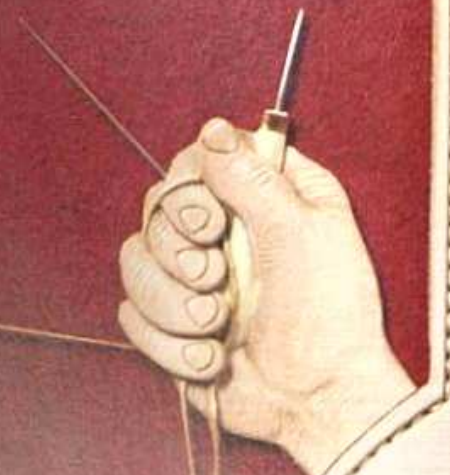




The ART of

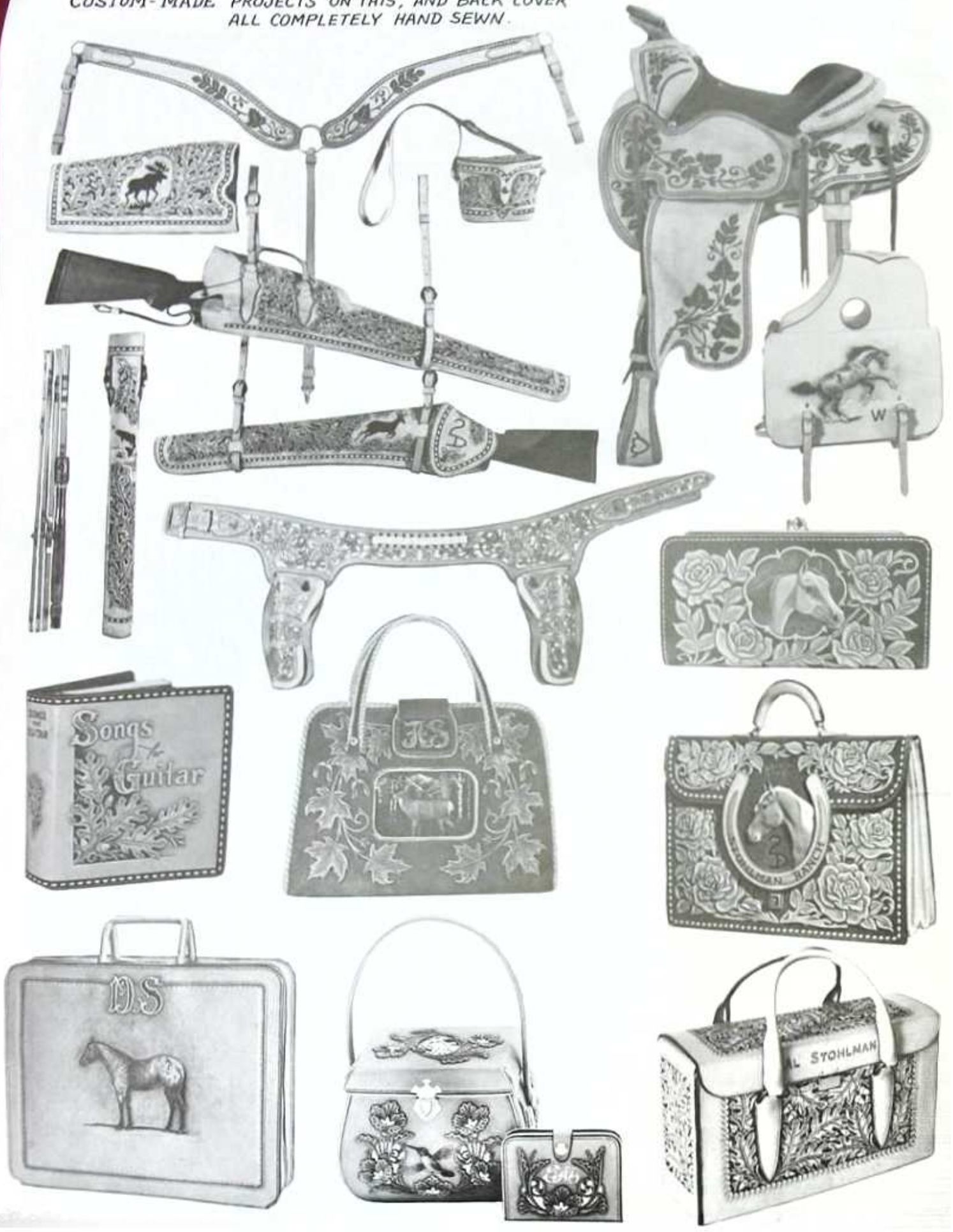
# HAND SEWING

## *Leather*



by AL STOHLMAN

CUSTOM-MADE PROJECTS ON THIS, AND BACK COVER  
ALL COMPLETELY HAND SEWN.



## ACKNOWLEDGMENTS



**ANN STOHLMAN**

HAND SEWING THE GIRTH BINDING ON A SADDLE SHE IS MAKING

A special thanks to my wife, Ann, for her most valuable assistance in making this hand sewing book a reality. She has personally sewn most of the items in this book, including inside and outside covers . . . all by hand. In the past fourteen years she has sewn *thousands* of leather projects, dozens of saddles and related items . . . using many, many one lb. spools of linen thread. Every stitch in the items and projects shown . . . is *hand sewn* . . . practically all of them by Ann.

Thanks, also, to Mr. Cletus E. Manley of Peoria, Illinois, for information on the hog bristles.

Al Stohlman



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## INDEX

TOOLS; MATERIALS REQUIRED .....	4	SEWING WITH CURVED NEEDLES .....	30
PREPARING THE THREAD .....	5	SEWING BUCKLES; STRAPS; LOOPS .....	36
THREADING THE NEEDLES .....	6	SEWING DOUBLE REVERSED LOOP .....	40
PREPARING LEATHER FOR SEWING .....	7	SEWING REVERSED SLIDE LOOP .....	41
STABBING WITH THE AWL .....	9	SEWING THE BLOCK LOOP .....	42
HOW TO HOLD NEEDLES; AWL .....	9	SEWING WELTS .....	45
SEWING THE LEATHER .....	10	SEWING THE BASEBALL STITCH .....	47
TYING THE THREAD ENDS .....	18	SEWING THROUGH SHEARLING .....	51
BEGINNING WITH KNOTTED THREAD .....	19	COMPLETING THE PILLOW .....	52
TROUBLE: PIERCED THREAD .....	20	SEWING THE HIDDEN STITCH .....	54
TROUBLE: BROKEN THREAD .....	21	SEWING ROUNDS .....	56
SEWING A MITER JOINT .....	22	"MAKING" A THREAD .....	59
MAKING LEATHER BOXES .....	25	HOG BRISTLES .....	62
USING WOODEN FORMS .....	27	SIZES; OVERSTITCH WHEELS .....	63
HAND SHOE TACKS; SEWING AIDS .....	28	CONCEALED APPLIQUE STITCH .....	64
CURVED NEEDLES AND AWLS .....	29	AL STOHLMAN STITCHING PONY .....	66

### TIPS AND SUGGESTIONS :

SORE FINGERS .....	21
USING WOODEN DOWELS .....	35
SPLICING WELTS .....	46
SINGLE PLY WELTS .....	46
SEWING THROUGH WOOL .....	51
SINGLE THREAD SEWING .....	63
USING BROKEN GLASS .....	63

## FOREWORD

This book: "The Art of HAND SEWING LEATHER" . . . is the culmination of over 30 years of knowledge and practical experience in Hand Sewing. It is presented to perpetuate the fading art of hand sewing . . . in this age of mass production by machine. Though slower, hand sewing is superior to machine sewing. It is the best method of stitching two or more pieces of leather together for lasting years of wear and service.

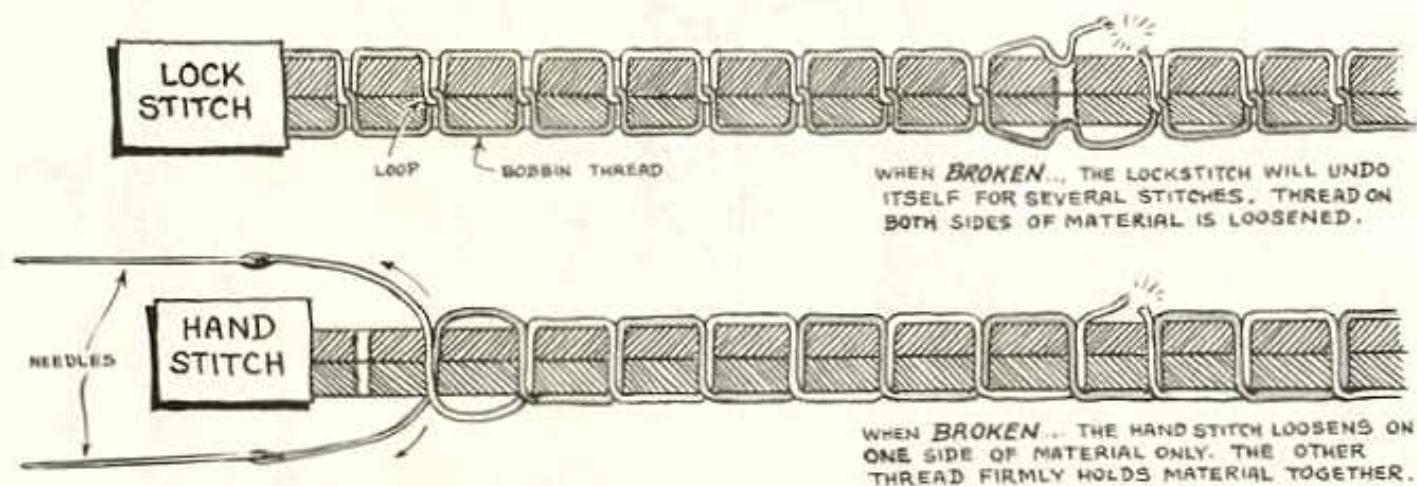
No patterns, for specific projects, are presented as space does not permit. The instructions in this book are to enable you to sew any project you may wish to make or repair. The various techniques included in these pages are given to assist you with any sewing endeavor.

Before machines, everything requiring stitching was sewn by hand. Most of the old-time boot and shoemakers used hog bristles (in place of harness needles) and a curved awl for sewing in difficult places. There are still a few, today, who sew in this manner. Much hand sewing is still being done where better construction and quality leathers are desired. In the Stohlman's saddlery shop . . . every stitch in all

saddles and all leather projects is completely sewn by hand. No machines are used.

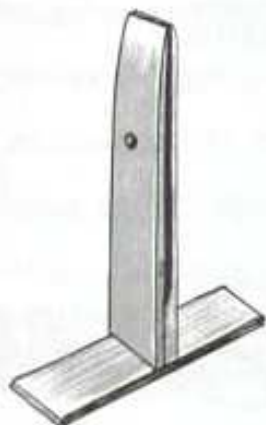
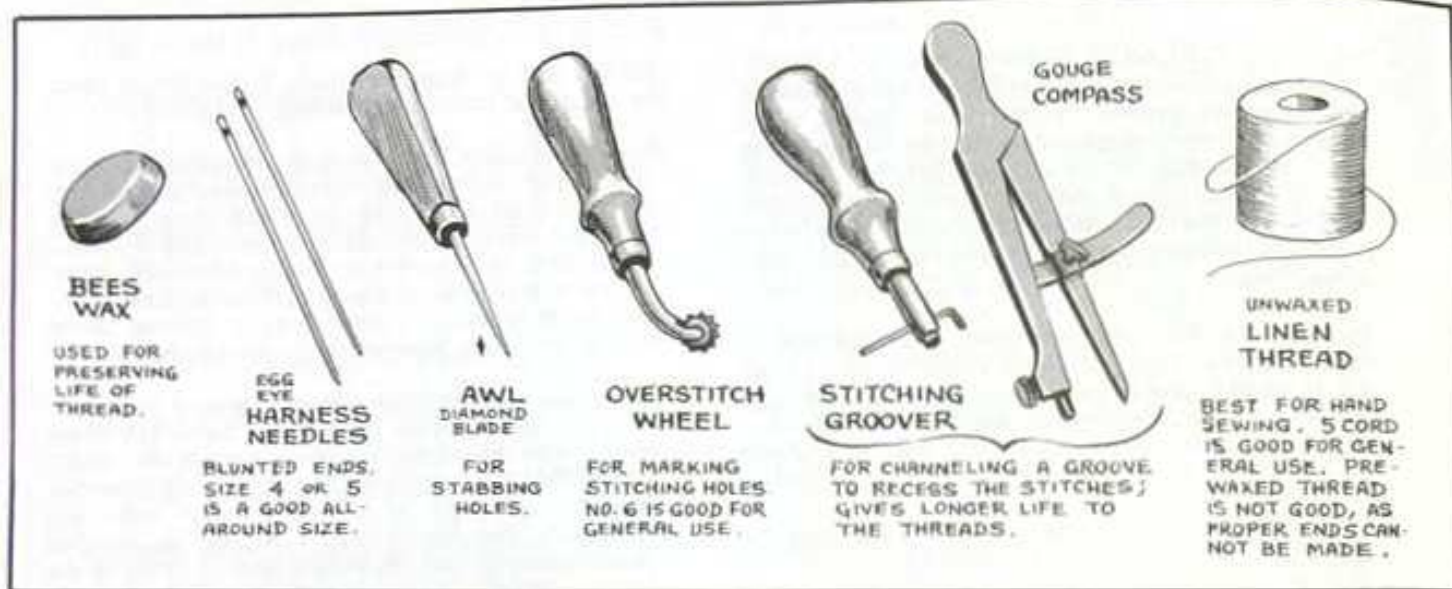
There are many things that can be sewn *only* by hand. Much of the repair work demands hand sewing, as it may be impossible to re-sew on a machine though it was originally done so. An article is usually constructed in step-by-step stages. Therefore, when an inside seam (for example) rips loose, it is usually impossible to put on a machine again, without taking it all apart. It can, however, be re-sewn by hand.

There are thousands of different sewing machines, designed for multiple or specific uses. The most common of the machine stitches is called the "lock" stitch. This is made with a top thread and a bottom thread . . . which is in a small spool called the "bobbin". The lock stitch is formed by the top thread going around the bobbin spool, picking up the bottom thread, to form a loop. When properly adjusted, the loop is pulled between the two thicknesses of materials being sewn. The cut-away illustrations below show the differences in the LOCK STITCH . . . and the HAND STITCH.



To the beginner, Hand Sewing will seem uncomfortable and slow. Disregard all attempts at speed . . . learn to sew properly, as instructed. You will find hand sewing is fun and easy. You will soon be fast and professional with your stitches. Speed will come by itself . . . with practice.

# TOOLS AND MATERIALS REQUIRED FOR HAND SEWING



**LACING PONY**

This is a substitute for the stitching horses shown at right. It is good for small items, but not suitable for heavy work. It is placed on a chair and sat upon . . . to hold.



**SADDLER'S STITCHING HORSE**

This tool is used for holding leathers in the clamped jaws . . . allowing both hands to be free for sewing. Some items cannot be put in the stitching horse and must be held between the legs, or in some other fashion, to sew. Example on page 31.



**AL STOHLMAN STITCHING PONY**

This tool was designed for those who are unable to obtain the regular stitching horse. This is designed to use with a regular household chair. Build your own; plans on page 66.

*Complete PLANS FOR BUILDING THE AL STOHLMAN STITCHING PONY ON PAGE 66*

## PREPARING THE THREAD

Preparing the thread . . . properly . . . is of the utmost importance for ease of sewing and lasting service. Special attention should be given to tapering the ends and threading the needles. Carefully study the photos, drawings, and instructions on this and the following pages.



To determine correct length of thread, pull two lengths off spool . . . equal to your arms' lengths (shown above). This will be about 8' to 10' in total length. Do this with each thread you prepare. Do not cut thread length to fit any particular project. Make them all of about the same length. No thread will be wasted. Instructions explain joining threads, using short ends, etc.



- 1** Place thread and knife on bench, as shown, about 2" from end of thread. Rest heel of blade on bench and tilt the blade angle toward the end of thread (see arrow).



- 2** Apply light pressure to blade and slowly pull the thread. Pressure of blade unravels and "frays" ends of thread; angle of blade reduces danger of cutting.



- 3** Too much pressure on blade will cut thread. Apply only enough to scrape and pull the fibers loose. Repeat operation with more pressure near end of thread.

## PREPARING THE THREAD - Continued



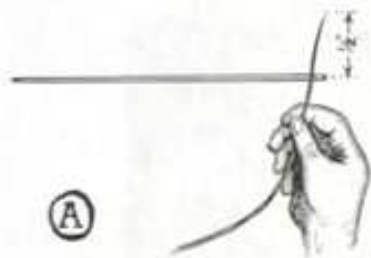
- 4** Scraping and pulling the fibers in this manner tapers the tiny sinews to fine, pointed ends. Repeat the operation until the sinews appear silky, and evenly tapered. Repeat operation on other end of thread.



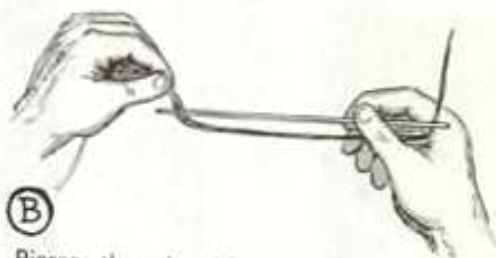
- 5** Place the thread over a hook or smooth, rounded object and rub briskly with bees wax. Wax ends thoroughly to fine points. Waxing the thread lengthens its life and prevents fraying while sewing.



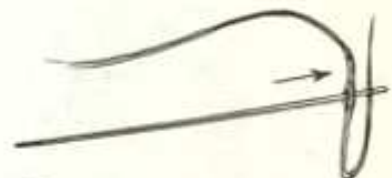
## HOW TO THREAD THE NEEDLES



- A** Push end of thread through needle eye . . . about  $\frac{1}{4}$ ".



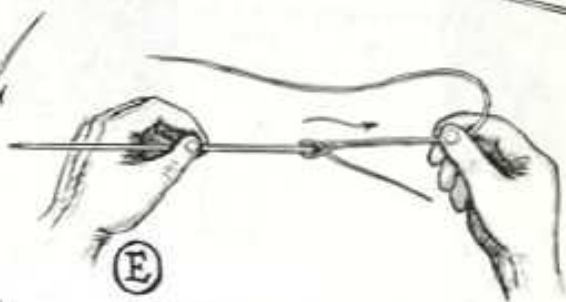
- B** Pierce thread with needle point as shown.



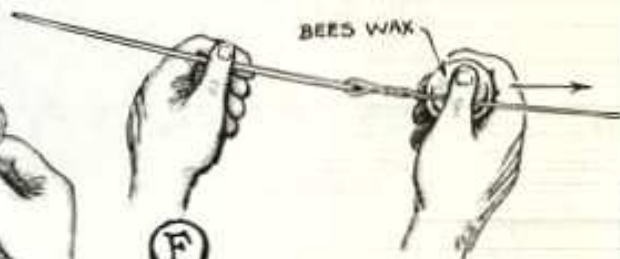
- C** Push thread up on needle, to eye.



- D** Pull end of thread through eye as far as it will go.



- E** Hold needle and pull thread over eye to lock end of thread.



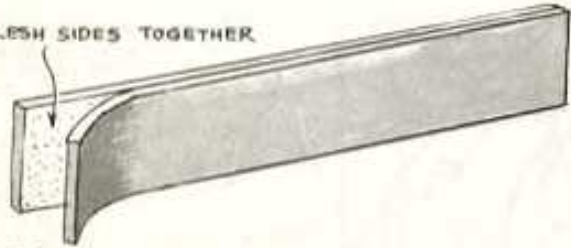
- F** Wax end to "fuse" threads together. Repeat operation with other thread and needle.



## PREPARING THE LEATHER FOR SEWING

To begin . . . we will take two pieces of scrap leather of any size or thickness . . . so you can practice hand sewing. 4 oz. to 6 oz. leather would be preferable as it will be easier to pierce with the awl. Cut leathers any size desired.

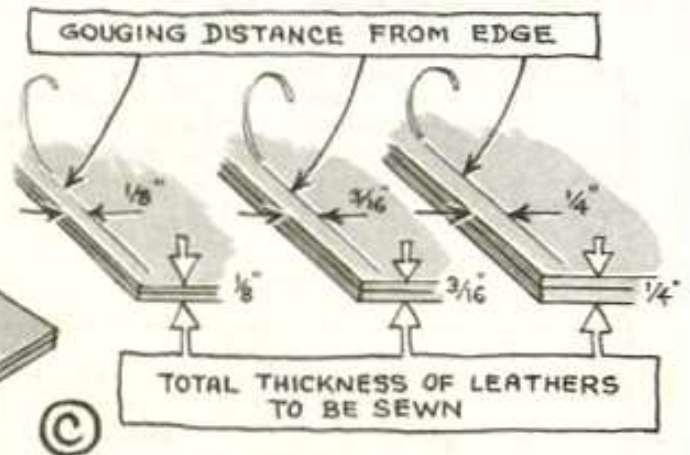
FLESH SIDES TOGETHER



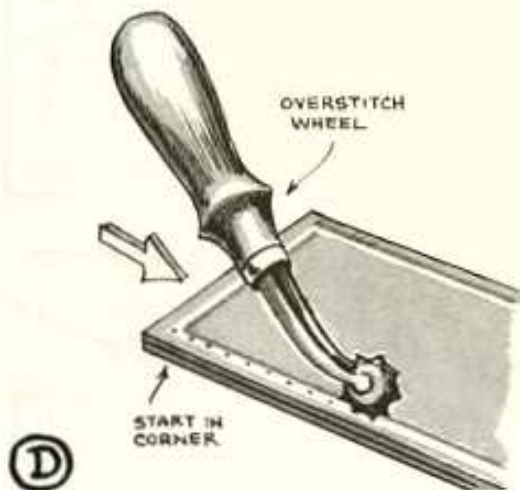
**(A)** Use rubber cement and adhere the two pieces together. Trim the edges of both pieces . . . so that the edges are flush.



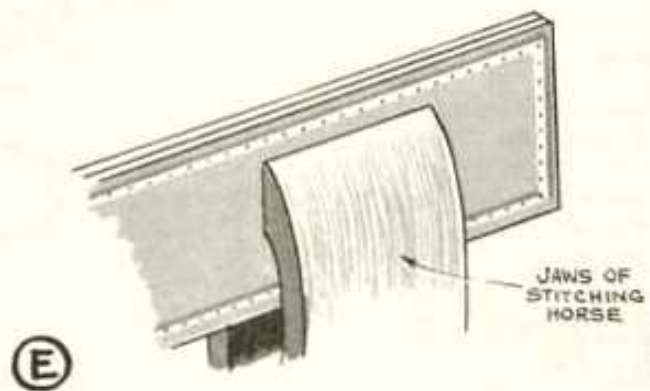
Use the gouging tool of your choice and gouge a channel around the edges of the leather. Gouge the leathers on both sides. Keep tool tight against leather edges to insure a uniform gouge along the edge.



In determining "How far" from the edge to gouge stitching channel, a good rule-of-thumb to follow, is to make the gouge about the same distance from the edge as is the total thickness of the leathers to be sewn. (See above.)



Moisten the gouged channels lightly with a damp sponge, and run the overstretch wheel all around the channel . . . on the front side only. This marks position of awl holes to insure even stitches.

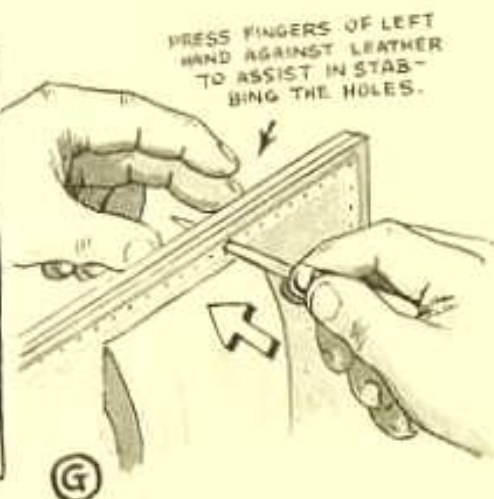


Clamp leathers in stitching horse close to channel, as shown . . . an inch or so from the corner. Note . . . we are not starting in the corner . . . because of instruction clarification (in later steps) on how to end stitching and begin with knotted threads, etc.

## STABBING WITH THE AWL



Hold the awl in hand as shown above. End of awl handle should press against heel of hand. If awl handle feels too long; cut off some of the end.



PRESS FINGERS OF LEFT HAND AGAINST LEATHER TO ASSIST IN STABBING THE HOLES.

The purpose of the awl is to pierce a hole through the leathers to allow entrance of the needles. See the illustrations at right for correct angle of awl blade. Stab first hole at far end of stitching jaw, as shown.

### STABBING THE AWL HOLES

**RIGHT** ↗

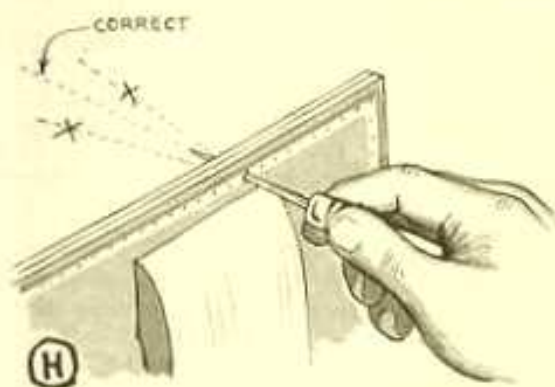
THIS IS THE CORRECT ANGLE TO HOLD THE AWL BLADE WITHIN THE CHANNEL. KEEP THEM UNIFORM.

**WRONG** ↗

AWL PIERCES OUTSIDE CHANNEL. HOLES AT DIFFERENT ANGLES; STITCHES WILL BE UNEVEN.

**WRONG** ↗

HOLES NOT ANGLED. THREAD MAY TEAR THROUGH HOLES IN THIS POSITION.



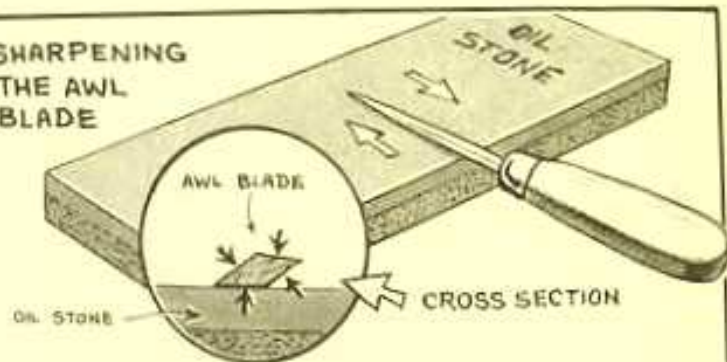
When stabbing the awl holes, always hold the awl at the same angle (right angle to leather) so that all stitches will be uniform. Practice insures uniformity.

The smallest hole, possible, for needle clearance is most desirable. You will notice, after piercing the leather with the awl, that it will "stick" or "grab" when trying to withdraw. It is generally necessary to twist it either to right or left to loosen its grip in the leather . . . for easy removal.

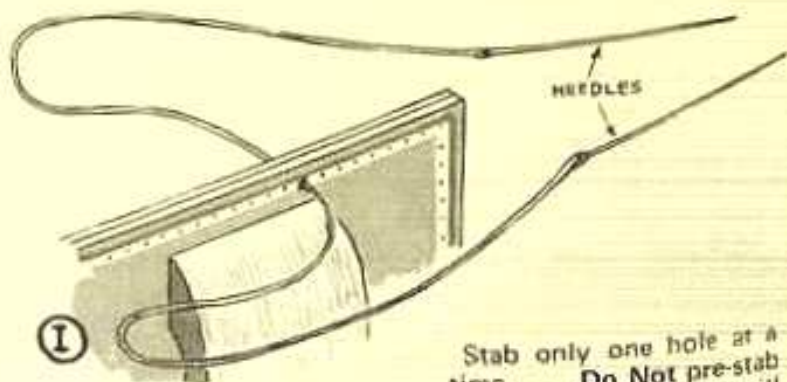
Do not wriggle it back and forth . . . boring a big gaping hole. This makes a larger hole than necessary; makes bad appearing stitches.

The awl (on back side) should come out in the gouged channel. It will not take much practice to stab the holes properly.

### SHARPENING THE AWL BLADE



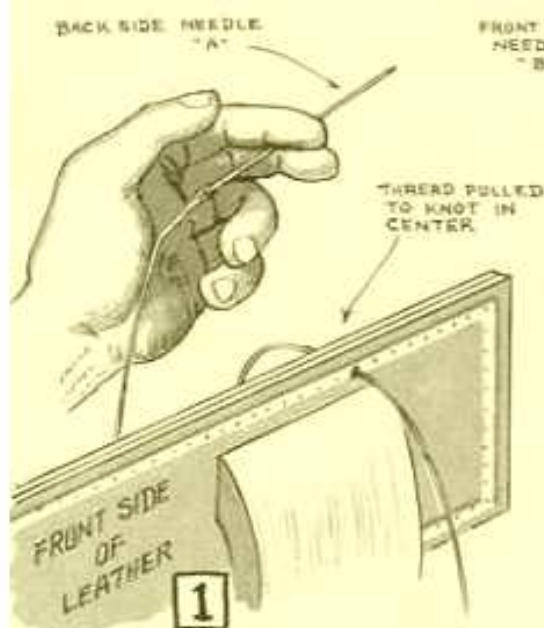
If the awl blade does not penetrate the leather easily, it probably needs sharpening. Sharpen by rubbing the four flat surfaces (indicated by arrows in cross section) on an oil stone. Hold firmly against oiled stone; work back and forth. Strip on a rouge board to polish the surfaces. A sharp awl is a "must" for easy sewing.



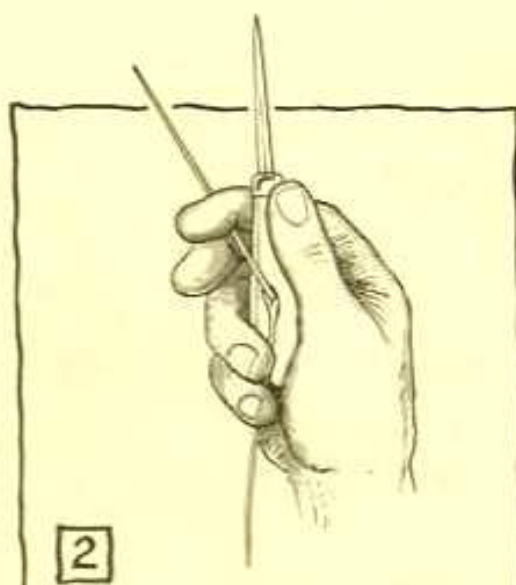
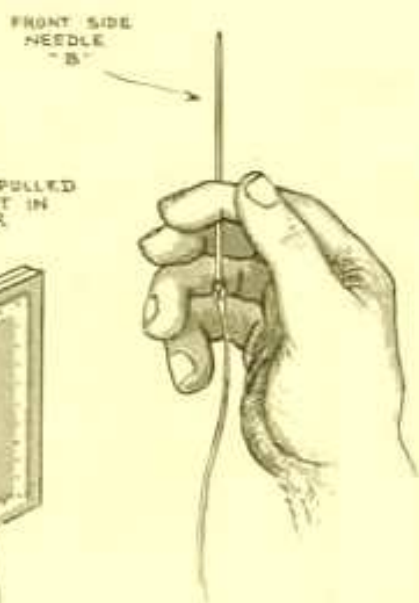
**I**

Stab only one hole at a time . . . Do Not pre-stab extra holes . . . they will close up; have to be re-opened, causing extra work and time. Push one needle through hole and pull knot (in thread) to the center of the leathers. The threads are now equal on both ends. You are ready to sew.

## HOW TO HOLD THE NEEDLES AND THE AWL



1 Pick up the needles and hold in the fingers as shown above. Let the full length of the thread, on each side, drop down.

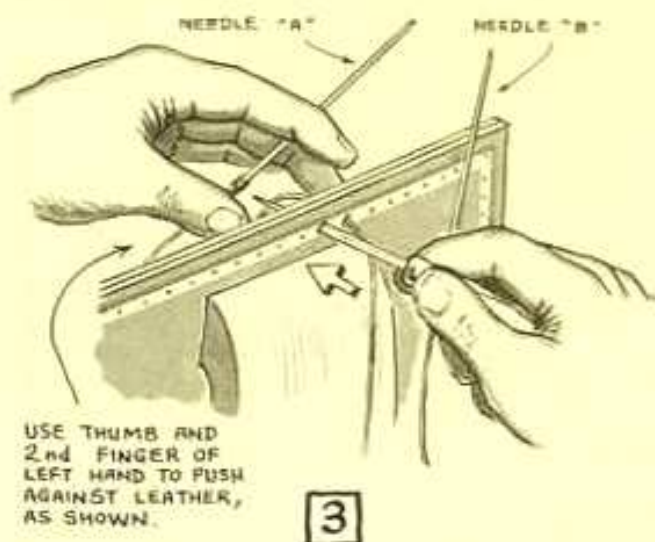


2

Now . . . place awl in right hand as shown. Hold with thumb. Close little finger on awl handle. Keep needle between fingers, as illustrated.

**DO NOT . . . WHILE SEWING . . . LAY DOWN THE NEEDLES . . . OR THE AWL!** At first, it will be uncomfortable; feel awkward. The temptation is to lay down the awl after stabbing a hole. *Keep it in your hand!* Stick with the following instructions and it won't be too long before you will be hand-sewing properly, easily and comfortably.

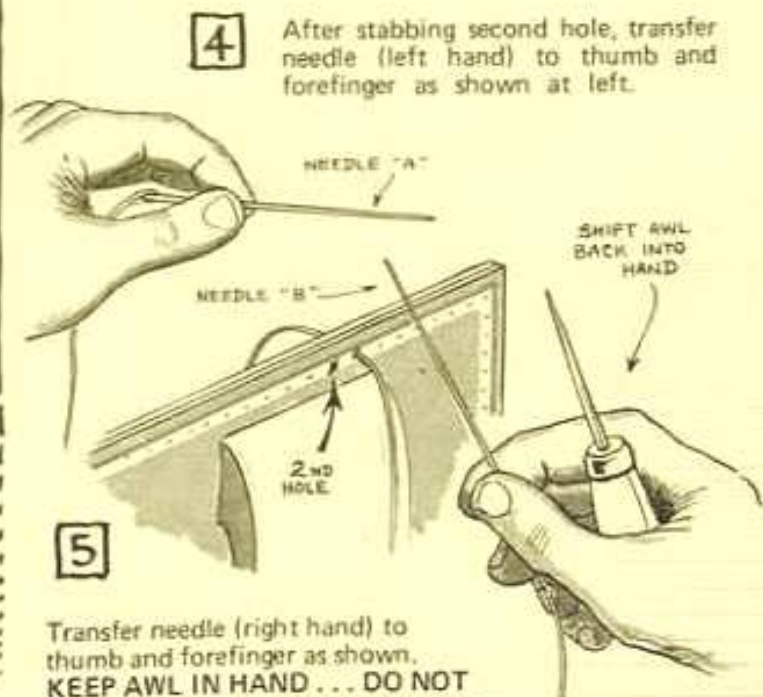
### KEEP NEEDLES BETWEEN FINGERS



USE THUMB AND 2nd FINGER OF LEFT HAND TO PUSH AGAINST LEATHER, AS SHOWN.

3

Turn hand and stab second hole with awl as shown above. Be sure to stab proper angle with the awl blade. Use left hand to assist. *Do not lay the needles down!*



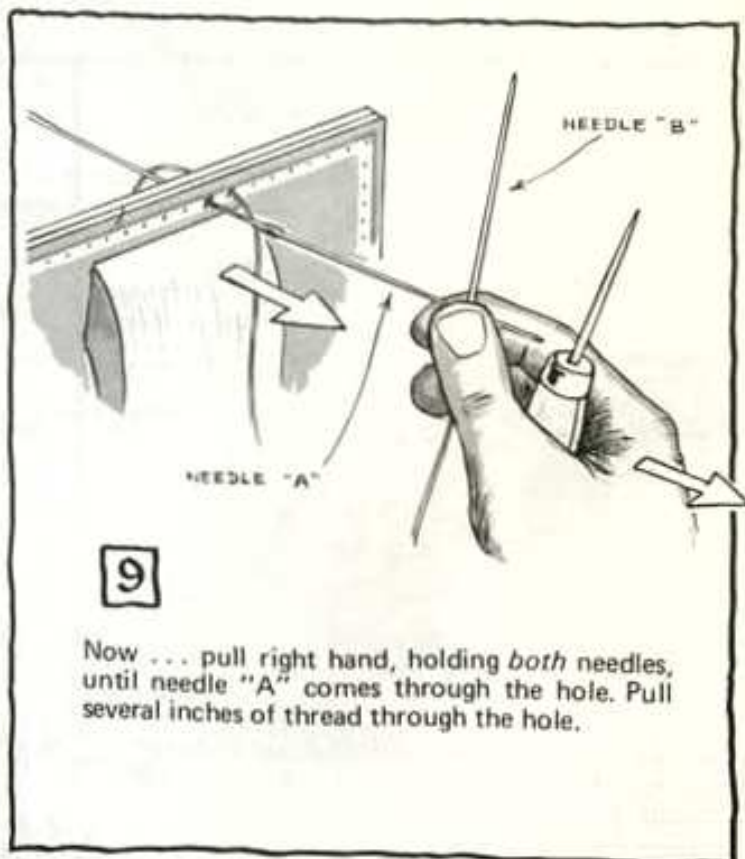
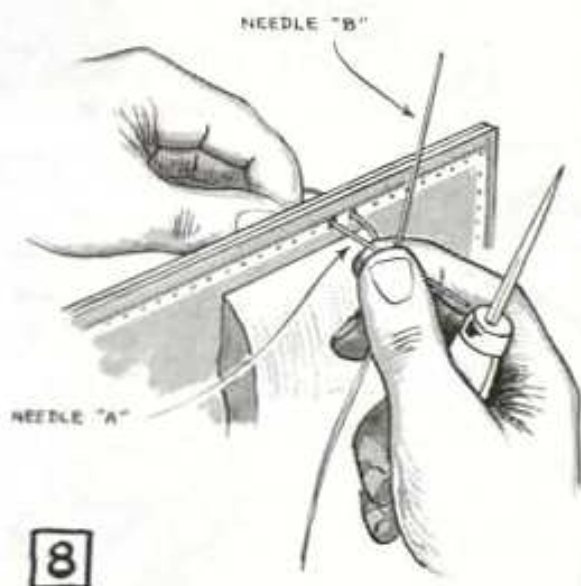
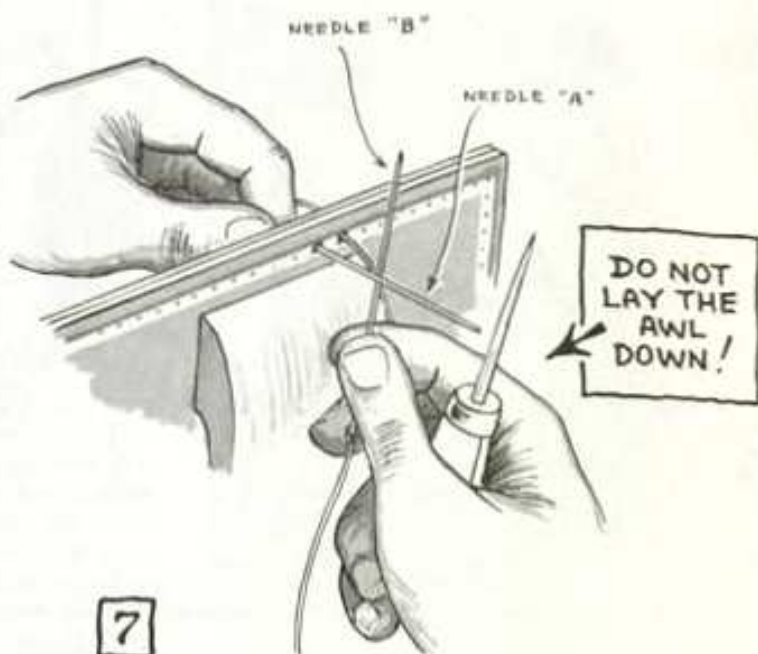
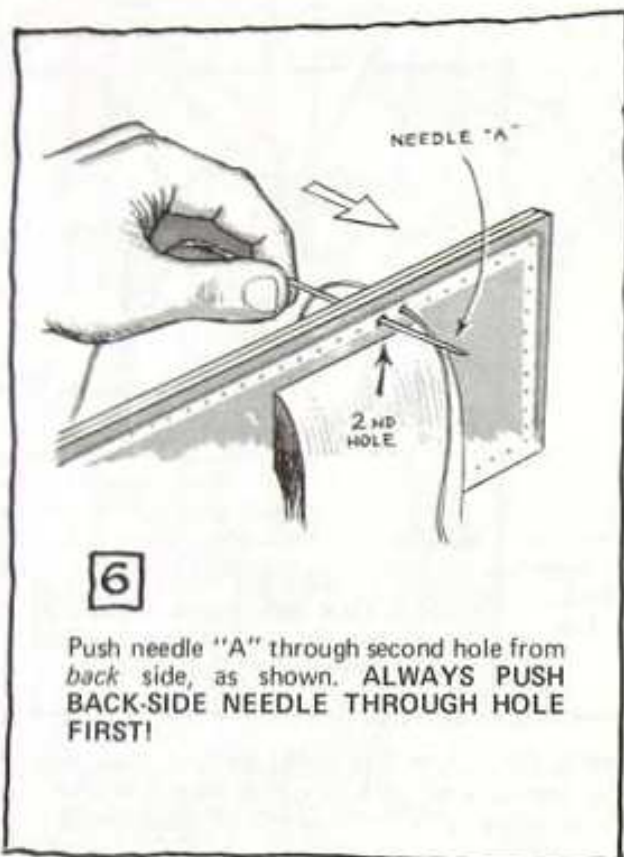
4

After stabbing second hole, transfer needle (left hand) to thumb and forefinger as shown at left.

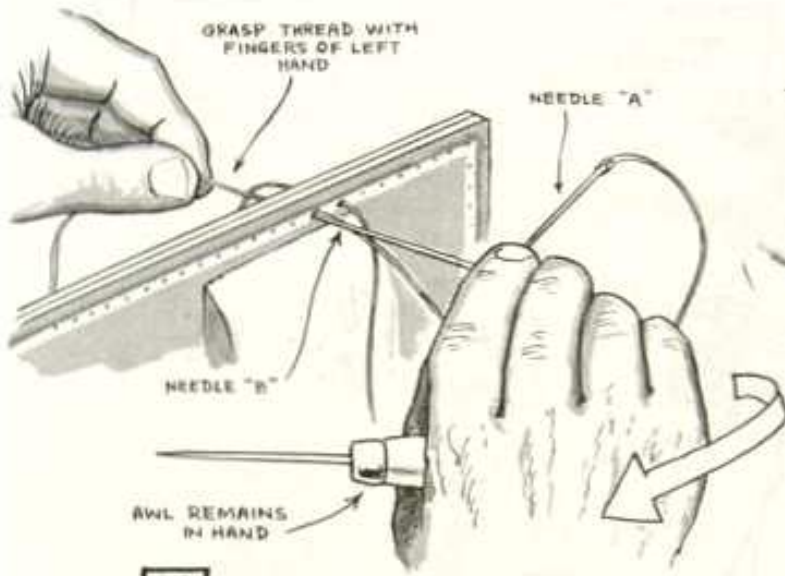
5

Transfer needle (right hand) to thumb and forefinger as shown. **KEEP AWL IN HAND . . . DO NOT LAY IT DOWN!** Each hand must manipulate needle and/or awl by itself without the aid of the other hand.

## SEWING THE LEATHER

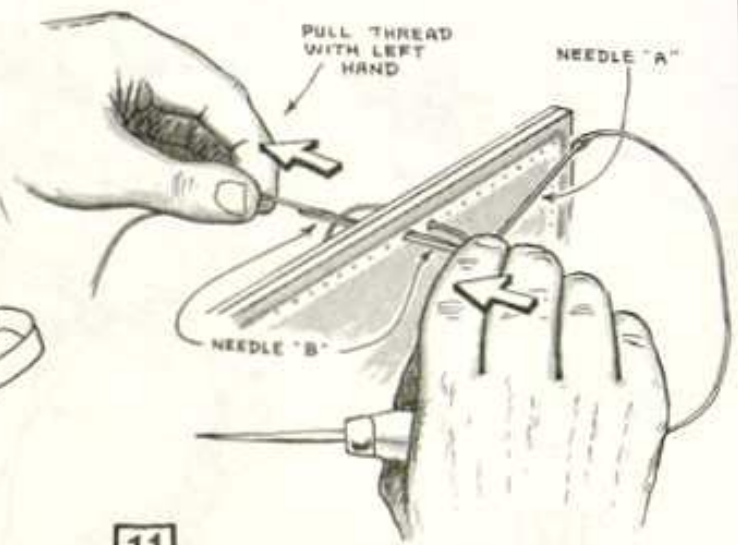


## CONTINUE WITH THE SEWING



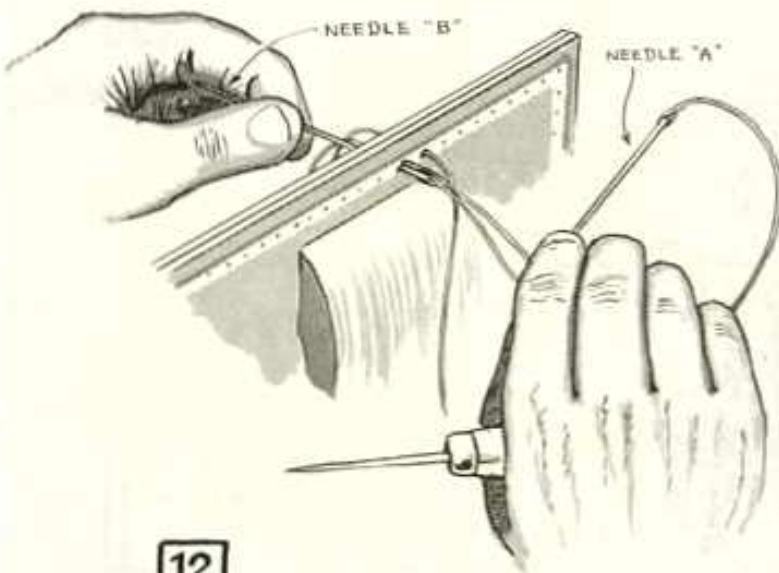
**10**

Turn right hand over and insert needle "B" in hole, next to thread of needle "A" ... that is coming through. Grasp the thread on back side with left hand. **ALWAYS PUSH RIGHT HAND NEEDLE THROUGH HOLE ON SAME SIDE OF THREAD!**



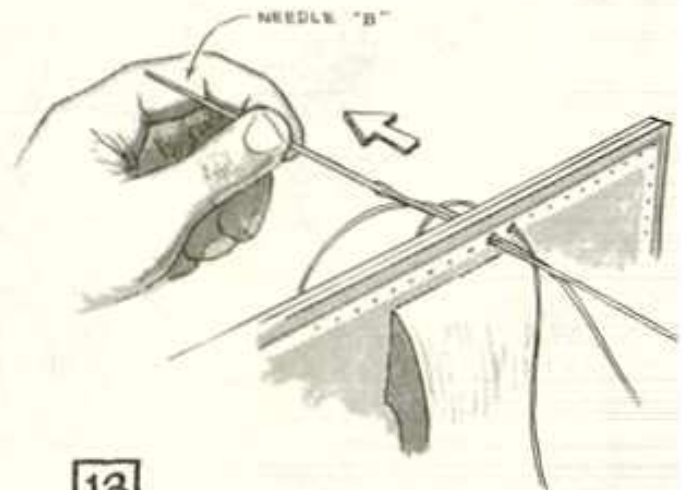
**11**

As you push needle "B" through hole ... *simultaneously pull thread with left hand!* This insures that the point of the needle will not penetrate the strands of the thread. If needle goes through any thread strands, it will have to be removed ... or a proper stitch cannot be completed. (See page 20 for pierced threads.)



**12**

After right hand pushes needle almost through ... drop thread with left hand ... and grasp needle "B" as shown. Right hand continues to hold needle "A" in fingers.

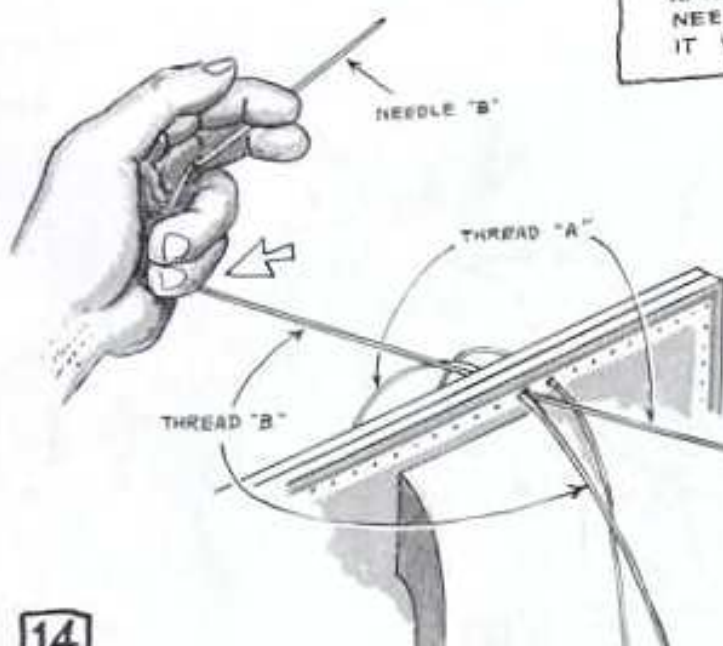


**13**

Now continue pulling needle "B" through, and pull several inches of thread through the hole.

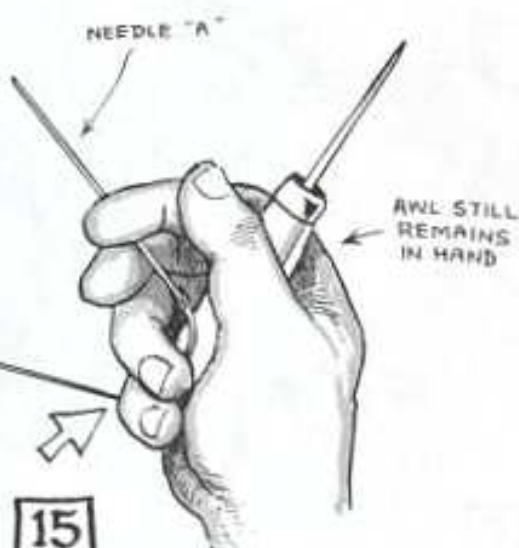
## CONTINUE WITH THE SEWING

AFTER A LITTLE PRACTICE MANIPULATING NEEDLES AND AWL, WITH EACH HAND... IT WILL BECOME EASY TO DO.



14

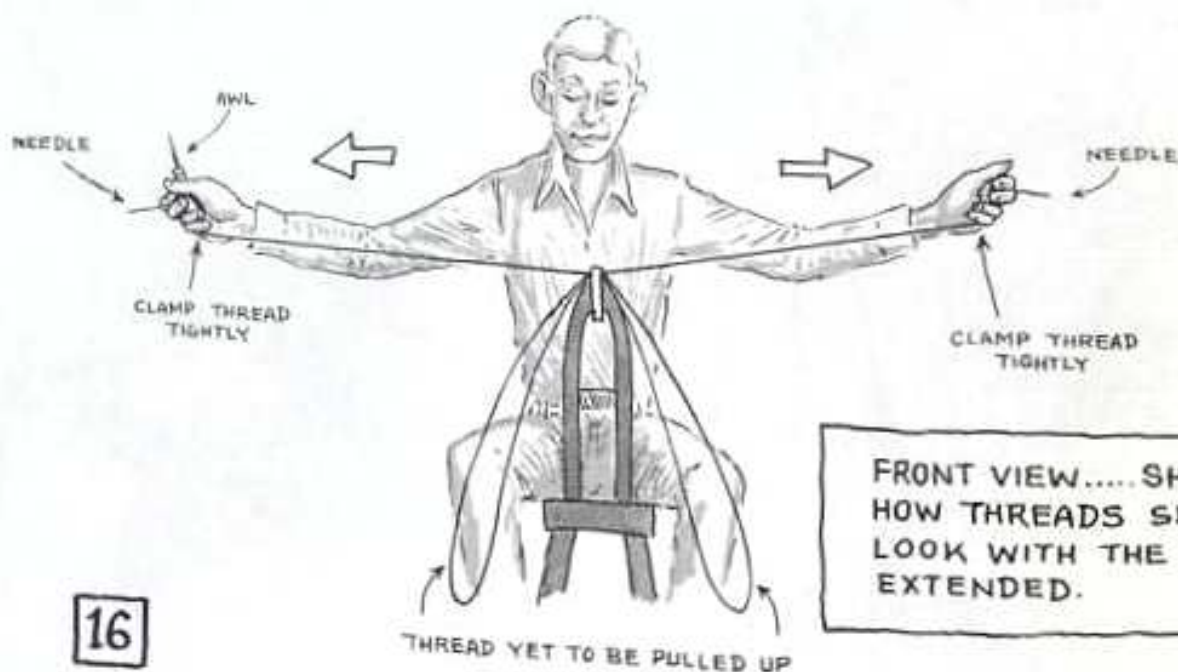
Transfer needle back between fingers. Wrap 3rd and 4th fingers around thread (large arrow) ... pull slack out of thread as shown above.



15

Simultaneously, transfer right hand needle back between fingers. Wrap little finger around thread (large arrow) ... pull up slack, as shown.

.....YOU ARE NOW READY TO PULL THE FIRST STITCH UP!



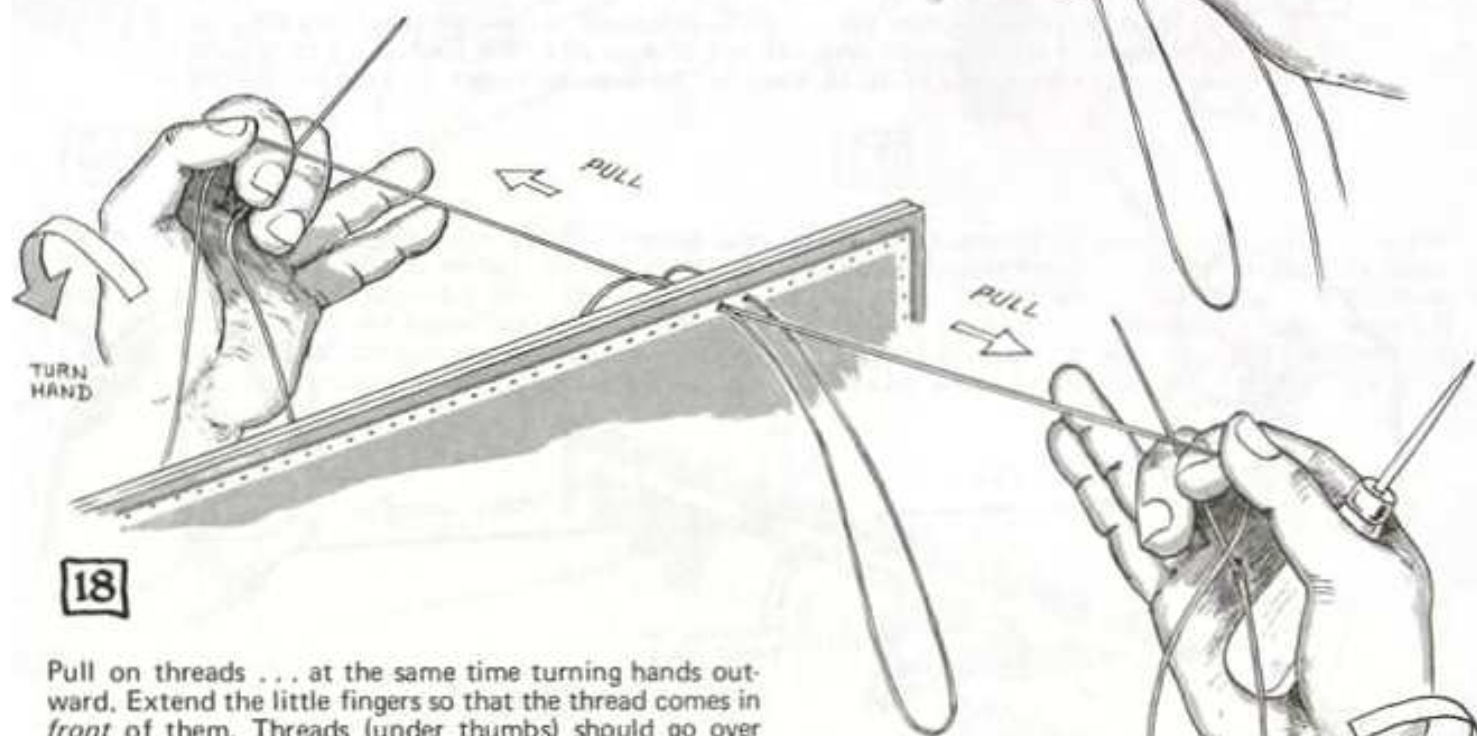
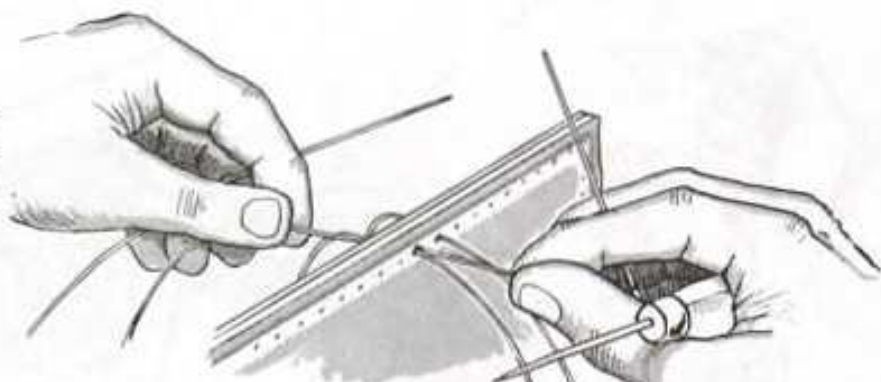
16

Now ... pull arms out to full length ... to take up the slack in the thread. This will take up about half of the total thread length. Pull arms generally straight out from the project, as shown. This makes for easier sewing and has less wear and friction on the thread being pulled

## CONTINUE WITH THE SEWING

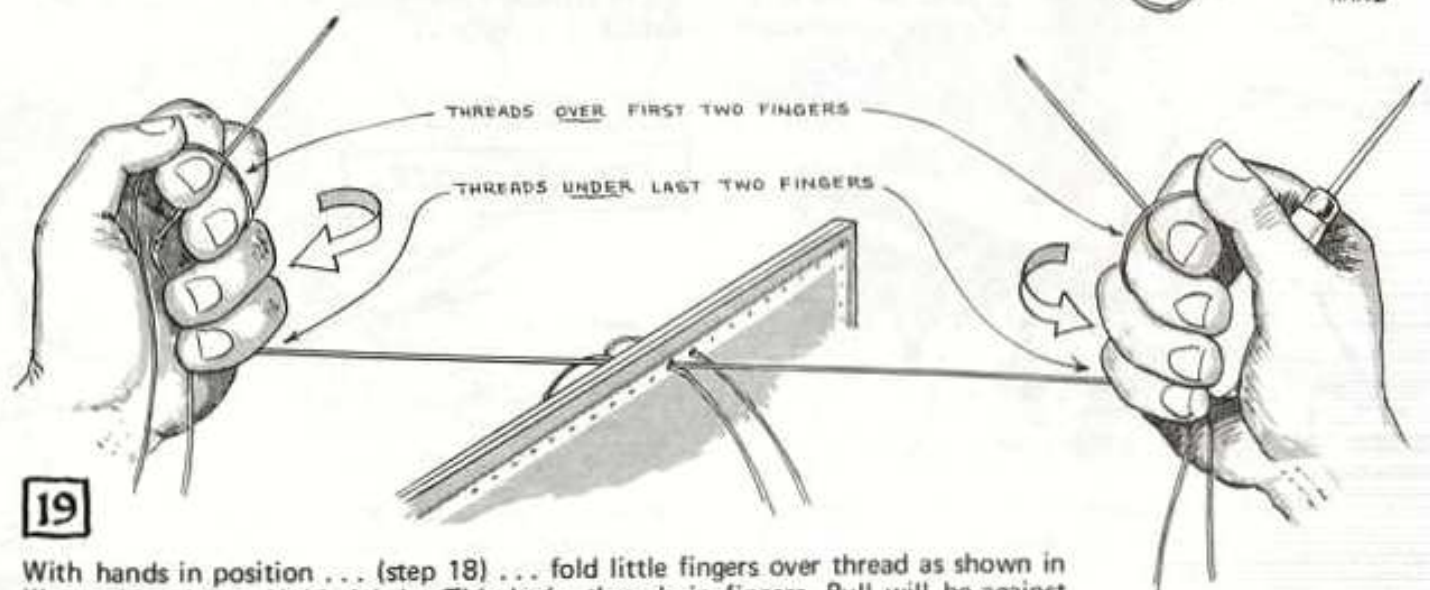
17

After pulling threads (as in step 16) move hands back to project. Let threads drop out from under little fingers. Re-grip threads close to leather, as shown. Grasp the *same* threads you had been previously pulling.



18

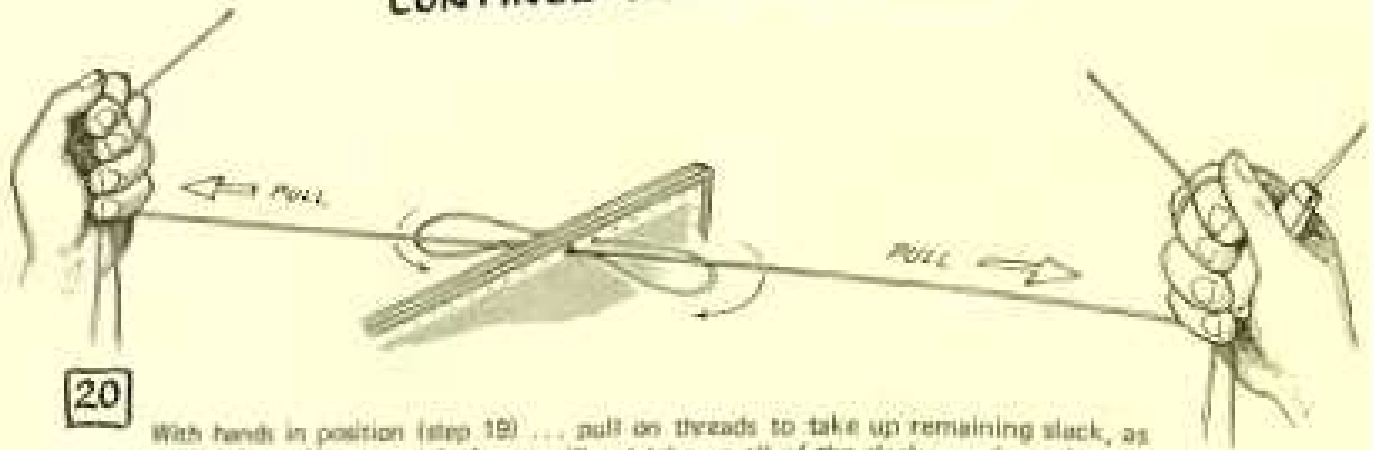
Pull on threads . . . at the same time turning hands outward. Extend the little fingers so that the thread comes in *front* of them. Threads (under thumbs) should go over top of index and second fingers.



19

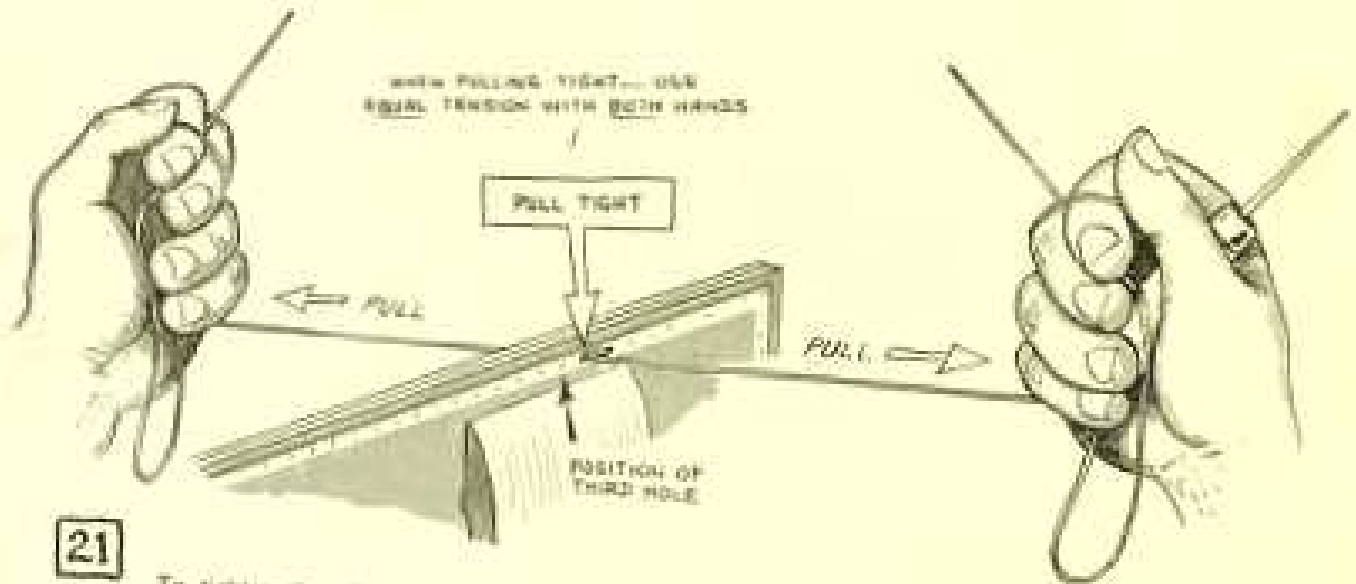
With hands in position . . . (step 18) . . . fold little fingers over thread as shown in illustration above. Hold tightly. This locks threads in fingers. Pull will be against bottom of little fingers and *not* on the eyes of the needles.

## CONTINUE WITH THE SEWING



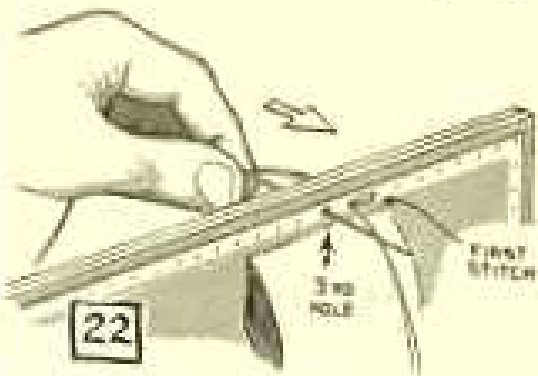
20

With hands in position (step 19) ... pull on threads to take up remaining slack, as shown above. If out stretched arms will not take up all of the slack ... drop threads again ... and repeat steps 17-18-19. Keep needles between fingers ... keep awl in right hand!



21

To tighten the stitch ... grip threads tightly ... and pull into gouged channel. You have completed the first stitch! Drop threads ... move awl back into position in right hand as shown in step 2. Stab the 3rd hole ... see illustration (step 3) for position of hands and needles. Continue sewing as instructed ... steps 2 ... through 21.



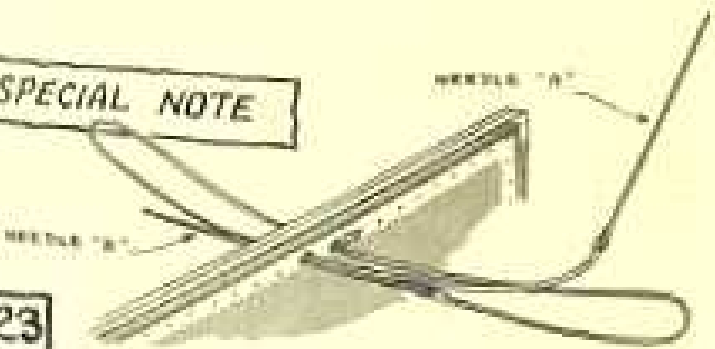
22

Always push needle from back side through the hole first! Try always to stab holes at proper angle ... come out in channel on back side.

### SPECIAL NOTE

23

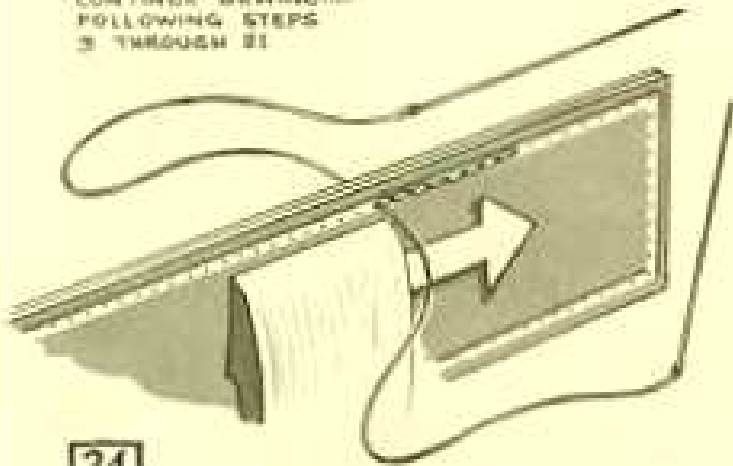
When putting needle "B" through hole ... always put it on same side of thread of needle "A". This will insure uniform appearing stitches.





## CONTINUE WITH THE SEWING

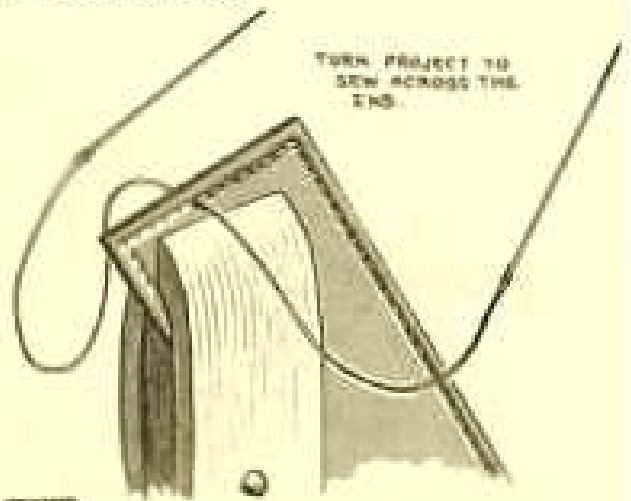
CONTINUE SEWING—  
FOLLOWING STEPS  
2 THROUGH 21



24

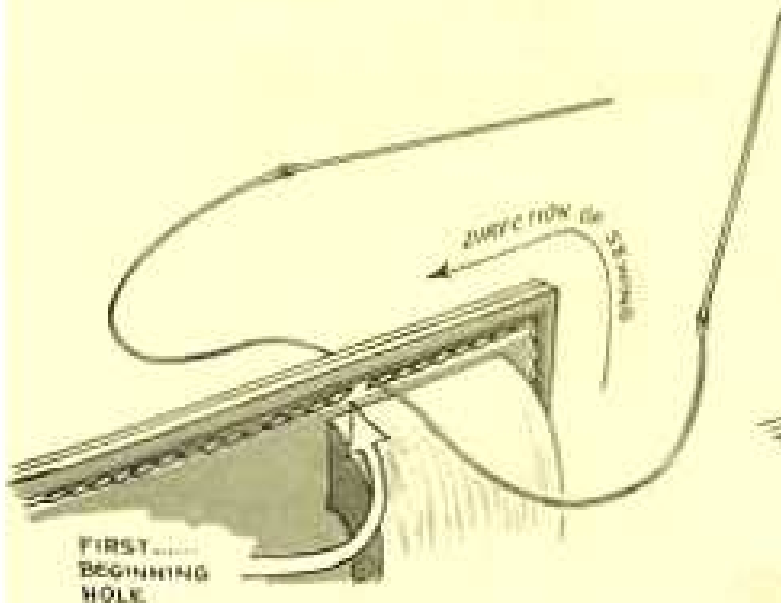
When you have sewn to opposite side of stitching jaw ... move project over (large arrow). Re-clamp so that you are always sewing above the jaws. This gives more support while stabbing the holes. Do not use the top of the jaws for a "guide" for stabbing holes. Stab one hole at a time. Position jaws as shown, near channel.

TURN PROJECT TO  
SEW ACROSS THE  
END.



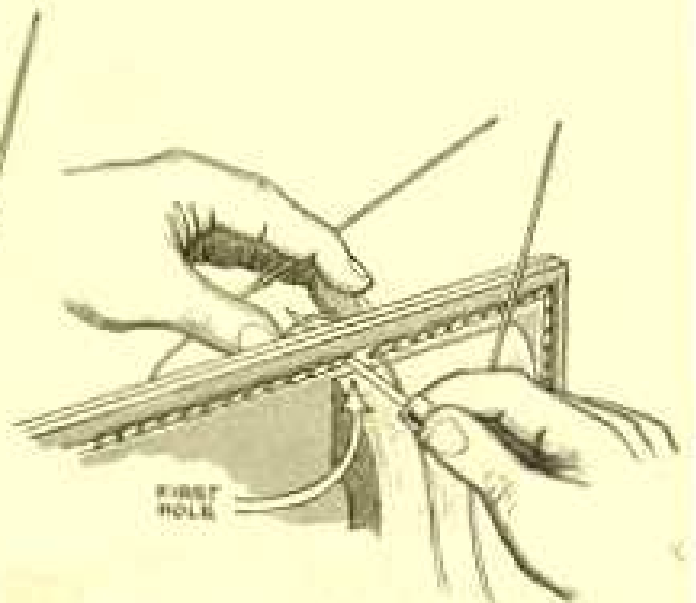
25

Continue sewing to corner. Turn project to sew across end. If length of project will not fit down into jaws far enough ... you will have to angle the project, as shown, to clamp jaws near channel. It may be necessary to reclamp project several times to keep jaws near channel, while sewing the end.



26

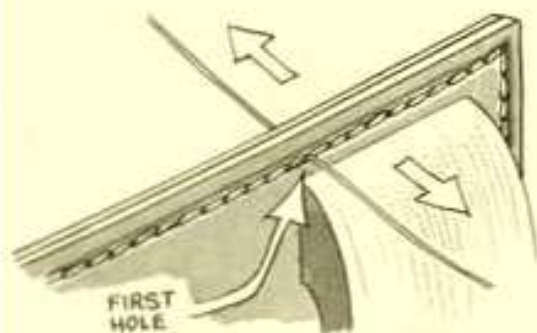
Continue sewing completely around the project ... until you are one stitch away from the beginning hole. Clamp project in stitching horse so you are always above the jaws.



27

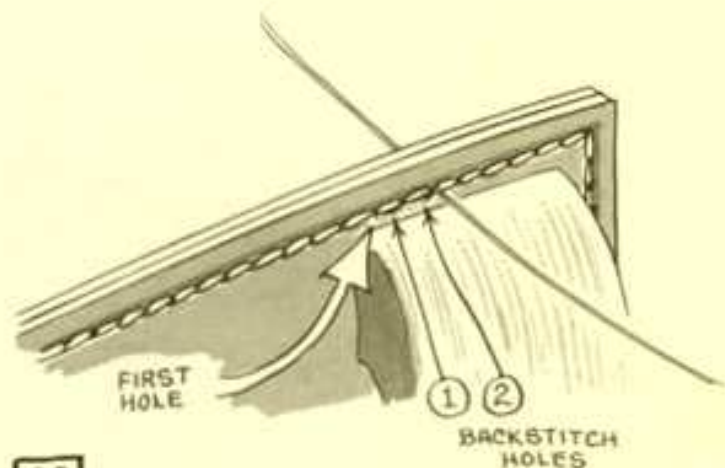
Carefully work awl into first hole so as not to cut the thread. After you have had some practice, you will be able to "feel" with the awl without cutting thread.

## CONTINUE WITH THE SEWING



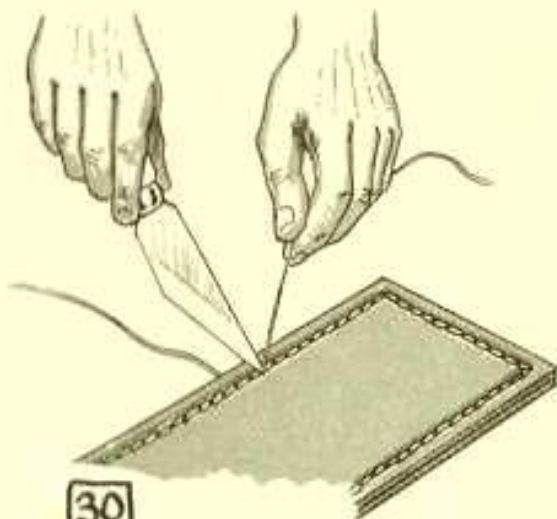
28

Insert needles, as previously instructed, and pull the stitch tight.

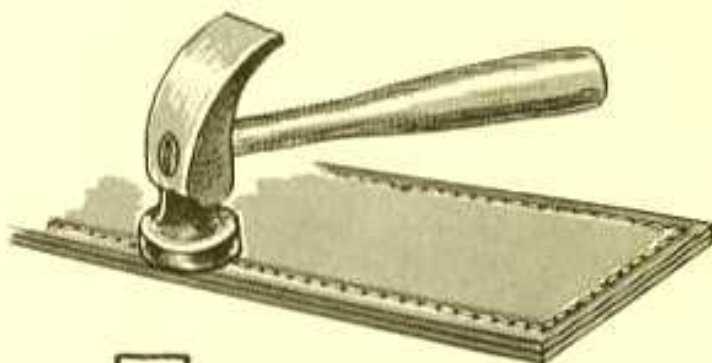


29

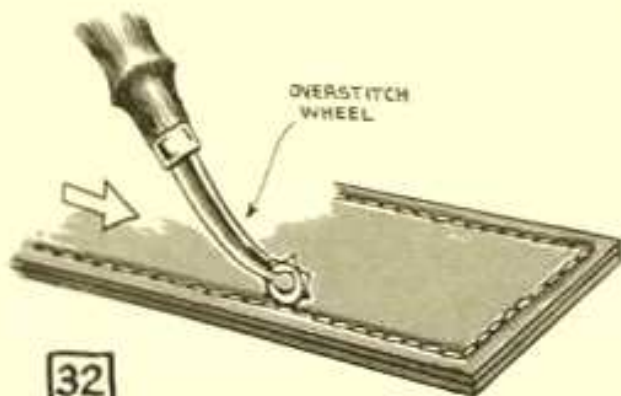
To complete the stitching ... *backstitch* two holes (small arrows). Enlarge the backstitch holes with the awl, to insert needles. Pull the threads tight with each stitch.



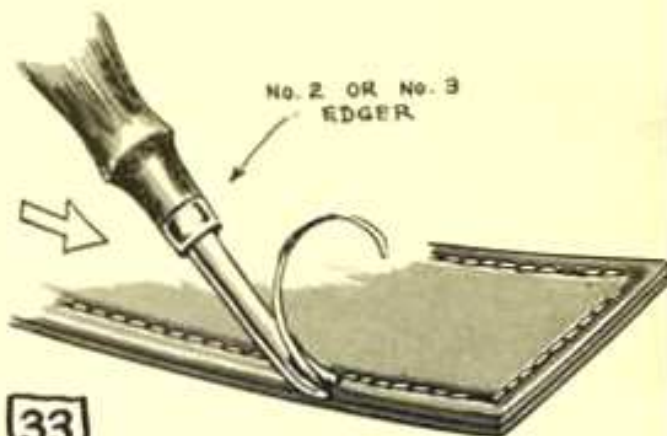
Take project out of stitching horse. Cut threads off, in stitching channel, on both sides. Use a sharp knife. Sewing is completed.



Lay on bench and "tap" over all stitching with a smooth-faced hammer.

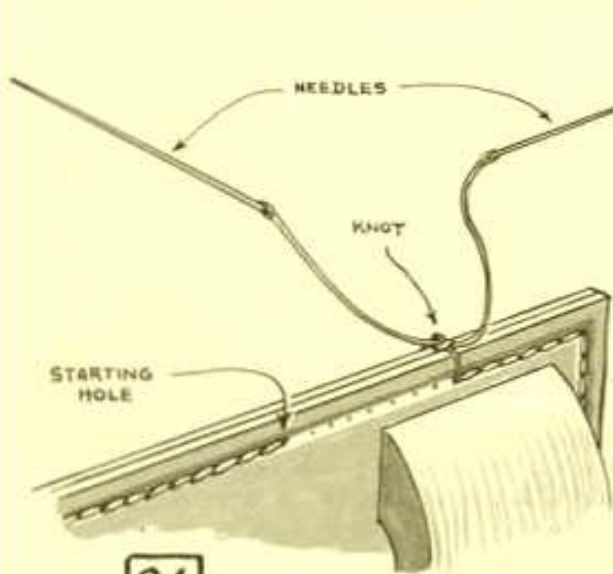


Run the overstitch wheel over all of the stitches. This adds the final touch of professionalism, it actually helps the appearance of any slightly irregular stitches.



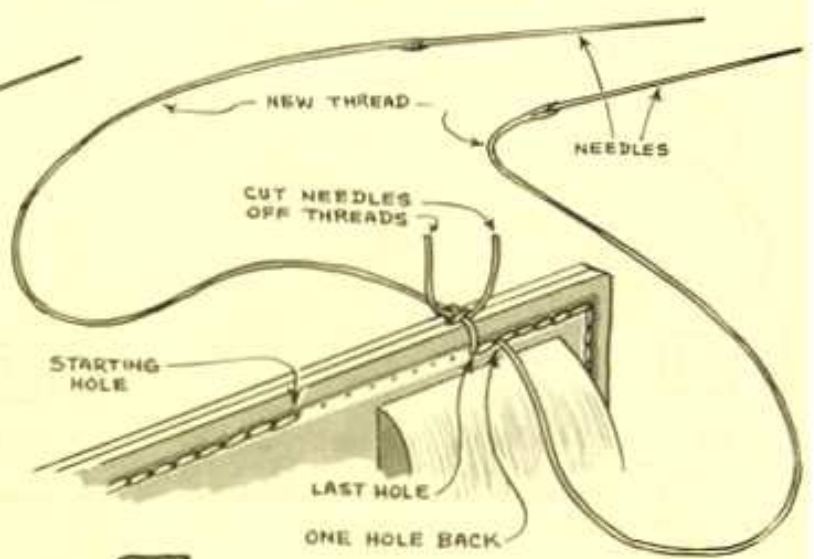
The final step ... on the sewn project ... round the edges on both sides as shown above. Moisten edges and burnish with a cloth, or an edge slicker.

## CONTINUE SEWING ... RUNNING OUT OF THREAD



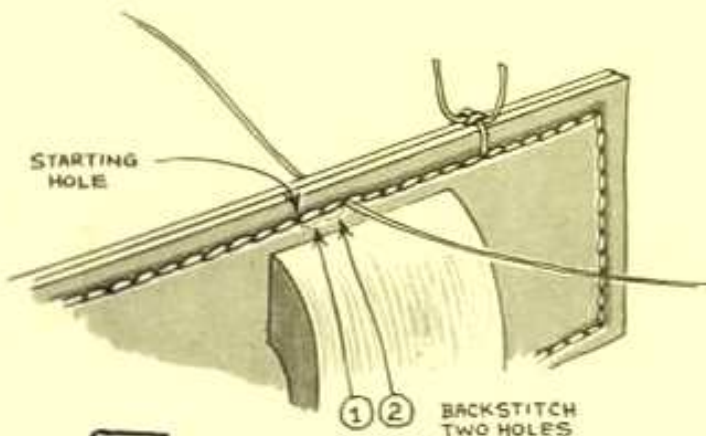
34

If you are sewing and use up a full length of thread (with only a few inches left) and have not reached the starting hole ... pull last stitch tight and tie threads together on top of the edge, as shown above. Any kind of a double knot will do.



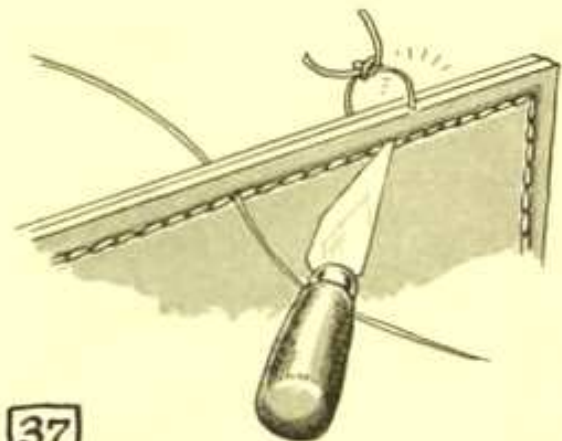
35

Cut needles off threads. Prepare a new thread (page 5) insert awl ... one hole back from last stitch ... and push needle through. Pull thread to center (as in step 1 on page 9). When starting a new thread, it is permissible to push first needle through from front side. Beginning one hole back ... "locks" the last hole-threads in place.



36

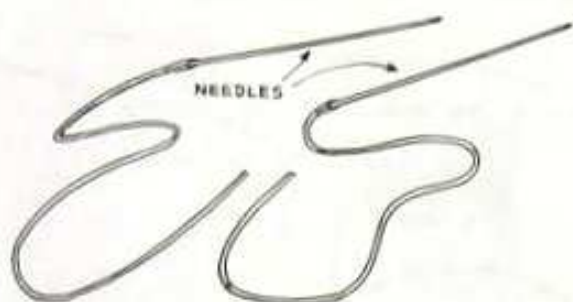
Continue sewing to starting hole, as previously described. Keep sewing area above jaws. Back-stitch two holes ... as in step 29.



37

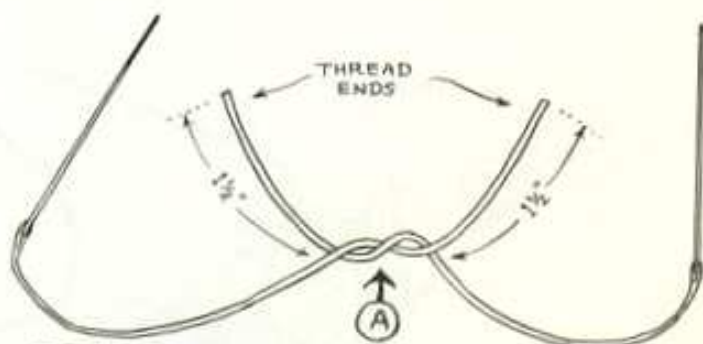
Cut off the threads as described in step 30. Do not cut into the stitched threads. With sewing completed, follow through steps 31-32-33.

## TYING THE THREAD ENDS TOGETHER



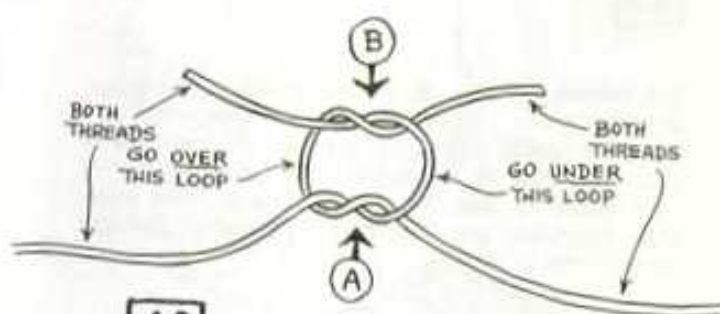
38

Now . . . from step 30 . . . you have a length of thread on each needle. To use this thread for additional sewing, the ends will have to be tied together.



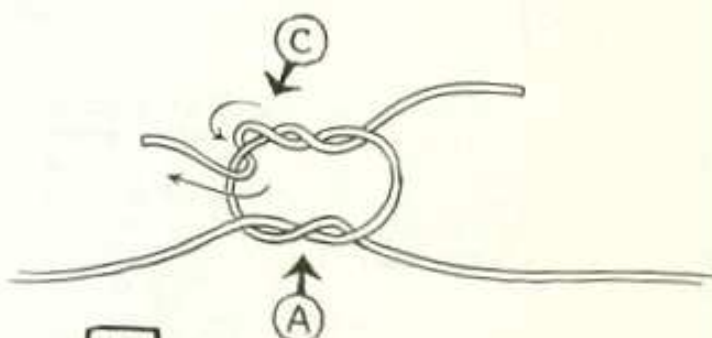
39

Since the thread is waxed . . . the weaver's knot will not hold. Begin by tying a simple overhand knot as shown above (A). Leave about 1/2" of ends.



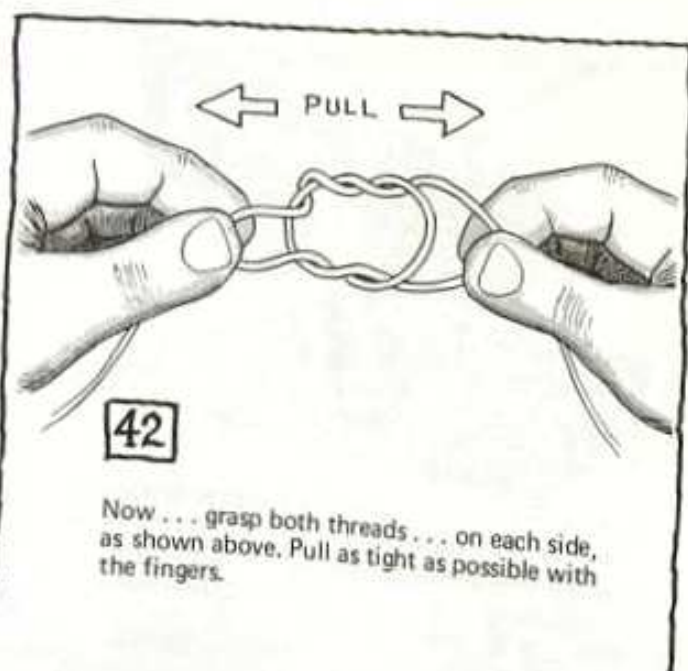
40

Next . . . form a loose "square" knot with the ends (B) as shown above.



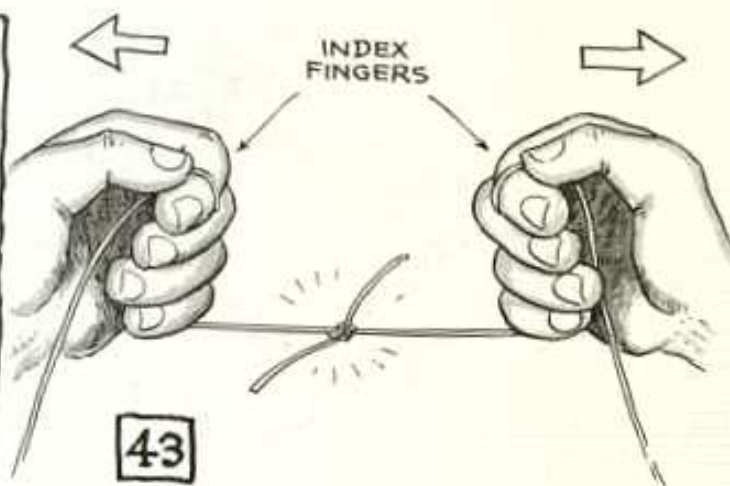
41

Take one extra twist (C) around the thread . . . as shown above.



42

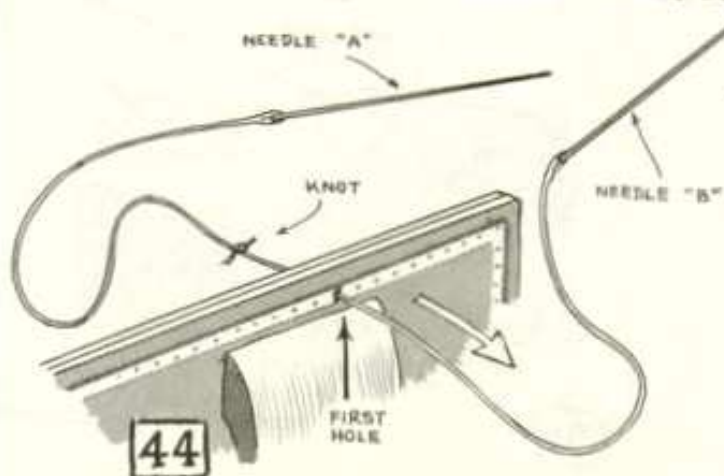
Now . . . grasp both threads . . . on each side, as shown above. Pull as tight as possible with the fingers.



43

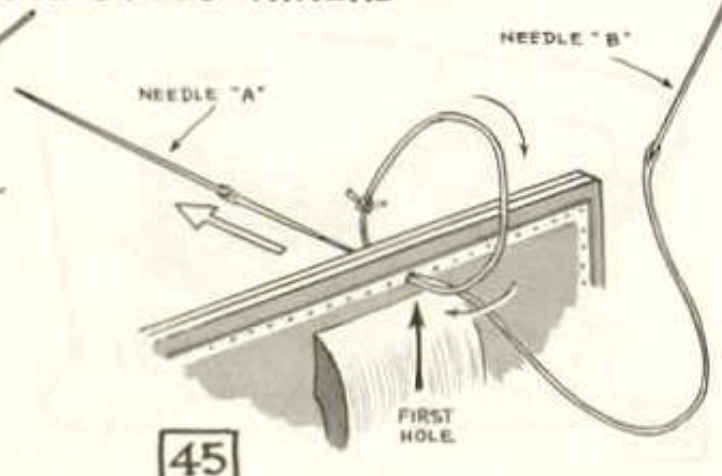
Loop threads around index fingers, as shown, and pull knot down as tight as possible. Cut thread ends off close to knot.

## BEGINNING WITH A KNOTTED THREAD



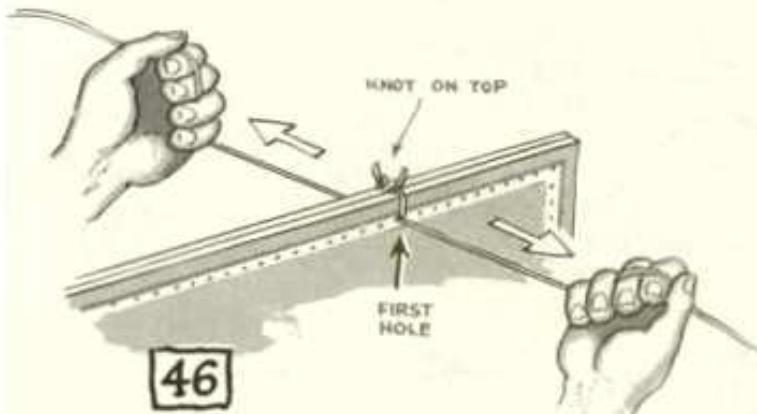
44

To start a new project with a knotted thread . . . stab hole and pull thread through from *backside*, pulling knot up close to leather as shown above.



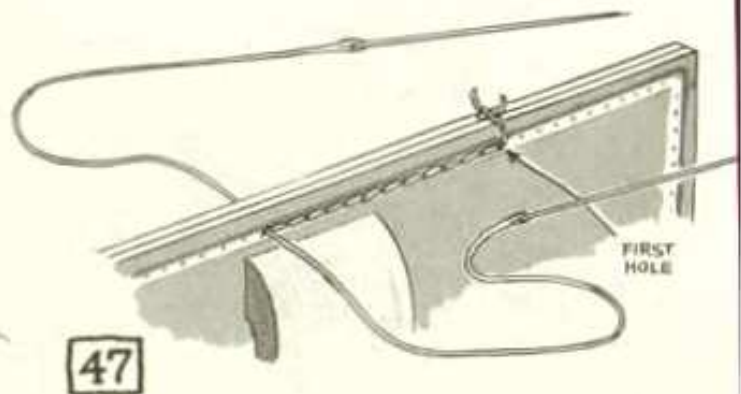
45

Take needle "A" over top edge of project . . . and back through the *same* hole. Be careful not to pierce the thread.



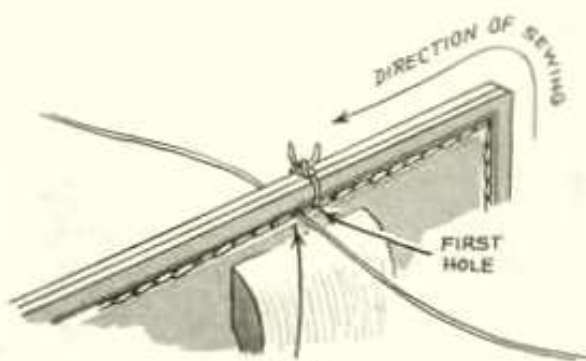
46

Adjust threads so that knot comes on top edge. Pull threads tight.



47

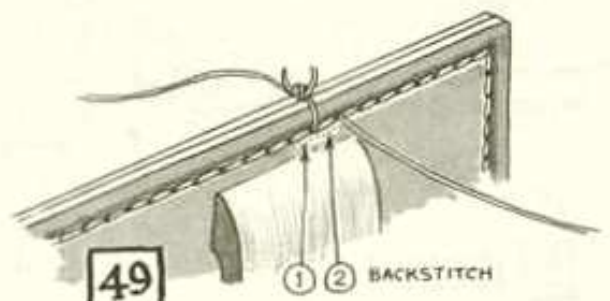
Continue sewing. Move project so you are always sewing above jaws. If you run out of thread before completing project, tie threads as in step 34. Make a new thread and continue sewing as in step 35.



48

ONE STITCH BEYOND FIRST HOLE

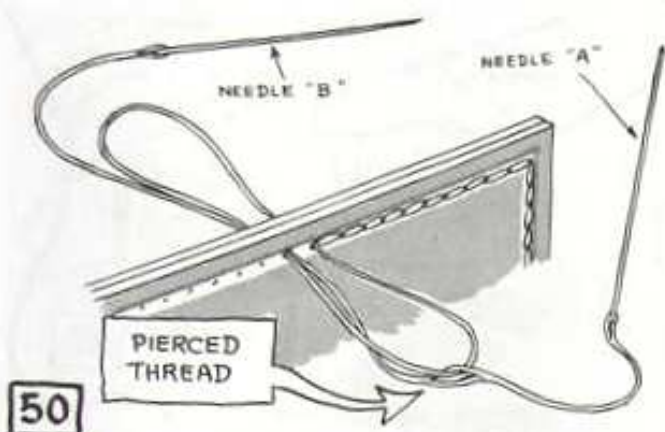
Sew around project . . . through first hole . . . then take one extra stitch beyond first hole, as shown. Pull tight. This locks ends of knotted thread.



49

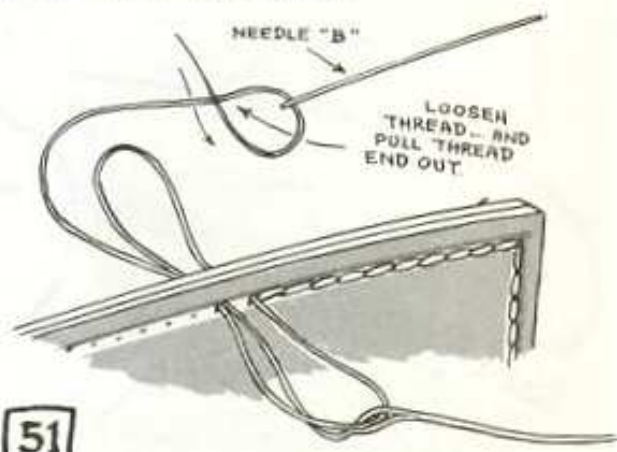
Now backstitch two holes . . . same as step 29. Cut off the threads as previously described.

## TROUBLE SHOOTING — PIERCING THE THREAD



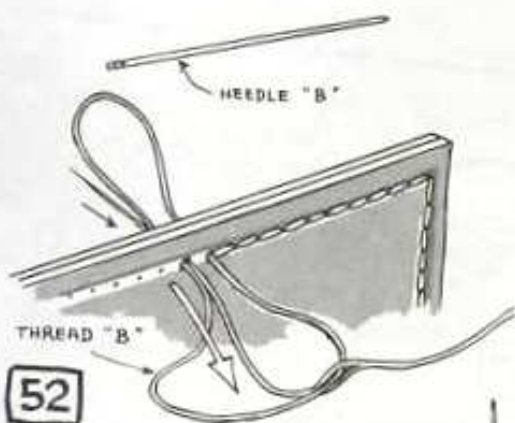
50

The most professional sewers will sometimes pierce a thread. When taking up the stitch, it will resemble the sketch above. Needle "B" has pierced thread of needle "A" . . . you cannot continue sewing.



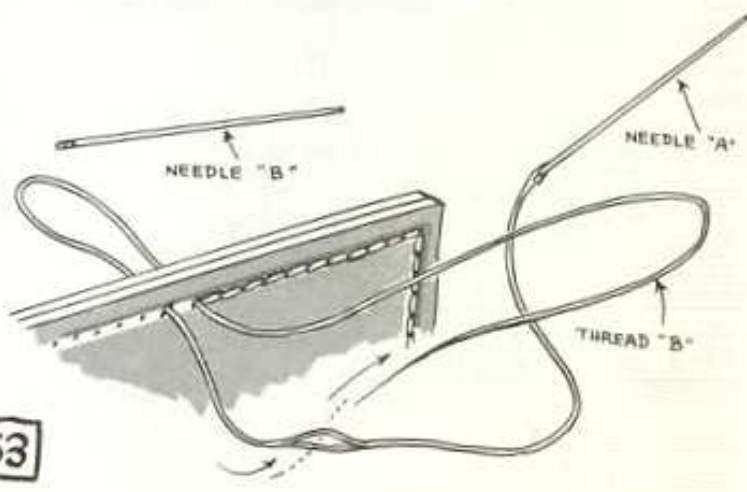
51

To correct the situation, separate tapered end of thread on needle "B" . . . and pull end out of thread. Remove the needle.



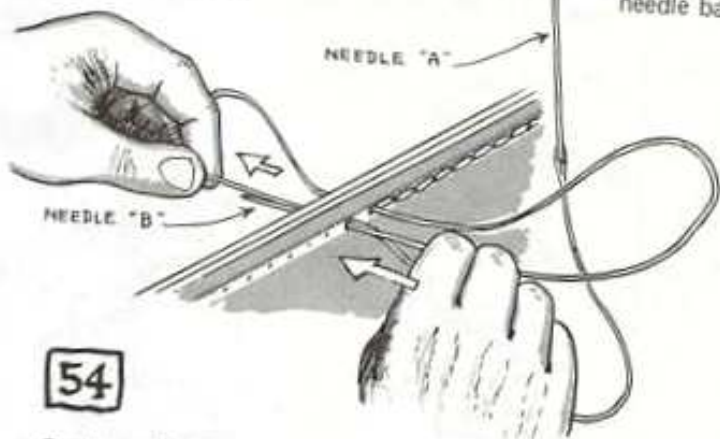
52

Pull thread . . . from needle "B" . . . back out of hole.



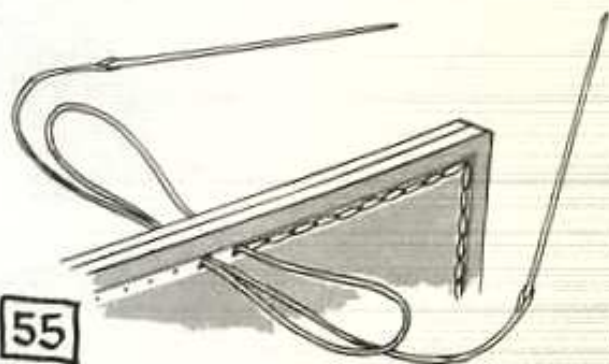
53

Pull thread "B" out of pierced thread, as shown. Re-wax pierced thread . . . and end of thread from needle "B". Put needle back on thread, as shown on page 6.



54

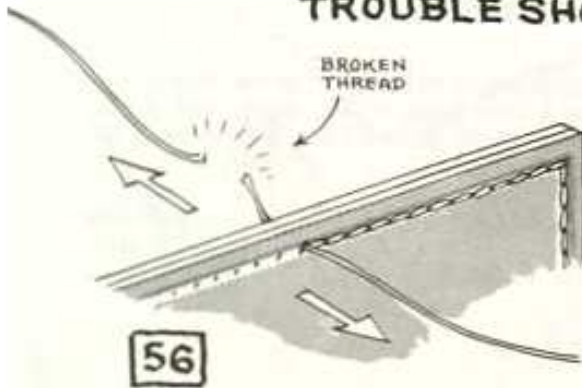
Push needle "B" back through hole. Simultaneously pull on thread with left hand, as shown. Use same procedure as steps 11-12-13.



55

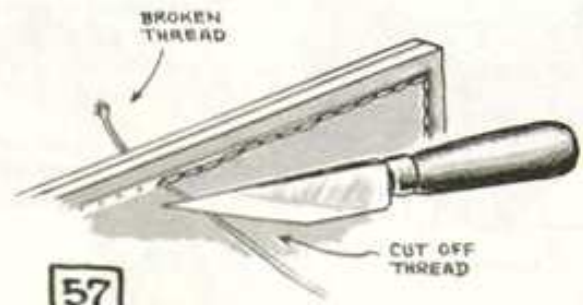
Project should now be back to normal, appearing as above. Continue sewing as in step 14.

## TROUBLE SHOOTING — BROKEN THREAD



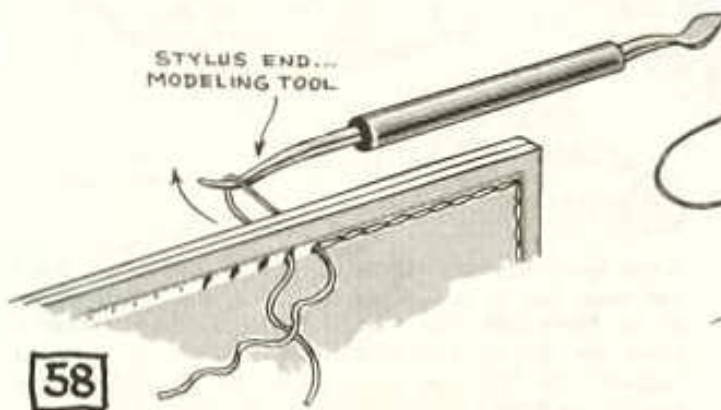
56

Once in a while . . . for various reasons . . . the thread will break when pulling a stitch tight. *Don't panic!*

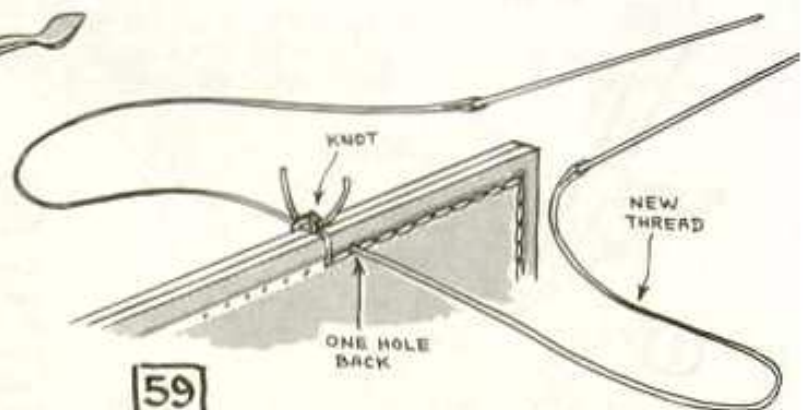


57

Cut off the unbroken thread about the same distance from the leather, as the broken thread.

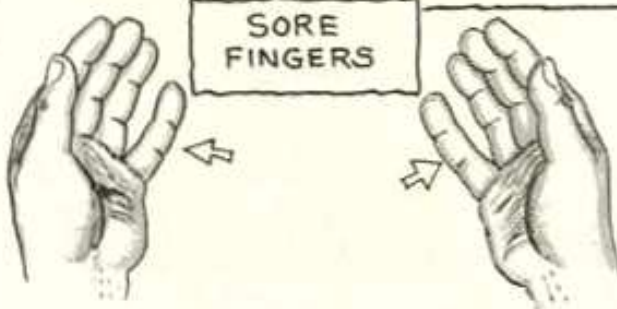


With the stylus end of your modeling tool, pull the loose ends of the threads out of the holes . . . until you have about 3" of loose ends on each side.



Tie the ends on top edge, as shown. Make a new thread. Pull to center, one hole back from knotted ends. Continue sewing as in step 35.

### SPECIAL NOTES



SORE FINGERS

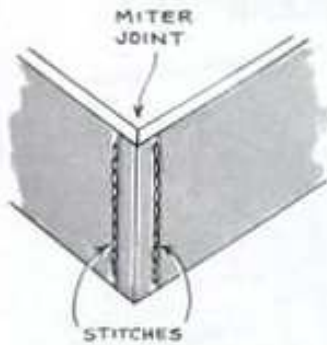
If you have followed the instructions . . . by now the outside of your little fingers will be sore from pulling on the threads. Continued sewing will build up callouses. However, you can use tape, band-aids, or make a leather finger stall, if desired, to aid this problem.

BROKEN THREAD



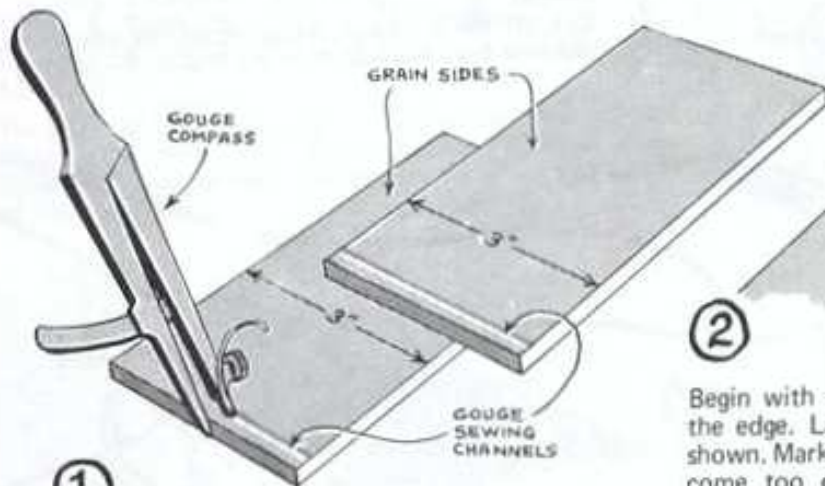
On occasion . . . the thread will break at the needle eye. It is difficult to taper the end of a waxed thread. Pull the fibers apart with fingers and scrape as much beeswax off as possible. Follow steps 1-2-3-4 on pages 5 and 6. Re-wax; put back on needle.

## SEWING A MITER JOINT

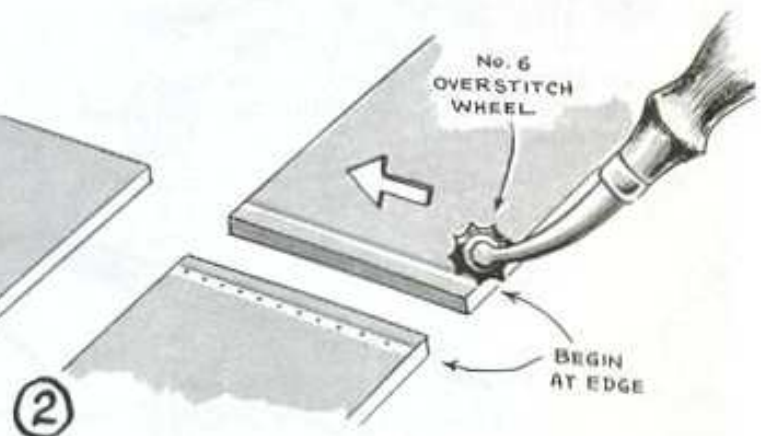


This method of sewing is used to secure two pieces of leather together where they join at a 90° angle. It is used on leather boxes, cases, or any specialized project where two such leathers join. The leathers, to be joined, must be beveled at 45° angles.

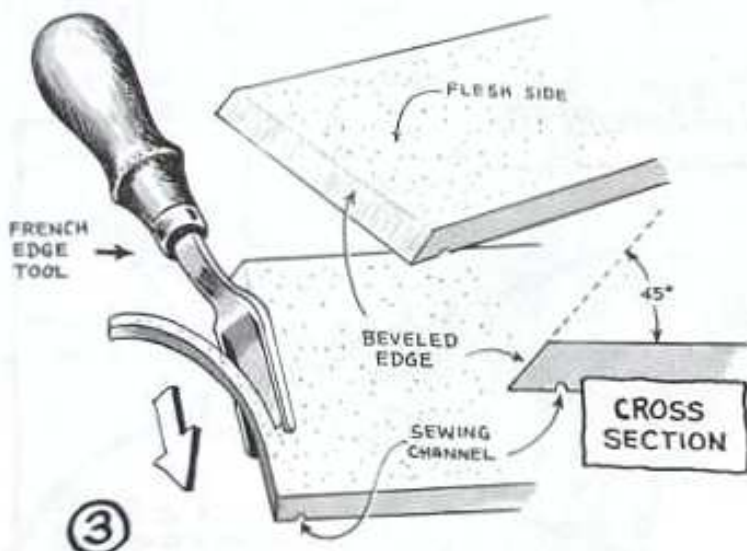
For instructional purposes . . . we will make a single miter joint using two pieces of 8/9 oz. leather. We'll cut them about 3" wide and 4" long . . . or any length, for that matter; whatever scraps you have available.



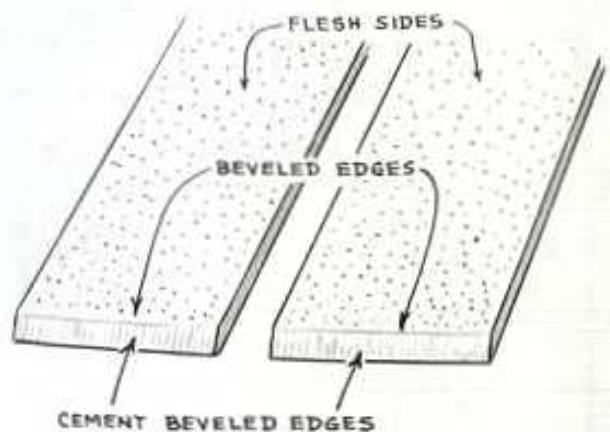
1 Cut the leather pieces. Gouge a sewing channel along the edge of each piece . . . that is to be joined. Page 7, step "C", shows correct distance from edge for channel.



2 Begin with overstitch wheel, as shown, one space from the edge. Lay ends . . . to be joined . . . together, as shown. Mark both ends exactly the same. If wheel marks come too close to opposite edge, you may have to "adjust" the last two or three marks to equalize the spacing. Last mark should not be right-on-the edge.



3 Turn leathers flesh side up and bevel the ends at a 45° angle with the French edge tool. Bevel the ends with the sewing channels, as shown. Place leathers on a smooth, firm surface . . . try to hold edger at a 45° angle.



4 Apply all-purpose cement (strong bonding) to both beveled edges. Allow to "set" some minutes to insure adhesion.

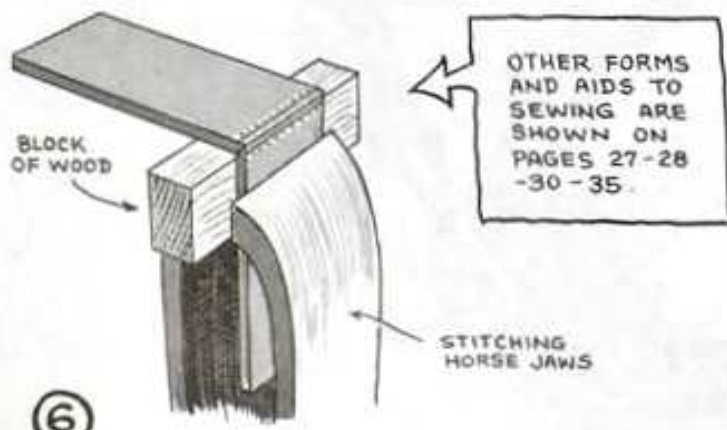


## SEWING A MITER JOINT - Continued



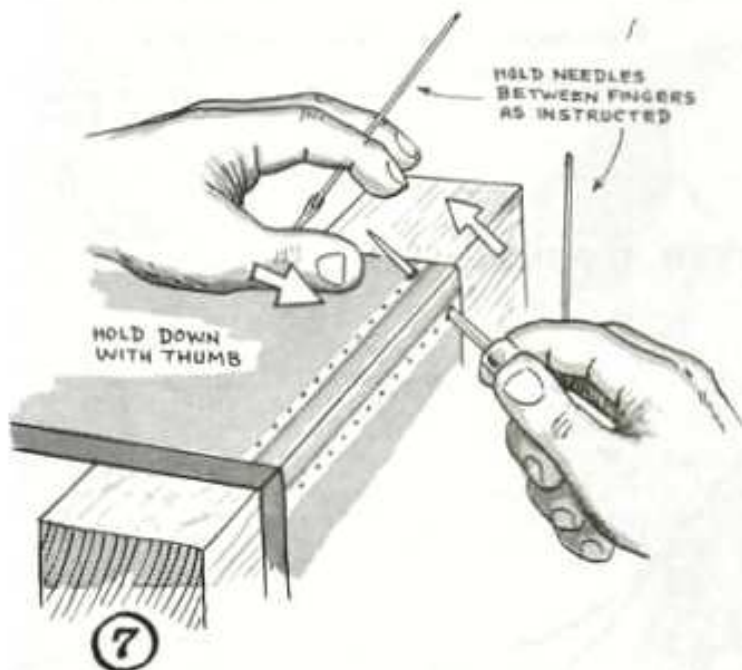
5

Stand pieces on edge, on bench, and adhere the beveled edges. Press them firmly together.



6

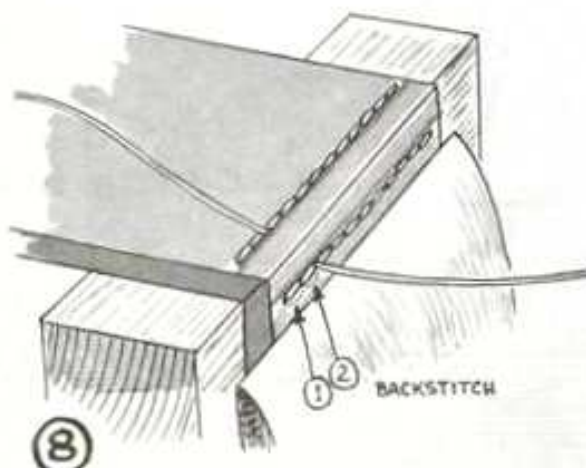
Fit a block of wood inside the miter joint . . . and clamp the project in the stitching horse, as above. The block of wood will insure a square corner, and aid in the sewing.



7

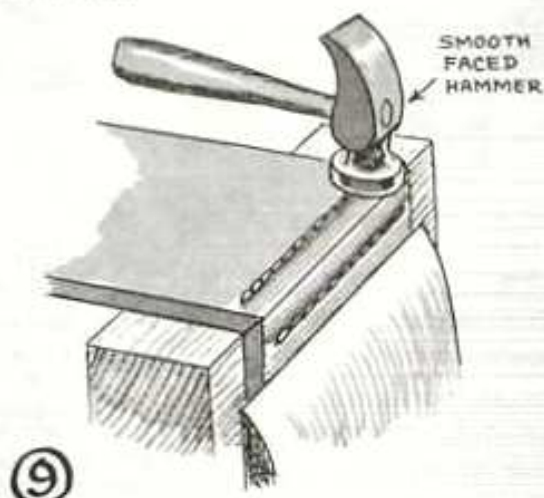
Stab first hole, upwards, at a 45° angle. The awl blade should come out in the opposite channel . . . at the wheel mark. You may have to back the awl off a few times until you get the correct angle. With a little practice you will get the "feel" . . . and will exit in the opposite wheel mark with regularity.

Push one needle through the hole and pull thread to center. Sewing procedures are the same as steps 1 through 28 (pages 9 through 16). Always push the needle through the hole from the left hand first. The only difference here . . . you are sewing at an angle . . . rather than straight across.



8

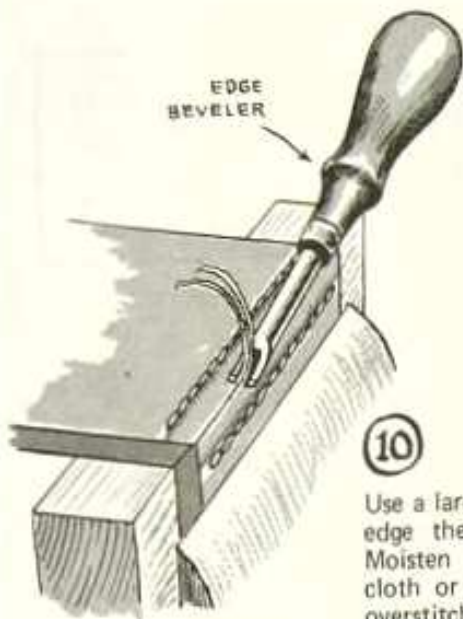
Sew to end . . . and backstitch two holes. Cut off threads.



9

While leather is still clamped in jaws, tap stitches with hammer.

## SEWING A MITER JOINT — Continued



10

Use a large edge beveler . . . edge the joint as shown. Moisten and burnish with cloth or bone folder. Run overstitch wheel back over stitches.

NO STITCHING SHOULD SHOW ON INSIDE

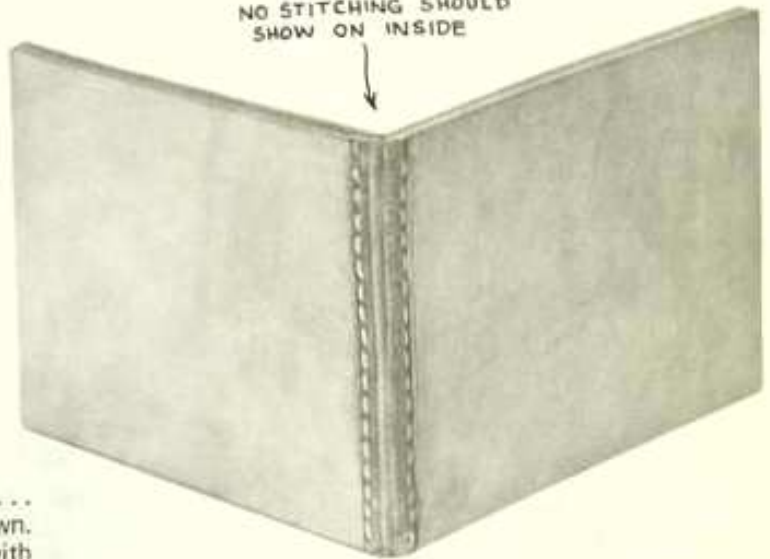
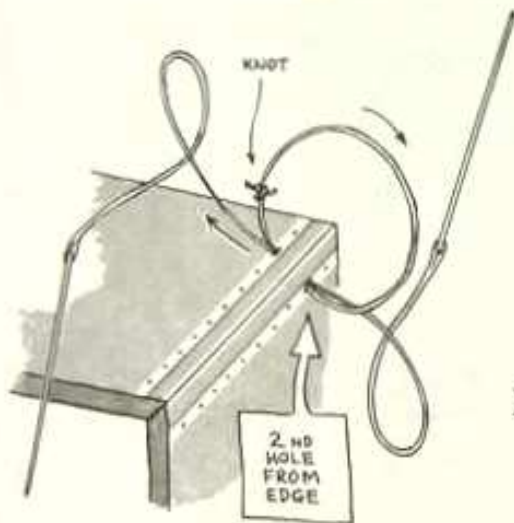


Photo above shows completed miter joint.

## STARTING WITH A KNOTTED THREAD



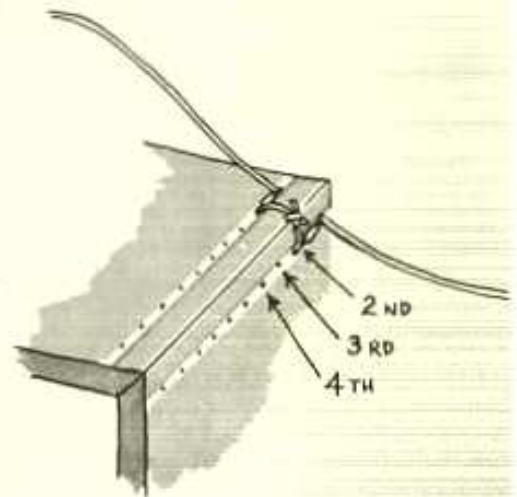
A

When beginning with a knotted thread . . . start in 2nd hole as shown above. See instructions on page 19, steps 44-45-46 for making this first stitch.



B

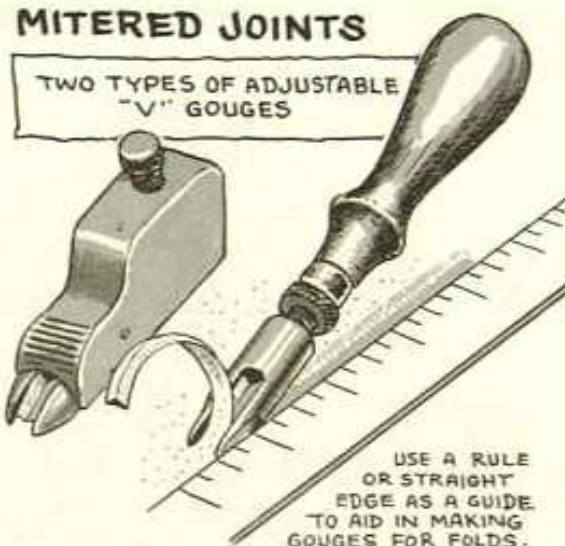
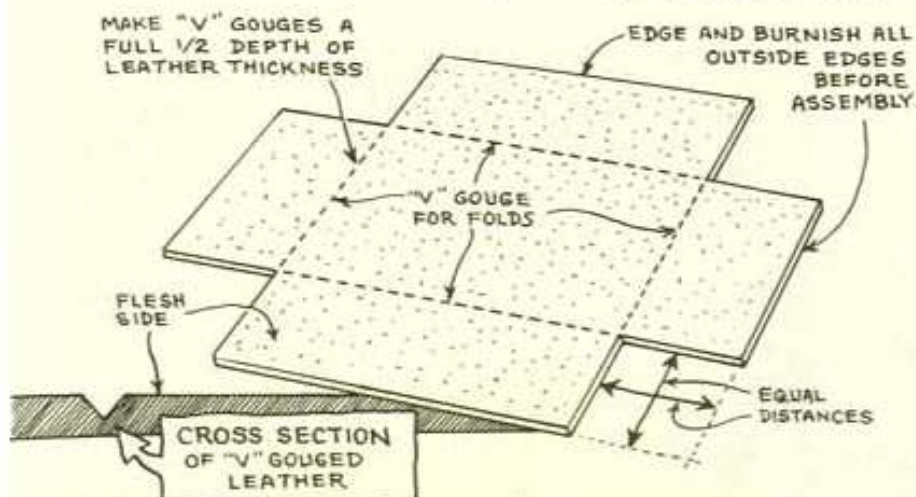
Pull knot down tight on top of miter joint. Stab first hole and push needles through in the regular manner.



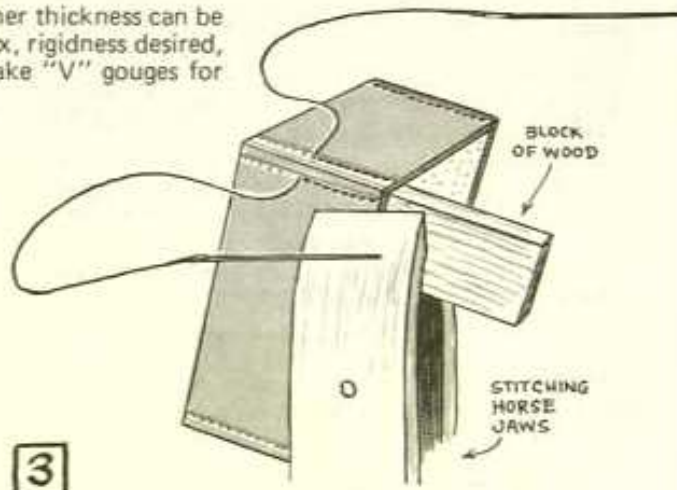
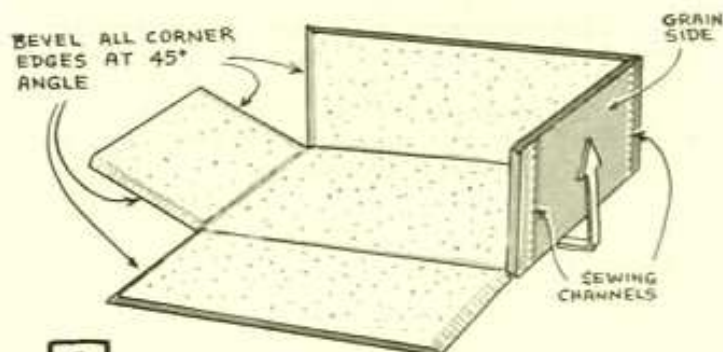
C

Pull stitch tight. Now go back through 2nd hole . . . pull stitch tight. This locks ends of knotted threads. Continue sewing . . . 3-4-etc . . . to end of project.

## MAKING LEATHER BOXES WITH MITERED JOINTS

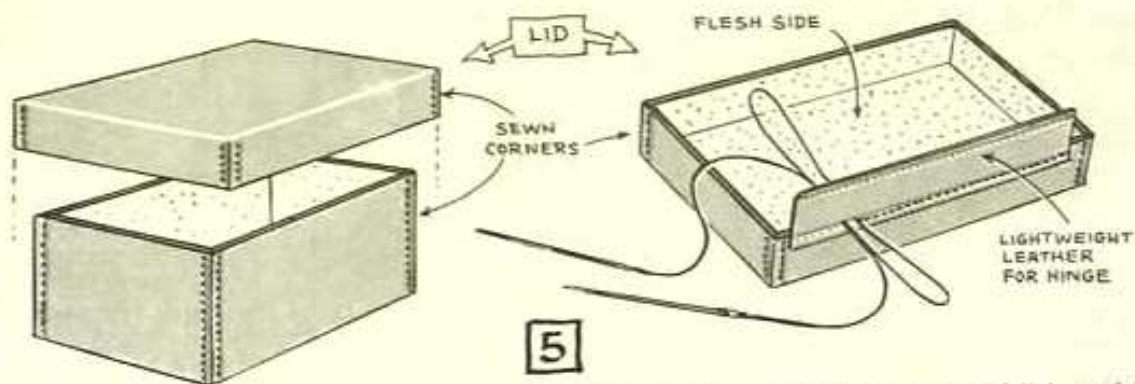


- 1** A simple leather box can be made as shown above. Leather thickness can be from 6 oz. to 12 oz. . . . depending on the size of the box, rigidity desired, etc. Use a carpenter's square to lay out dimensions. Make "V" gouges for folds. Study sketch above before beginning.



- 2** Gouge sewing channels on grain side. Mark with over-stitch wheel. Turn to flesh side, bevel corners (to be sewn) at 45° angle . . . see page 22. Moisten the folds, fold and tap with hammer to insure square folds. Apply glue to beveled edges.

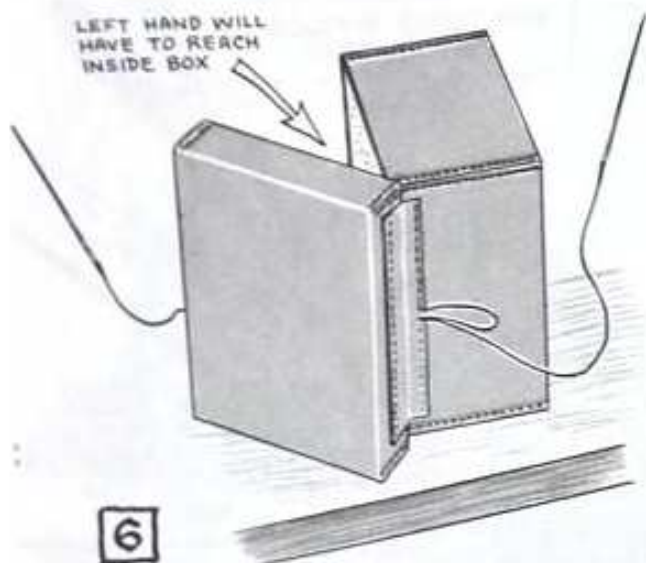
- 3** Adhere corners. Small boxes can be placed in stitching horse, using block of wood as shown above. Sew the mitered corners . . . then finish them as previously instructed (pages 23-24).



- 4** A lid can be made for the box in the same manner. Bear in mind . . . it will have to be made larger to fit over the outside edge of the box.

- 5** To hinge the lid . . . prepare a piece of light weight leather with a sewing channel on each edge. Burnish the edges. Glue one edge to lid . . . and sew, as shown above.

## MAKING LEATHER BOXES — Continued



6

After sewing hinge to lid . . . fit lid on box and glue other edge of hinge to box. To sew . . . set box on bench, or table, as shown above. Open lid far enough to get left hand easily inside. The left hand will have to feel the point of the awl blade . . . and follow the awl back out of the hole, with the left hand needle. See page 51 on how to hold the needle . . . to be able to follow the awl blade back out of the hole.

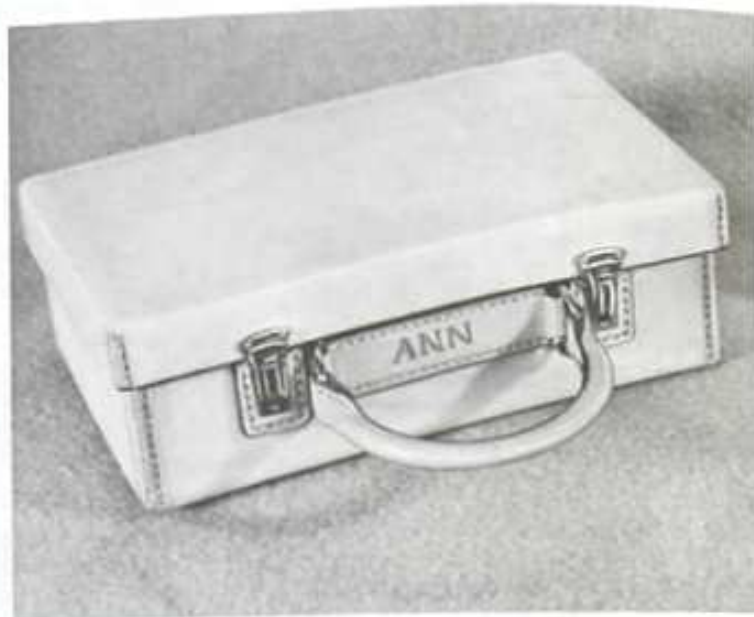
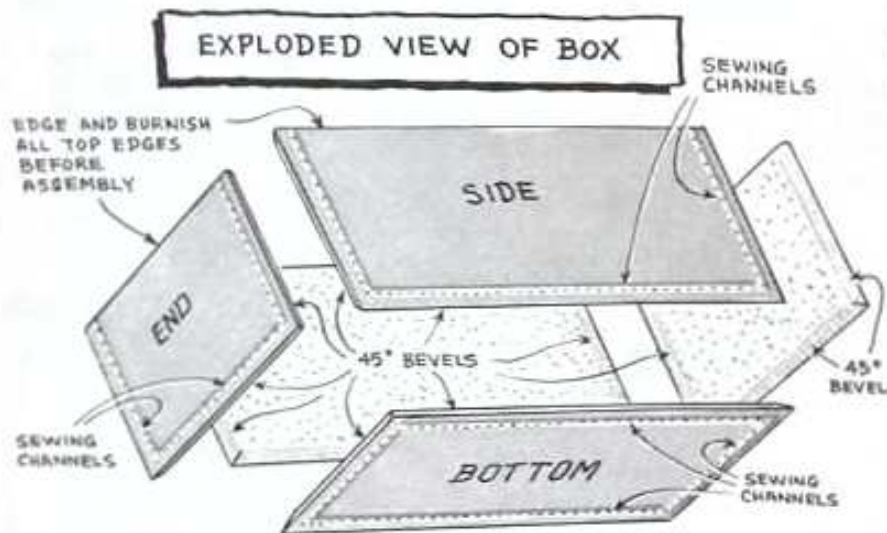
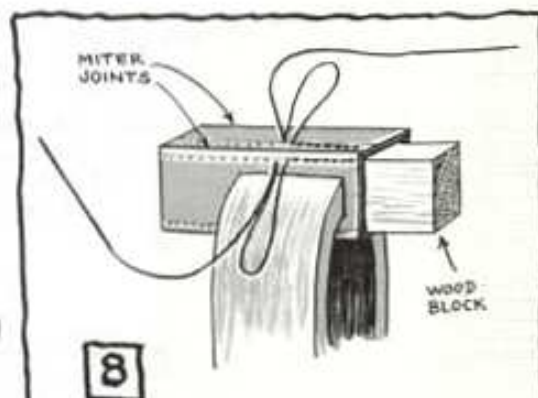


Photo above shows a completed box with addition of catches and handle. You'll note the catches are fastened to leather "blocks" . . . then sewed to box. This is to make them operational with the top part of the catch, on the lid. The round handle has been added. How to make rounds is shown on page 56.



7

Another method of making a leather box is shown above. This is made of individual parts. All edges to be sewn must be channeled for sewing, and beveled for the miter joints. Much more work is involved with this type of box, but it has the advantage of utilizing smaller pieces of leather.



8

Small cases can be sewn very easily by making a block of wood the same size as the inside of the case. The case is fitted around the wood . . . and clamped in the stitching horse. After all sewing, finish joints as previously described. Remove the block.

**NOTE:** IF BLOCK WILL NOT REMOVE, THREAD A LARGE SCREW-HOOK IN BLOCK TO AID IN PULLING OUT!

## USING WOODEN FORMS

**WOODEN FORMS** . . . where possible, are a definite aid for making certain projects, they are especially helpful while hand sewing, as the project can be sewn while on the wooden form. The form is then removed.

When making the forms for a specific item . . . check all measurements carefully. The form should be made slightly larger than the item . . . so it (the item) can be inserted and removed easily, after the project is completed.

When carving or stamping designs are used . . . these should be stamped on the leather before fitting to the form and sewing. Also install any snaps, catches, rings, etc., to the leather before assembly.

A few examples of simple wooden forms are shown on this page. With the wooden form . . . the leather can easily be fitted and trimmed for a perfect fit on any given project.



**BINOCULAR CASE**

This form was made from three pieces of standard board ( $\frac{3}{4}$ " thick) glued together, and shaped with a wood rasp. Heavy leather was also used on the front for additional build-up.



**FILM CARTRIDGE CASE**

This simple form was made to fit the 126 Kodacolor Film Cartridge. A strip of leather and two sides is all that is required. Miter all edges to be sewn.



**CAMERA CASE**

This form was made from careful measurements of the camera. Cut out, at side, was for camera trigger. A leather plug was used here (inside case) so trigger could not be tripped. Install snaps and strap dees before assembly.

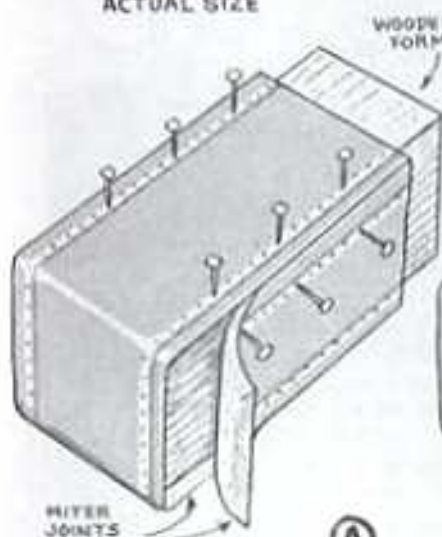
**CAUTION:** NEVER SEW A LEATHER PROJECT OVER A WOODEN FORM WHEN THE TOP OPENING IS SMALLER THAN THE DEPTH OF THE PROJECT!

## HAND SHOE TACKS ..... AS SEWING AIDS



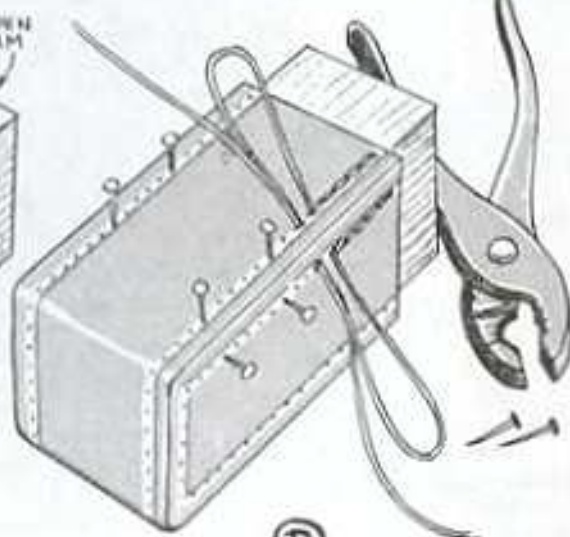
ACTUAL SIZE

**HAND SHOE TACKS** have a definite place in hand sewing. They are especially useful where wooden forms are involved . . . as the leather can be tacked to the form, and gluing of the joints can be eliminated. The 3 oz. tack is a good all-around size. Other illustrations of their uses are shown in this book. Hand shoe tacks should be available in most shoe-findings stores and saddlery supply outlets.



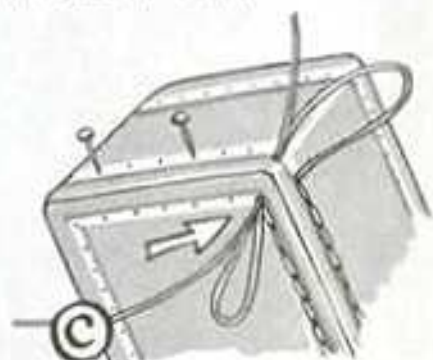
**A**

Prepare leather for sewing as previously described. Fit over wood form, and tack in place. Place tacks in overstitch wheel marks. Tap into wood with a tack hammer.



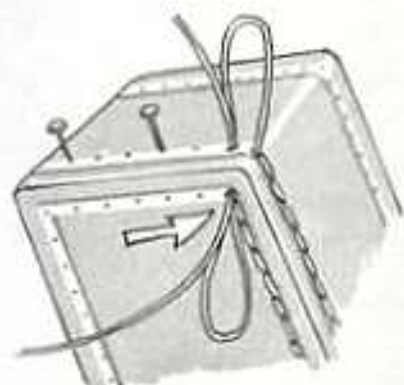
**B**

Begin sewing as previously explained. Sew to hole next to tacks. Remove tacks with pliers. Continue sewing to next tack, etc., until you have completed the sewing.



**C**

To sew around corner, stab through corner hole again on front side; pull threads through as shown.

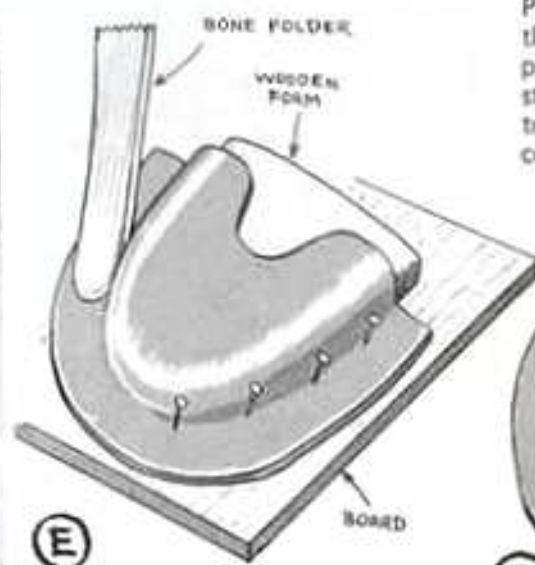


**D**

Pull stitch tight. Stab once more through corner hole on front side; pull threads as shown. Two or three stitches like this may be necessary to get back-thread around the corner, continue sewing.

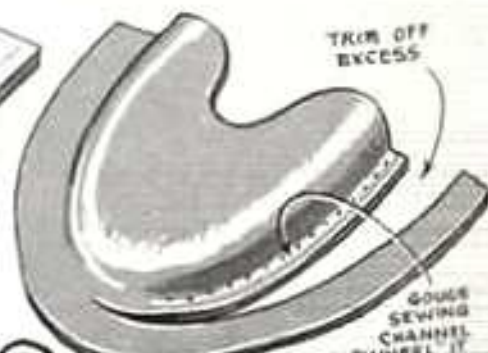


Photo illustrates a folding hoof-pick pocket on saddle. This was shaped over wooden form . . . as shown at right.



**E**

Thoroughly wetted leathers can be shaped over wooden forms with a bone folder. Cut leather over-size . . . tack in place; allow to dry.

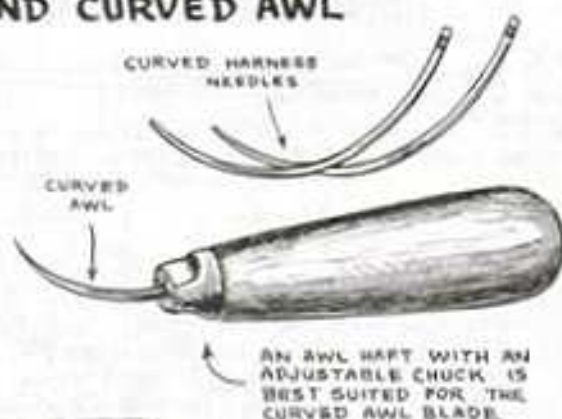


**F**

When dry . . . remove from board and trim off excess. Edge and burnish all edges. Gouge sewing channel and mark with overstitch wheel.

## THE CURVED NEEDLES AND CURVED AWL

The purpose of curved needles and the curved awl is for sewing in places that might otherwise be difficult, or impossible, with the straight awl and needles. Some examples are: round tubes for collapsible fishing rods, telescope cases, thermos bottle carriers, dice cups, etc. With hand sewing fast becoming a lost practice . . . curved needles and awls may be difficult to find in the regular supply houses. If this is the case . . . you can make your own. Follow the instructions below.



### HOW TO MAKE CURVED NEEDLES AND AWLS

ALL YOU NEED IS A PAIR OF PLIERS, SOME WOODEN (KITCHEN) MATCHES . . . OR A CIGARETTE LIGHTER.



## HOW TO SEW WITH THE CURVED NEEDLES AND AWL

KNOT IN CENTER OF THREAD

MAKE A THREAD AND ATTACH TO THE CURVED NEEDLES AS PREVIOUSLY INSTRUCTED. TIGHTEN CURVED AWL IN ADJUSTABLE CRICK AWL HAFT. BE SURE AWL BLADE IS SHARP.



For instructional purposes, we will make a leather cup to show how to use the curved needles and awl. Select an object about 2 1/2" in diameter . . . and form 4" to 6" long. A suitable object would be a jar from the pantry. Almost any round object can be used as long as it does not have a protruding rim, at the bottom, as the leather must be able to slip off the object after sewing. The object we have selected is a jar 6" long and 2 5/8" in diameter.



1

Cut a piece of 8/9 oz. leather about 4" wide and a little longer than is required to wrap around the jar.



2

Fold tightly around jar and mark where leather should be trimmed. Edges butt together.



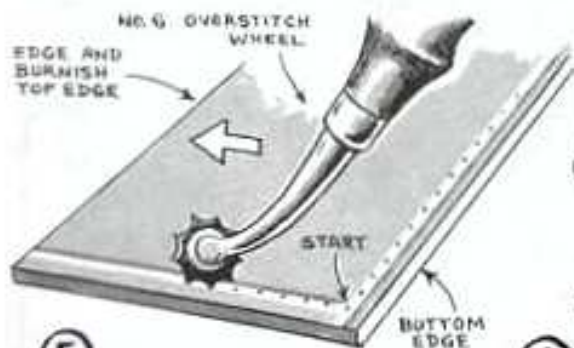
3

Trim on mark . . . fold around jar again. Trim any areas . . . so that both edges butt flush together; snug to jar.



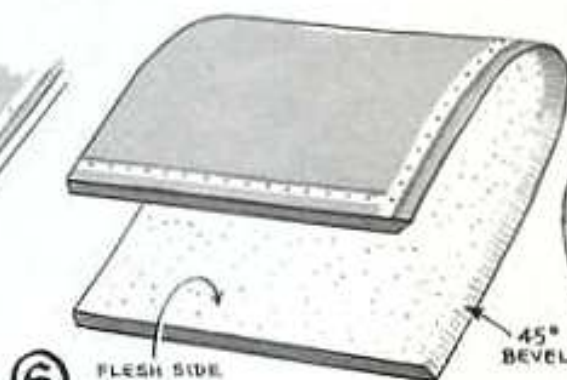
4

Gouge bottom channel from end to end. Side channels do not cross bottom channel. See page 7 for gouging distance from edges.



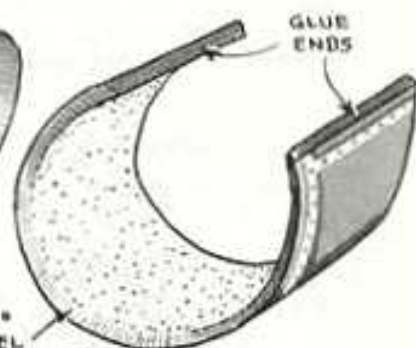
5

Moisten channels and "wheel" in bottom channel. Wheel end channels . . . beginning at bottom, as shown above. Wheel both ends exactly the same.



6

Turn leather to flesh side up and bevel the bottom edge at 45° angle with French edge tool, same as for a miter joint.



7

Apply all-purpose (strong bonding) cement to both ends. Allow to "set" to insure adhesion.



## SEWING WITH CURVED NEEDLES — Continued



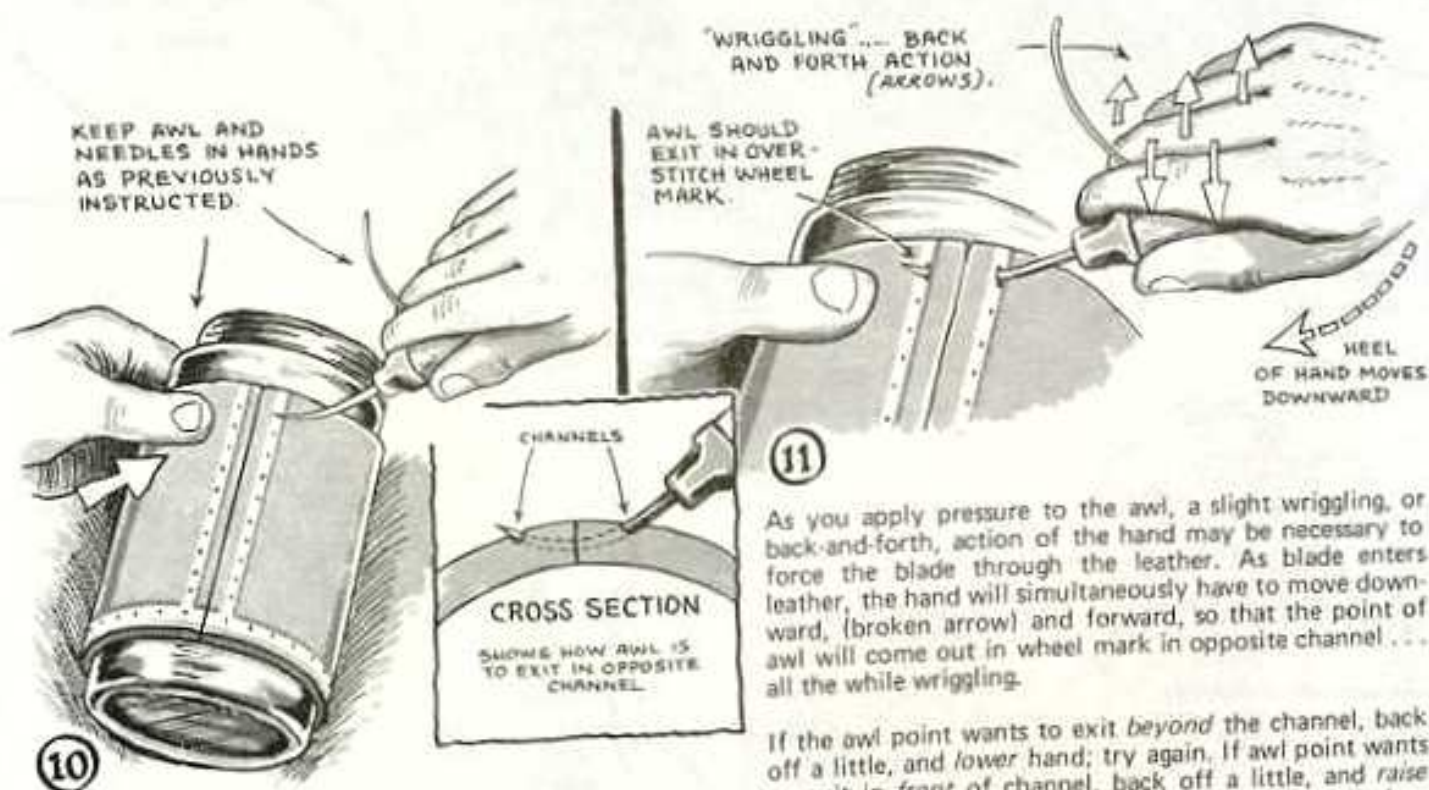
8

Fold leather tightly around jar . . . and butt edges together. Press firmly with thumbs to adhere the edges. Be sure top and bottom edges are even.



9

Since this project will not fit in the stitching horse, it is best sewn by holding between your knees. Get comfortable in a chair. Have needles, awl, etc., ready to sew. Most often, one is more comfortable with feet elevated.



10

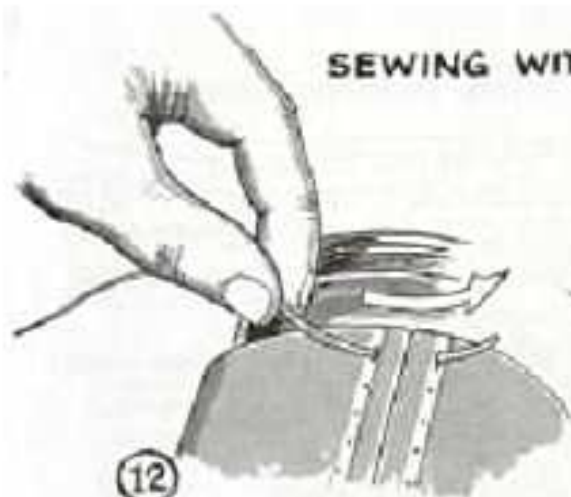
With project between knees . . . begin stabbing first hole. Since the awl is curved, you will have to start the hole at a high angle. Use the left hand and thumb (arrow) to push against the leather.

11

As you apply pressure to the awl, a slight wriggling, or back-and-forth, action of the hand may be necessary to force the blade through the leather. As blade enters leather, the hand will simultaneously have to move downward, (broken arrow) and forward, so that the point of awl will come out in wheel mark in opposite channel . . . all the while wriggling.

If the awl point wants to exit *beyond* the channel, back off a little, and *lower* hand; try again. If awl point wants to exit in *front* of channel, back off a little, and *raise* hand; try again. Some practice will be required before you get the "feel", and can exit in the opposite wheel mark with regularity.

## SEWING WITH CURVED NEEDLES - Continued



12

Push needle through first hole and pull thread to center, as previously instructed.



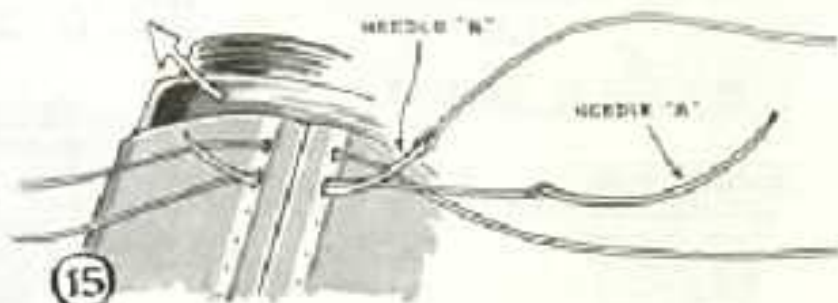
13

Start second hole. Note . . . you held the needles and awl in hands exactly as with all previous sewing. Being curved, the needles will feel a bit awkward, but persist in this practice.



14

Insert needle "A" through hole from back side. This is exactly the same as step 6, page 10.



15

Push right hand needle "B" through same hole. Always put needle "B" on same side of thread with each stitch. This insures uniform appearing stitches.



16

Taking up the stitch . . . same as step 20, page 14.



17

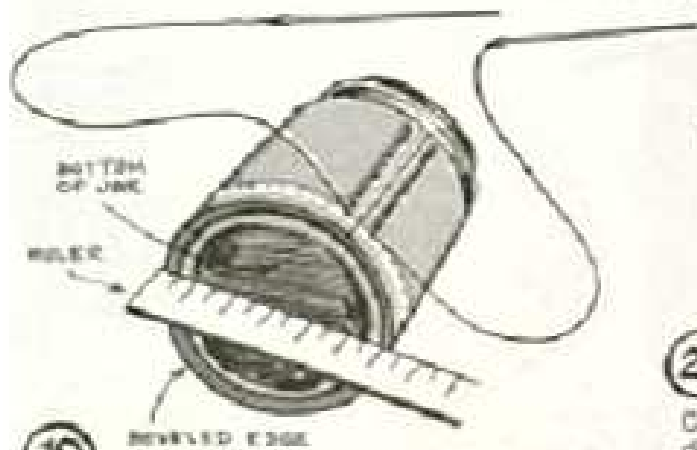
Pull first stitch tight . . . same as step 21, page 14.



18

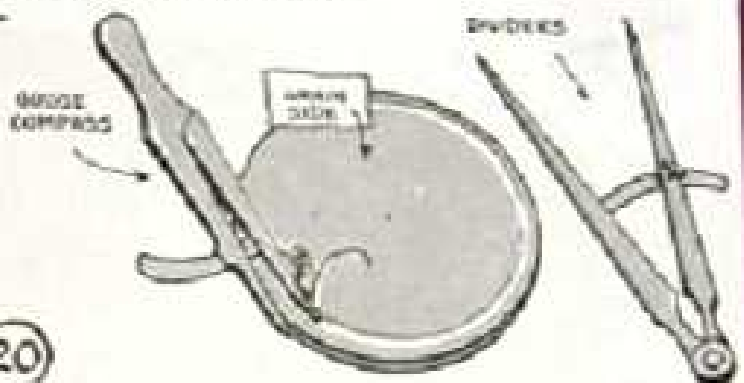
Continue sewing down to bottom channel. Pull the last stitch up tight. Do not cut off threads! Now . . . take curved needles off the threads. Re-wax ends and put the straight needles on the threads.

## SEWING IN THE BOTTOM



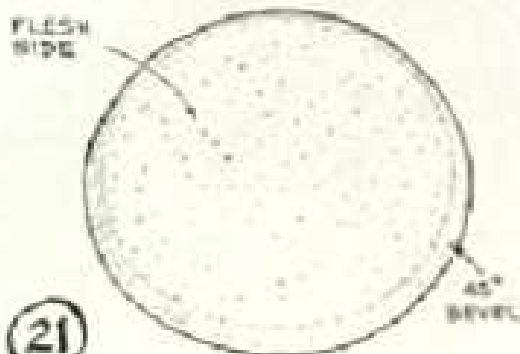
19

Slide leather down jar so that beveled edge extends beyond bottom of jar. Measure across, in center, to determine diameter of bottom leather.



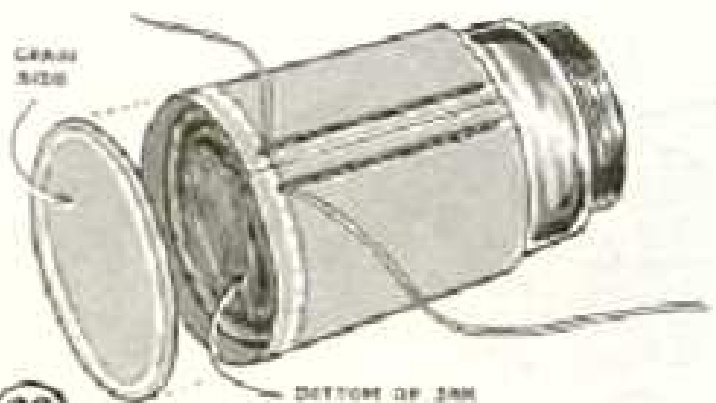
20

Cut a circle out of heavy leather (8/9 oz. or 10 oz.) to the diameter dimension ... indicated on ruler in step 19. Gauge a sewing channel all around the edge. Do not use the overstretch wheel in channel.



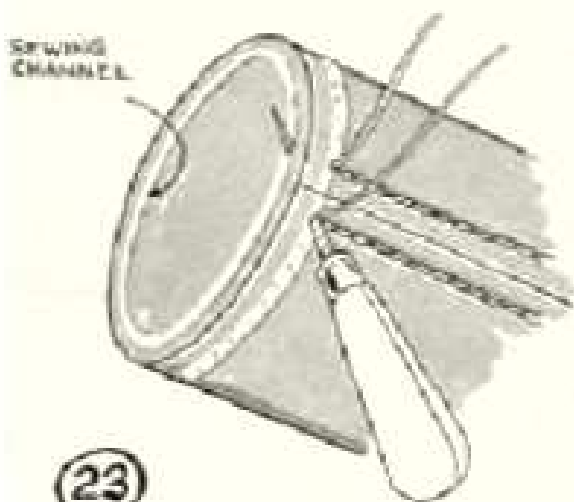
21

Turn leather to flesh side and bevel all around edge for miter joint with the French edge tool.



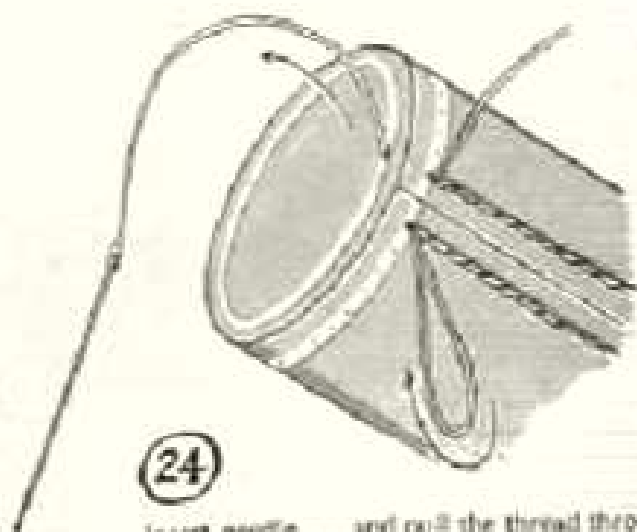
22

Apply glue to beveled edge of bottom circle and beveled edge of leather on jar. When glue "sets" ... put bottom into place. Work into position so that all edges are as even as possible.



23

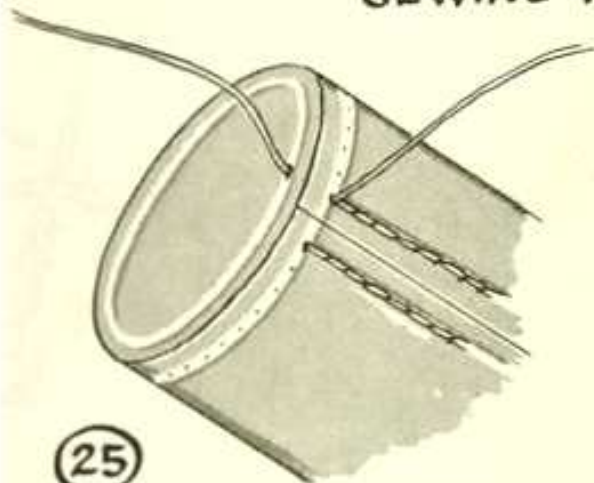
With the straight awl blade ... stab through last hole, as shown, angling outwards to come out in channel ... opposite the other thread.



24

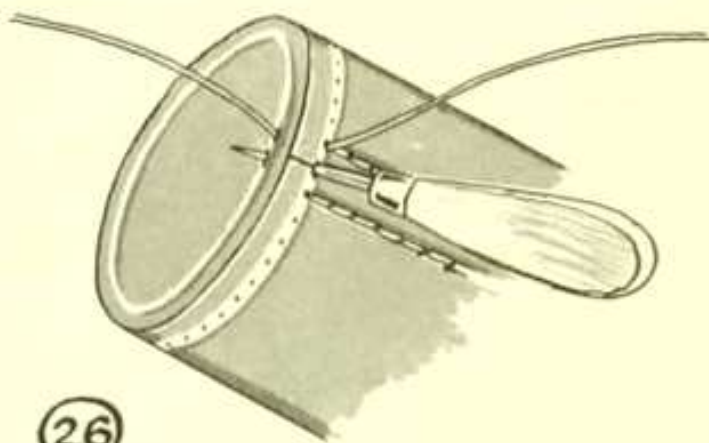
Insert needle ... and pull the thread through, as shown.

## SEWING IN THE BOTTOM — Continued



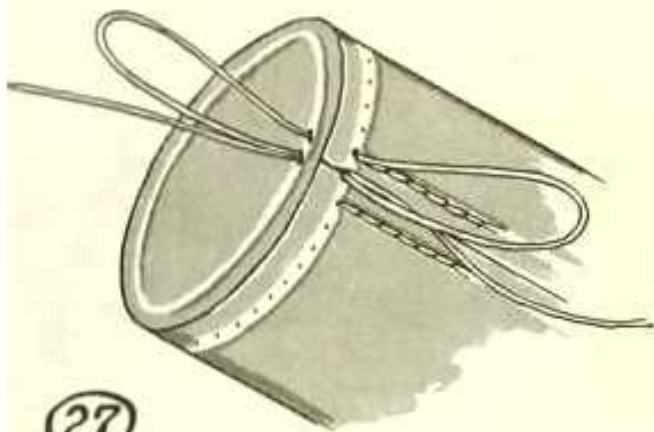
25

Pull thread up tight. Project should now look as illustrated above.



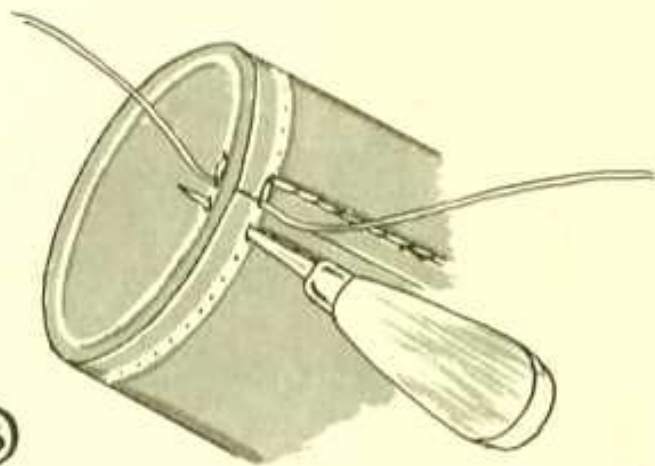
26

Stab next hole . . . in seam . . . and come out in bottom channel as shown.



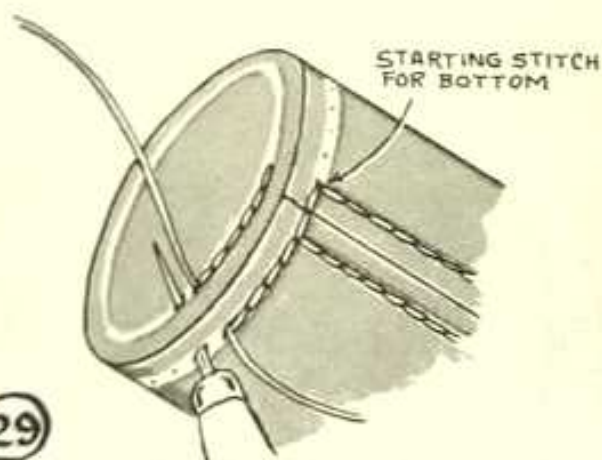
27

Put needles through holes in usual manner . . . pull up slack.



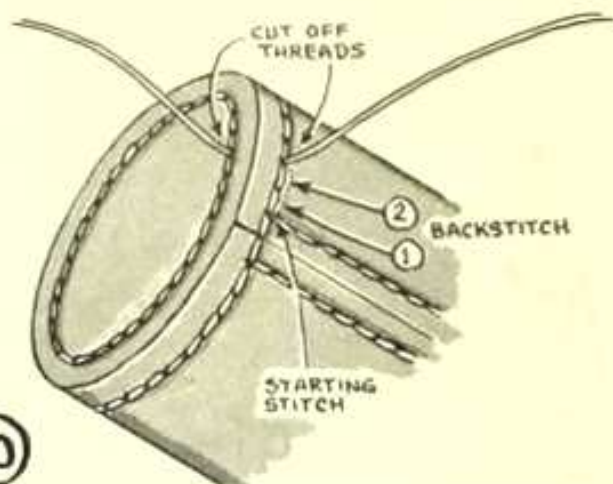
28

Pull stitch tight. Stab next hole as shown. Awl should always come out in bottom channel.



29

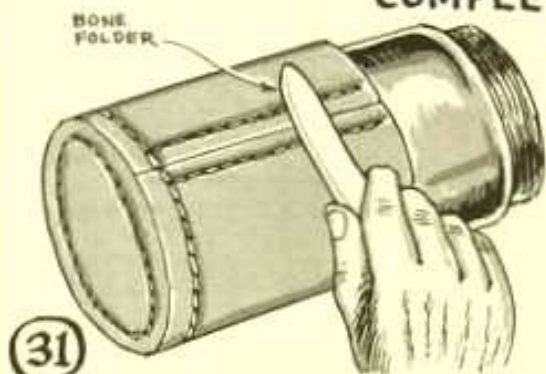
Continue sewing. Note: stitches (in bottom) will be shorter than cylinder stitches . . . as the circumference is smaller.



30

Sew completely around bottom . . . to the starting stitch. Backstitch two holes; cut off threads. Tap stitches with hammer. Edge and burnish the miter joint . . . same as step 10, page 24.

## COMPLETING THE LEATHER CUP

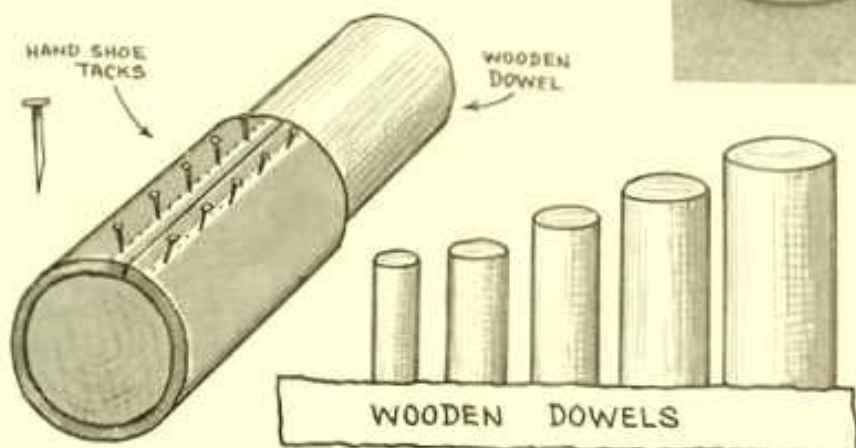


Dunk the project in water . . . and use a bone folder on side seams and rub areas where needles and awl have marked the leather. Allow to dry. Run overstitch wheel over stitches; remove from jar.



LEATHER CUPS

Photo at left shows the side and bottom of two leather cups . . . sewn on the jar. Any carving or stamping should be done on leather before assembling.



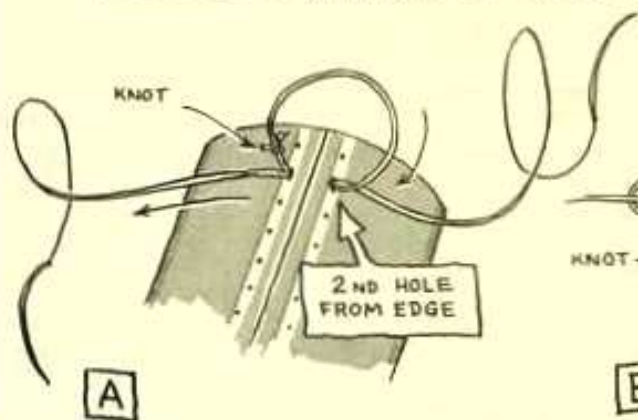
Most helpful . . . for making round cases for cylindrical objects . . . are wooden dowels. It is good to have a large range of sizes from 2" to 4" or larger. The leather can be tacked to these, eliminating the gluing. Other aids can be lengths of different sized water pipes, etc.



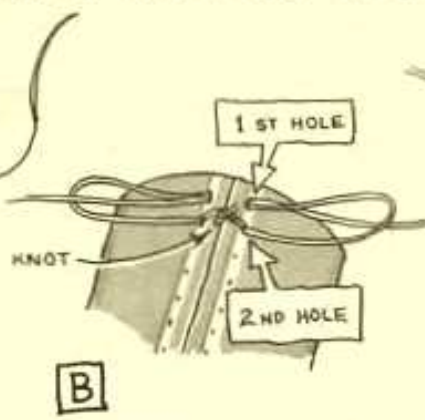
DICE CUPS

Photo above shows three dice cups of varying designs. After stamping, be sure to check fit again before sewing. Dice cups have an inner ring of leather sewn inside top.

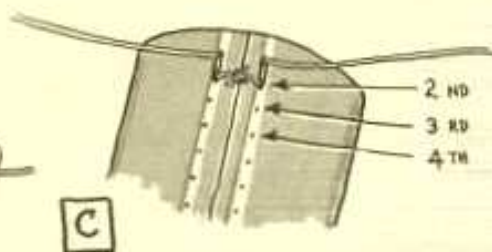
## STARTING WITH A KNOTTED THREAD



When beginning with a knotted thread . . . start in 2nd hole as shown. See instructions on page 19 for making this first stitch.



Pull knot down on top of seam. Stab first hole and push needles through in the regular manner.



Pull stitch tight. Go back through 2nd hole, this locks knotted thread ends. Continue sewing . . . 3-4 etc., to end of project. These steps are identical to those for the miter joint A-B-C on page 24.

# SEWING BUCKLES AND LOOPS TO STRAPS

LEATHER LOOP (KEEPER)

There are many types of harness, saddlery, and belt straps requiring buckles and leather loops (keepers). Hand sewing is more durable than machine sewing . . . and often times the only way they can be sewn.

## BUCKLE END

## PREPARING THE STRAP

## BILLET END

(A) CUT STRAP TO WIDTH OF BUCKLE & DESIRED LENGTH.

(B) MAKE A TAPERED SKIVE ON BUCKLE END. DO NOT SKIVE TO FEATHER EDGE HERE. FOLD. BEGIN SKIVE BEYOND FOLD.

(C) CUT TONGUE SLOT. MOISTEN STRAP AT FOLD AREA; FOLD. MOISTENING PREVENTS CRACKING GRAIN, AT FOLD.

(D) GOUGE A SEWING CHANNEL ALONG EACH EDGE OF STRAP, AS SHOWN. GOUGE CHANNEL ABOUT TWO STITCHES BEYOND FOLDED END.

(E) FOLD STRAP AROUND THE BUCKLE. MARK CHANNELS WITH OVERSTITCH WHEEL AS SHOWN AT RIGHT.

(F) CUT A STRIP OF LIGHTER-WEIGHT LEATHER THAN THE STRAP, FOR MAKING THE LOOP. THIS IS CALLED "LOOP-STOCK". CUT 5/8" WIDE FOR 3/4" WIDE STRAPS. BEVEL EDGES AND BURNISH.

(G) FOLD LOOP-STOCK AROUND STRAP TO DETERMINE THE LENGTH OF THE LOOP.

(H) ALLOW ONE EXTRA THICKNESS OF STRAP (BEYOND EDGE OF LOOP-STOCK) AND CUT OFF (AT ARROW). SKIVE OFF TIP OF STRAP END . . . ON FLESH SIDE.

(I) LOOP, READY TO INSTALL. SLIGHTLY TRIM TWO CORNERS. THESE CORNERS FIT AGAINST BUCKLE TONGUE (SEE BELOW).

## SETTING UP FOR SEWING

(J) LEATHER LOOP - FLESH SIDE UP. TRIMMED CORNER.

INSIDE VIEW. SKIVED EDGES. TRIMMED CORNER.

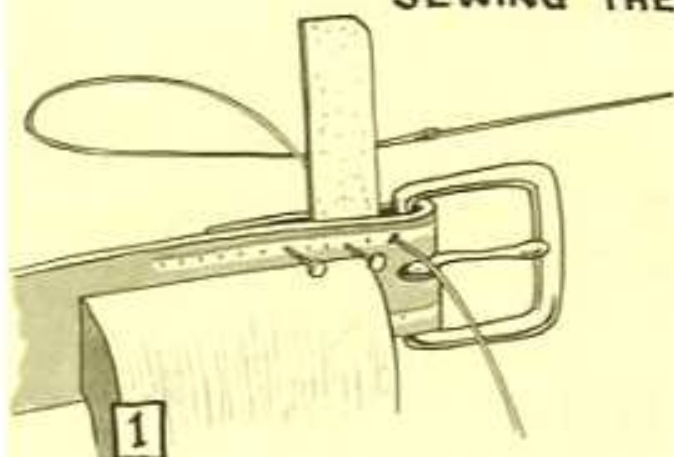
(K) HAND SHOE TACKS. METAL SURFACE.

Insert loop between leathers. Push in half-way of strap, up to buckle tongue. Trimmed corner faces buckle.

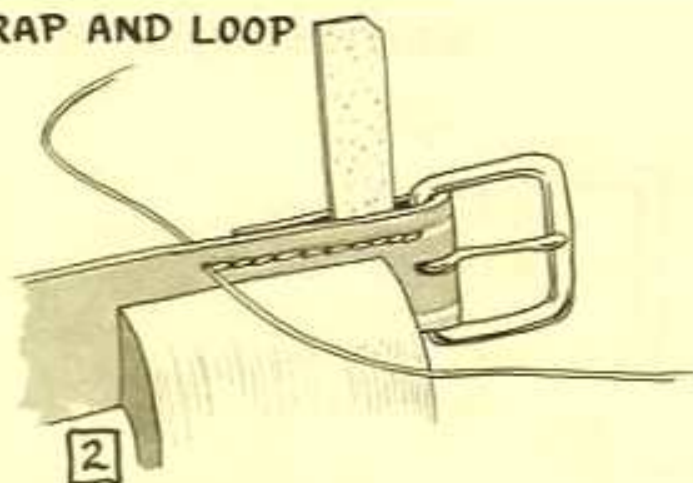
Note how trimmed corner rests against buckle tongue.

Tack through leathers, as shown. Metal surface clinches tacks . . . to hold loop. You are now ready to sew.

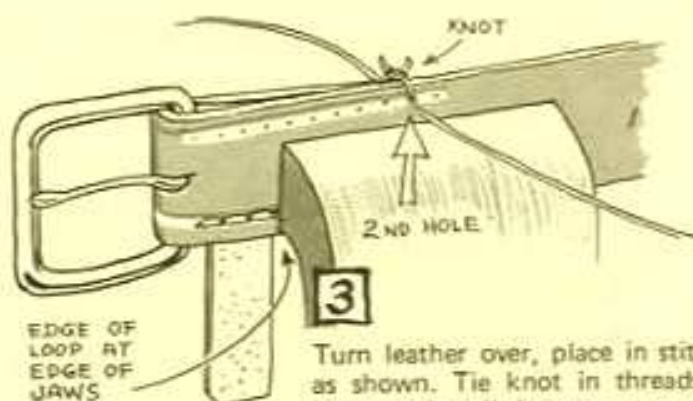
## SEWING THE STRAP AND LOOP



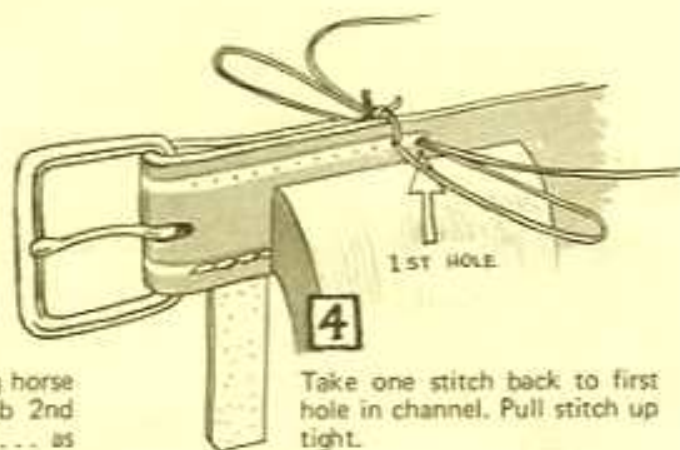
**1** Place project in stitching horse as shown above. Make a thread, stab hole close to buckle ... and pull thread to center.



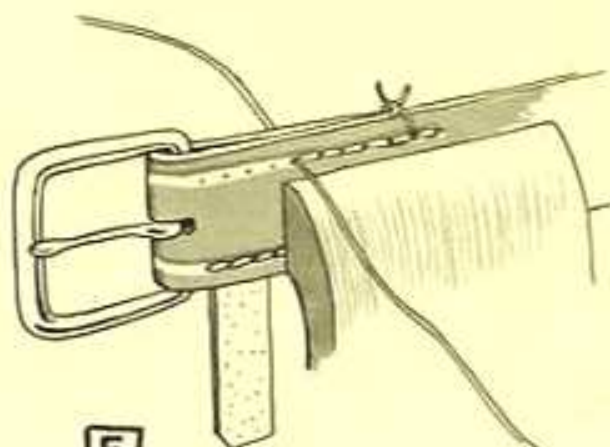
**2** Sew to end of channel ... pull tacks as you go. Backstitch one or two holes; cut off threads.



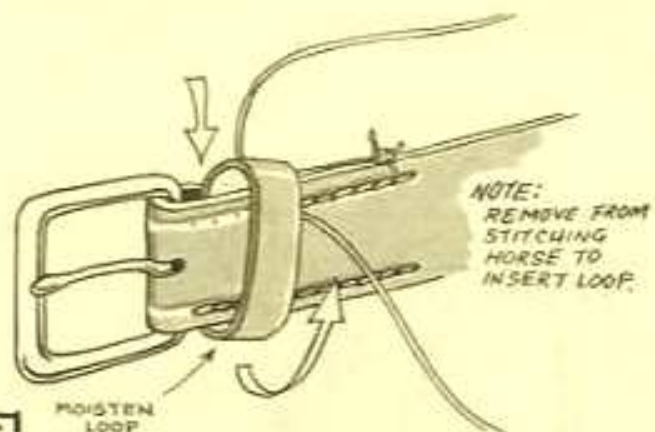
**3** Turn leather over, place in stitching horse as shown. Tie knot in threads, stab 2nd hole, and pull knot on top edge ... as instructed in steps 44-45-46, page 19.



**4** Take one stitch back to first hole in channel. Pull stitch up tight.



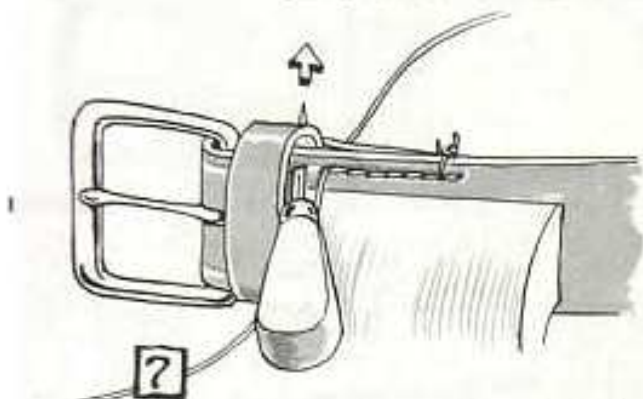
**5** Now ... continue sewing almost to edge of the stitching horse jaws, as shown above.



**6** Spread leathers ... pull loop up and insert between strap leathers as shown above. Push loop all the way down until the ends meet at buckle tongue.

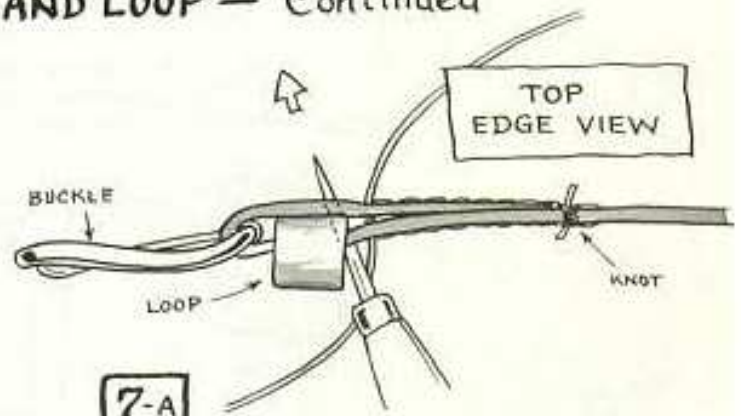
**TIP:** Moistening the loop will aid in folding it into place.

## SEWING THE STRAP AND LOOP — Continued



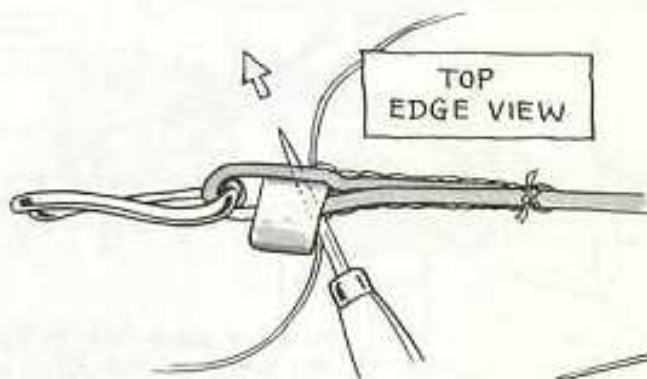
7

Sew up to loop. Then stab next hole (inside loop) at a slight angle. Awl blade should pierce loop leather and exit in channel on back side.



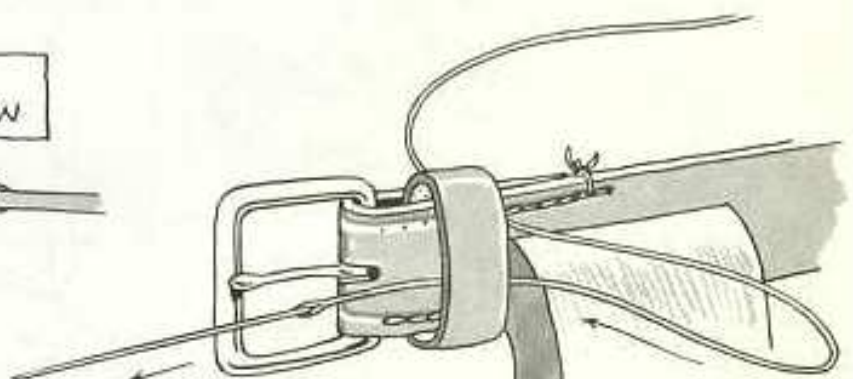
7-A

This shows top view of step 7 ... at left. Be sure loop ends still touch, when awl pierces the leathers.



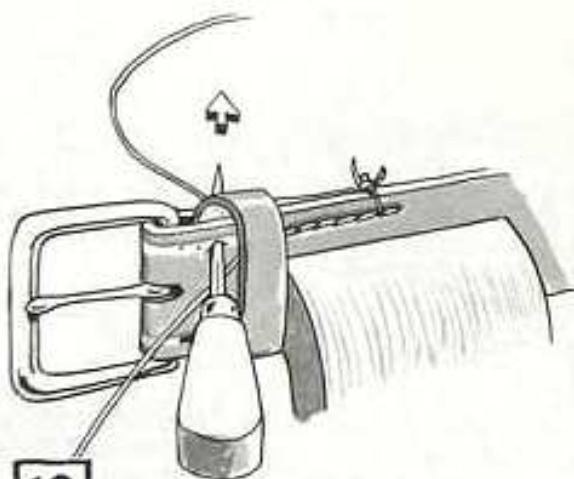
8

Pull stitches tight. Stab next hole ... at slightly more angle ... coming out in back channel. Insert needles; pull stitch tight.



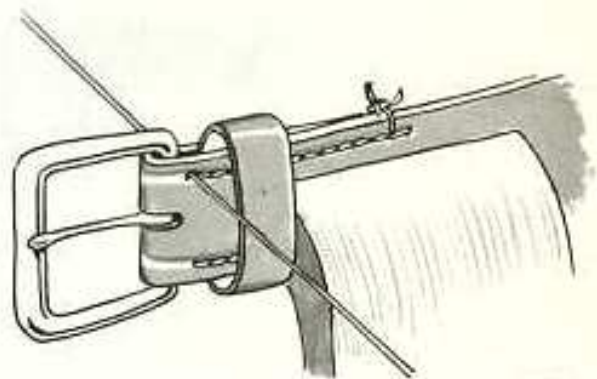
9

Pass front needle *inside* loop as shown above. Pull slack out of thread.



10

Stab next hole ... angling back through loop, as shown, coming out in backside channel. Insert needles; pull stitch tight.

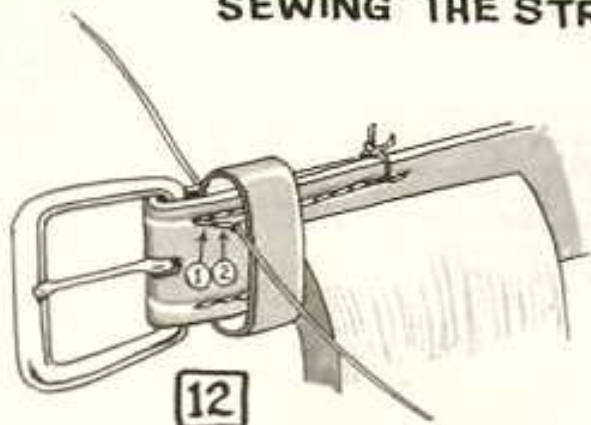


11

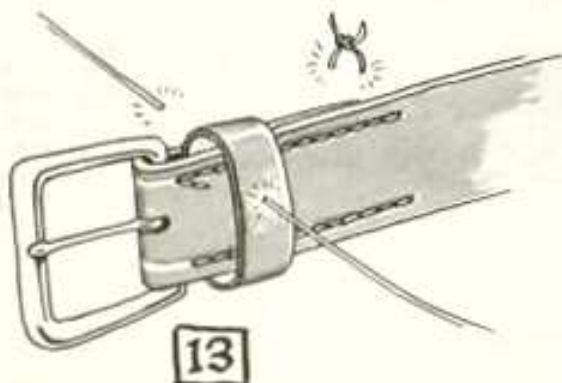
Sew up to buckle. Pull the last stitch tight.



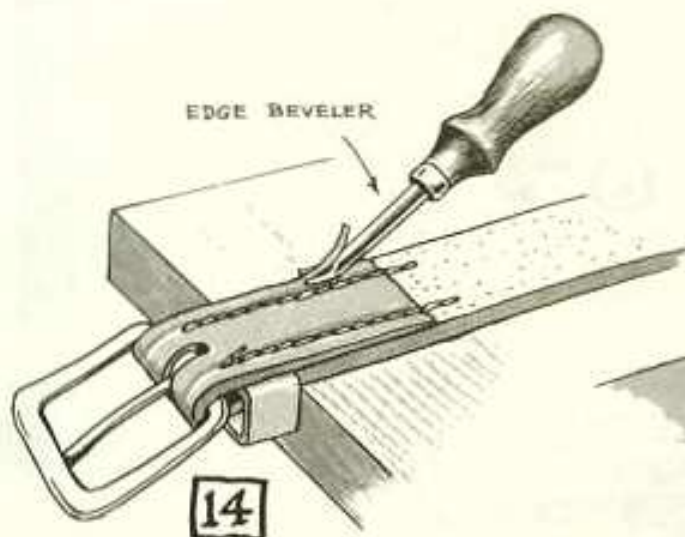
## SEWING THE STRAP AND LOOP — Continued



Backstitch one or two holes. Note: when backstitching here, stab holes below previous stitches . . . to be sure you do not cut threads with awl blade.

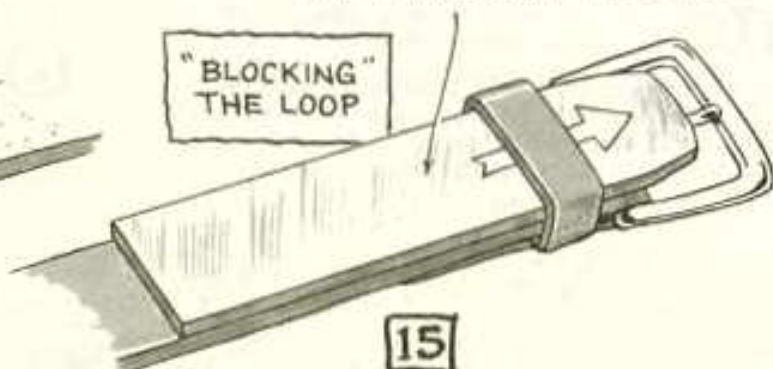


Cut off the threads, and knot, with a sharp pointed knife. Lay on edge of bench and tap the stitches with a smooth hammer.



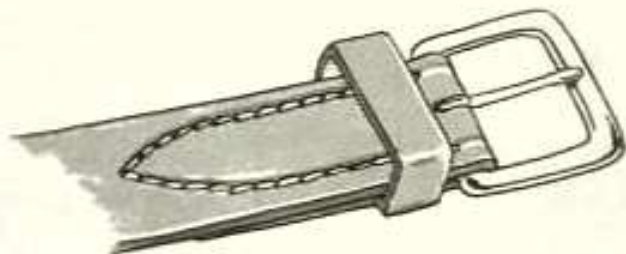
Turn strap over, and lay on bench as shown. Edge bevel the ends of the fold. Tap stitches with hammer.

"LOOP-STICK"... MADE OF HARDWOOD, METAL, OR FIRM LEATHER... TO WIDTH AND THICKNESS OF THE STRAP.

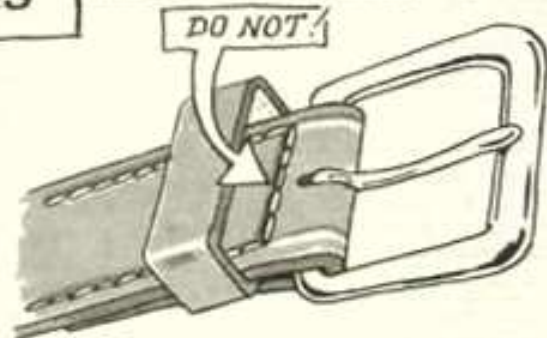


Moisten the loop and insert a "loop-stick" as shown. Tap the loop with hammer (top and sides) to shape (block) the loop. Remove; allow to dry before oiling or finish coating.

### SPECIAL NOTES



On narrow straps . . . sewing channel can taper to a point, midway on strap, as shown above. This eliminates cutting threads and re-starting with knot. Sewing is continuous.



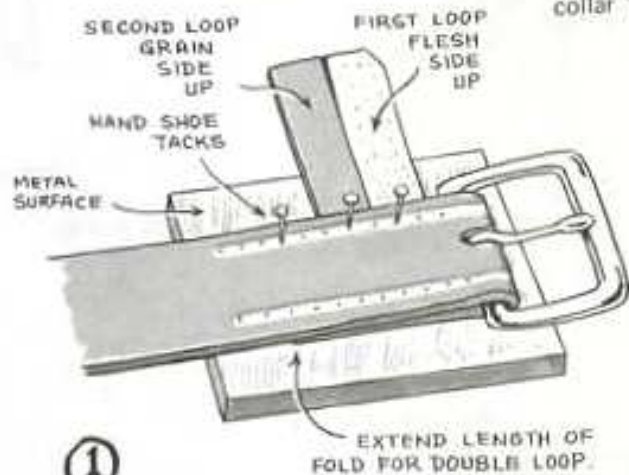
Do not sew across straps . . . as shown above. This weakens the leather . . . much as a perforated stamp . . . taking away some of the strength of the strap.

# SEWING A DOUBLE (Reversed) LOOP

REVERSED LOOP

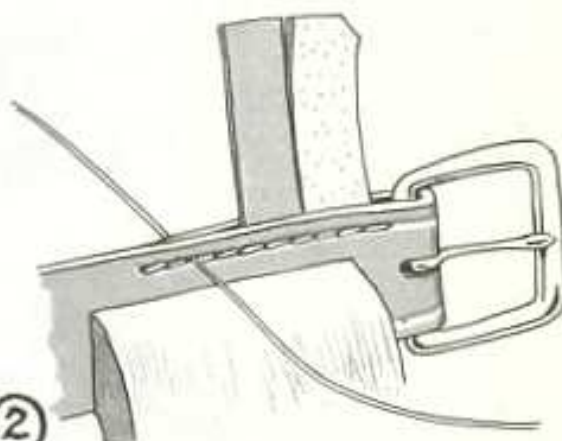


This type of strap is used where easy attachment and removal is desired. The strap loops around a ring . . . back through the reversed loop . . . through another ring; into buckle. One example is shown in sketch at right . . . used on a breast collar for horse and saddle.



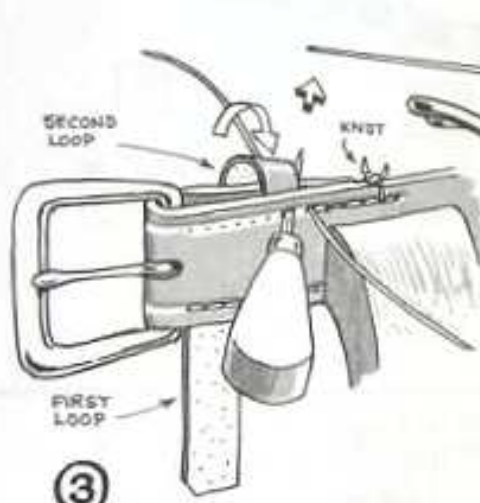
①

Make two loops as previously described. Trim corners on one . . . this fits against buckle tongue. Set up for sewing as instructed in steps J-K on page 36. Second loop rests next to first loop, grain side up.



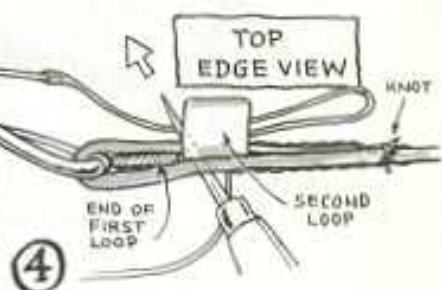
②

Sew to end of channel. Backstitch one or two holes. Cut off threads, turn project over in stitching horse. Tie knot in threads.



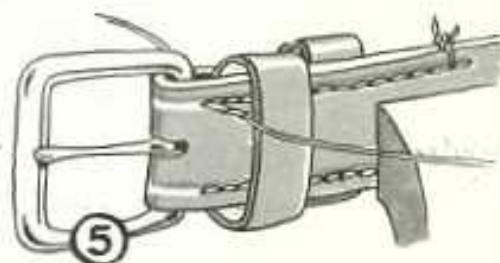
③

Sew up to 2nd loop, spread leathers, fold 2nd loop up, on back side, and push down between leathers until ends meet. Angle awl through loop to take next stitch. Take next stitch at slightly more angle. Be sure ends of loop are still in contact.



④

Pass back side needle through loop. Stab next hole, angling as shown. Take stitch. Fold first loop into position . . . as instructed in step 6, page 37.

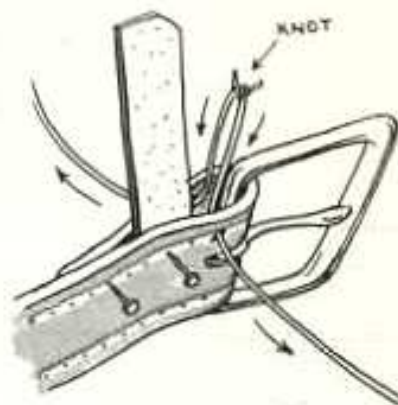


⑤

Continue sewing as described in steps 6 through 12 on pages 37-39. Block the loops, etc., as shown with single loop.

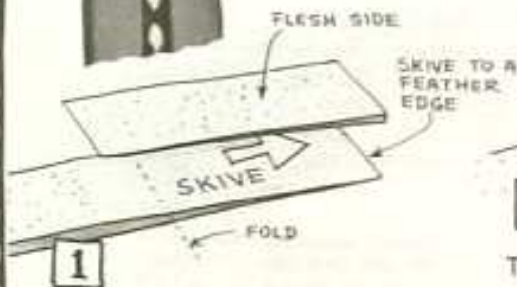
## SPECIAL NOTE:

When starting with a knotted thread, stab first hole and insert needles from *inside* the leathers. Push needles outward, as shown, and pull knot down between the leathers. Continue sewing in the regular manner.

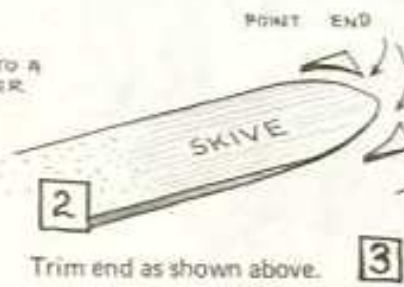


## SEWING THE REVERSED SLIDE LOOP

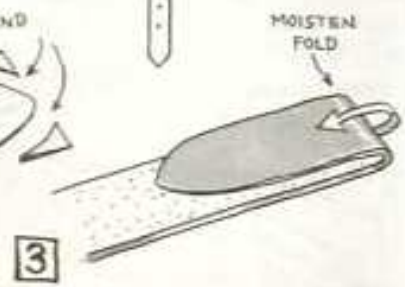
This loop is used on billet straps for their easy installation and removal. One example is shown in sketch at right . . . the flank cincha billet, used on saddles. Photo at left illustrates decorative examples.



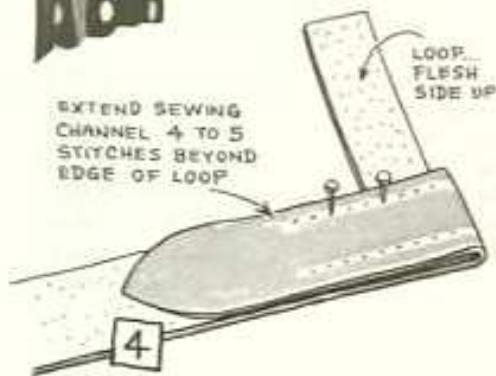
1 Cut strap to desired width and length. Make a longer skive, on end, than suggested on page 36. Skive to a "feather" edge.



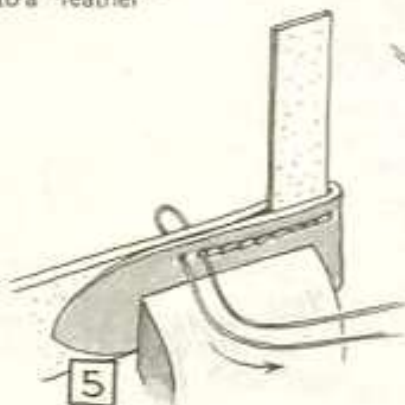
2 Trim end as shown above.



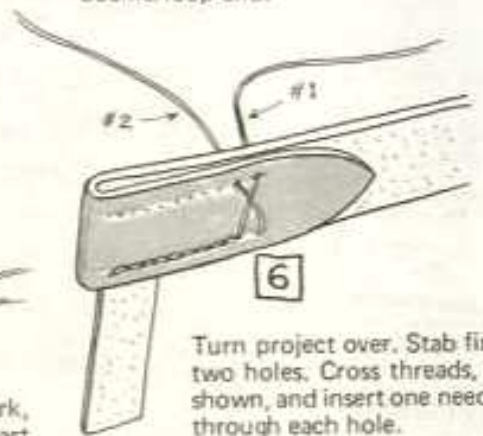
3 Moisten fold area and tap with hammer. Length of folded end should be about double that for the ordinary buckle/loop end.



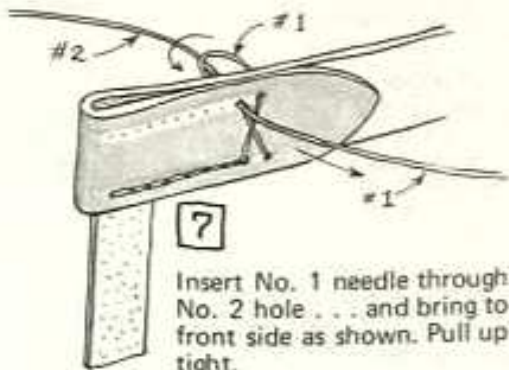
4 Make a loop. Gouge the sewing channels; wheel. Insert loop to half-way of strap. Tack in place. See page 36 . . . follow procedures outlined.



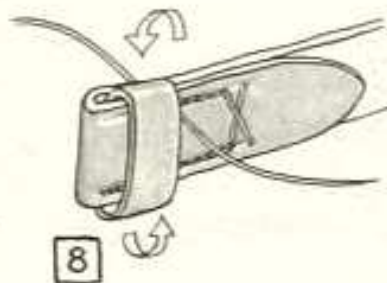
5 Sew up to last wheel mark, pull stitch tight. Stab last hole, bring thread (from back side) through to front . . . as shown above.



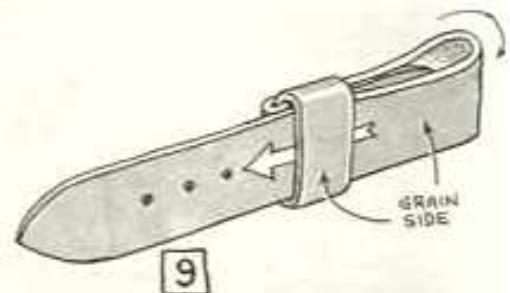
6 Turn project over. Stab first two holes. Cross threads, as shown, and insert one needle through each hole.



7 Insert No. 1 needle through No. 2 hole . . . and bring to front side as shown. Pull up tight.



8 Sew up to loop. Fold loop and push down between leathers. Complete sewing as instructed on pages 37-39.



9 Moisten loop and adjacent area. Run strap through loop and pull up snug (see photos above). Be sure skived end also goes inside loop. Tap with hammer to "block" the loop. Allow to dry in this position.

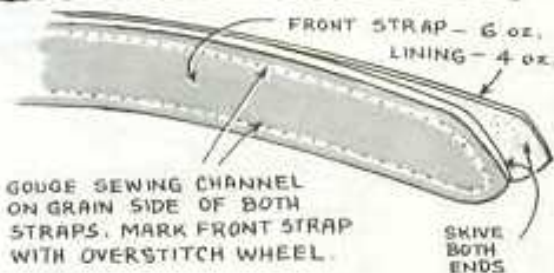
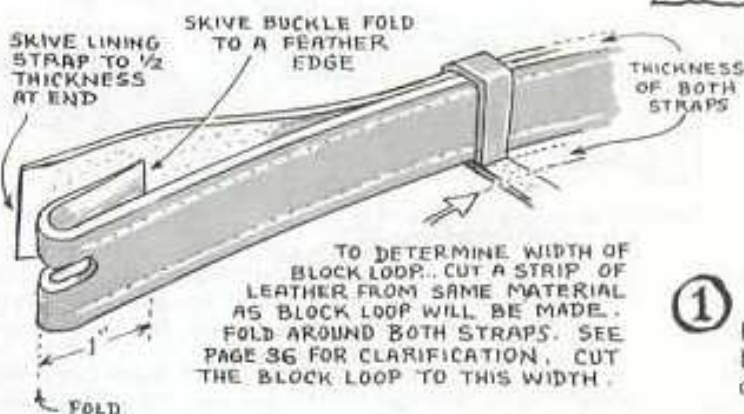
BLOCK LOOP

## SEWING THE BLOCK LOOP



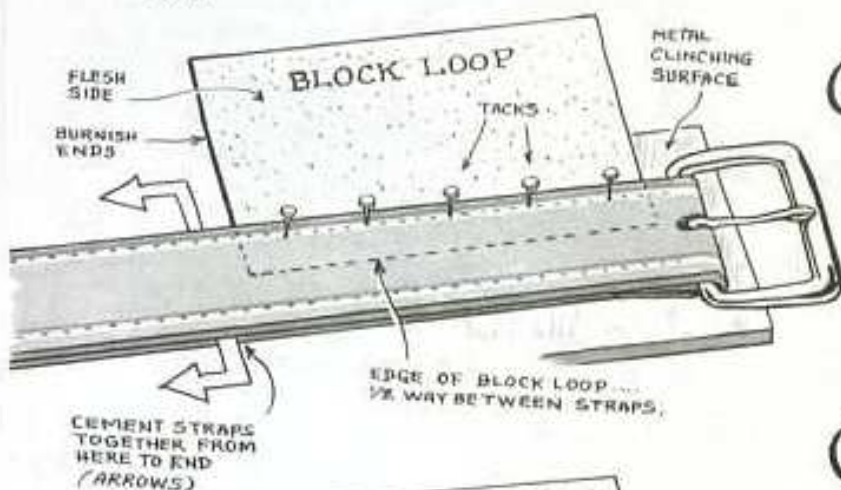
The block loop is used when you want the billet end of the strap enclosed, when buckled. Where straps come from opposite directions . . . a long block loop can be used; a buckle sewn to each end of the strap. When buckled, both billets would then be enclosed within the block loop. These loops are used in some saddlery and harness work.

For instructional purposes, we will make a one inch wide strap. Cut the block loop about 4" long, from 4/5 oz. cowhide. Cut the front strap from 6 oz. cowhide; lining strap from 4 oz. cowhide.



1

Prepare straps as instructed on page 36. Edge and burnish grain sides only of straps. Flesh sides cement together . . . up to block loop.

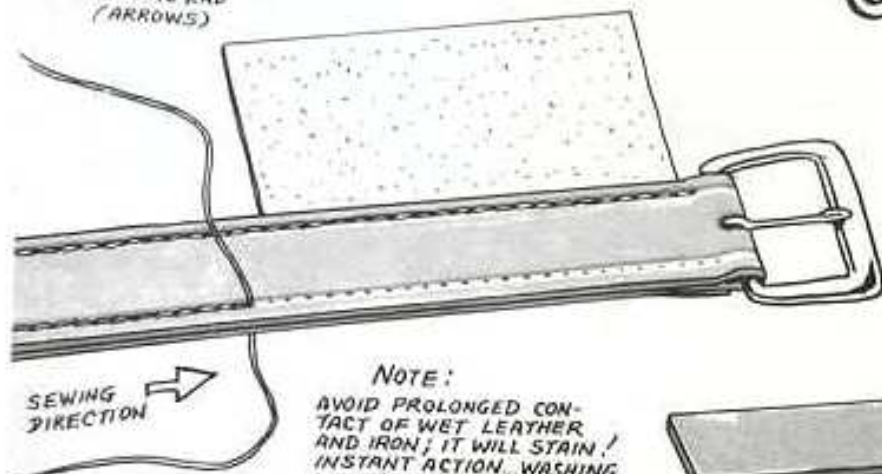


2

Edge and burnish ends of block loop. Fit the loop between the straps . . . with bottom edge to 1/2 width of strap. Mark a guide line on loop, if necessary. Tack in place, in sewing channel. Cement remainder of straps together . . . on flesh sides. Use rubber cement.

3

Place in stitching horse . . . and sew first side of block loop. Continue sewing around strap until you reach position shown in sketch . . . opposite the edge of the block loop.



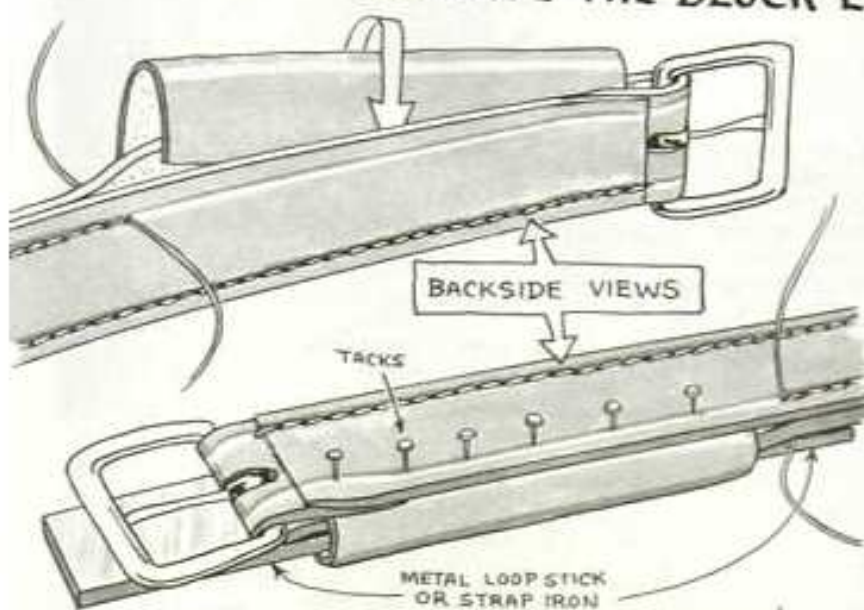
You will need a metal loop-stick . . . or length of 1/8" strap iron . . . 3/4" or 1" wide, as shown below. This will be used in step 5.



### NOTE:

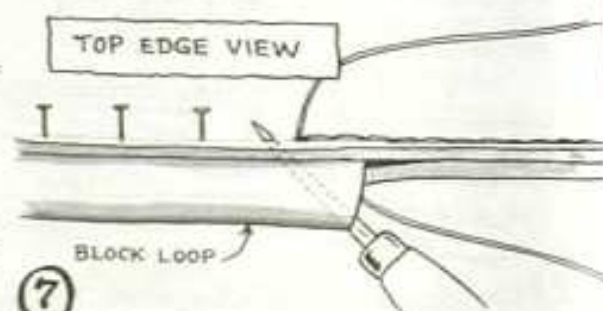
AVOID PROLONGED CONTACT OF WET LEATHER AND IRON; IT WILL STAIN! INSTANT ACTION. WASHING WITH SOLUTION OF OXALIC ACID WILL REMOVE STAINS. DILUTE ACID CRYSTALS WITH WATER.

## SEWING THE BLOCK LOOP—Continued

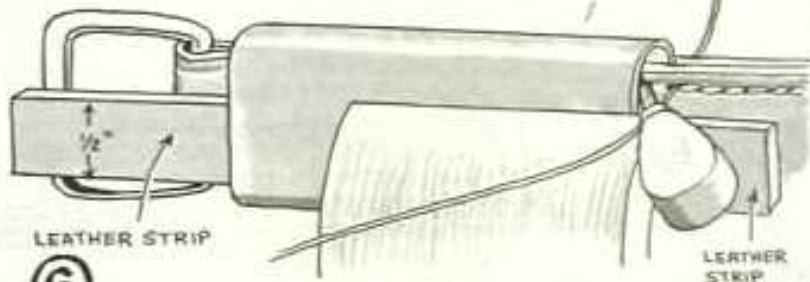


- ④ Spread straps and push other side of block loop down between leathers. Push all the way down to other edge of loop. Moisten the block loop . . . it will be easier to push into place.

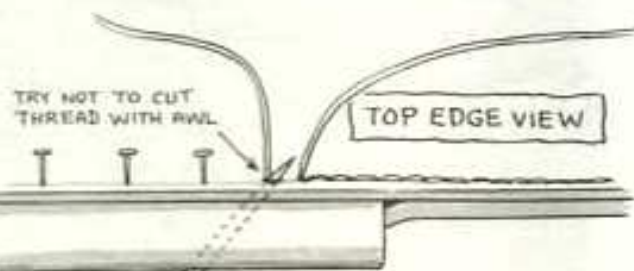
- ⑤ Slide metal loop stick inside block loop, as shown. Be sure leather loop is held in place. Tack in the sewing channel. Tacks clinch on metal.



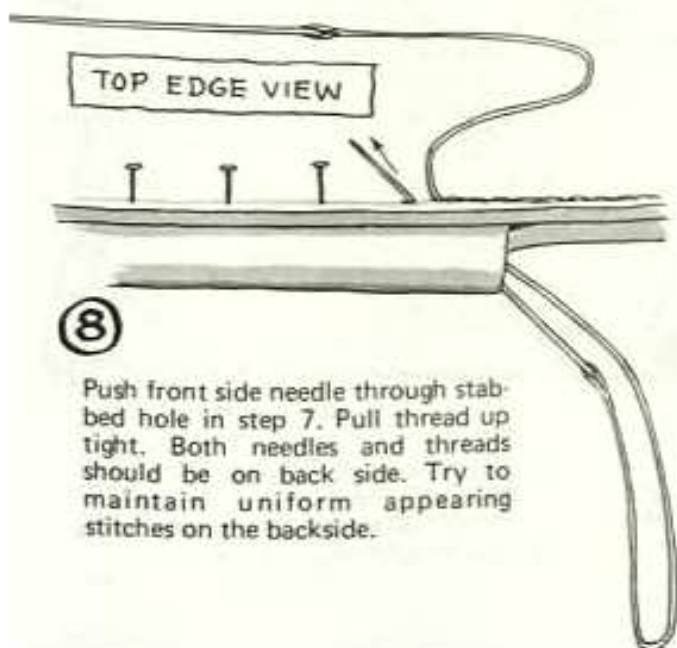
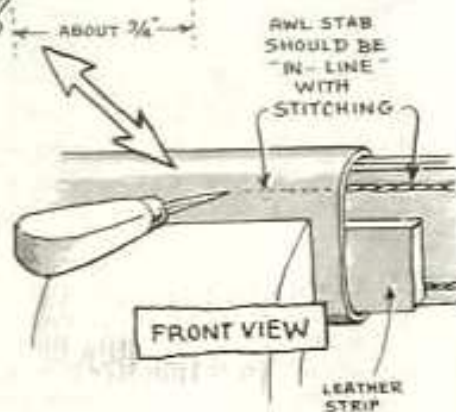
- ⑦ Now . . . continue angling stitches through open end of block loop until you reach the extreme angle, as above. Remove tacks as you go. Point of awl should exit in channel on backside with each stitch. Do not put needle (from backside) through this last extreme angled hole.



- ⑥ Remove metal from loop. Insert a  $\frac{1}{2}$ " wide length of heavy leather inside loop. Keep to lower side of loop, as shown. This keeps loop open when clamped in stitching horse. Sew up to loop . . . then angle awl in loop, as shown. Follow steps 7-8 on page 38.



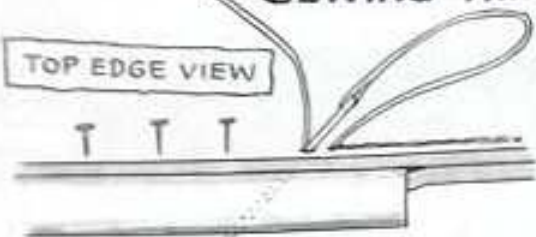
- ⑨ Now . . . stab a hole through front of block loop as illustrated in sketch above and at right. The awl must angle through to come out in last hole stabbed . . . step 7-8. Some practice may be necessary to obtain correct angles.



- ⑧ Push front side needle through stabbed hole in step 7. Pull thread up tight. Both needles and threads should be on back side. Try to maintain uniform appearing stitches on the backside.

## SEWING THE BLOCK LOOP - Continued

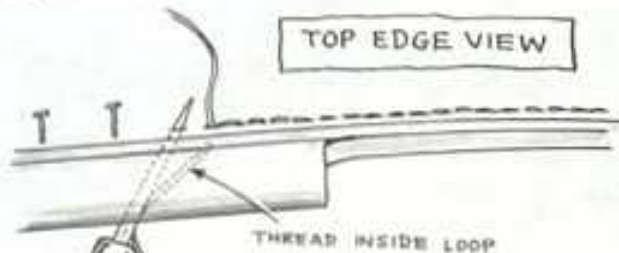
TOP EDGE VIEW



10

Push needle through hole made in step 9 ... out through hole in front of loop. Pull up tight.

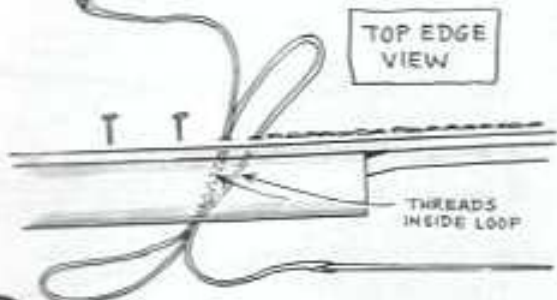
TOP EDGE VIEW



11

Insert awl in same hole in block loop front and angle over for next stitch.

TOP EDGE VIEW



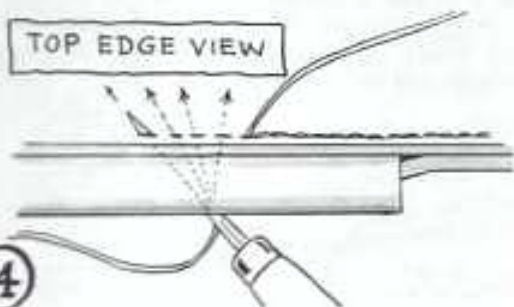
12

Continue sewing in the usual manner. Needles and threads exit and enter the hole in the front of the block loop.

13

Front side view of step 12.

TOP EDGE VIEW



14

Continue sewing ... angling each stitch through hole in loop ... until you reach extreme angle above.

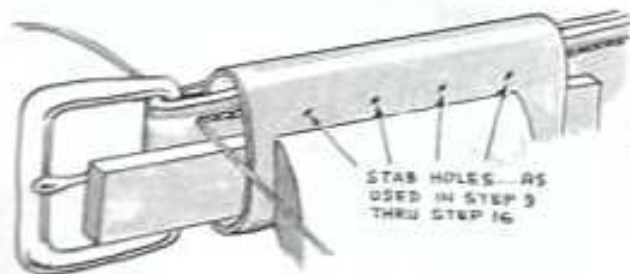
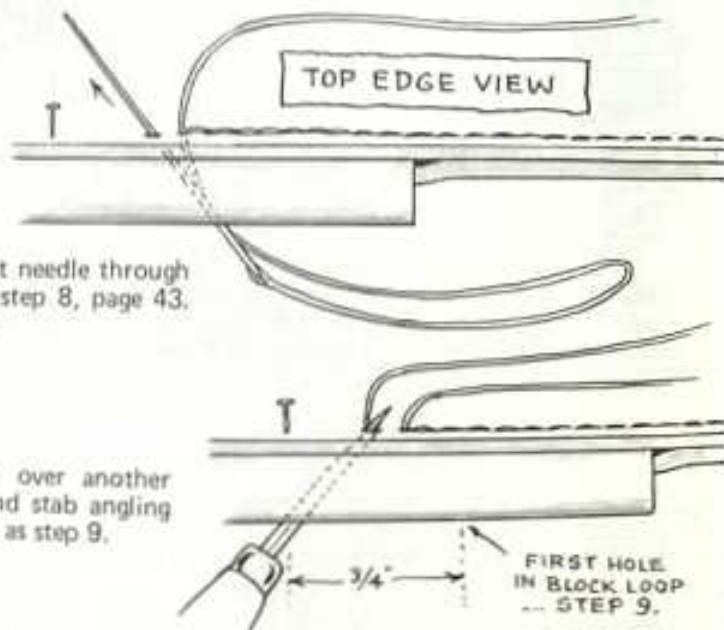
15

Push front needle through ... as in step 8, page 43. Pull tight.

16

Move awl over another  $\frac{3}{4}$ " ... and stab angling hole; same as step 9.

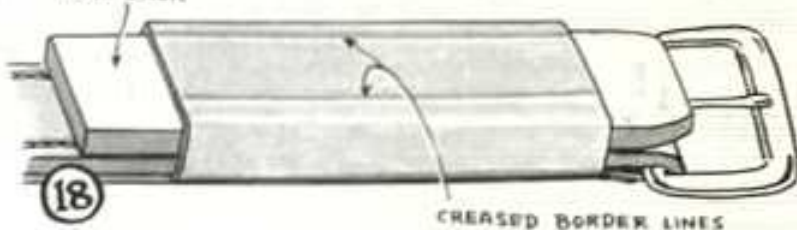
TOP EDGE VIEW



17

Continue sewing in this manner until you reach the buckle. Keep stab holes (in loop front) in an even line. Scribe a light guide line, if necessary. Backstitch; cut off threads.

LOOP STICK



18

"Block" the loop as described; step 15, page 39. To camouflage the awl holes in block loop, moisten and use a creaser. Or, cut border lines, bevel, and use border stamp. (See photo, page 42.) A metal loop stick must be used for this.

## SEWING WELTS



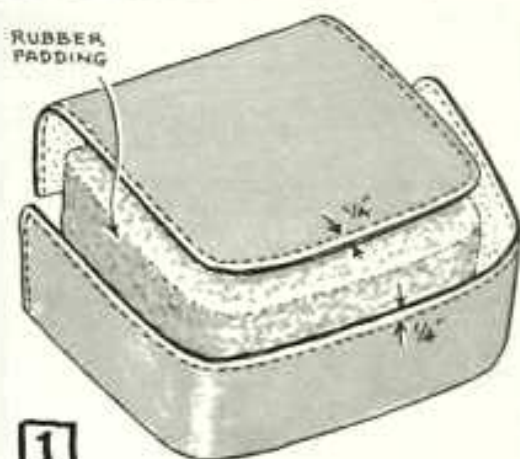
**BOAT SEAT:** This project was made of vinyl material, with vinyl welts. 4" of foam rubber was used for padding. Seat fits bow of boat.



**SADDLE SWELLS:** The bulge of this saddle's swells could not be smoothly covered without splitting. Here, the welt is used to join the leathers.

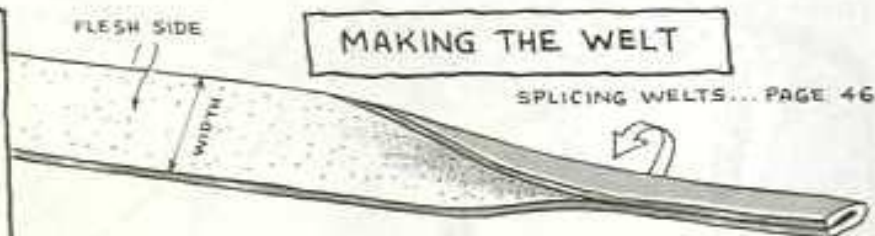
Welts can be made from most any flexible material. Garment type leathers make good welts . . . can be used in vests, jackets, etc. For heavy weight leathers . . . welts are generally cut from lighter material. Example: welts (for saddle shown) were made from 4/5 oz. latigo lace leather. Welts can also be made of single-ply leather (see page 46).

### MAKING A CUSHION SEAT

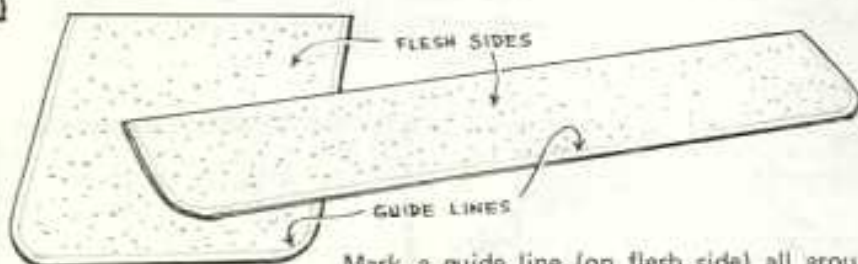


**1**

Measure rubber . . . and cut out covering material. Allow  $\frac{1}{4}$ " extra material for welts . . . indicated by broken lines on sketch above. Allow extra material at bottom, if cover is to be tacked to a base board . . . see step 10.

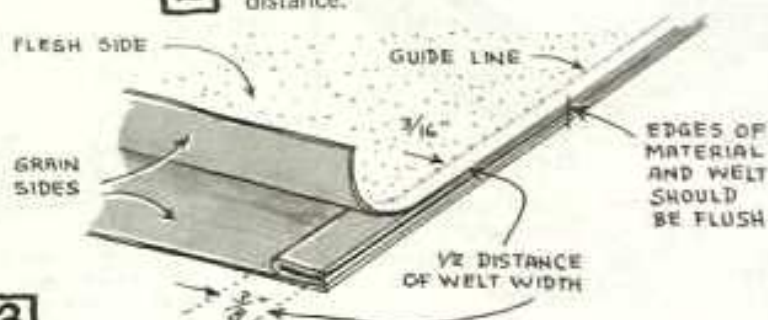


The width of the welt is determined by the materials to be sewn. Welts can be from  $\frac{1}{2}$ " to 1" wide. Cement flesh side . . . fold and adhere as shown above. Make welts full length of seams to be sewn. Extra length can be trimmed later.



**2**

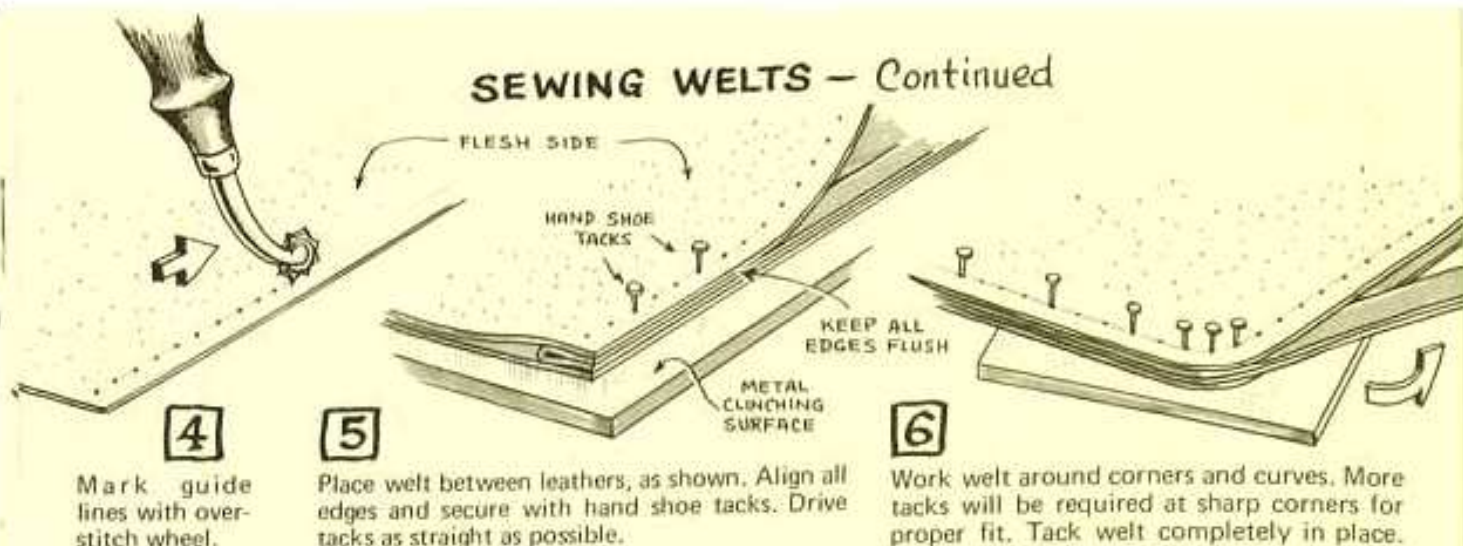
Mark a guide line (on flesh side) all around edges to be sewn. See below for correct distance.



**3**

Guide line should be  $\frac{1}{2}$  of the width of the folded welt . . . from the edge (see above). If folded welt is  $\frac{1}{2}$ " wide . . . guide line should be  $\frac{1}{4}$ " from edge. Welt fits between materials as shown above.

## SEWING WELTS - Continued



**4**

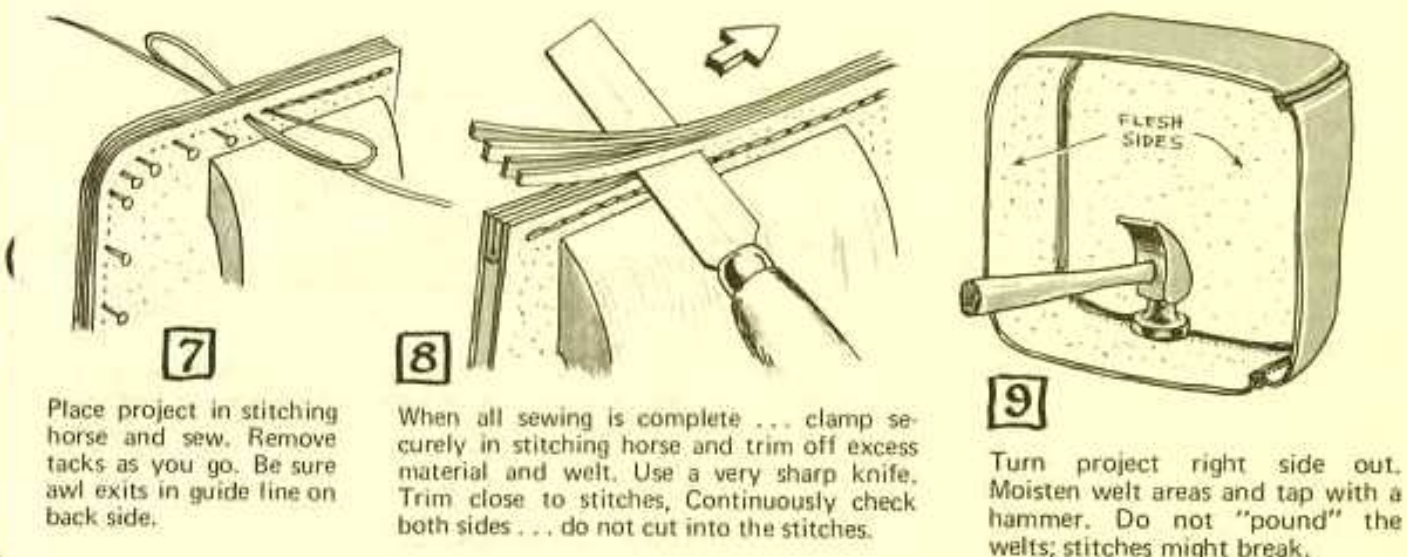
Mark guide lines with over-stitch wheel.

**5**

Place welt between leathers, as shown. Align all edges and secure with hand shoe tacks. Drive tacks as straight as possible.

**6**

Work welt around corners and curves. More tacks will be required at sharp corners for proper fit. Tack welt completely in place.



**7**

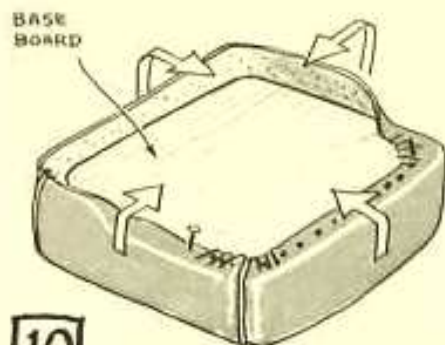
Place project in stitching horse and sew. Remove tacks as you go. Be sure awl exits in guide line on back side.

**8**

When all sewing is complete ... clamp securely in stitching horse and trim off excess material and welt. Use a very sharp knife. Trim close to stitches. Continuously check both sides ... do not cut into the stitches.

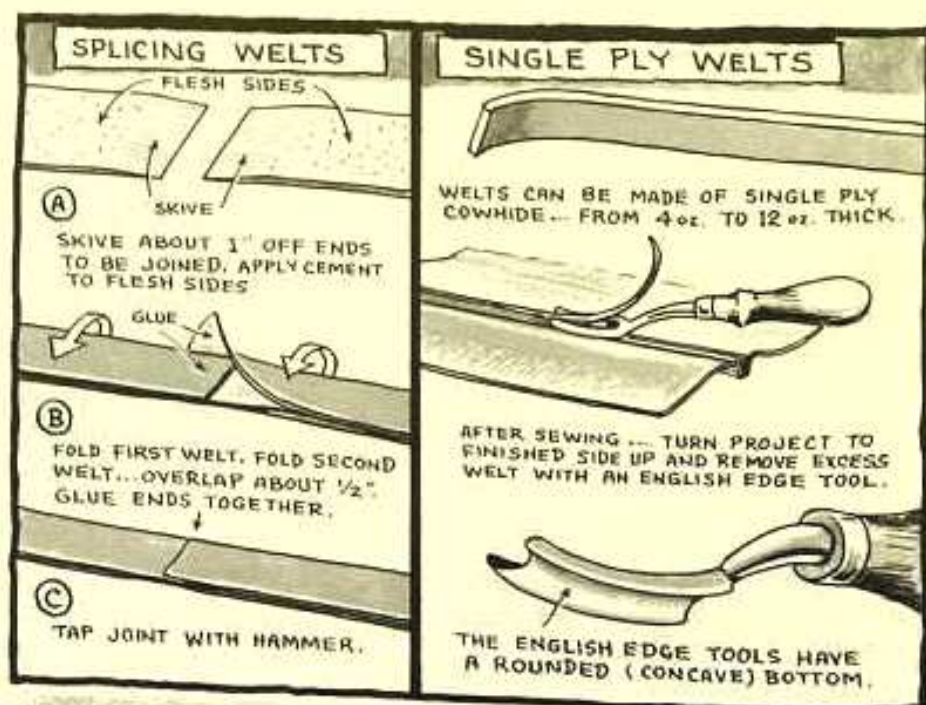
**9**

Turn project right side out. Moisten welt areas and tap with a hammer. Do not "pound" the welts; stitches might break.



**10**

Slip cover over rubber padding and base board. Turn over ... pull sides snugly over base board and tack or screw in place.



### SPlicing WELTS

FLESH SIDES

**(A)** SKIVE  
SKIVE ABOUT 1" OFF ENDS TO BE JOINED. APPLY CEMENT TO FLESH SIDES

GLUE

**(B)** FOLD FIRST WELT. FOLD SECOND WELT... OVERLAP ABOUT 1/2". GLUE ENDS TOGETHER.

**(C)** TAP JOINT WITH HAMMER.

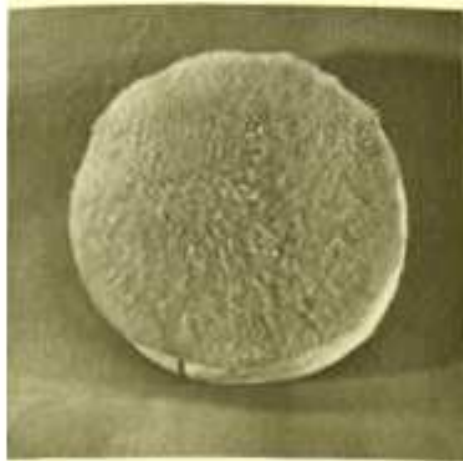
### SINGLE PLY WELTS

WELTS CAN BE MADE OF SINGLE PLY COWHIDE... FROM 4oz. TO 12oz. THICK.

AFTER SEWING ... TURN PROJECT TO FINISHED SIDE UP AND REMOVE EXCESS WELT WITH AN ENGLISH EDGE TOOL.

THE ENGLISH EDGE TOOLS HAVE A ROUNDED (CONCAVE) BOTTOM.





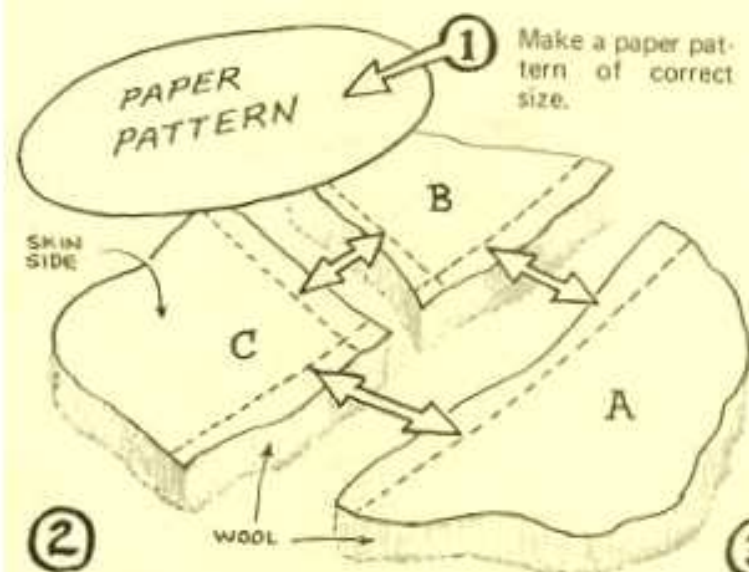
## SEWING THE BASEBALL STITCH

This stitch is used for joining two or more pieces of shearling together. It is sometimes used when shearling is not large enough to line a saddle skirt. It is used here to make the pillows shown. This allows one to use up odd pieces of shearling for various projects. These pillows were made from  $\frac{3}{4}$ " shearling.



This pillow top was made from three pieces of  $\frac{3}{4}$ " shearling. Seams are almost undetectable.

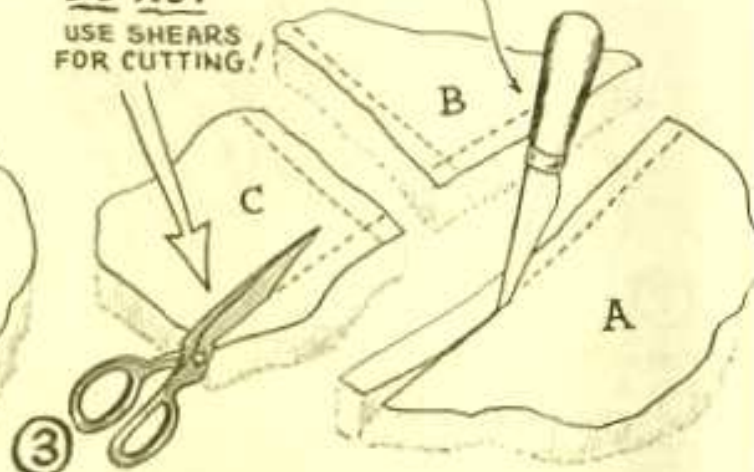
This pillow was made with white shearling. The brand was of cream colored shearling . . . inset and sewn with baseball stitch.



1 Make a paper pattern of correct size.

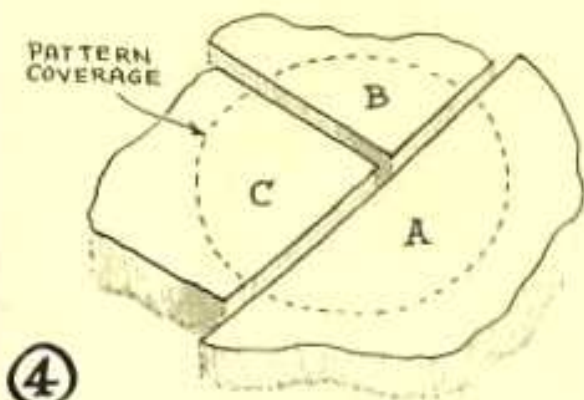
**DO NOT**  
USE SHEARS  
FOR CUTTING!

USE A SHARP KNIFE . . .  
CUT ONLY THRU THE SKIN.

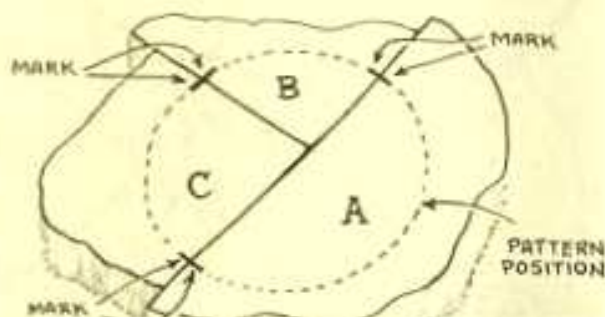


Do not cut with shears . . . as they cut the wool fibers making seams easily detectable. By cutting only through the skin, with knife, the wool fibers are not cut. Fibers pull apart, and blend into fibers of adjoining pieces when sewn together.

2 Select pieces of shearling large enough for pattern. Note . . . the areas to be joined must parallel each other, indicated by arrows, on broken lines.

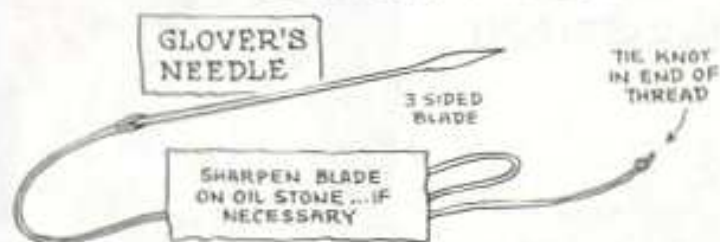


4 After making parallel cuts . . . fit pieces together and check for any trimming required. Be sure you have enough area for the pattern.

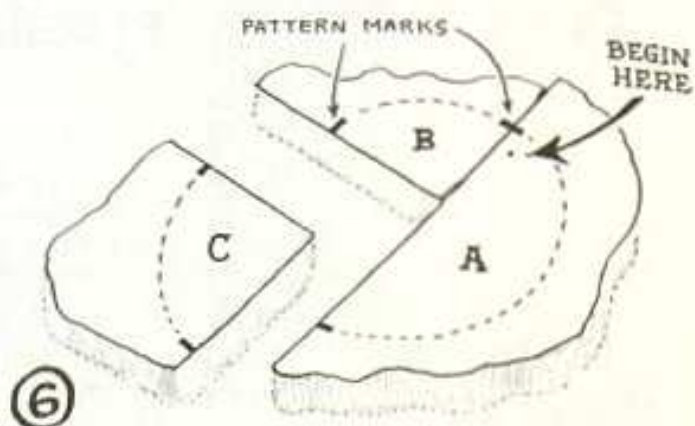


5 Snug pieces together. Place pattern in position and mark the skins at all seams, at pattern edge, as indicated above.

## SEWING THE BASEBALL STITCH—Continued

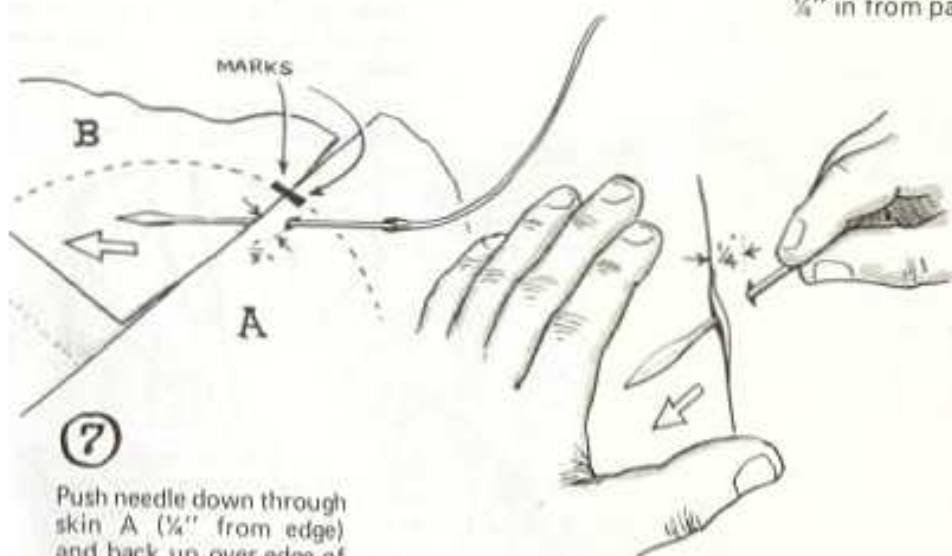


The glover's needle is used for sewing the baseball stitch. Make a single thread . . . preparing only one end for the needle. Tie a knot in the other end. Wax the thread and put on needle as previously instructed.



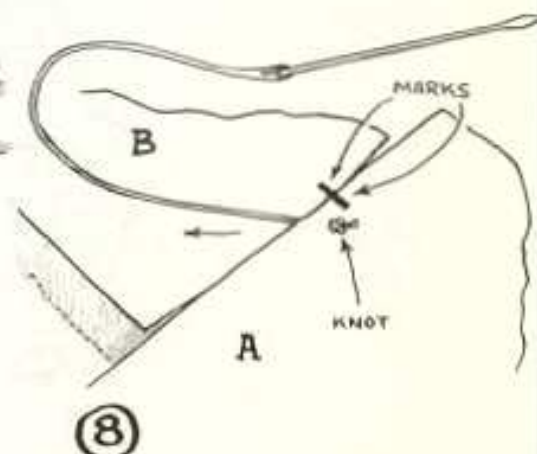
6

Begin sewing pieces A and B together. Begin about  $\frac{1}{4}$ " in from pattern mark and  $\frac{1}{4}$ " in from edge.



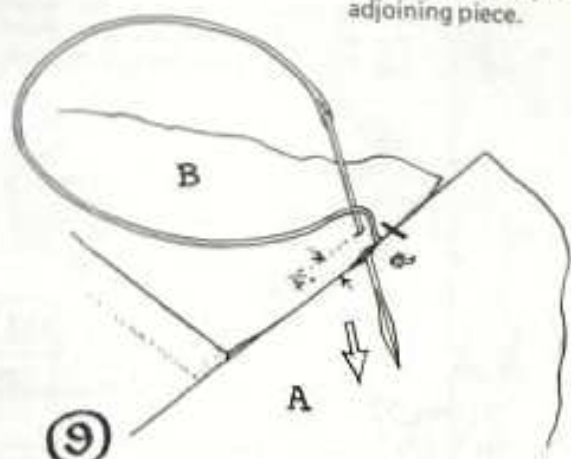
7  
Push needle down through skin A ( $\frac{1}{4}$ " from edge) and back up over edge of piece B.

Needle should come out right under edge of skin. Left hand holds material in place. Needle must be lifted up . . . to come out on top of adjoining piece.

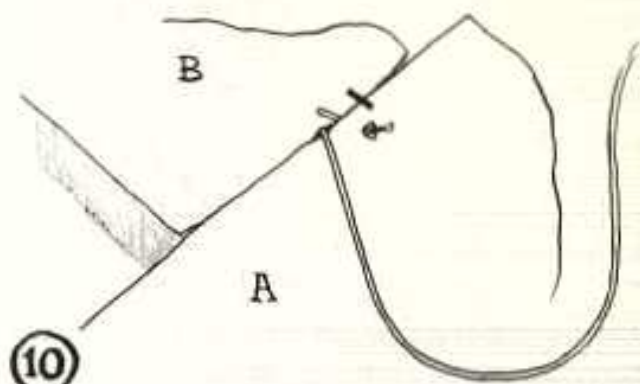


8

Pull slack out of thread. Pull down to knot. Keep pieces A and B in position . . . with marks.



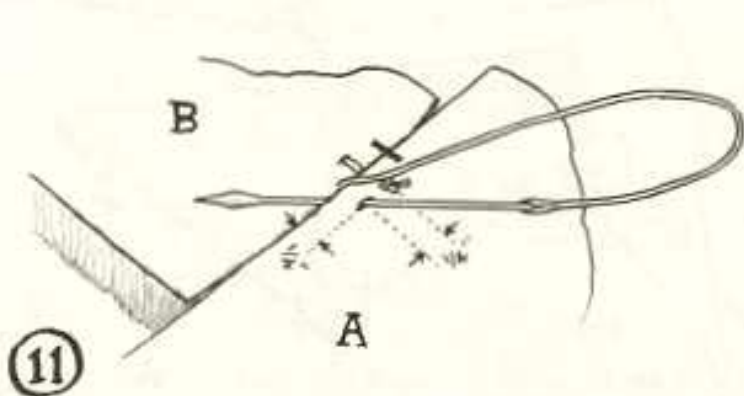
9  
Push needle down through skin of piece B and up over piece A as shown above. Be sure to go *under* thread, as shown.



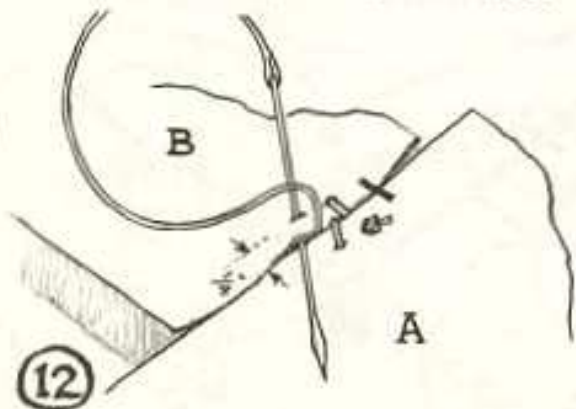
10

Pull stitch up snug . . . as shown. CAUTION: some sheepskins will easily tear. Experience will teach you how tight to pull the stitches.

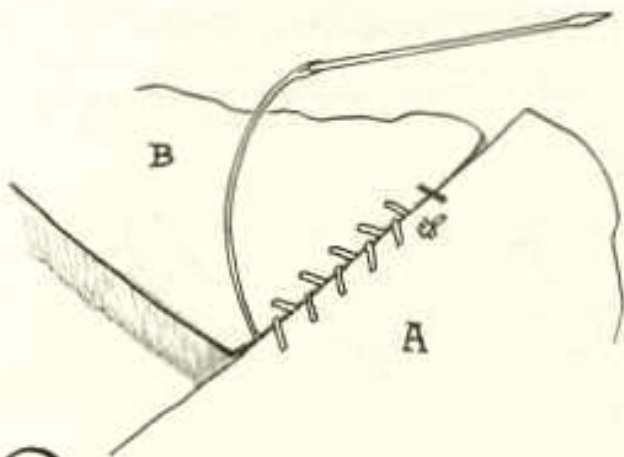
## SEWING THE BASEBALL STITCH — Continued



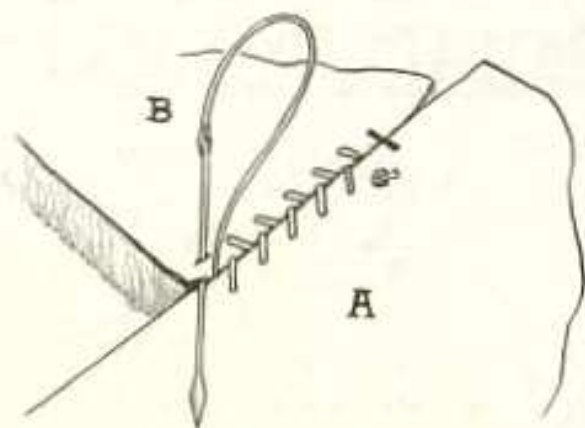
11 Push needle down through piece A, about  $\frac{1}{4}$ " from edge, and  $\frac{1}{4}$ " from knot . . . and back up over piece B as shown. Pull stitch up snug.



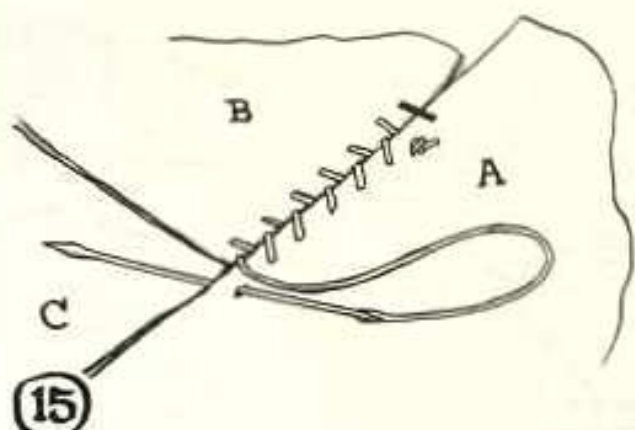
12 Push needle down through piece B up over piece A, as shown. Be sure to go *under* thread. Pull stitch snug.



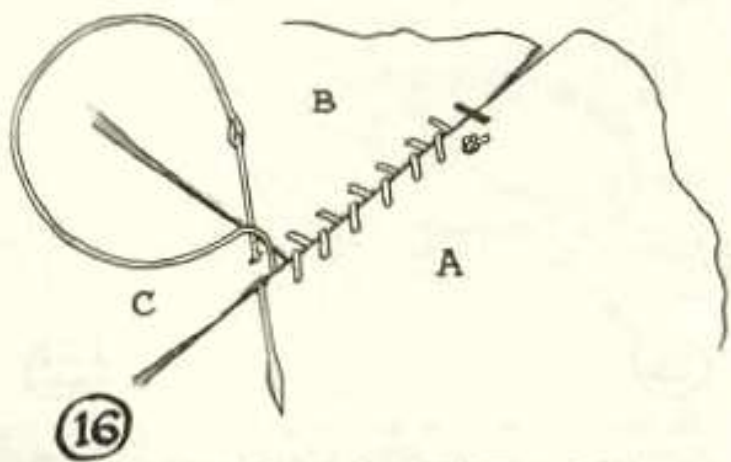
13 Continue sewing in this manner . . . down to end of piece B. Space stitches about  $\frac{1}{4}$ " apart and  $\frac{1}{4}$ " from edges.



14 Push needle down through corner of piece B . . . back up over piece A, as shown. Pull stitch snug.

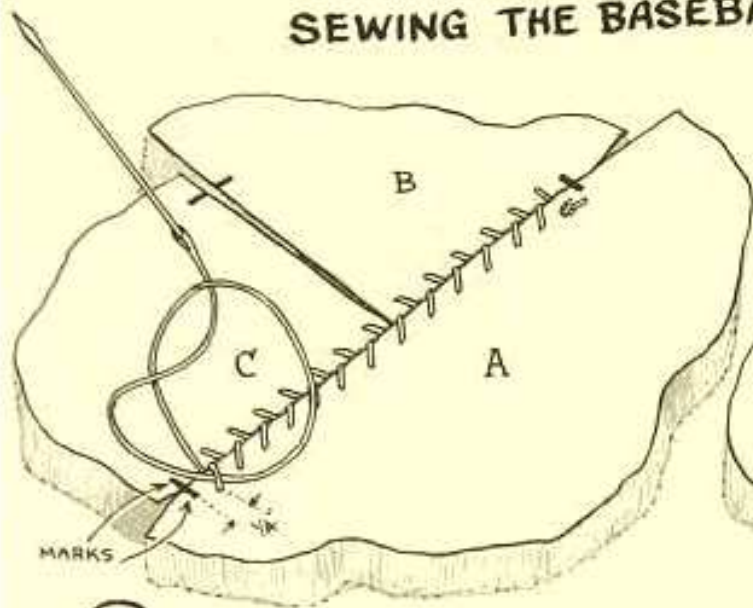


15 Fit piece C in position. Push needle down through piece A . . . up over piece C. Pull stitch snug.



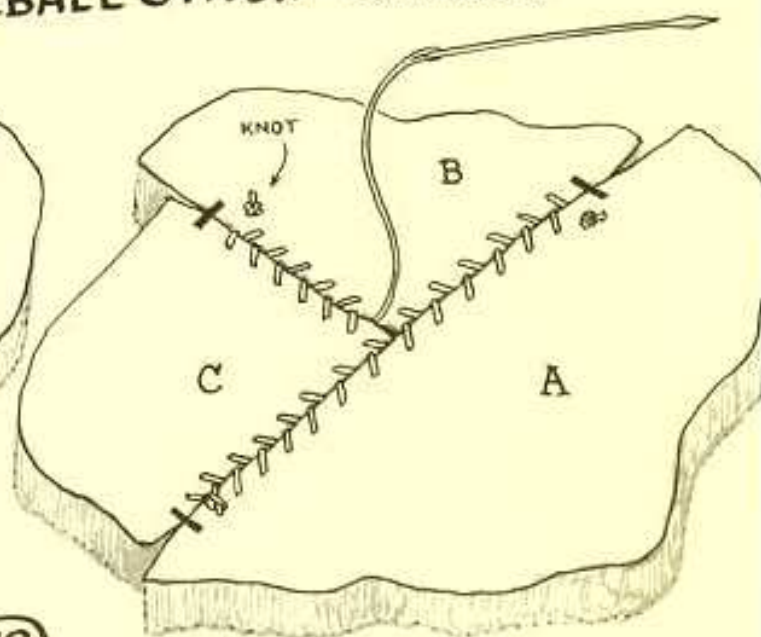
16 Push needle down through corner of piece C . . . up over piece A.

## SEWING THE BASEBALL STITCH - Continued



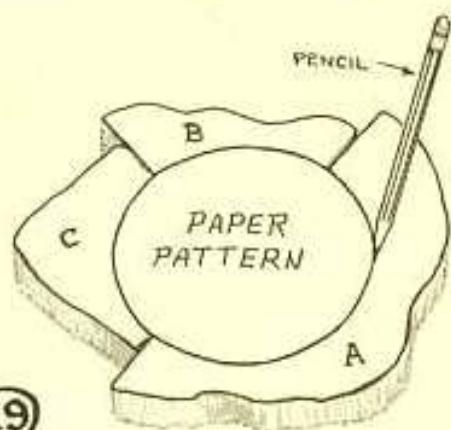
17

Continue sewing to within  $\frac{1}{4}$ " of marks on pieces A and C. Tie knot... cut off thread.



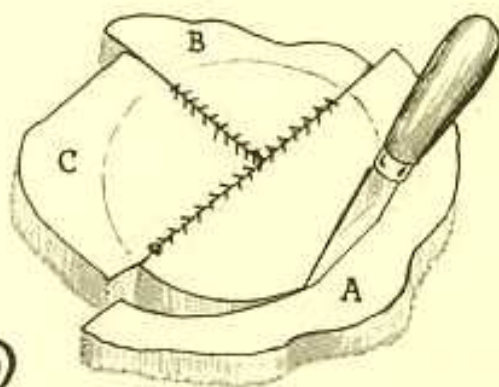
18

Tie knot in end of thread and sew pieces B and C together. Tie knot... cut off thread. Sewing is complete.



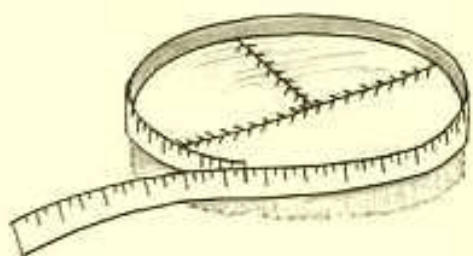
19

Place pattern in position and draw around with pencil.



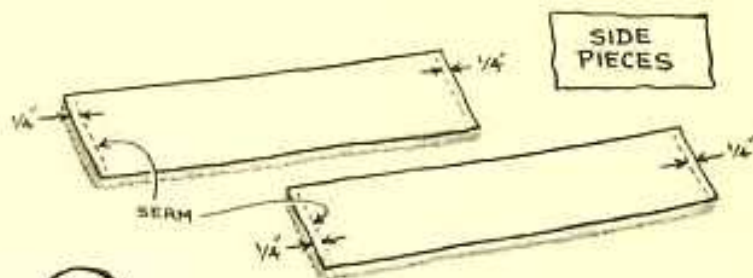
20

Trim off excess shearling with a sharp knife. Make two covers of this size.



21

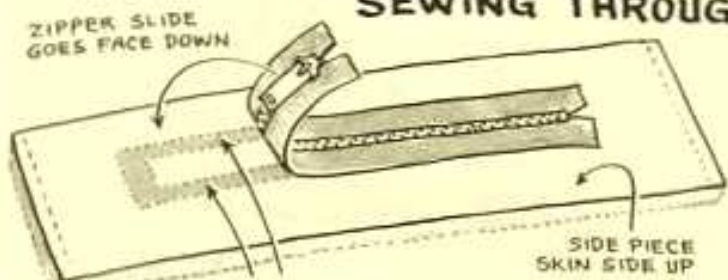
To determine length of side piece... measure around cover. Allow  $\frac{1}{2}$ " extra length for seams. ( $\frac{1}{4}$ " on each end.)



22

The side piece may have to be made in two pieces... for a large diameter cover. The project illustrated, was made in two pieces... of  $\frac{1}{4}$ " shearling. It was cut 4" wide to accommodate the foam rubber padding used. Allow  $\frac{1}{4}$ " at each end... for seams.

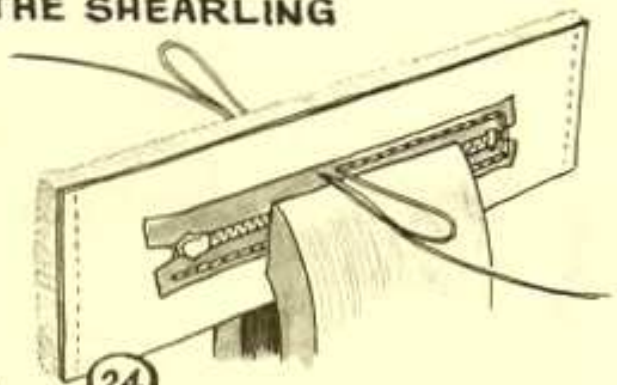
## SEWING THROUGH THE SHEARLING



23

APPLY RUBBER CEMENT TO EDGES OF ZIPPER AND TO SKIN WHERE EDGES WILL ADHERE.

Next . . . install a heavy duty zipper in center of one of the side pieces. For 14" diameter cover, use a 12" to 14" zipper. Cement face down to skin side. Do not apply cement in area where zipper slide will pass along zipper. Use a non-locking type zipper slide. Do not cut opening in shearling yet!



24

Place in stitching horse and sew along the edges of the zipper tape, and across the ends. See *special note* below.

### SEWING THROUGH THE WOOL

#### SPECIAL NOTE:

You cannot sew through the wool without special preparation of the thread . . . as the wool fibers will "grab" the thread . . . and pull it into the awl hole, virtually locking the stitch. To overcome this, make a thread in the usual manner. Wax with bees wax. Now, tear a piece from a paper bag.



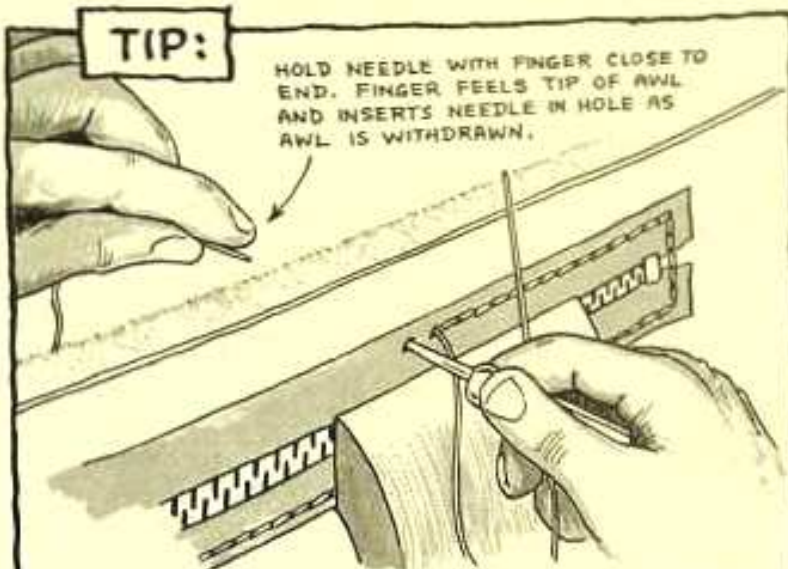
### PREPARING THE THREAD



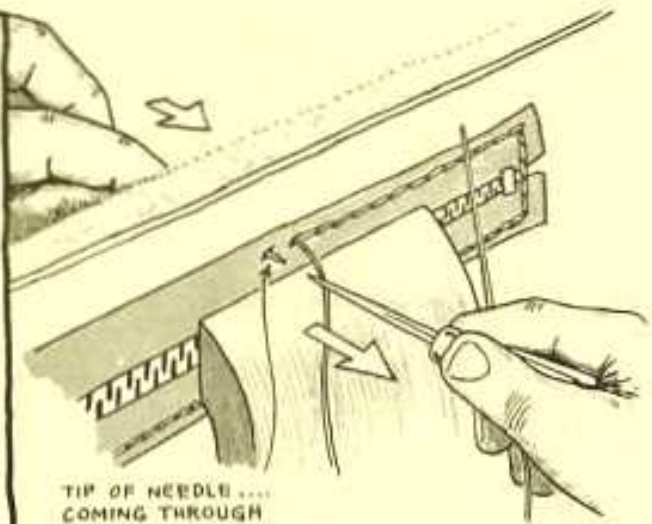
Rub vigorously back-and-forth over the thread. This hardens and burnishes the wax . . . and the threads will easily pass through the holes.

#### TIP:

HOLD NEEDLE WITH FINGER CLOSE TO END. FINGER FEELS TIP OF AWL AND INSERTS NEEDLE IN HOLE AS AWL IS WITHDRAWN.

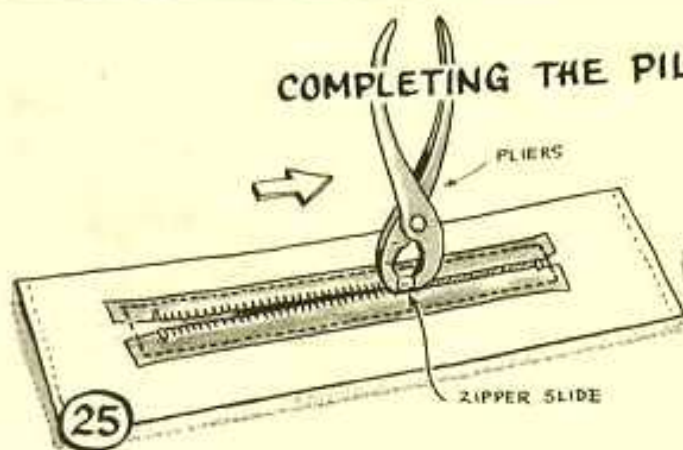


When sewing through wool . . . the back side awl hole cannot be seen. Therefore, as the awl is about to be withdrawn, the index finger of left hand must feel tip of awl blade . . . and left hand needle must follow awl as it is withdrawn.

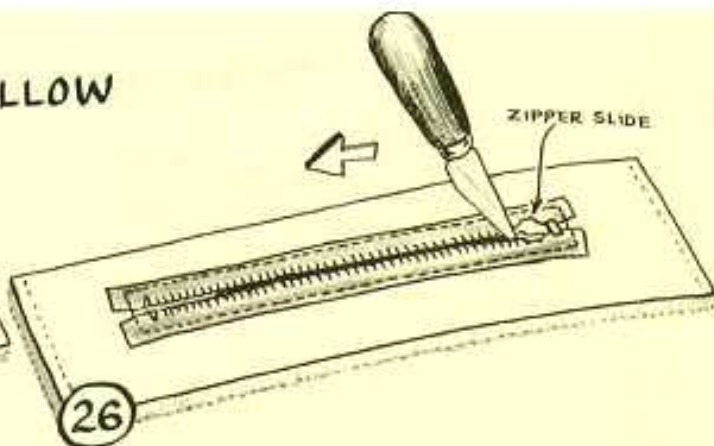


Some practice will be necessary to become proficient. This practice will benefit your regular sewing . . . as you should seldom look at the back side, while sewing.

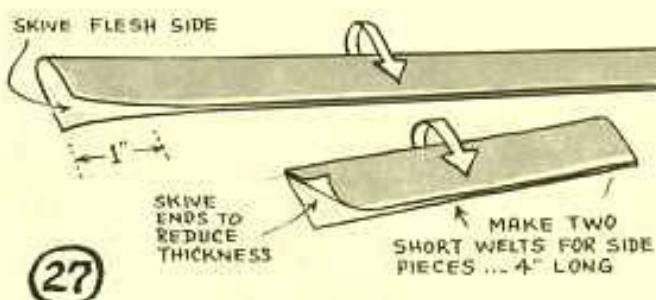
## COMPLETING THE PILLOW



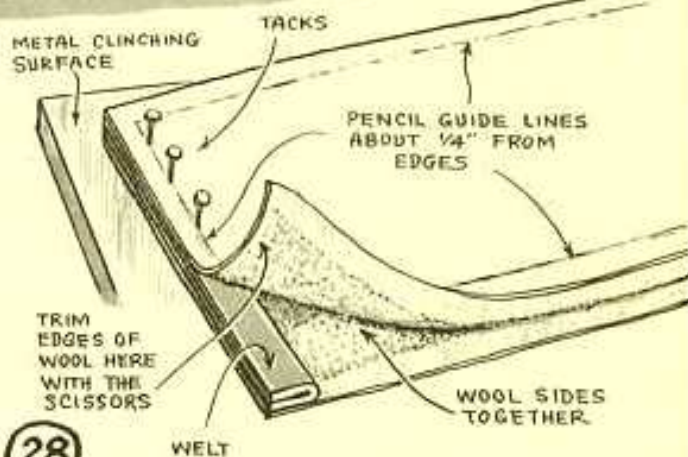
25 With zipper sewn in place ... grasp bottom of zipper slide with pliers and pull zipper open.



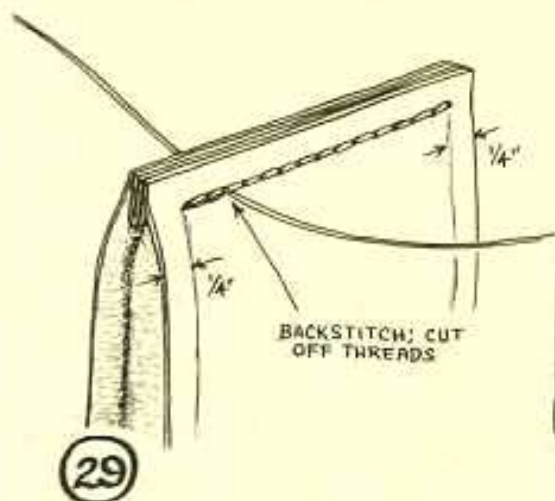
26 Take a sharp knife and cut a single slit, through the wool skin, the full length of the zipper. No more cutting is necessary.



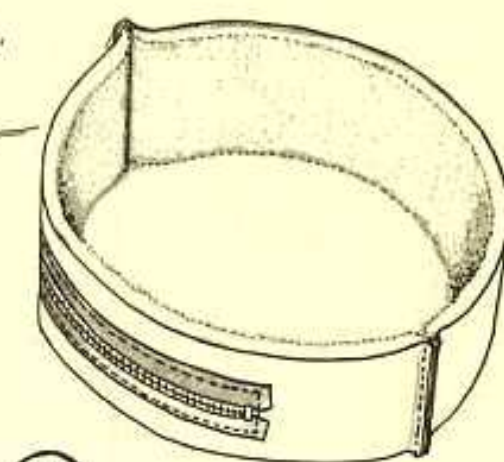
27 Make the welts for the covers (two required). Cut 1" wide and about an inch longer than measurement. Skive one end. Fold and cement ... except for about 1", as shown above. The welts for this project were made from cream cowhide. Make two short welts for end pieces.



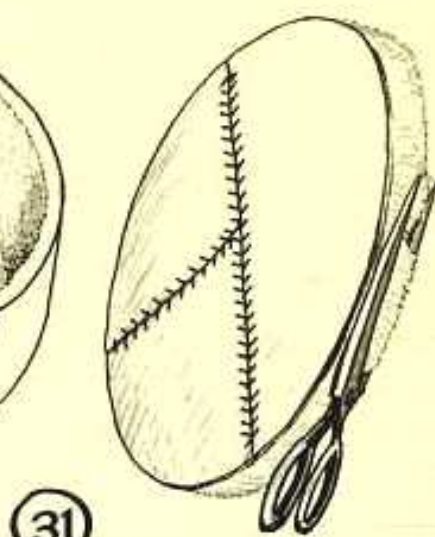
28 Fit ends of side pieces and welt together, as shown above. Tack in place. Try to keep all edges flush.



29 Sew across end. Sew to within 1/4" of each side. Before sewing other ends together ... fit around cover to check measurements. Sew welt in other ends of side pieces.

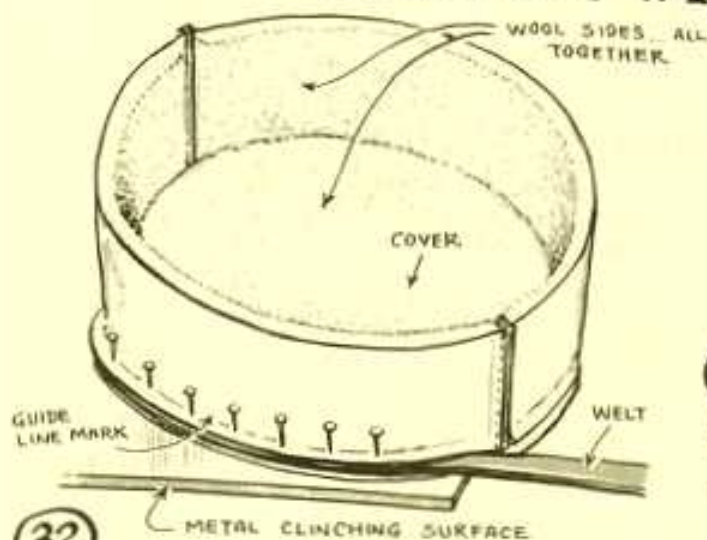


30 Sides ... ready to install.



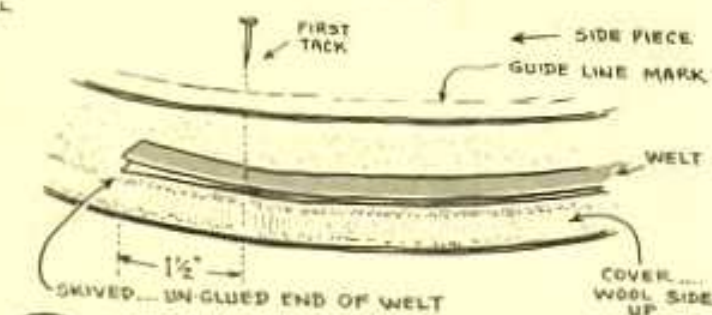
31 With scissors, trim off fringe of wool around outside edges of the covers.

## COMPLETING THE PILLOW - Continued



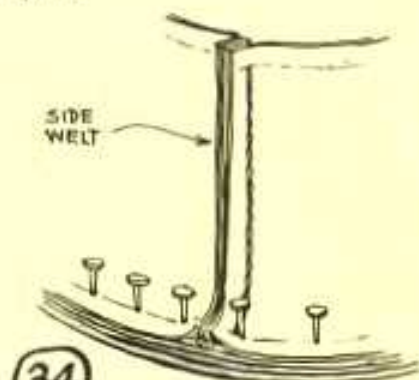
32

The sides are tacked to the cover as shown above ... with welt in between. Space tacks about 1" apart.



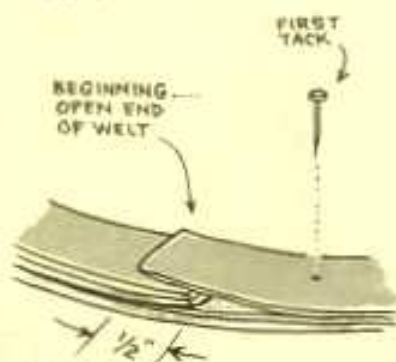
33

Begin first tack about 1 1/2" away from open end of welt. The wool side of the cover is up. Hold all parts firmly in place with left hand ... as you tack.



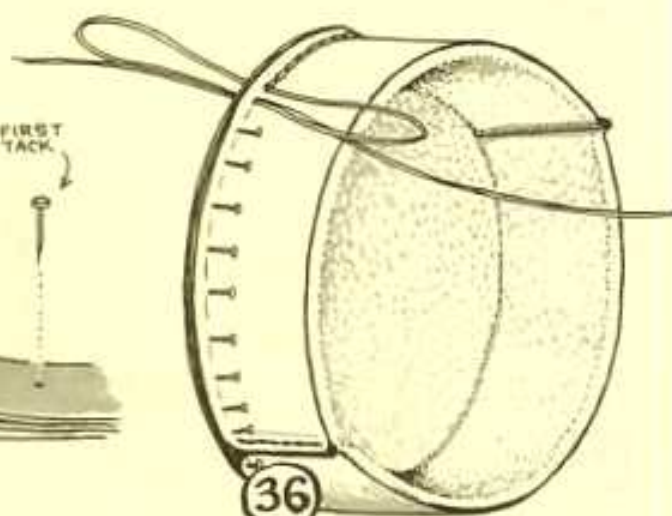
34

When you come to the side welts ... spread ends and force a bend in them. Tack securely. Sew over these welted ends.



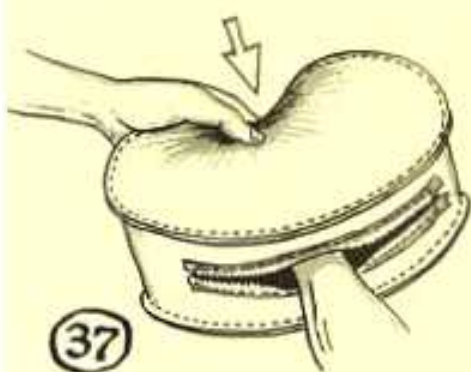
35

To complete, trim end of welt, allowing 1/2" overlap. Insert in open end of welt; complete tacking.



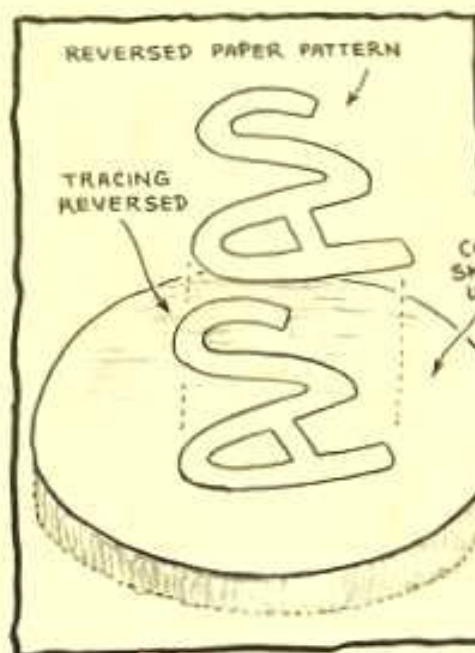
36

Sew completely around the cover ... pulling tacks as you go. If the project will not fit in stitching horse, hold between legs. Fit other cover to sides ... (wool inside) tack and sew as with first cover.



37

When sewing is completed, open zipper ... reach arm inside ... and turn the pillow inside out ... coming out the zipper opening. Insert foam padding into pillow case through zipper opening.



### NOTE:

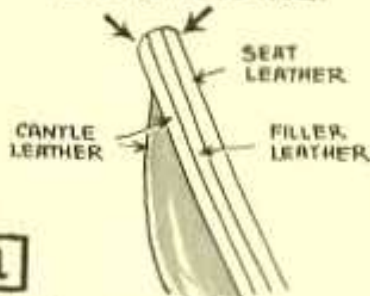
When inseting initials or brands ... make a pattern and trace it in reverse to the skin side of shearling. Trace in reverse, also, to contrasting colored shearling. Sew in with baseball stitch.

## THE HIDDEN STITCH



Arrow points to hidden stitches at back of cantle binding, on saddle above.

ROUND EDGES WITH A LARGE EDGE BEVELER OR ENGLISH EDGE TOOL.



**1**

Edge view of saddle cantle ... to be bound with leather ... covering raw edges.



**2**

Cut the binding leather from 6/7 oz. cowhide. Cut a strip of this 1/2" wide and fold over cantle, as shown above, to determine how wide to cut the binding leather.

GOUGE A SEWING CHANNEL ALONG ONE EDGE

GRAIN SIDE

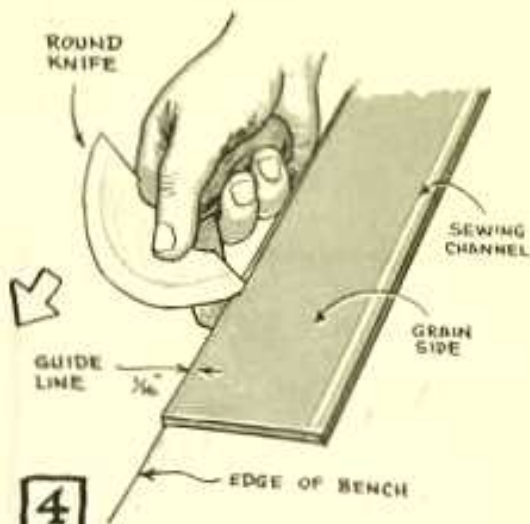
SCRIBE A GUIDE LINE 1/16" FROM EDGE WITH DIVIDERS

WIDTH OF BINDING LEATHER

**3**

Cut a length of binding leather (6/7 oz.) to width ... determined in step 2. Cut long enough to fully cover from one side of the project to the other. Prepare the leather as instructed above.

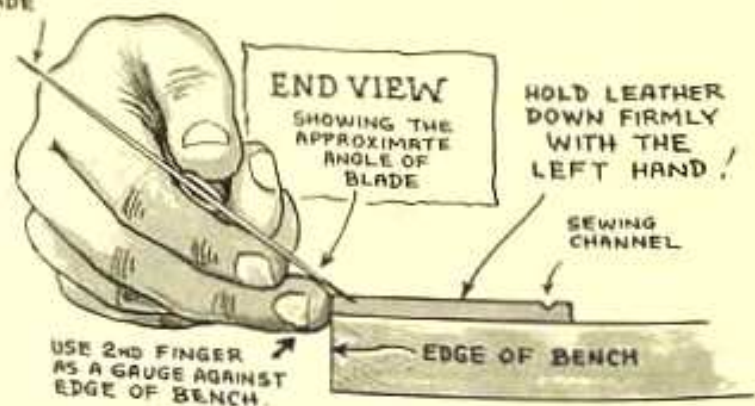
ROUND KNIFE



**4**

Place binding leather flush with edge of bench. Use the round knife (or other sharp knife) and cut an angled slit into the binding leather ... on the guide line.

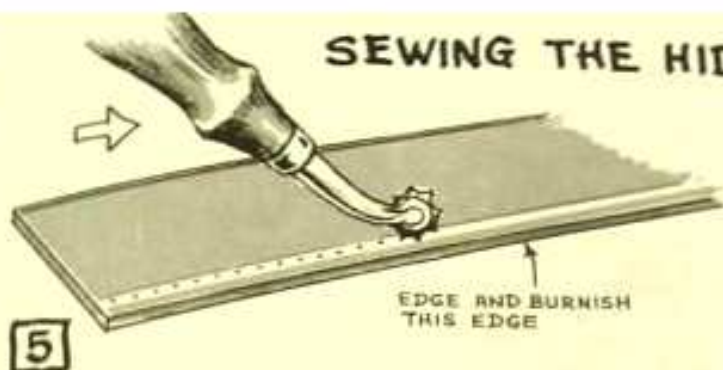
ROUND KNIFE BLADE



This view shows the angle to hold the blade. Note the angle. Use finger against the edge of the bench as a gauge. Cut into the leather about 1/2 depth. Follow the 1/16" guide line. Practice cutting on scrap leather first.



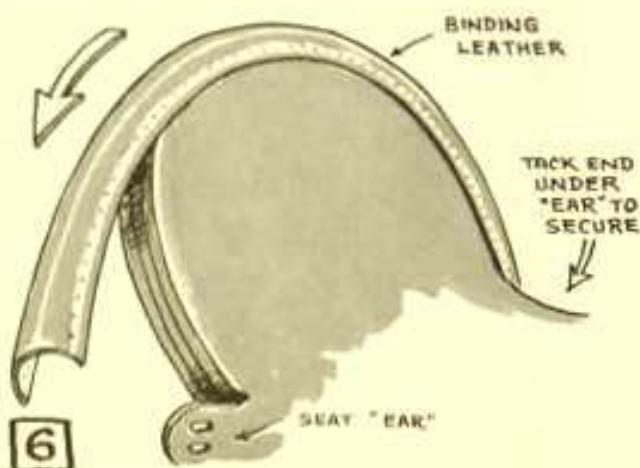
## SEWING THE HIDDEN STITCH



EDGE AND BURNISH THIS EDGE

5

Thoroughly soak the binding leather. Wrap in plastic bag overnight to "case" (soften) the leather. Next day remove ... and when leather is about half dried out ... run the overstitch wheel in the sewing channel,



BINDING LEATHER

TACK END UNDER "EAR" TO SECURE

6

SEAT "EAR"

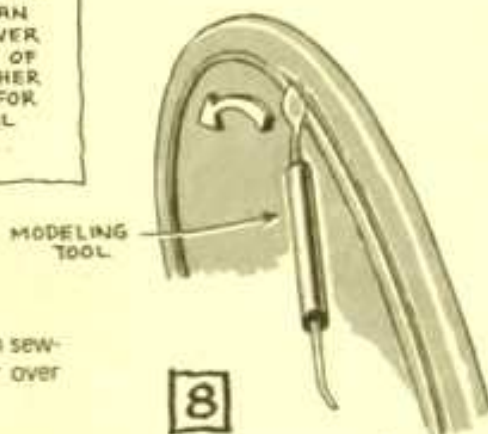
While leather is still moist ... stretch over cantele leathers, as shown. Secure first end with tack, pull over cantele leathers ... tuck under "ear" and secure other end with tack.



**NOTE:** THIS BINDING METHOD CAN BE USED TO COVER OTHER EDGES OF VARIOUS LEATHER PROJECTS ... FOR PROFESSIONAL APPEARANCE.

7

Tack binding in place ... all around ... in sewing channel. Use fingers to shape leather over back side of cantele.



MODELING TOOL

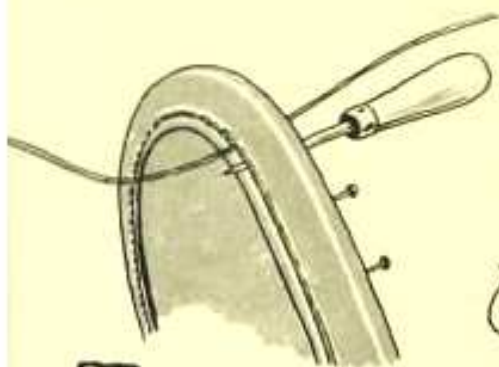
8

Use the spoon of your modeling tool to spread the slit open ... on back side.



SEWING CHANNEL

CROSS SECTION SHOWING SLIT SPREAD OPEN

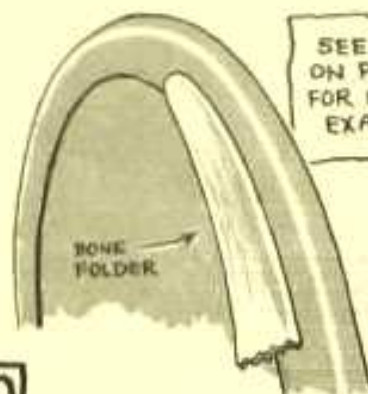


9

Make a thread ... sew in the usual manner. Some practice will be required to make the awl come out in the open slit. Watch for point of awl blade ... if it wants to come out in the wrong place ... withdraw about half way and angle blade until it comes out in the slit.



CROSS SECTION SHOWING AWL BLADE PROPERLY COMING OUT IN SLIT



BONE FOLDER

10

When sewing is completed ... use a bone folder to lay slit back down. Moisten, if necessary. No glue is required. Edge bevel along the slitted edge.

SEE PHOTO ON PAGE 54 FOR FINISHED EXAMPLE.

## SEWING ROUNDS



"ROUNDS" are used for handles, headstalls, reins, or other items where a trim, round appearance is desired. This method is used on bridles where silver ferrules are added for showy effect.

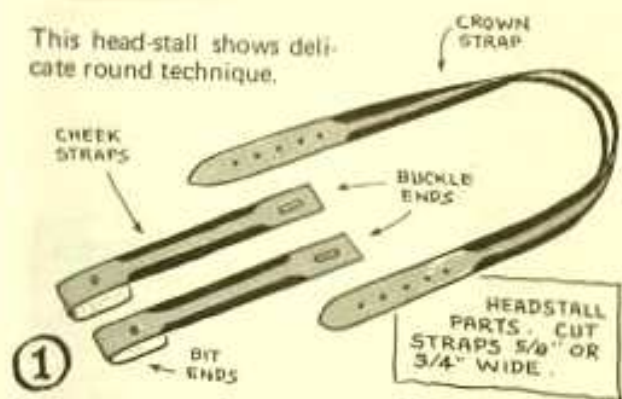
The hidden stitch is used . . . as previously described. However, it is used on both edges of the leather, where sewn.

Space denies us patterns for bridles, etc. Our purpose here is to show you *how* to do it. Pattern dimensions, etc., can be obtained from other sources, or by measuring an old head-stall, handle, etc.

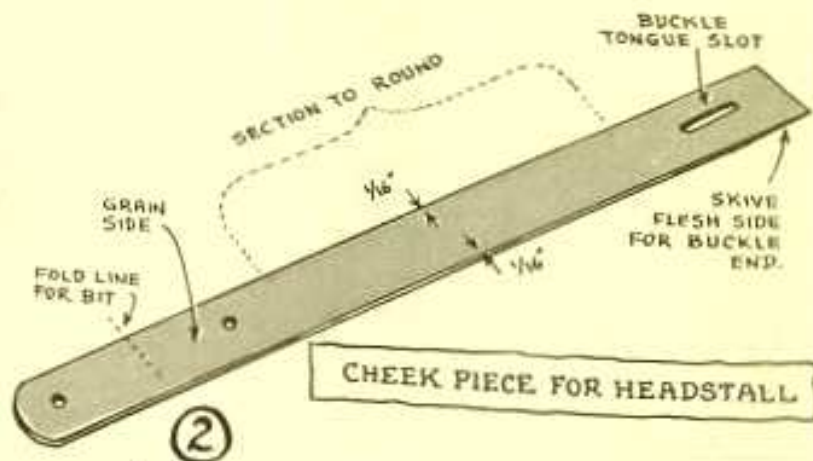


Handles here are shown with the "round" sewing.

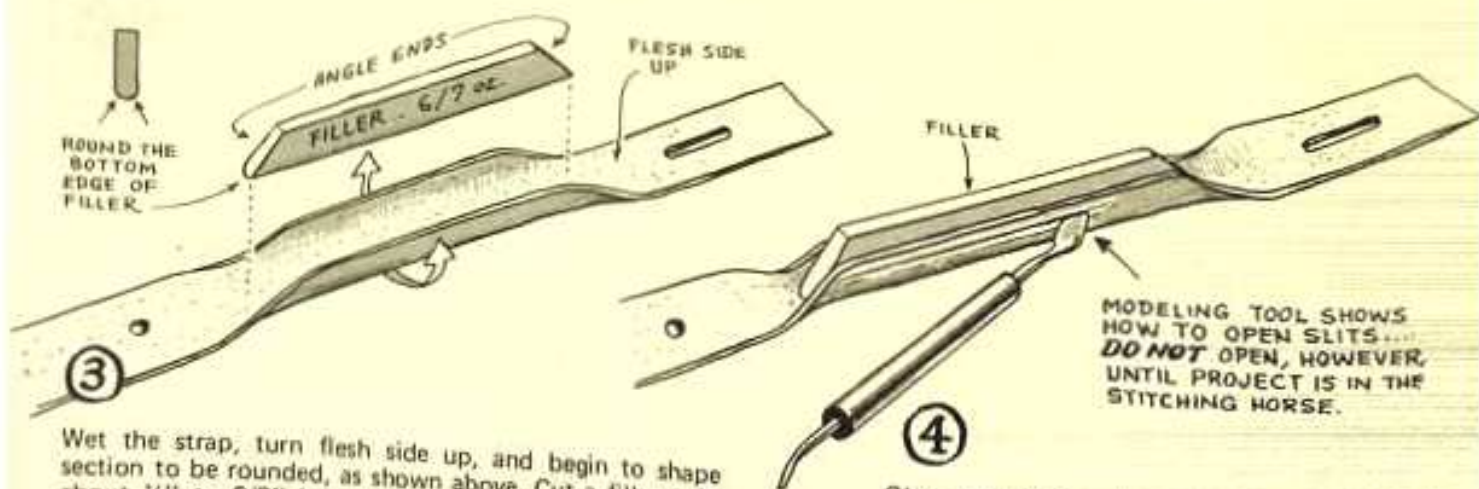
This head-stall shows delicate round technique.



To make a head-stall . . . cut all straps to their proper lengths. Solid black (on sketch above) indicates areas to be rounded.



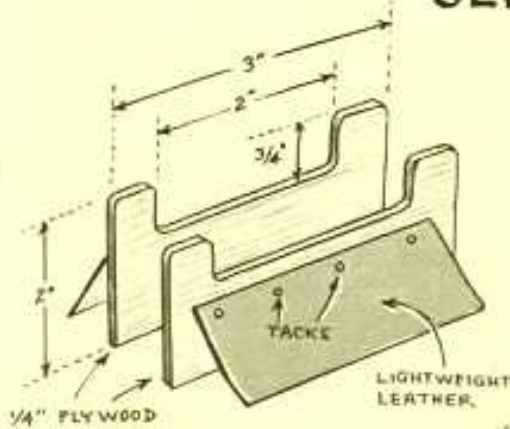
Scribe a guide line on both edges (of section to round) and cut an angled slit in each edge . . . same as for the hidden stitch on page 54.



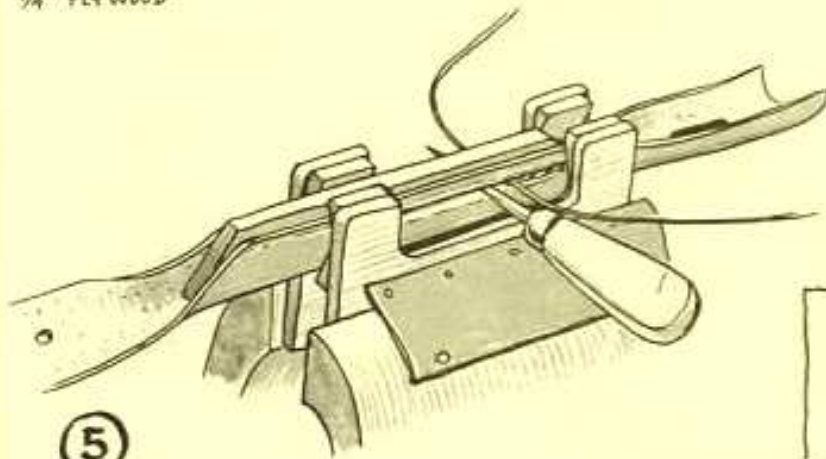
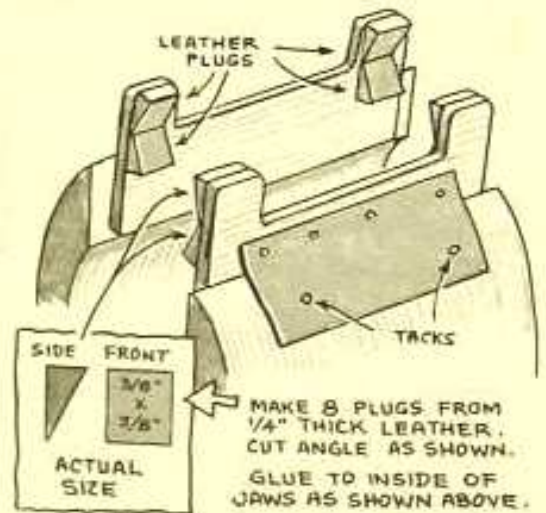
Wet the strap, turn flesh side up, and begin to shape section to be rounded, as shown above. Cut a filler strip about  $\frac{1}{4}$ " to  $\frac{3}{8}$ " longer than the angled slits . . . and about  $\frac{3}{8}$ " to  $\frac{1}{2}$ " wide.

Glue the filler in place with strong bonding cement. Be sure filler rests in bottom of fold. Tap with hammer to insure adhesion. Do not open slits . . . until step 5.

## SEWING ROUNDS -

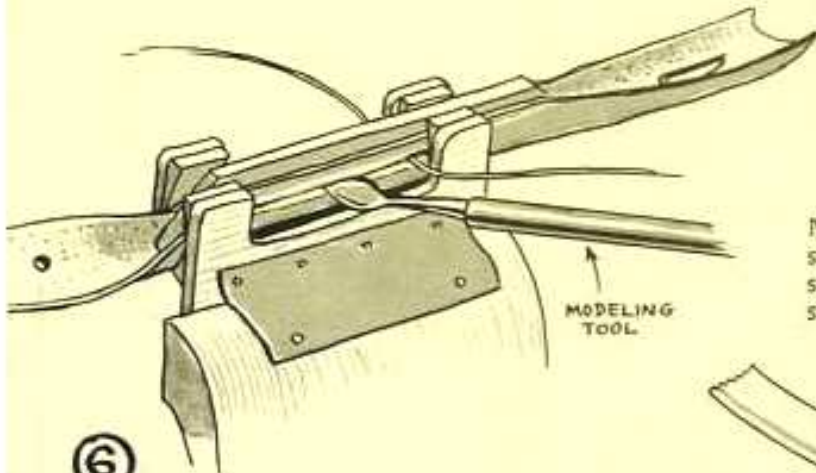
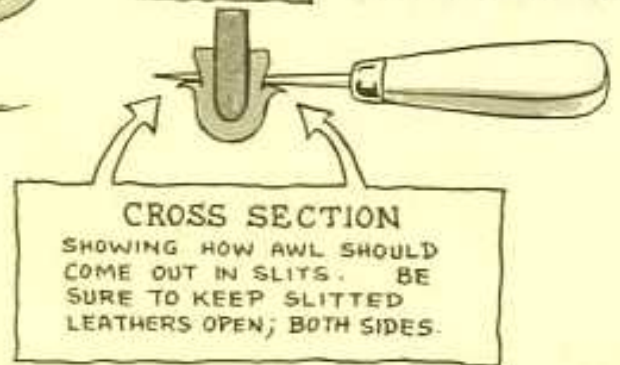


To aid in sewing rounds, cut two pieces of plywood as shown at left. Tack, or glue pieces of leather to them, as shown, at upper edge. Tack these to the jaws of your stitching horse as illustrated at right.



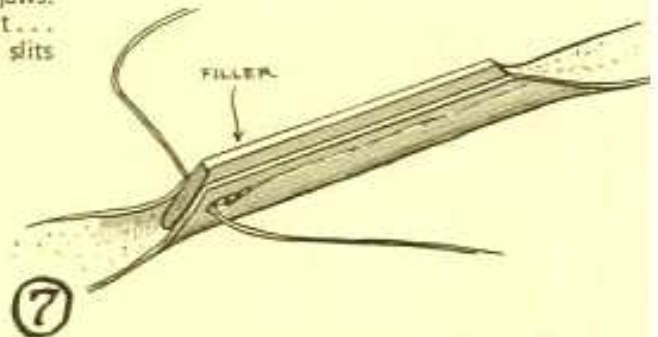
5

Place work in stitching horse. Open slits between modified jaws. Space stitches by eye; do not "wheel". Stab awl at base of slit... awl should exit in opposite slit in the same manner. Keep slits opened, between the modified jaws.



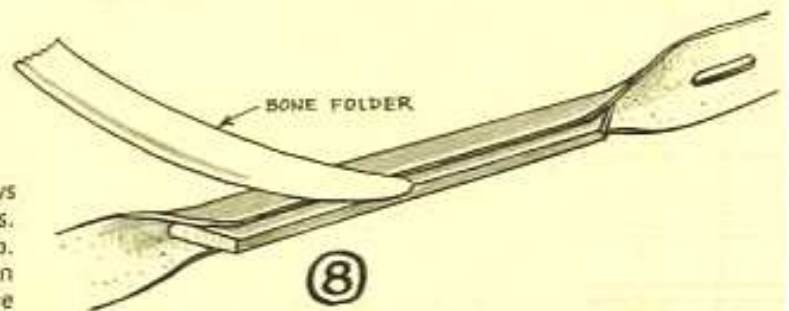
6

When you have sewn to the end of the modified jaws... take modeling spoon and close slits, over stitches. Release jaws... move project over... reclamp. Spread slits open with the modeling spoon (between modified jaws) on both sides. Continue sewing in the slits. Repeat... until you have sewn to the end of the slits.



7

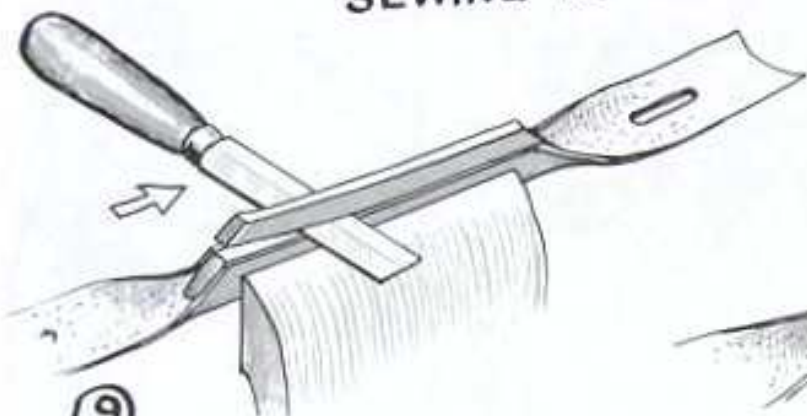
Note: Stitches should *not* go over end of filler. Backstitch one hole and cut off threads. Use modeling spoon to lay the slitted leather back down... over stitches.



8

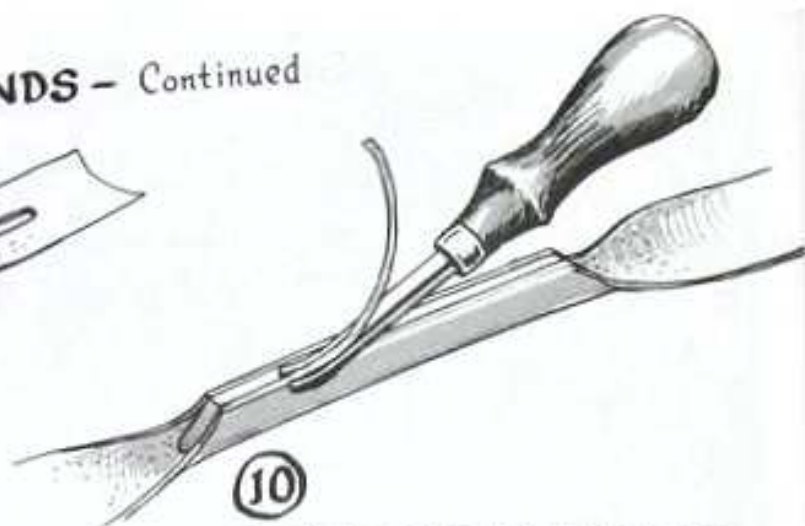
Wet the leather... tap with a hammer... and rub over sewn areas with the bone folder. Keep leather moist with a damp sponge.

## SEWING ROUNDS - Continued



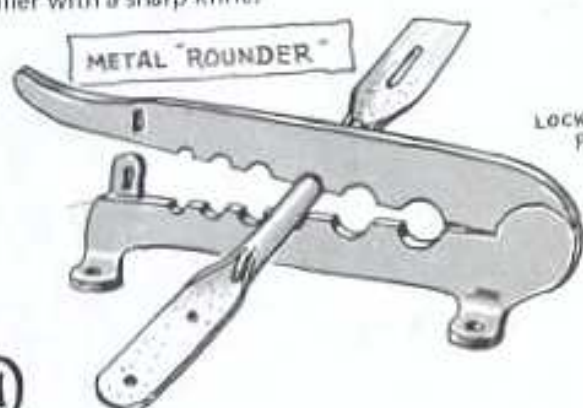
9

Clamp project in stitching horse and trim off excess filler with a sharp knife.



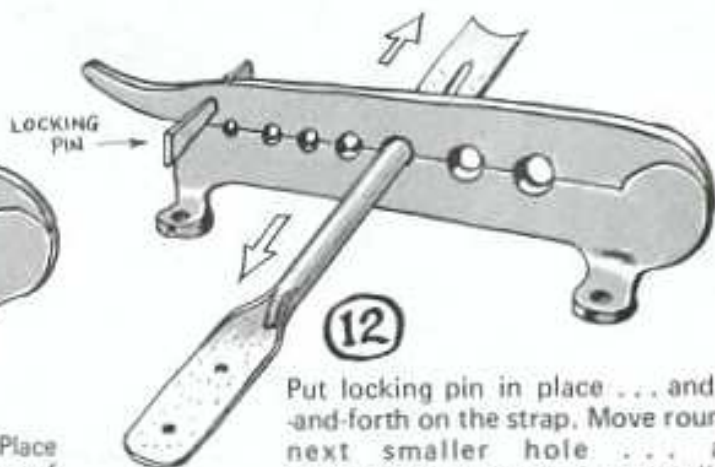
10

Round the edges with a large edge beveler.



11

Moisten the leather and place into "rounder". Place in larger hole, to start, than will be finished size of the round.



12

Put locking pin in place . . . and pull back-and-forth on the strap. Move round down to next smaller hole . . . and work back-and-forth. Work into smallest hole it will go, to make a perfect round.

### INSTALLING SILVER FERRULES

BUCKLE END MUST BE SHAPED THROUGH ROUNDER. FERRULES SLIP OVER END . . . DOWN ON ROUNDED PART

SPREAD BUCKLE END BACK OUT AND INSTALL BUCKLE AND LOOP.

CRIMP ENDS OF FERRULES TO HOLD THEM IN PLACE.

NOTE: FOR 5/16" \* FERRULES . . . CUT STRAP 5/8" WIDE. FOR 3/8" \* FERRULES . . . CUT STRAP 3/4" WIDE.

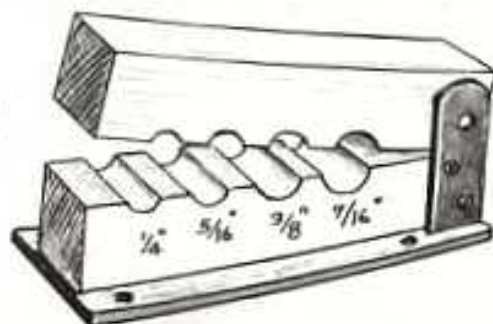
\* DIMETER



13

Sew buckle and leather loop in place as instructed on page 37.

MAKE YOUR OWN ROUNDER!



An improvised "rounder" can be made of two hardwood blocks. Clamp together; bore holes. Taper outside edges of holes; polish in holes. Hinge; rig up a locking pin. Use your ingenuity.

## "MAKING" A THREAD



2 OZ. PURE FLAX  
SHOE THREAD

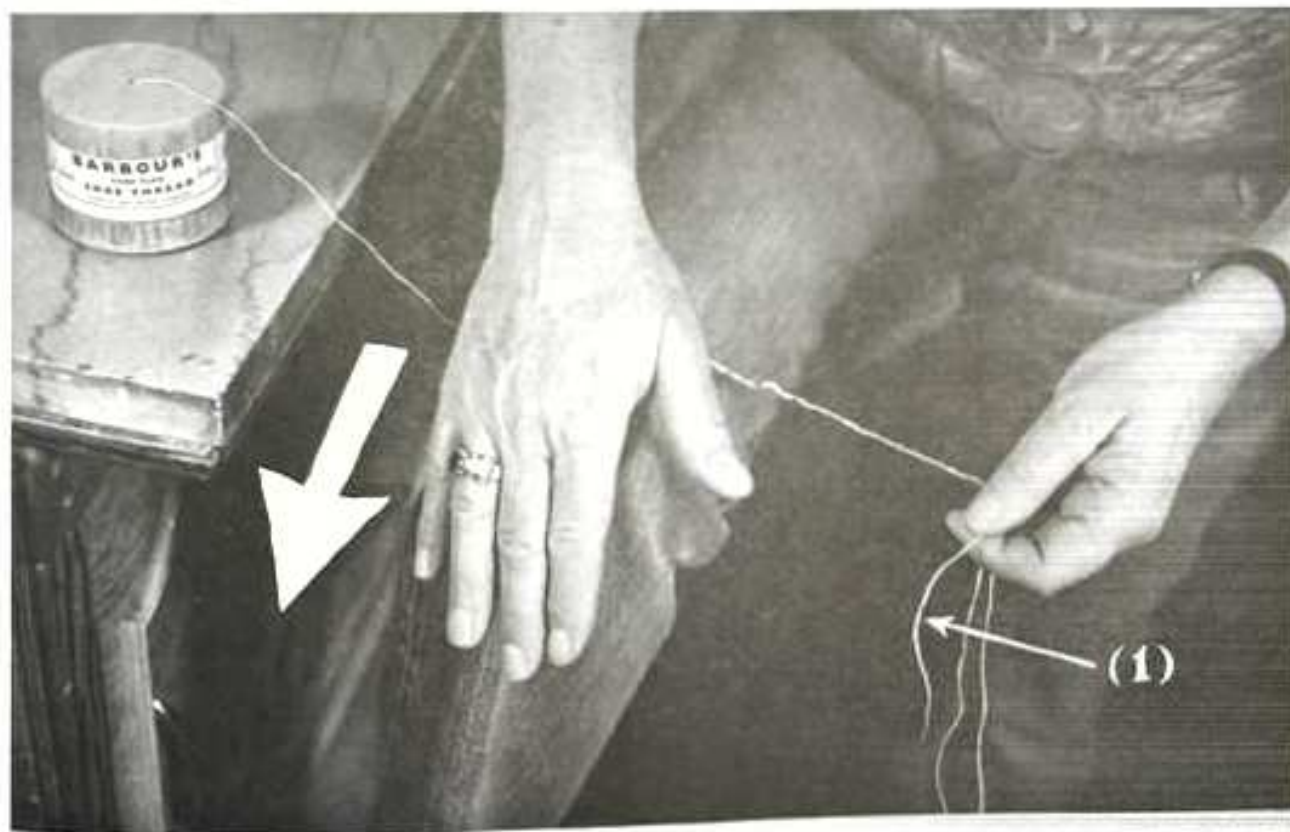
Hand-made threads are used when ready-made threads are unavailable . . . or when special threads are desired. Heavy threads can be made that have tremendous strength and durability . . . as for archery bow strings, etc.

The illustration at right shows a hand-made (7 cord) thread for quilting the padding in a saddle seat. It was made from seven lengths of the 2 oz. pure flax shoe thread.



THIS END OF THREAD MUST BE  
TAPERED AS IN STEPS 1-2-3-4-  
PAGES 5 AND 6. OR, AS DESCRIBED  
BELOW - STEPS 2-3-4-5.

To begin . . . pull out two lengths of thread (or more . . . if a longer thread is desired). Pull each length the same.



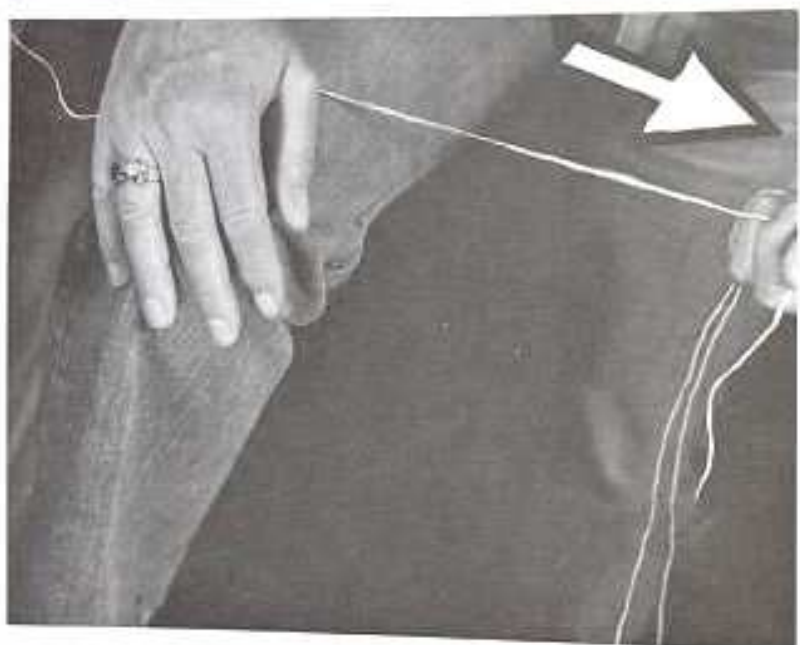
**2** After pulling out desired length of thread . . . place on leg and roll forward with heel of right hand (arrow). Hold with the left hand. This untwists the fibers. Hold beginning end of thread between thumb and index finger . . . shown (1) above

## "MAKING A THREAD — Continued



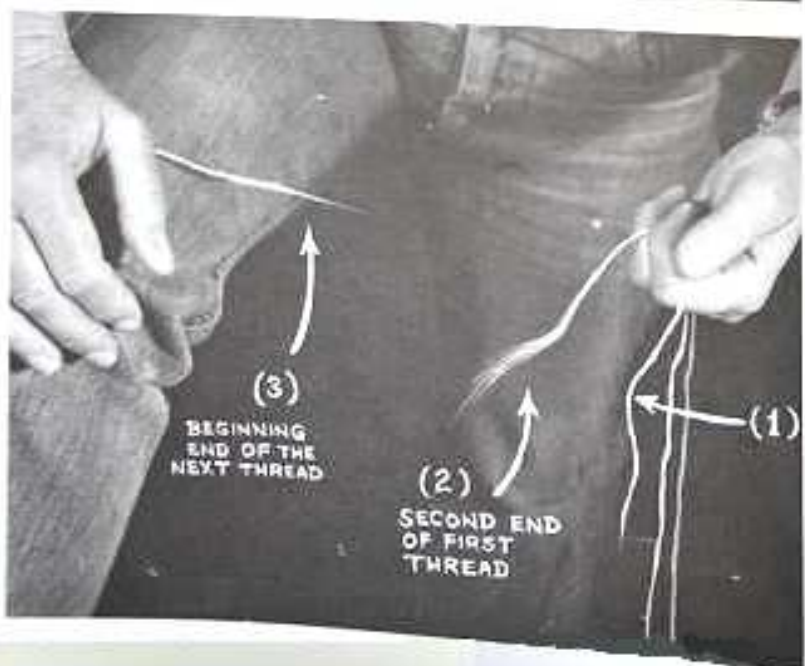
**3**

With fibers untwisted . . . continue to hold down with the right hand (on leg) and begin pulling outward with the left hand. Notice how the fibers are pulling apart, note thread between index and second finger. This will be the *second end* . . . of the *first thread* . . . indicated by (2).



**4**

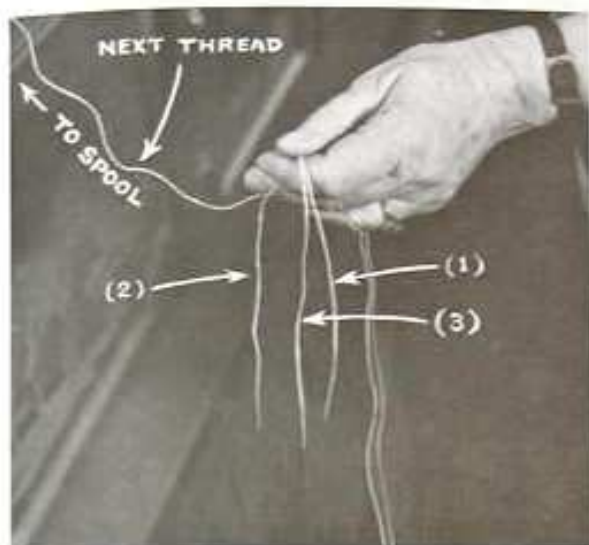
Here . . . you will notice that continued tension and pull with the left hand has the fibers almost pulled apart. Continue to hold the thread down on leg with the right hand. Moistening palm of right hand will aid in rolling the thread.



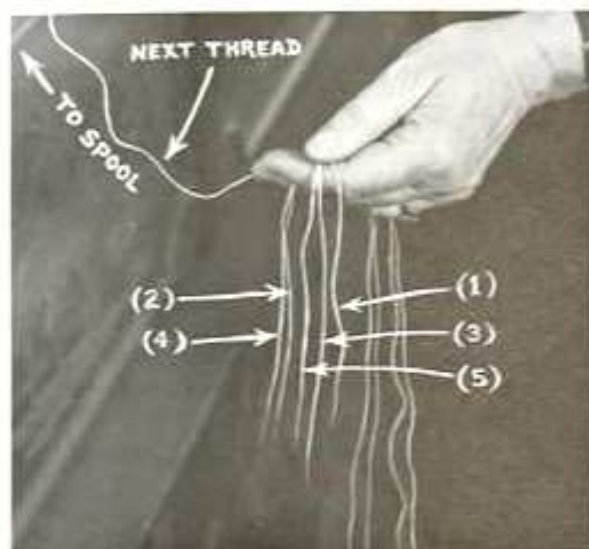
**5**

Here . . . photo shows the threads pulled apart . . . with perfectly tapered ends. You now have one thread . . . end (1) is between thumb; index finger. End (2) is between index and 2nd finger. End (3) . . . beginning of next thread . . . is at right hand.

## "MAKING" A THREAD — Continued



- 6** Place end (3) along with end (1) as shown above.



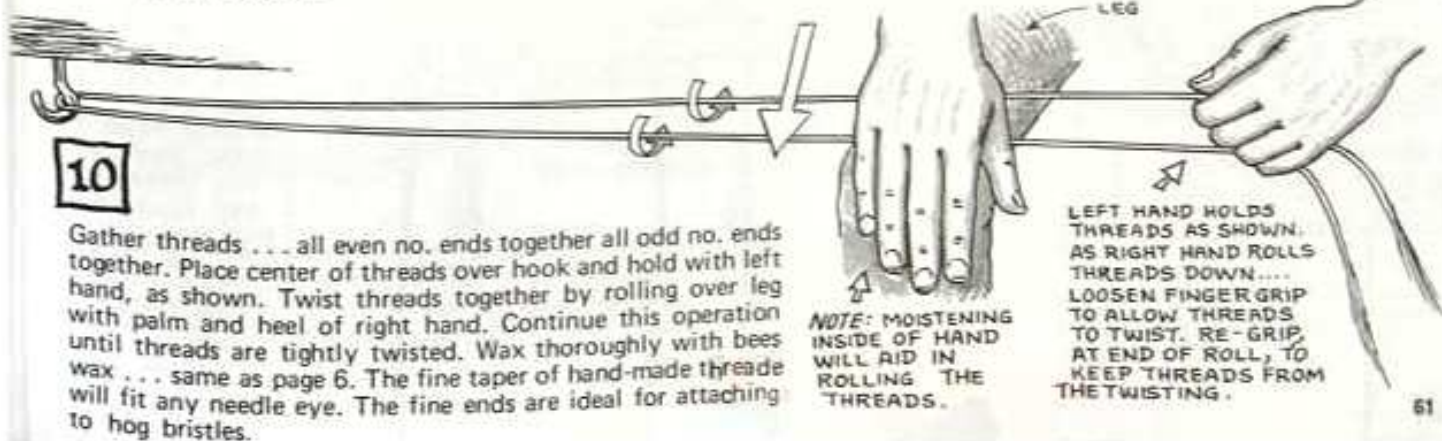
- 8** After pulling apart, end (4) should be with end (2) between index and second finger. Place end (5) between thumb; index finger (shown above).



- 7** Now ... pull out next length of thread ... same as in step 1, page 59. Be sure to keep the thread ends in left hand fingers as shown above, and at left. Again roll thread on leg and pull apart as in steps 2-3-4-5.



- 9** Pull out next length of thread, as in step 1 and step 7. Keep thread ends between fingers as shown. Pull next thread apart ... place end (6) with (2) and (4); end (7) with (1) (3) and (5). Continue in this manner until you have desired number of threads.



- 10** Gather threads ... all even no. ends together all odd no. ends together. Place center of threads over hook and hold with left hand, as shown. Twist threads together by rolling over leg with palm and heel of right hand. Continue this operation until threads are tightly twisted. Wax thoroughly with bees wax ... same as page 6. The fine taper of hand-made thread will fit any needle eye. The fine ends are ideal for attaching to hog bristles.

# HOG BRISTLES

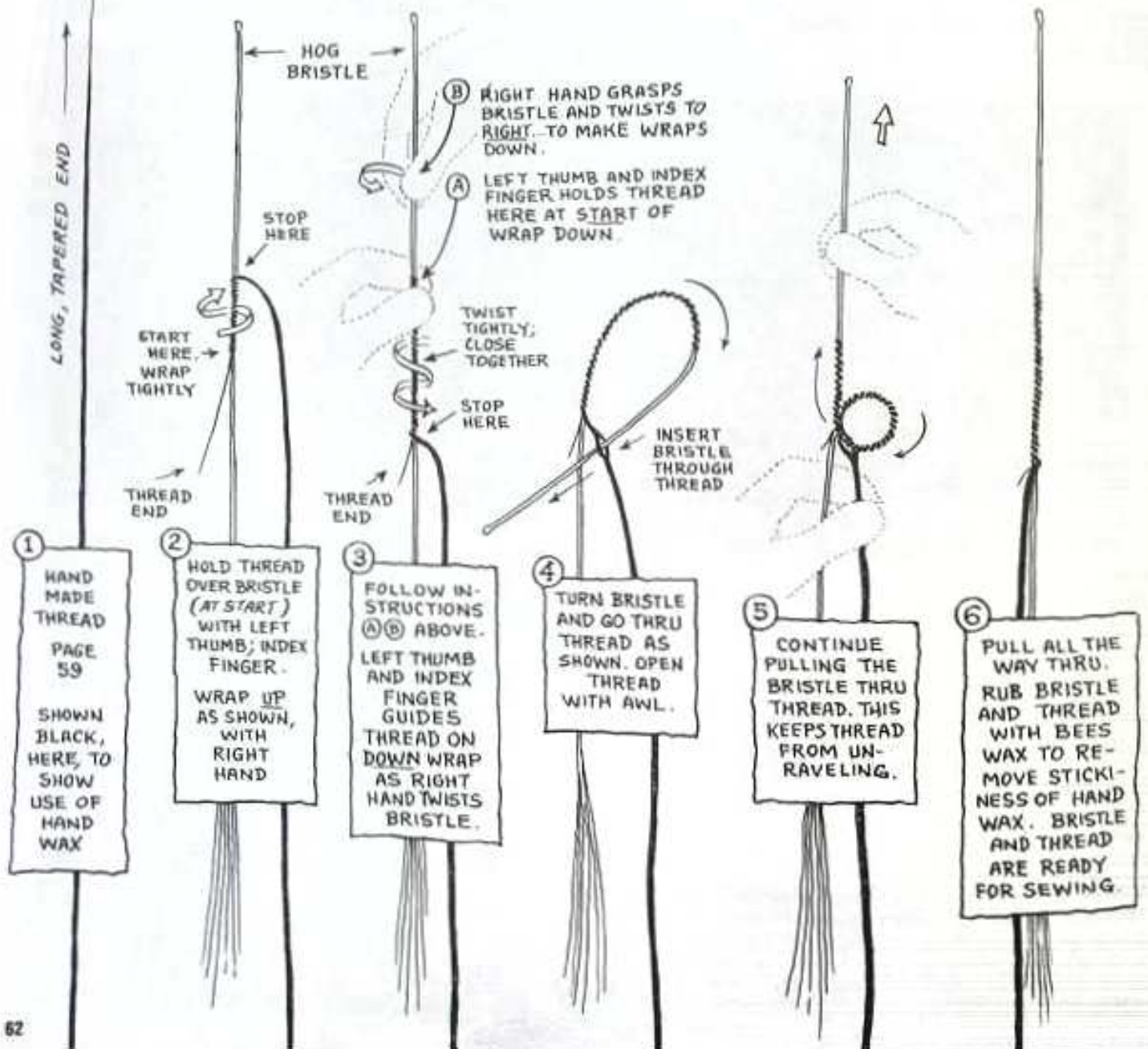
USED IN PLACE OF HARNESS NEEDLES

HOG BRISTLE  
APPROXIMATELY  
ACTUAL SIZE

Hog bristle . . . this is the stiff, coarse hair of swine. It has been used for centuries . . . as a needle . . . for sewing articles together by hand. The awl is used to stab the holes . . . the hog bristles take the place of the harness needles. Bristles, being flexible, are easier to use in some difficult sewing areas. Some of the old-time shoemakers still sew with bristles, but it is fast becoming a lost art. We present it here, mainly, to preserve this technique and knowledge for future generations.

A few shoemaker's supply houses may still carry hog bristles and shoemaker's hand wax (black or brown). The hand wax must be used to stick the thread to the bristle. Bees wax will not hold. The wax is warmed in the hand and fingers and rubbed on the long, tapered end of the thread . . . and also on the bristle.

## FOLLOW INSTRUCTIONS BELOW FOR ATTACHING THREAD TO BRISTLE



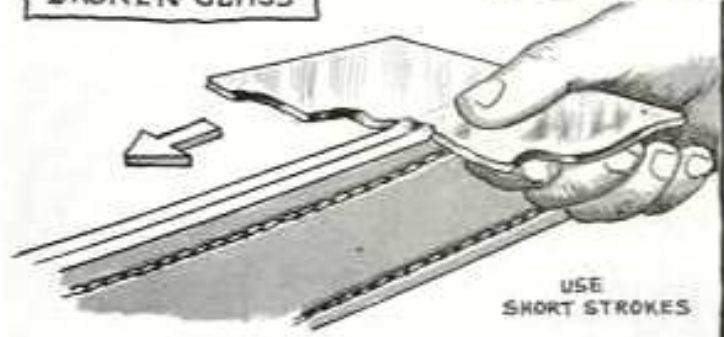


## DIFFERENT SIZE OVERSTITCH WHEELS AND THREADS

The photo illustrations below show examples of hand sewing with different size overstitch wheels and threads. The no. of the wheel size indicates that no. of stitches per inch. Example: no. 6 wheel . . . six stitches per inch. The proper thread size and stitches per inch make for more professional work. A small awl blade and needles should be used for the no. 9 and no. 10 stitches. A regular awl blade can be ground down, if necessary.

THREAD SIZE AND SUGGESTED USES	THREAD	STITCHES	WHEEL MARKS	OVERSTITCH WHEEL SIZE
USE ON HAT BANDS, WATCH BANDS, ETC.	2 OZ. THREAD			No. 10
				No. 9
USE ON BILL-FOLDS, COIN PURSES, ETC.	3 CORD			No. 8
				No. 7
USE ON HAND BAGS, ALBUMS ETC.	4 CORD			No. 6
FOR SADDLES, GENERAL ALL-AROUND USE	5 CORD			No. 5
USE ON GUN SCABBARDS, LINEMAN'S BELTS, HEAVY DUTY ITEMS	6 OR 7 CORD			No. 5

### BROKEN GLASS

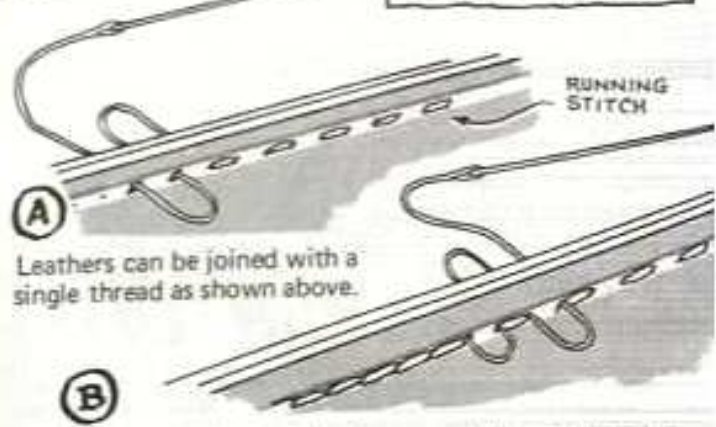


USE SHORT STROKES

After sewing two or more pieces of leather together . . . edges can be evened, perfectly, by running the sharp edge of a piece of broken glass over them. Hold glass firmly, as shown, use short quick strokes.

### TIPS AND SUGGESTIONS

#### SINGLE THREAD



Leathers can be joined with a single thread as shown above.

By going back through the *same* holes, in the *opposite* direction, you have the same stitch as if you had used two needles.

## CONCEALED APPLIQUÉ STITCH



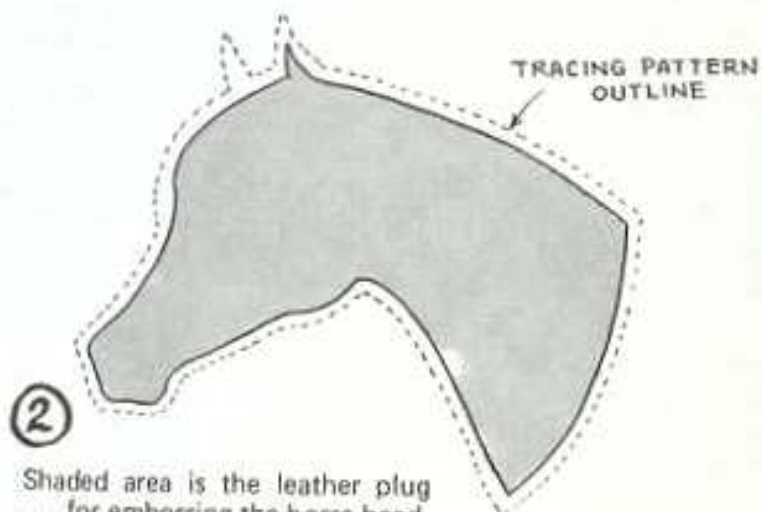
This custom-made saddle features embossed Arabian horse heads, as shown in photo at left. They were cut out and sewn to 23 K gold kid background . . . with a concealed applique stitch. Circles were cut out of the skirting (saddle) leather . . . which acted as a frame for the horse heads. The horse heads were recessed within the circles, offering them protection from excessive rubbing and wear.

For those wishing to do similar work . . . the following instructions are offered. Space does not permit full instructions on carving and embossing. Our main purpose, here, is to show you *how* to applique the horse head. The same procedures can be applied to other subjects.



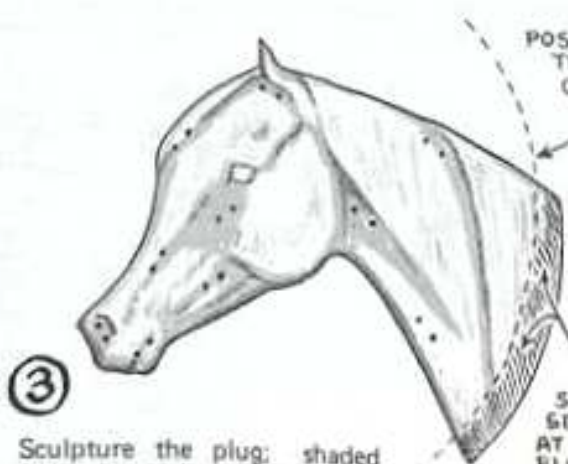
①

This is the tracing pattern . . . for the carving design.



②

Shaded area is the leather plug . . . for embossing the horse head. It is cut undersize.

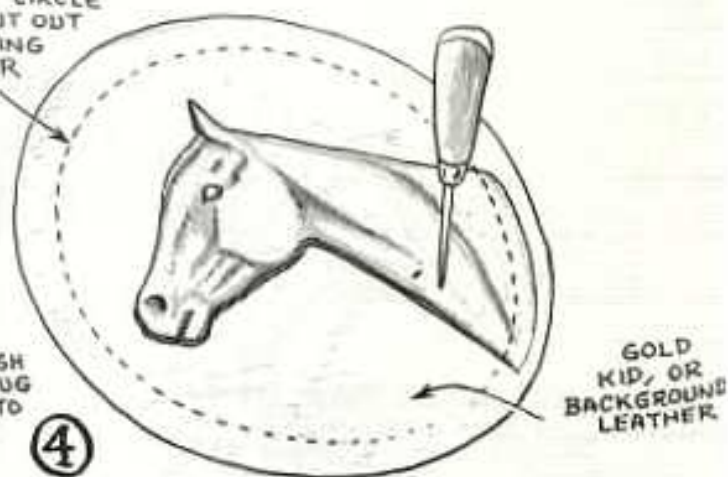


③

Sculpture the plug; shaded areas. Black dots indicate position of awl holes, step 4.

POSITION OF CIRCLE THAT IS CUT OUT OF SKIRTING LEATHER

SKIVE FLESH SIDE OF PLUG AT NECK . . . TO ELIMINATE BULK

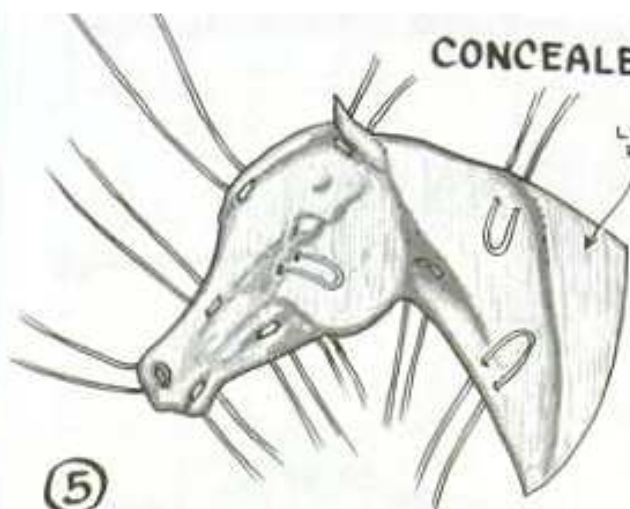


④

Place plug, in position, on background leather . . . and stab awl holes through plug and back-leather . . . positions shown; step 4.

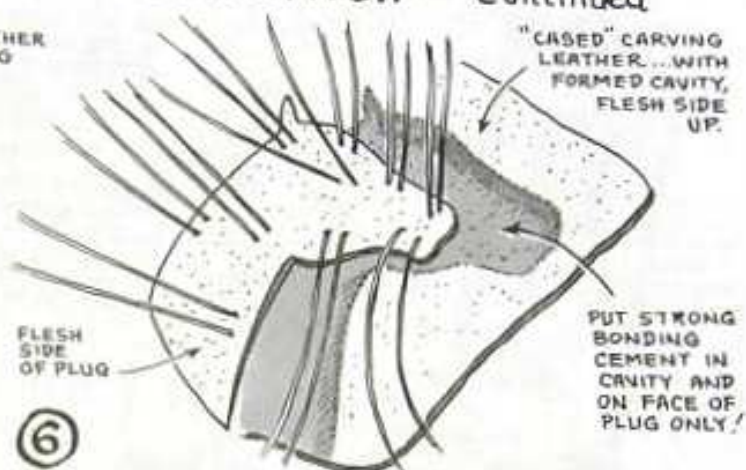
GOLD KID, OR BACKGROUND LEATHER

## CONCEALED APPLIQUE' STITCH - Continued



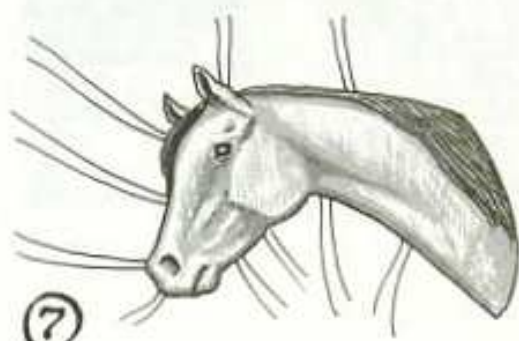
5

Insert threads through all of the stab holes, in plug, from step 4. Leave about 3" to 4" of ends on all of the threads. Pull the threads down tight.



6

Prepare the carving leather for embossing. Work a cavity in area for the plug. Cement the plug in place. Keep threads out of the cavity.



7

Turn leather over; cement flesh side to cardboard with rubber cement. Bevel, stamp, and model head over plug! When dry, remove from cardboard. *Carefully* cut out head . . . do not cut threads! Dye as desired, and apply leather finish.



8

Now . . . put threads down through holes, in background leather, punched with awl in step 4. Pull threads up tight . . . and tie.



BUCKSTITCH WITH LACE  
- OR -  
HAND SEW WITH THREAD

SKIRTING LEATHER WITH CIRCLE CUT OUT

GOLD KID

LINING LEATHER

9

Cement head and background to lining. Cement skirting leather cut-out in place; sew or lace through all leathers. Photo at left shows head . . . acting

# HOW TO MAKE THE *AL STOHLMAN* (QUARTER HORSE) STITCHING PONY



RIGHT SIDE

FOR USE WITH  
AN ORDINARY  
HOUSEHOLD  
CHAIR

FOR LEFT HANDED  
PERSONS REVERSE  
THE PLANS. THE  
JAWS ARE SET  
AT ANGLE FOR  
RIGHT HANDERS.



LEFT SIDE

COMPLETE  
PLANS AND  
INSTRUCTIONS  
FOR MAKING

**NOTE:**  
THE SHAPE OF  
THE SIDE  
PIECES  
MAY HAVE TO  
VARY DEPENDING  
ON THE  
STYLE OF THE  
CHAIR IT WILL  
BE USED ON.

This stitching horse was designed for the home craftsman. It is not as complicated to build as the regular stitching horse, yet will do the same job. It can be made by the average handyman in his home shop, in a few evenings. It requires little space for storage. Being used on a chair, it has the added comfort of the backrest. It makes sewing (or lacing) less tiring for those unaccustomed to long hours of hand sewing.

The jaws and seat, of the one shown, were made of  $\frac{3}{4}$ " particle board. It is quite satisfactory. However, our instructions recommend making these parts out of  $\frac{3}{4}$ " plywood. Plywood has much more strength, and will

last for many years of service.

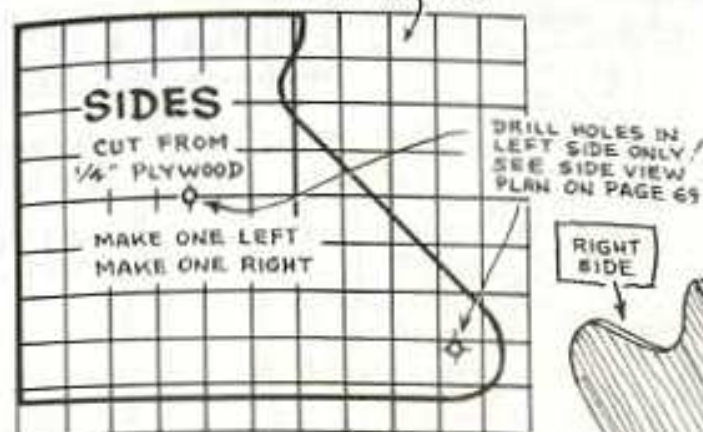
Study all of the pages and plans before beginning to make this project. All of the materials are readily available from your hardware and lumber sources. After completion, all parts should be thoroughly sanded. The project can be stained or varnished, if desired, for longer serviceability and pleasing appearance. If any measurements are in doubt, the plans are drawn in scale:  $\frac{1}{4}$ " equals 1". Carefully study the plans and instructions, and no difficulty should be encountered in constructing the Al Stohlman "QUARTER HORSE" Stitching Pony.



## SPECIAL NOTE:

This photo shows how back legs can be added to the Stitching Pony. This model has hardwood jaws. Seat and legs are made of pine. The horse is sanded, stained, and varnished. It was made by: Tom Wolfe, Edgewood, New Mexico.

1" X 1" SQUARES



**SIDES**

CUT FROM 1/4" PLYWOOD

MAKE ONE LEFT  
MAKE ONE RIGHT

DRILL HOLES IN LEFT SIDE ONLY! SEE SIDE VIEW PLAN ON PAGE 69

RIGHT SIDE

**ASSEMBLY**

DRILL HOLES FOR #12 X 2" WOOD SCREWS

SEAT SUPPORT... CUT FROM 2" X 6" BLOCK (STANDARD LUMBER)

LEFT SIDE

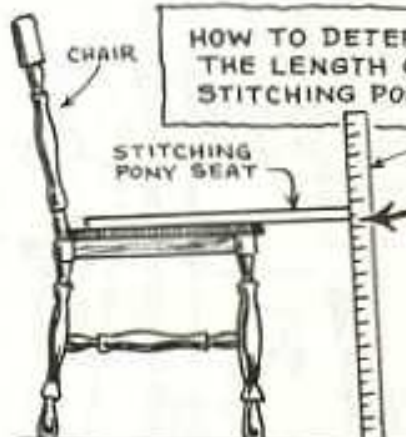
GLUE AND NAIL OR SCREW PARTS TOGETHER

NOTCH LEGS SO SIDES FIT FLUSH ON OUTSIDE

BE SURE CUTS HAVE PROPER ANGLES FOR SPREAD OF LEGS

1 5/8" X 1 3/8"

BRACE



**HOW TO DETERMINE THE LENGTH OF YOUR STITCHING PONY LEGS**

CHAIR  
STITCHING PONY SEAT  
RULER

PLACE STITCHING PONY SEAT ON YOUR CHAIR SEAT AS SHOWN AT LEFT. HOLD RULER AT FRONT EDGE. MEASUREMENT AT BOTTOM EDGE (AT ARROW) IS LENGTH TO CUT LEGS. ADJUSTABLE LEGS CAN BE MADE TO FIT DIFFERENT CHAIRS, SEE PAGE 69.

**ATTACHING THE JAWS**

APPLY GLUE TO PARTS (ARROWS) FIT IN PLACE. LEFT JAW FITS IN SEAT SLOT. SCREW OR NAIL; CLAMP IN PLACE.

NOTE ANGLE OF SUPPORT BLOCK

FIT JAWS TOGETHER. END OF THE HINGED JAW MAY HAVE TO BE SHORTENED A BIT. ADJUST BOTTOM SO JAWS ARE FLUSH AT TOP.

SCREW HINGE IN PLACE

IF NECESSARY, TRIM SLANTED EDGE OF THE SUPPORT BLOCK TO INSURE CLOSING OF JAWS.

SUPPORT BLOCK

**NOTE:**

More information is shown on the following pages . . . as to assembly of parts, etc. The compression spring is installed over spring posts (inside jaws) before the leather strap is buckled up to the harness dee.

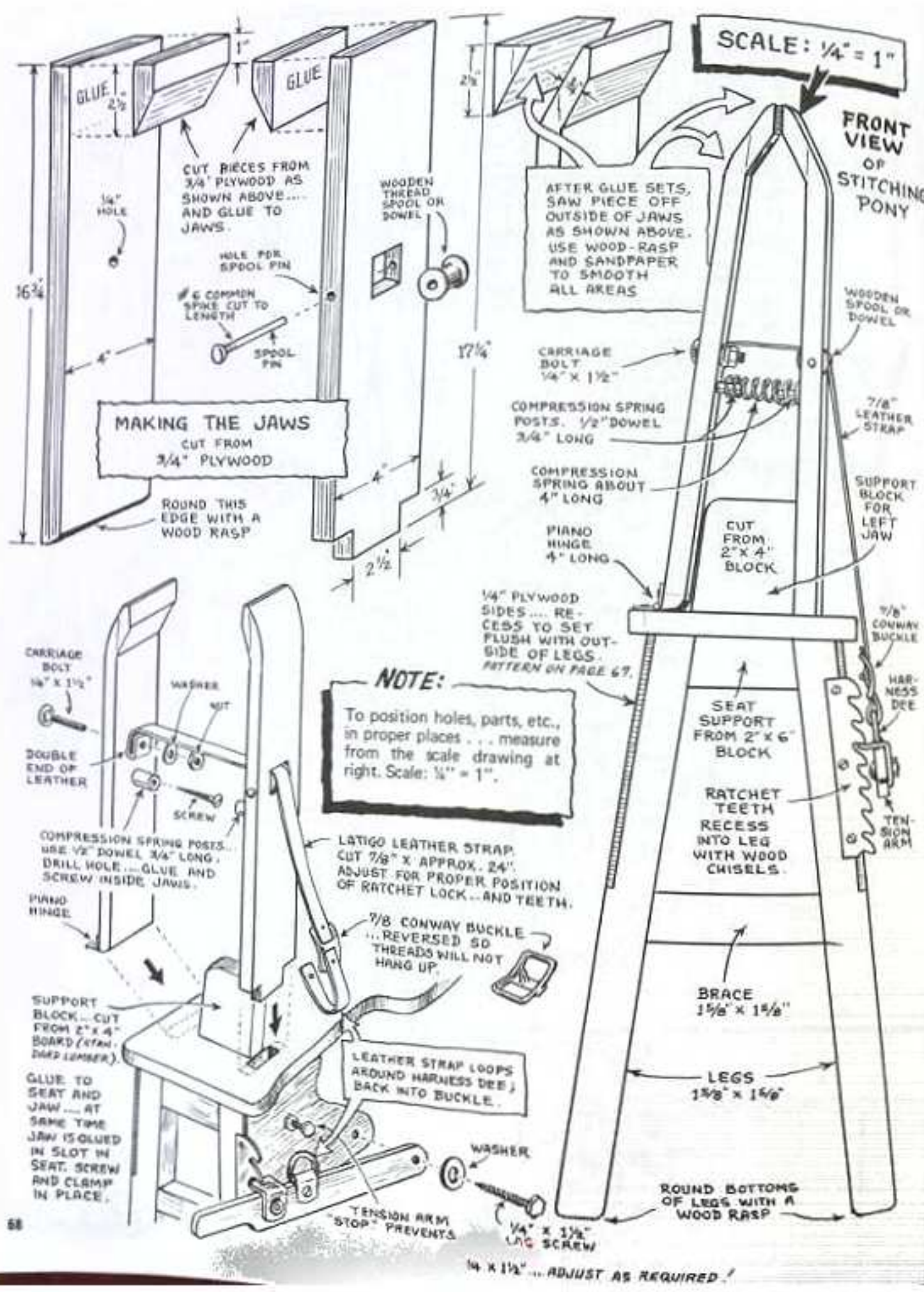
TURN SEAT UPSIDE DOWN AND POSITION LEG ASSEMBLY 1/2" FROM SIDES AND 1/2" FROM FRONT, AS SHOWN. GLUE AND SCREW IN PLACE.

APPLY GLUE TO TOP OF LEG ASSEMBLY AND TO BOTTOM OF SEAT, BEFORE SCREWING.

CUT SUPPORT SPACER TO PROPER LENGTH AND GLUE AND NAIL OR SCREW IN PLACE (SEE SIDE VIEW PLAN ON PAGE 69).

BE SURE TO CUT ENDS AT LEG ANGLES

SUPPORT SPACER  
1 5/8" X 1 3/8"



SCALE: 1/4" = 1"

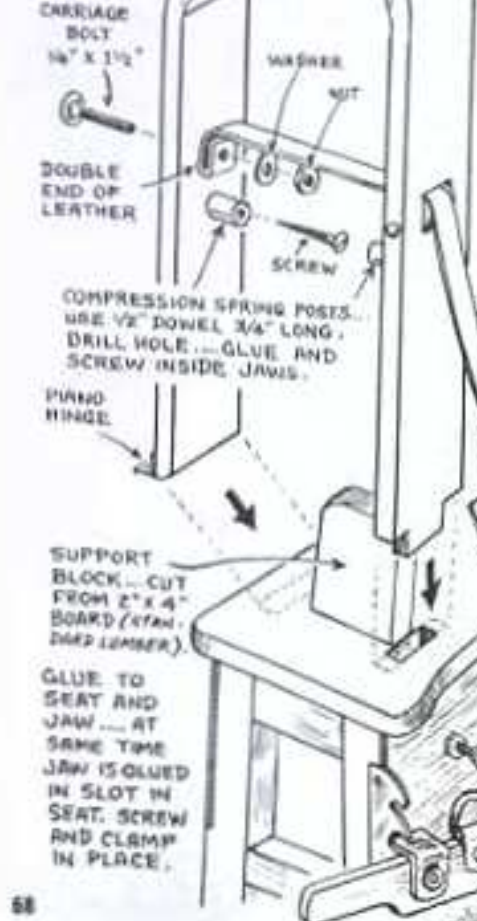
FRONT VIEW OF STITCHING PONY

**MAKING THE JAWS**  
CUT FROM 3/4" PLYWOOD

AFTER GLUE SETS, SAW PIECE OFF OUTSIDE OF JAWS AS SHOWN ABOVE. USE WOOD-RASP AND SANDPAPER TO SMOOTH ALL AREAS

**NOTE:**  
To position holes, parts, etc., in proper places... measure from the scale drawing at right. Scale: 1/4" = 1".

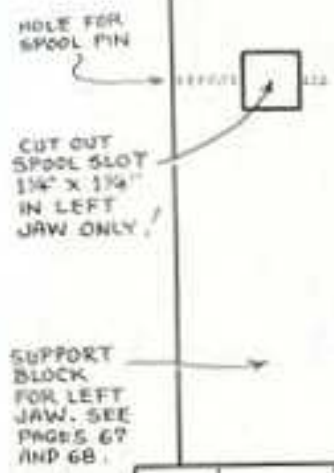
LEATHER STRAP LOOPS AROUND HARNESS DEE, BACK INTO BUCKLE.



1/4" x 1 1/2" ... ADJUST AS REQUIRED

SCALE: 1/4" = 1"

**LEFT SIDE VIEW OF STITCHING PONY**



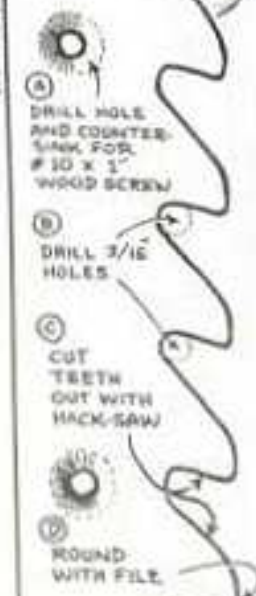
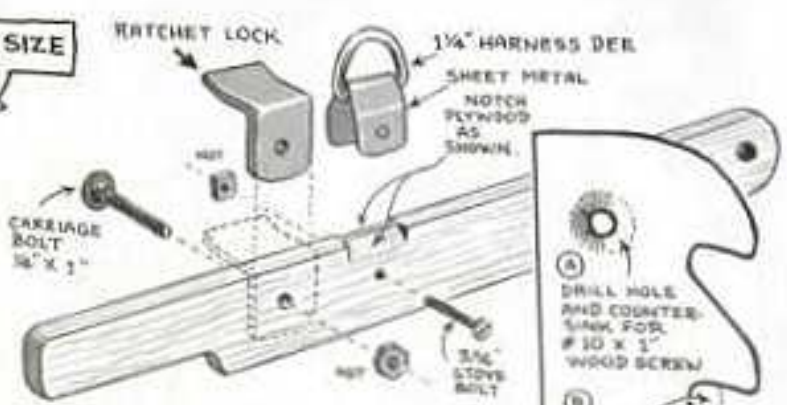
**ACTUAL SIZE**

**SIDE VIEW OF RATCHET LOCK**

CUT FROM STRAP IRON 1 1/2" X 2 1/2" 1/8" THICK BEND AS SHOWN.

**TOP VIEW**

**SIDE VIEW**



**ACTUAL SIZE STRAP IRON 1/8" X 1 1/4" X 6"**

**RATCHET TEETH**

**NOTE:**  
All parts on this page (not shown actual size) are to scale: 1/4" = 1". Cut out slots and position parts accordingly.

POSITION OF RATCHET TEETH SET IN FLUSH WITH EDGE

1/4" HOLE FOR TENSION ARM "STOP" - USE MACHINE BOLT: 1/8" X 1 1/2" SEE PAGE 68

SUPPORT SPACER

HOLE FOR 1/4" LAG SCREW. DRILL 1/8" HOLE INTO SUPPORT SPACER.

POSITION OF TENSION ARM

**SIDES - 1/4" PLYWOOD - MAKE TWO - (PATTERN - PAGE 67)**

BRACE BETWEEN LEGS

LEGS 1 1/8" X 1 5/8"

POSITION OF JAWS

**SEAT**  
CUT FROM 3/4" PLYWOOD

EACH SQUARE EQUALS 1"

**NOTE:**  
LEGS CAN BE MADE ADJUSTABLE IF DESIRED

1" X 1" SQUARES

CUT OUT SLOT (FOR LEFT JAW) 3/4" X 2 1/2"



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