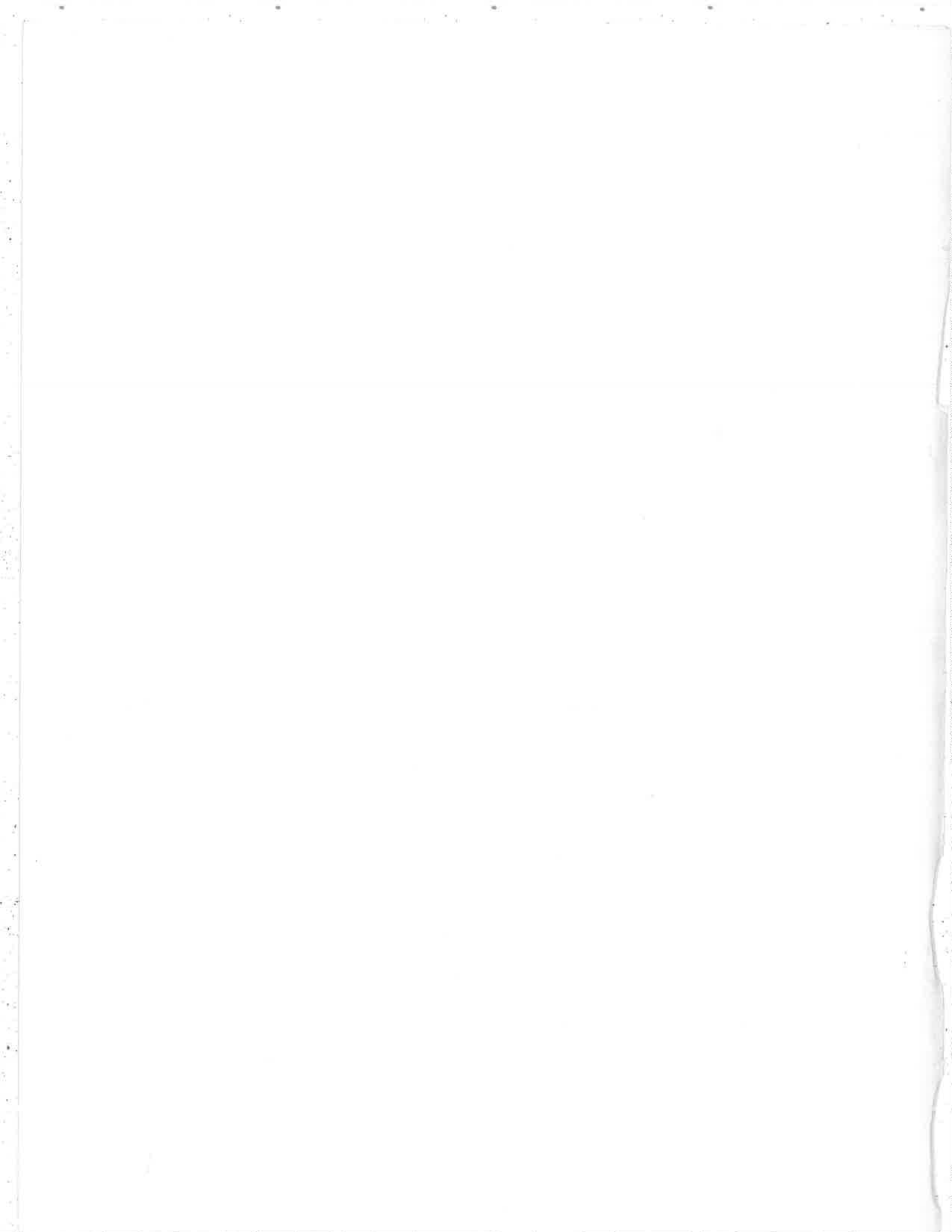
	<u>Suggested Score Card</u>	<u>Your Score</u>
1. Record book		
a. Meeting attendance record	5	_____
b. Demonstrations and/or talks	5	_____
c. Completeness of record book	10	_____
d. Three articles completed and skills developed listed	8	_____
2. Exhibit board to include:		
a. 12" x 18" x 1/8" or 1/4" exhibit board, preferably pegboard, with name, address, and county on back.	1	_____
b. Basic steps shown on scrap leather (any size but keep small to fit on board). The use of the eight basic steps or tools may be shown on a single sam- ple or on as many as needed. Label and indicate where each step is used in the design.		
(1) Sample showing use of swivel knife.	1	_____
(2) Sample showing use of camouflage tool	1	_____
(3) Sample showing use of shade tool.	1	_____
(4) Sample showing use of beveler tool.	1	_____
(5) Sample showing use of veiner tool.	1	_____
(6) Sample showing use of seeder tool.	1	_____
(7) Sample showing use of background tool.	1	_____
(8) Sample showing ornamental cuts.	1	_____
(9) Leather finish applied to all samples.	1	_____
(10) Label each practice sample and article.	1	_____
(11) Fasten each piece to exhibit board. (Lacing is good, but do not glue or nail.)	1	_____
3. Completeness, design, and quality of workmanship considered on the articles below:		
Select and attach to your exhibit board three of your carved, finished articles and list them here. At least two of them must show your lacing skill. Label; indicate if kit, self-cut or designed.		
a. _____	20	_____
b. _____	20	_____
c. _____	20	_____
Total possible score	100	_____



## Other Sources of Help

Your local hobby craft supply or leathercraft supply house is an excellent source of ideas, assistance, and supplies. A supply catalog is always helpful. Your 4-H leader has a Leader's Guide for "4-H Adventures in Leathercraft" that lists helpful reference books and available visual aids.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.





Units 3-9

Member's Manual

# ADVENTURES IN LEATHERCRAFT



Division of Agricultural Sciences  
**UNIVERSITY OF CALIFORNIA**

REPRINTED MARCH 1980

4-H-5011

## 4-H ADVENTURES IN LEATHERCRAFT

Objectives of this project include helping youth:

- Learn leathercraft skills.
- Appreciate the natural beauty and usefulness of leather.
- Learn the principles of good design.
- Become creative and original.
- Learn to strive for quality in their craftsmanship.

This project is of equal interest to boys and girls from urban or rural homes. It complements many other projects where leather is used, as in livestock and horsemanship, clothing, and home furnishings.

Interest and enthusiasm is best if a group of members are enrolled, rather than a single individual in a club.

The nine units offered in the "4-H Adventures in Leathercraft" series include:

- Unit 1 Leather Tooling
- Unit 2 Basic Leather Carving and Stamping
- Unit 3 Advanced Leather Carving and Stamping
- Unit 4 Pictorial Carving and Color
- Unit 5 Leather Garments and Accessories
- Unit 6 Home Furnishings and Accessories
- Unit 7 Original Design in Leathercraft
- Unit 8 Leather Saddles and Accessories
- Unit 9 Leathercraft - Self-Determined

Formerly 4-H-227

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture, James B. Kendrick, Jr., Director, Cooperative Extension, University of California.

## C O N T E N T S

This 4-H manual contains guidelines for all the advanced units in the "4-H Adventures in Leathercraft" series.

	<u>Page</u>
Unit 3 Advanced Leather Carving and Stamping . . . . .	2
The basic skills of leather carving and stamping are outlined and taught in Unit 2. Unit 3 guidelines provide from one to three years of experience to advance your skills in carving, stamping, designing, and assembly. After gaining sufficient skills in Unit 3, you are ready to select the unit from 4 to 9 of most interest to you. Units 4 to 9 do not need to be taken in sequence. It would be good to read the guidelines for all units below before selecting any one unit.	
Unit 4 Pictorial Carving and Color . . . . .	4
Unit 5 Leather Garments and Accessories . . . . .	5
Unit 6 Home Furnishings and Accessories . . . . .	6
Unit 7 Original Design in Leathercraft . . . . .	8
This particular unit can help a member become more creative and original in planning or developing any of the other advanced units.	
Unit 8 Leather Saddles and Accessories . . . . .	16
Unit 9 Leathercraft - Self-determined . . . . .	18
Sources of help . . . . .	18

These advanced units contain only an outline for achieving the skills in each unit. You will need to find other sources of help, depending on the unit in which you enroll and the articles you select to make. There are many sources of help and many specific references to aid you. Some are listed in this section to help you get started.

\* \* \* \* \*

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

## UNIT 3

### ADVANCED LEATHER CARVING AND STAMPING

This unit is designed for boys and girls who have already acquired the basic skills in leather carving and stamping. It is divided into three options: A, B, and C. The higher lettered options require more skill and the type of articles made are usually more expensive. You should select the option you can afford that best meets your skill level.

For the sake of skill development, it is desirable for you to complete three articles in an option before advancing to the next higher option. You can enroll in this unit as many years as necessary to develop basic carving and assembly skills. However, depending upon your skill, available time, resources, and needs, you may choose to select and complete three articles from a single option or a combination of options.

#### Learning Goals

##### Learn:

To increase your knowledge and skills related to:

Leather carving	Invented carving
Leather stamping	Embossing
Leather lacing	Filigree
Leather assembly	Braiding
Designing and creating leather articles	

#### Learning Experiences

Participate actively in your 4-H Club meetings.  
Determine the best option (A, B, or C below) for you.  
Select three or more articles you wish to make.  
Create or adapt patterns and designs.  
Choose more challenging articles for each option.  
Keep a record of costs and new skills gained.  
Share your new knowledge learned through talks, demonstrations, and displays.  
Evaluate your progress with your leader.

#### Option A

Skills: Lacing, carving, stamping, and some lining.

1. Wallets (Should be more difficult than you may have made in Unit 2.)
2. Litter bag.
3. Women's shoes, such as the "Gypsies."
4. Safety tool pouch.
5. Purse (without handle).
6. Bar-b-que seat.
7. Belt.
8. Spur straps.
9. An article of your choice.\*  
(Requiring similar skills)

#### Option B

Skills: Option A skills, plus punching, lining, and new assembly skills.

1. Handbag (with handle).
2. Belt and holster.
3. Pistol caddy.
4. Quiver and arm guard.
5. Attache case.
6. Notebook.
7. Bridle or halter.
8. Travel or toiletry kits.
9. An article of your choice.\*  
(Requiring similar skills)

#### Option C

Skills: Options A and B skills on larger and more difficult articles, plus more design and creativity.

1. Rifle case.
2. Camera bag.
3. Bowling bag.
4. Travel-tote bag.
5. Saddlebag.
6. Breast collar.
7. Stirrups.
8. An article of your choice.\*  
(Requiring similar skills)

\*Check with your leader or other qualified person to be sure article is of like scale and requires similar skills to articles suggested in chosen option.

Learning Experiences (Cont.)

Exhibit: The Unit 3 Leathercraft exhibit will include your completed record book and one or two articles you made. If you have completed articles from several options, you may exhibit the most advanced article of your choice. Mount small articles, if desired, on a board (preferably a pegboard) no larger than 18" x 24".

The following guide should be helpful to you.

UNIT 3  
LEATHERCRAFT EVALUATION GUIDE

Following is a check list to help you know when unit goals are met and to serve as an evaluation form for exhibit judges:

	<u>Suggested Score Card</u>	<u>Your Score</u>
1. Record book		
a. Meeting attendance record	10	_____
b. Demonstrations and/or talks	10	_____
c. Completeness of record book	10	_____
d. List skills developed in your record. Were three or more articles completed in chosen options? List completed articles below:		
<u>Option A</u>	<u>Option B</u>	<u>Option C</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
	10	_____
2. Completeness, design, and quality of workmanship is considered on your exhibit article(s). Label all items as best you can with name, address, and county. Exhibit one or two leather articles you have completed this project year, showing your best workmanship for the skills expected. It is possible to score up to 60 points on quality of article(s). List article(s) on exhibit under proper option below:		
<u>Option A</u>	<u>Option B</u>	<u>Option C</u>
Skills expected: carving, stamping, and lacing.	Skills expected: option A skills plus lining, punch- ing, and necessary assembly skills.	Skills expected: option A and B skills on more difficult ar- ticles. More atten- tion to design and creativity.
a. _____	a. _____	a. _____
b. _____	b. _____	b. _____
		60
Total possible score for option		100

UNIT 4  
PICTORIAL CARVING AND/OR COLOR

Figure carving and coloring leather is a fascinating, enriching, and creative experience.

Learning Goals

Learn:

- To make a portrait and/or scene in leather.
- To do figure carving.
- Tinting and dyeing techniques on leather.
- Suitable mounting and/or framing of pictures and portraits.

Learning Experiences

- Participate actively in your 4-H Club meetings.
- Study references on coloring and figure carving. (See reference list in back of this book.)
- Select pictures to carve appropriate for your intended use and within your ability. Select and carve one or more pictures, scenes or portraits from 8-1/2" x 11" up to 18" x 36".
- Figure-carve your pictures.
- You may color and/or dye your pictures with one or more colors if you desire.
- Select frame and mount pictures as appropriate.
- Keep a record of costs and new skills gained.
- Share knowledge learned through demonstrations, talks, and displays.
- Evaluate your progress with your leader.

UNIT 4  
LEATHERCRAFT EVALUATION GUIDE

Following is a check list to help you know when unit goals are met and to serve as an evaluation form for exhibit judged:

	Suggested Score Card	Your Score
1. Record book		
a. Meeting attendance record	10	_____
b. Demonstrations and/or talks	10	_____
c. Completeness of record book	10	_____
d. Articles completed and skills developed are listed.	10	_____
2. Exhibit one or two of your completed pictures, framed or mounted, figure-carved and colored (if desired). These should be no smaller than 8-1/2" x 11" and no larger than 18" x 36" before framing. Label with name, address, and county. Earn up to 60 points considering the difficulty, quality of workmanship, coloring, and appropriateness of mounting or framing.		
Title(s) of picture(s):		
	60	_____
Total possible score	100	_____



UNIT 5  
LEATHER GARMENTS AND ACCESSORIES

Learning Goals

Learn:

- Sewing and/or assembling techniques with leather.
- To select and make leather garments and accessories.

Learning Experiences

- Participate actively in your 4-H Club meetings.
- Obtain and study references on sewing with leather. A booklet, "Sewing With Leather," is an excellent resource. (See reference list in back of this book.)
- Keep a record of costs and new skills gained.
- Share knowledge gained through demonstrations, talks, and displays.
- Make a leather garment and make or select a leather accessory. Garments should be all leather, excluding linings. It is wise to start with small articles and become familiar with the working properties of leather. A basic knowledge of sewing is needed. Besides using a sewing machine, you will need to obtain and utilize silk thread, rayon seam tape, skive knife, rawhide mallet, rubber cement, tailor's chalk, X-Acto type knife, Scotch tape, and paper clips.
- Evaluate your progress with your leader.

UNIT 5  
LEATHERCRAFT EVALUATION GUIDE

Following is a check list to help you know when unit goals are met and to serve as an evaluation form for exhibit judges:

	<u>Suggested Score Card</u>	<u>Your Score</u>
1. Record		
a. Meeting attendance record	10	_____
b. Demonstrations and/or talks	10	_____
c. Completeness of record book	10	_____
d. Articles completed and skills developed are listed.	10	_____
2. Completeness, design, difficulty, and quality of workmanship is considered on the leather garment and accessory. Label each article with your name, address, and county.		
a. Garment exhibited _____	50	_____
b. Accessory exhibited _____ (Indicate if accessory is made or purchased.)	10	_____
Total possible score	100	_____

## UNIT 6

### LEATHER HOME FURNISHINGS AND ACCESSORIES

This unit is divided into two options: A - small furnishings and accessories, and B - large and usually more expensive furnishings and accessories. A member may wish to enroll in this unit more than one year. It is possible to combine and complete both options in one year, depending on articles chosen, available time, and skill of the member. The member should, however, select the options and articles based on his ability and needs.

#### Learning Goals

##### Learn:

- Principles and skills essential to select, to design, and to make good home furnishings and accessories.
- To use leather in combination with other materials to make useful and beautiful items.
- To be artistic, creative, and original.
- To refinish leather home furnishings or accessories.
- To increase skill in evaluating design as related to furnishings.

#### Learning Experiences

- Participate actively in your 4-H Club meetings.
- Obtain catalogs of leather home furnishing ideas or create your own patterns and designs.
- Review the design principles discussed in Unit 7 of this manual.
- Possibly design or create some of your own original articles.
- Share knowledge gained through demonstrations, talks, and displays.
- Keep a record of costs and new skills gained.
- Evaluate your progress with your leader.
- Determine the best option (A or B, or combination) for you.
- Actually make and/or refinish several home furnishings or accessories as suggested in the following options:

#### Option A, Small Furnishings and Accessories

*(Make two items.)*

- Desk sets (pen/pencil holder, blotter holder, etc.)
- Lamps
- Clocks
- Longhorns
- Fireside bellows
- Bookends
- Wastebaskets
- Book covers for: Bibles, school books, telephone books, photograph albums, scrapbooks, etc.
- Small pillows
- Article of your choice

#### Option B, Large Furnishings and Accessories

*(Make one or more items.)*

- Chairs
- Sofa
- Headboard
- Card table cover
- Camel seat
- Large floor pillows
- Articles of your choice

Learning Experiences (Cont.)

UNIT 6  
LEATHERCRAFT EVALUATION GUIDE

Following is a check list to help you know when unit goals are met and to serve as an evaluation form for exhibit judges:

	Suggested Score Card	Your Score
1. Record book		
a. Meeting attendance record	10	_____
b. Demonstrations and/or talks	10	_____
c. Completeness of record book. (Photos showing articles being made and how they are used in your home would be helpful.)	10	_____
d. Articles completed and skills developed are listed.	10	_____
2. Completeness, design, difficulty, and quality of workmanship is considered on the leather furnishings and/or accessories. Label each article with your name, address, and county.		

Exhibit one or two leather articles you have completed this project year, showing your best workmanship. It is possible to score up to 60 points on quality of article(s) exhibited. List articles on exhibit under proper option below:

Option A

Option B

a. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

b. \_\_\_\_\_

60

Total possible score for option

100

*NOTE: Prices subject to change without notice.*

UNIT 7  
ORIGINAL DESIGN IN LEATHERCRAFT

Learning Goals

Learn:

- Principles of good design.
- To apply design principles in creating original leathercraft.
- Optional: design and complete Nature-Tand (or equivalent) leather articles.

Learning Experiences

- Participate actively in your 4-H Club meetings.
- Design and develop one or two large and/or small original articles.
- Read the following section on design principles.
- Keep a record of costs and new skills gained.
- Share knowledge gained through demonstrations, talks, and displays.
- Evaluate your progress with your leader.

UNIT 7  
LEATHERCRAFT EVALUATION GUIDE

Following is a check list to help you know when unit goals are met and to serve as an evaluation form for exhibit judges:

	<u>Suggested Score Card</u>	<u>Your Score</u>
1. Record book		
a. Meeting attendance record	10	_____
b. Demonstrations and/or talks	10	_____
c. Completeness of record book	10	_____
d. Articles completed and skills developed are listed.	10	_____
2. The design, functional relationship of design, quality of workmanship, and difficulty of project will be considered on the one or two articles completely of your own design which you made this project year. Label each article with your name, address, and county. Earn a possible 60 points on quality. List article(s) on exhibit:		
a. _____		
b. _____	60	_____
Total possible score for option	100	_____

## Choosing Good Designs for Leathercraft Articles

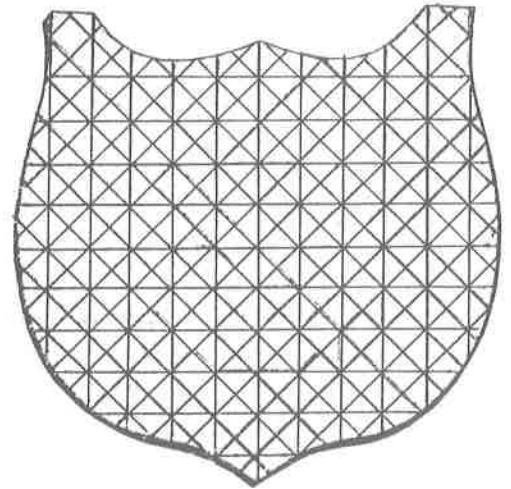
### 1. There are two types of design:

- a. Structural design is made by the size, form, shape, and space within the object and relates to function and use. For example, we often describe an article by its shape and size. These terms apply to structural design.

A well designed article should be chosen first on the basis of function and how well it does the job or fulfills the intended use - comfortable (as applied to a watchband), convenient (as applied to a coin purse). If the article does not meet the functional requirements, it will soon be discarded and become of little value or use. If the structural design is poor, no amount of surface enrichment can improve it. So an article or object should be 1) suited to its purpose; 2) well proportioned; 3) suited to the materials.

- b. Decorative design is surface enrichment of a structural design and should strengthen the structural shape.

Some objects are beautiful in themselves and require little or no application of decorative design. Example: an embossed billfold of Morocco leather, edged with leather lacing.



2. Good design is an orderly arrangement of lines, shapes, colors, textures (called art elements) created for some specific purpose or function, that meet an intended need and in addition, beauty is added in the finished product.

### 3. Design Motifs

A decorative design is made up of motifs or units of decorative design. There are four classes of motifs. Pattern is a combination of these units and they contribute to the textured look of surfaces. If patterns are small and closely spaced, they appear as texture.

- a. Natural or Realistic - Resemble close forms of nature such as animals, flowers, people, and landscapes. This class is not as acceptable to use in wearing apparel and illustrious objects. They are best reserved for pictures, paintings, or portraits.
- b. Conventional or Stylized - This group includes designs which have been modified from their natural form. The modification can range from a simple change to many changes, until it becomes almost abstract.
- c. Abstract - This group is the creation of the designer's imagination and shows little or no relation to objects around us. Indian and modern designs make much use of the abstracts.
- d. Geometric - These are based on lines and geometric forms such as rectangles, circles, triangles. They use some of the same forms as the abstracts.

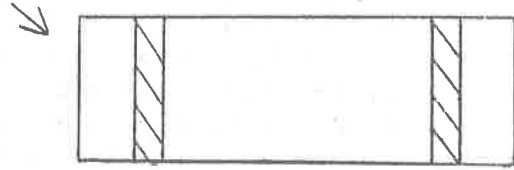
Motifs can express ideas that suggest different feelings, moods, or even the character of the piece.

#### 4. Placement of Motifs and Decorative Design

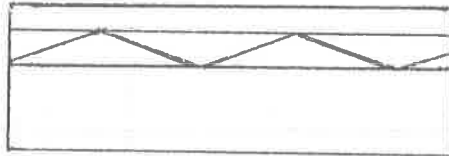
The structural design of an article has a certain shape, size, and form. Any decorative design that is applied should, in most cases, relate to the overall shape.

The structural shape can be strengthened visually by repeating in the decorative design some of the lines of the article's shape. For example:

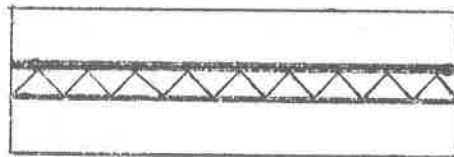
A rectangle has four straight sides. To emphasize this shape, repeat a straight line either across the ends . . .



← across the top or one long side . . .

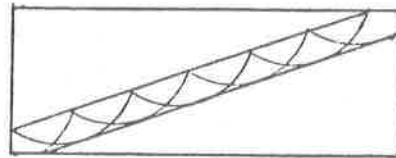


← across one end . . . →



← through the center.

Avoid:



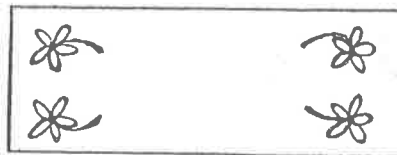
diagonal lines.

Avoid:



a design in one corner that has no relation to the corner's shape.

Avoid:



one design in each corner unless they relate to the corner's shape and are tied together to make a unit.

The rectangle may be long and narrow, like a belt or watchband, but placement of design motifs should follow the same principle.

The eye needs to flow rhythmically over the whole so it seems to be unified and the design placement should prevent spottiness.

Since leathercraft makes best use of the curved line, the curved line can be combined with some straight lines on rectangular articles to add some variety and interest. If the structural shape has rounded lines, repeat some of the curved lines in the design chosen.

### Design Choice and Placement Quiz

- a. What is the structural design of these knife sheaths?
- b. Would you judge the structural design as good? Yes \_\_\_ No \_\_\_ Why?
- c. What class of motif is used on Sheath A?  
  
On Sheath B?
- d. Which sheath has decorative design that is most pleasing and relates to shape?  
  
Why?



A

B

### 5. Art Elements

Every design makes use of one or more of these elements:

Line  
Direction  
Shape  
Form  
Texture  
Color  
Value  
Space

To create a pleasing, unified design, there must be a careful arrangement of these elements.

There are only three ways to combine these:

- a. Identical - repetition.
- b. Similar - harmony.
- c. Totally different - contrast and often discord.

Variety is created by contrast. Accent or contrast can be achieved by introducing opposite or nearly opposite qualities of elements, such as curved lines with straight lines; lines that go in two different directions; shapes opposite, such as triangle and round; different sizes - large and small; value - light and dark; change in color and texture. Like salt, some like a lot of contrast, some like a little. Two types: muted and strong. There is need of some contrast or element of discord or conflict, but there is also a need of dominance.

Helpful References and Resources, (Cont.)

Today's Leather	Detailed instructions for making every kind of leather garment. #1936.	\$1.00
Teacher's Guide - Leatherwork Manual	By Al Stohlman, A. D. Patten, and J. A. Wilson. Contains history of leather, preparation of leather, use of leather tools, dyeing and finishing leather with step-by-step illustrations. 160 pages. #1891.	\$5.00

16 mm Sound and Color Films: (Available from Tandy's, free for groups.)

- a. "Beginners' Leathercraft," 13 1/2 minutes.
- b. "The Art of Leathercraft Carving," by Joey Smith, 23 1/2 minutes.
- c. "The Art of Figure Carving," by Al Stohlman, 17 minutes.

Super 8 mm Color Cartridge Instruction Films: (All 4 1/2 minutes; available from Tandy Leather stores.)

- a. 0801 Introduction to Leather (\$20.00)
- b. 0803 Making Tools for Leather (\$20.00)
- c. 0807 Simple Lacing Techniques (\$20.00)
- d. 0809 Dyeing and Preserving Leather (\$20.00)
- e. 0830 Garment Leathers (\$20.00)
- f. 0831 Cutting Garments (\$20.00)
- g. 0832 Straight Seams (\$20.00)
- h. 0833 Curved Seams (\$20.00)
- i. 0834 Fasteners Film (\$20.00)
- j. 0835 Finishing Techniques (\$20.00)
- k. 0836 Decorative Features (\$20.00)  
Films 8030 through 8036, Leather Garment Color Instruction films, super 8 mm., may be purchased separately for \$20.00 each or as a set for \$126.00.
- l. 0840 Awareness and Design of Leather (\$12.50)
- m. 0841 Creative Approaches and Processes in Leather, I (\$12.50)
- n. 0842 Creative Approaches and Processes in Leather, II (\$12.50)
- o. 0843 Ideas in Leather for the Elementary (\$12.50)

Additional instructional aids available through Tandy Leather stores. Various leatherwork overhead projector transparencies may also be obtained from the Tandy Leather stores. (These relate to the Teacher's Guide - Leatherwork Manual.)



## Other Sources of Help

Your local hobby craft supply or leathercraft supply house is an excellent source of ideas, assistance, and supplies. A supply catalog is always helpful. Your 4-H leader has a Leader's Guide for "4-H Adventures in Leathercraft" that lists helpful reference books and available visual aids.

