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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 CANTLE 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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Fort Worth, TX 76140

INDEX

TIPS AND SUGGESTIONS:

FOREWORD

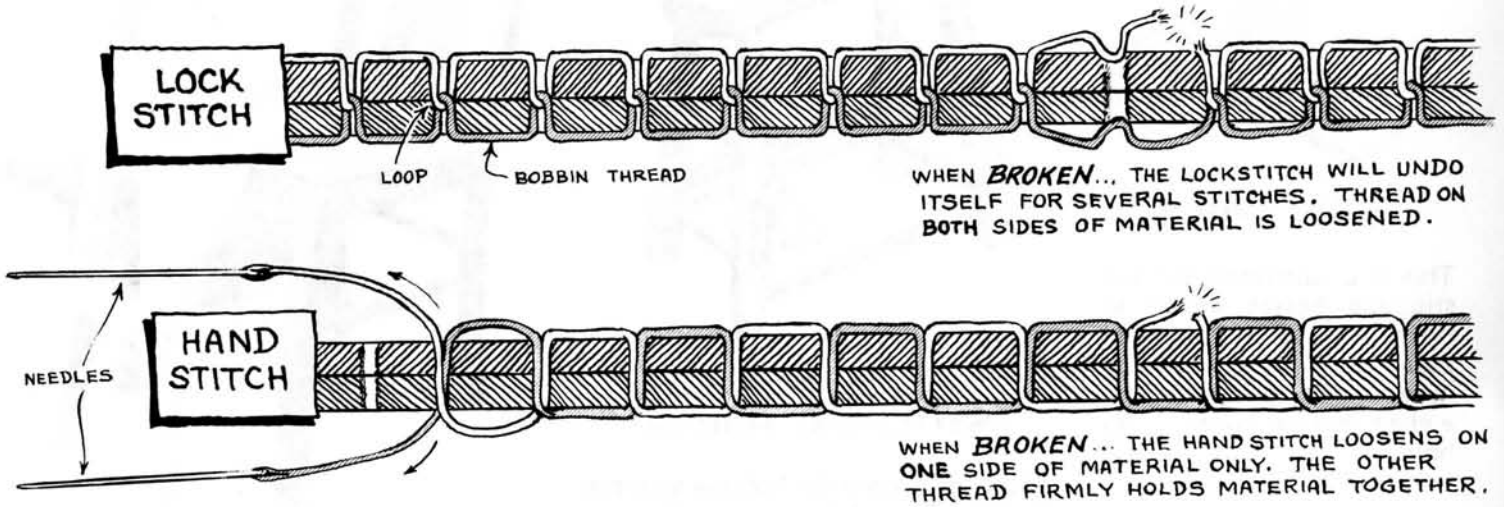
This book: "The Art of HAND SEWING LEATHER" . . . is the culmination of over 30 years of knowledge and practical experience in Hand Sewing. It is presented to perpetuate the fading art of hand sewing . . . in this age of mass production by machine. Though slower, hand sewing is superior to machine sewing. 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 leathergoods 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-a-way illustrations below show the differences in the LOCK STITCH . . . and the HAND STITCH.

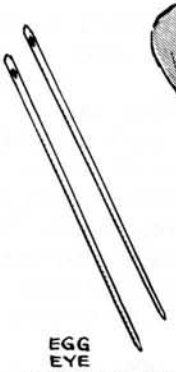


To the beginner, Hand Sewing will seem uncomfortable and slow. Disregard all attempts at speed . . . learn to sew properly, as instructed. You will find hand sewing is fun and easy. You will soon be fast and professional with your stitches. Speed will come by itself . . . with practice.

TOOLS AND MATERIALS REQUIRED FOR HAND SEWING

BEES WAX

USED FOR PRESERVING LIFE OF THREAD.



EGG EYE
HARNESS NEEDLES

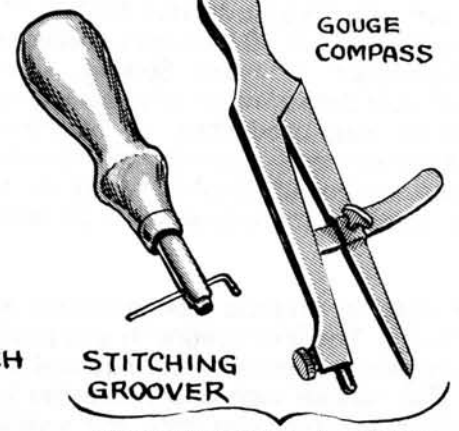
BLUNTED ENDS. SIZE 4 OR 5 IS A GOOD ALL-AROUND SIZE.

AWL
DIAMOND BLADE

FOR STABBING HOLES.

OVERSTITCH WHEEL

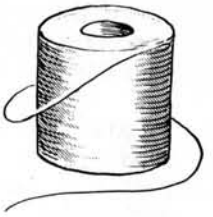
FOR MARKING STITCHING HOLES. NO. 6 IS GOOD FOR GENERAL USE.



GOUGE
COMPASS

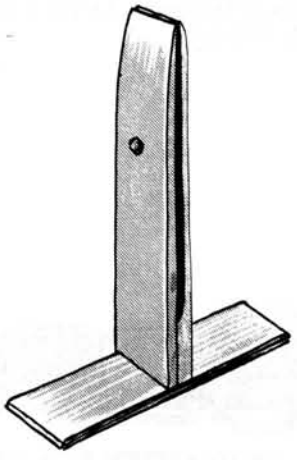
STITCHING GROOVER

FOR CHANNELING A GROOVE TO RECESS THE STITCHES; GIVES LONGER LIFE TO THE THREADS.



UNWAXED
LINEN THREAD

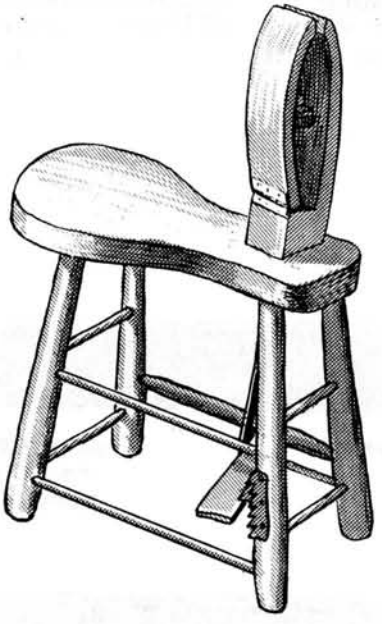
BEST FOR HAND SEWING. 5 CORD IS GOOD FOR GENERAL USE. PRE-WAXED THREAD IS NOT GOOD, AS PROPER ENDS CANNOT BE MADE.



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.

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



SADDLER'S STITCHING HORSE

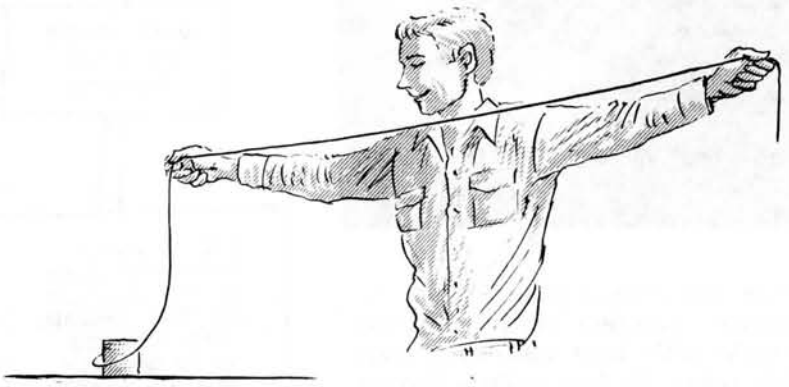
This tool is used for holding leathers in the clamped jaws . . . allowing both hands to be free for sewing. Some items cannot be put in the stitching horse and must be held between the legs, or in some other fashion, to sew. Example on page 31.

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.

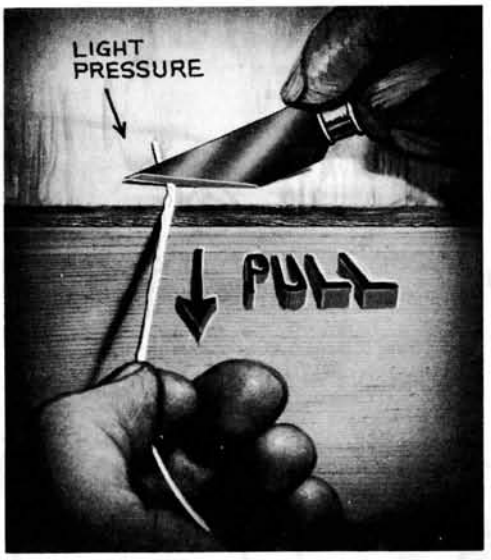
PREPARING THE THREAD

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).

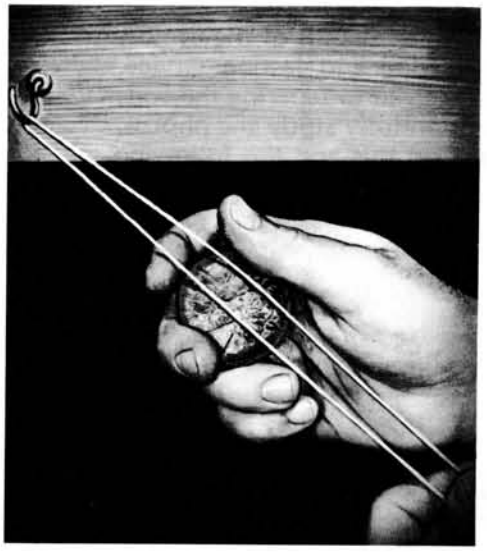


2 Apply light pressure to blade and slowly pull the thread. Pressure of blade unravels and "frays" ends of thread; angle of blade reduces danger of cutting.

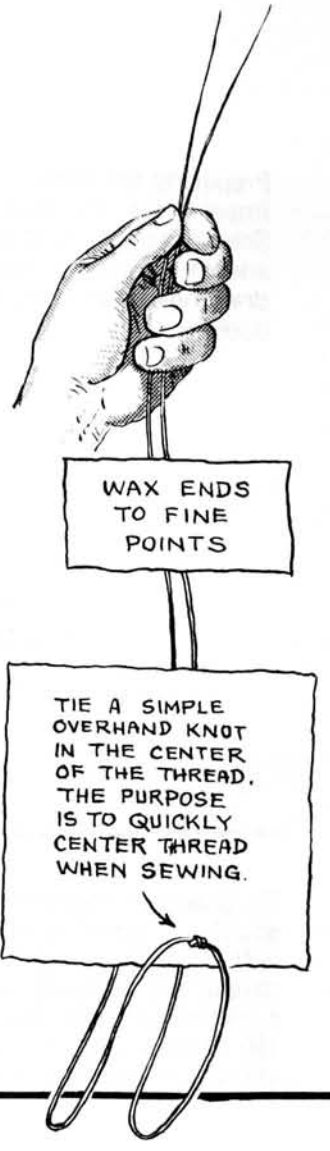
3 Too much pressure on blade will cut thread. Apply only enough to scrape and pull the fibers loose. Repeat operation with more pressure near end of thread.

PREPARING THE THREAD – Continued

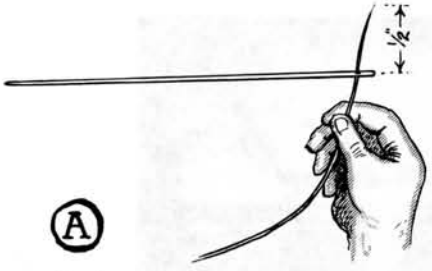
4 Scraping and pulling the fibers in this manner tapers the tiny sinews to fine, pointed ends. Repeat the operation until the sinews appear silky, and evenly tapered. Repeat operation on other end of thread.



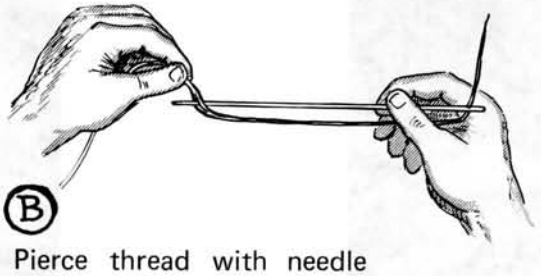
5 Place the thread over a hook or smooth, rounded object and rub briskly with bees wax. Wax ends thoroughly to fine points. Waxing the thread lengthens its life and prevents fraying while sewing.



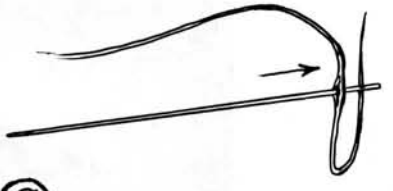
HOW TO THREAD THE NEEDLES



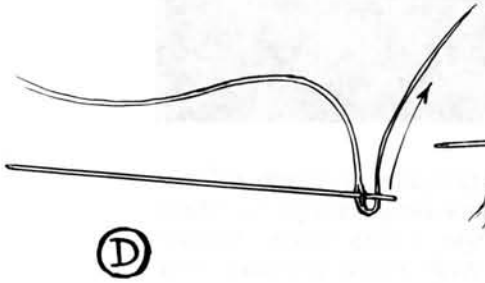
(A) Push end of thread through needle eye . . . about ½".



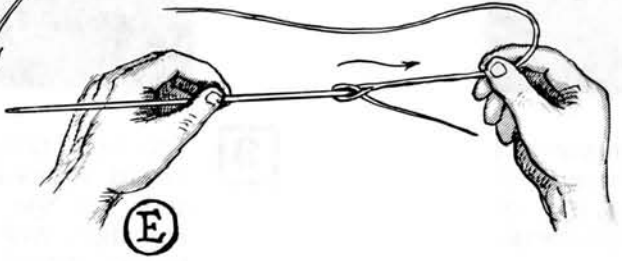
(B) Pierce thread with needle point as shown.



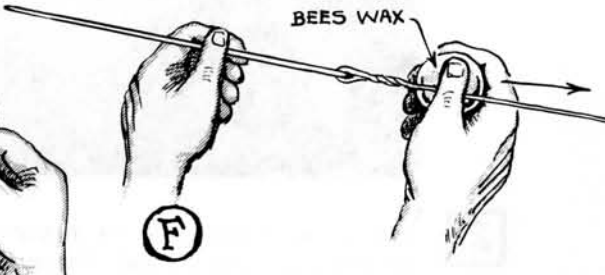
(C) Push thread up on needle, to eye.



(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.

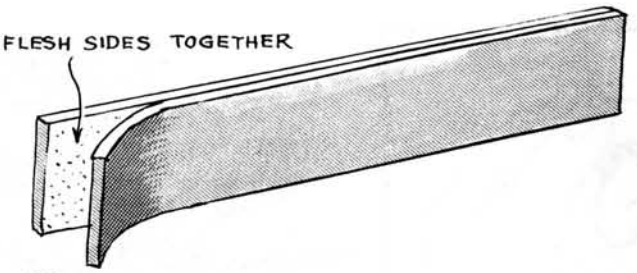


(F) Wax end to "fuse" threads together. Repeat operation with other thread and needle.

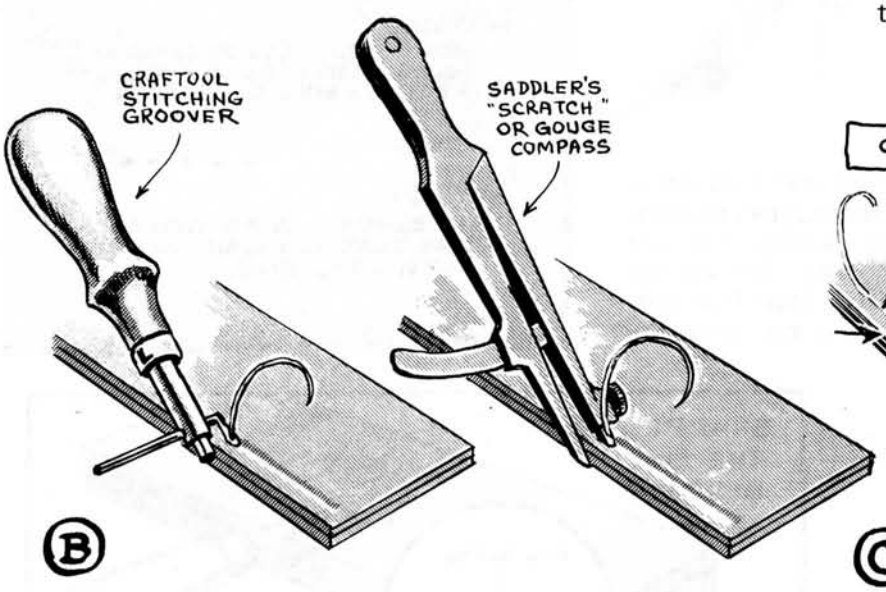
THREAD IS READY FOR SEWING

PREPARING THE LEATHER FOR SEWING

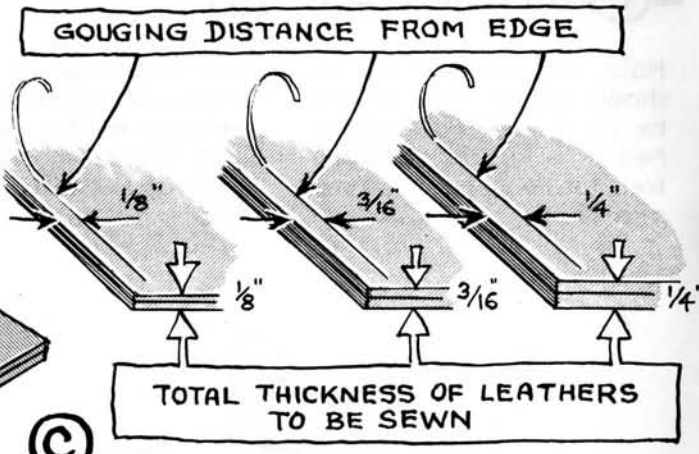
To begin . . . we will take two pieces of scrap leather of any size or thickness . . . so you can practice hand sewing. 4 oz. to 6 oz. leather would be preferable as it will be easier to pierce with the awl. Cut leathers any size desired.



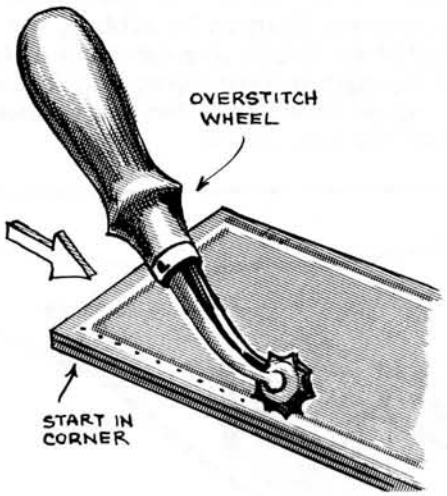
(A) Use rubber cement and adhere the two pieces together. Trim the edges of both pieces . . . so that the edges are flush.



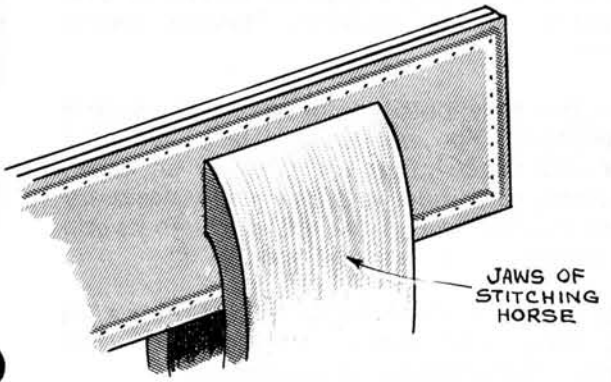
(B) Use the gouging tool of your choice and gouge a channel around the edges of the leather. Gouge the leathers on both sides. Keep tool tight against leather edges to insure a uniform gouge along the edge.



(C) 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.)

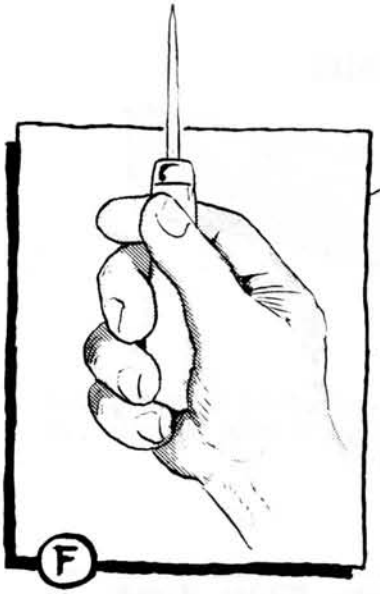


(D) Moisten the gouged channels lightly with a damp sponge, and run the overstitch wheel all around the channel . . . on the front side only. This marks position of awl holes to insure even stitches.

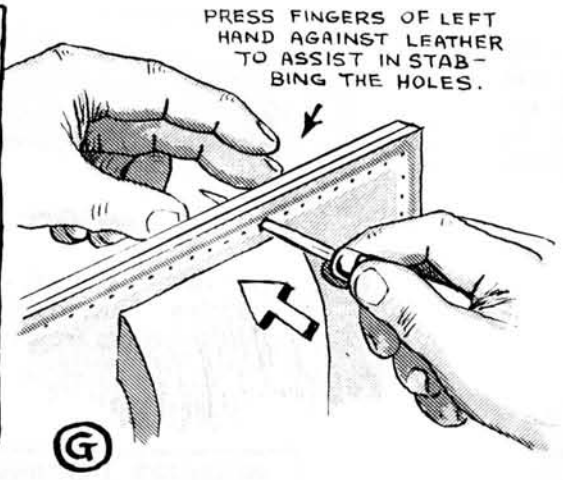


(E) Clamp leathers in stitching horse close to channel, as shown . . . an inch or so from the corner. Note . . . we are not starting in the corner . . . because of instruction clarification (in later steps) on how to end stitching and begin with knotted threads, etc.

STABBING WITH THE AWL



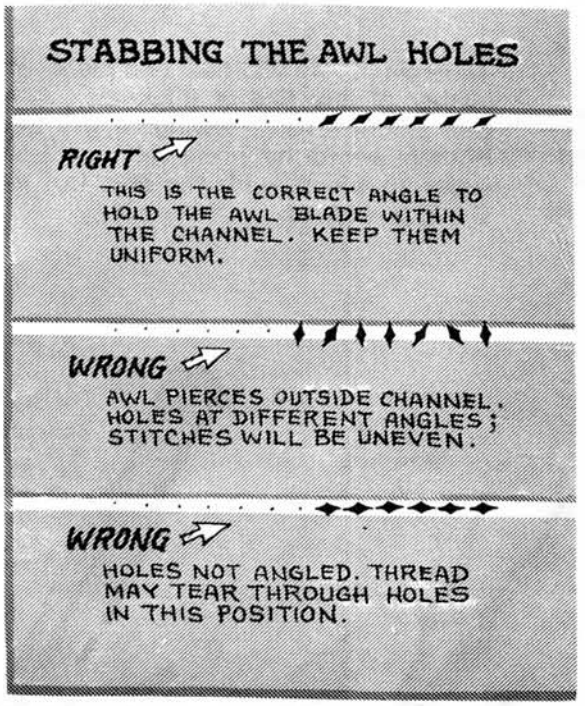
F

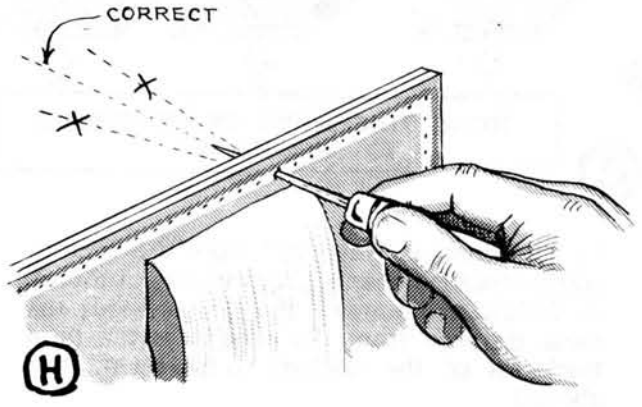


G

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.

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.





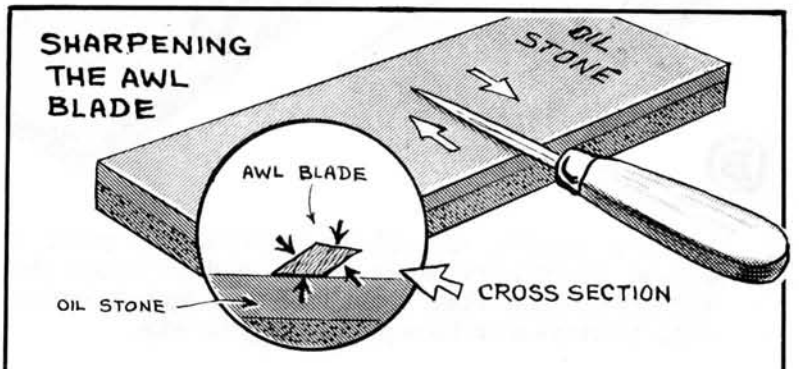
H

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.

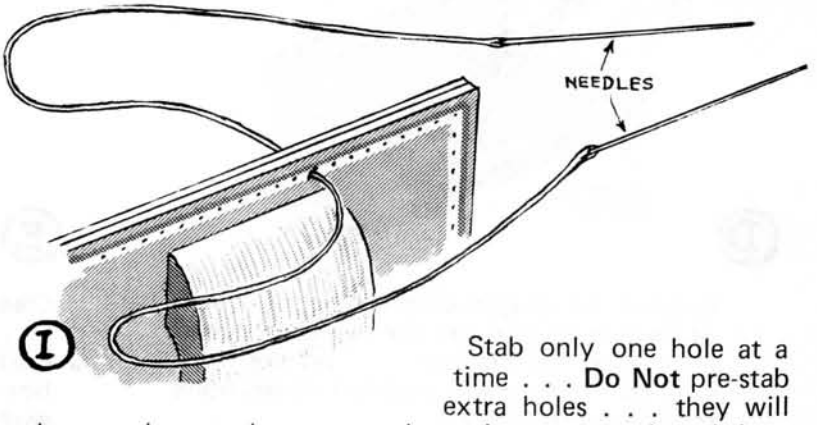
The smallest hole, possible, for needle clearance is most desirable. You will notice, after piercing the leather with the awl, that it will "stick" or "grab" when trying to withdraw. It is generally necessary to twist it either to right or left to loosen its grip in the leather . . . for easy removal.

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.



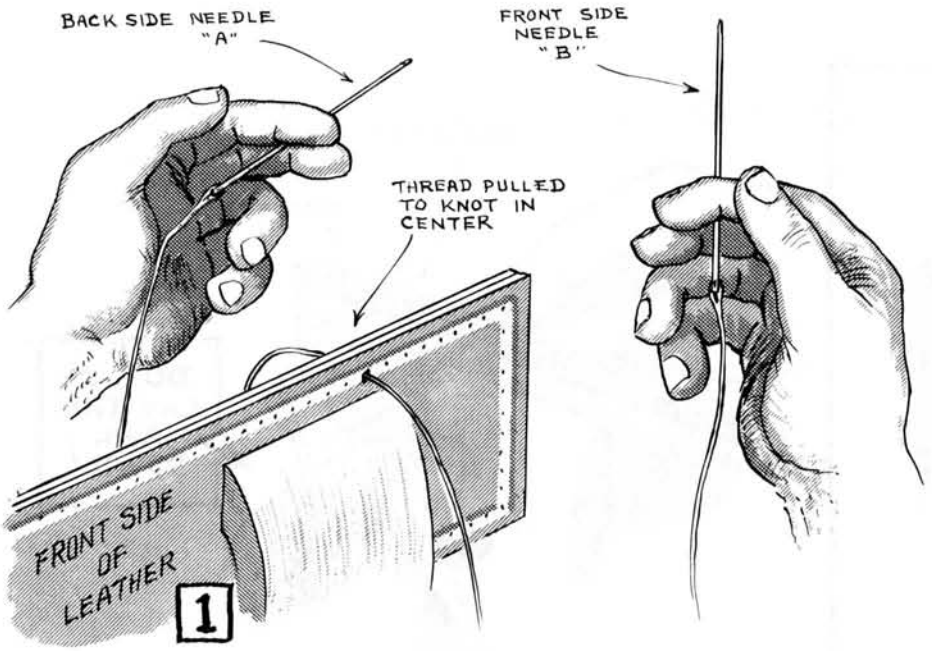
If the awl blade does not penetrate the leather easily, it probably needs sharpening. Sharpen by rubbing the four flat surfaces (indicated by arrows in cross section) on an oil stone. Hold firmly against oiled stone; work back and forth. Strop on a rouge board to polish the surfaces. A sharp awl is a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



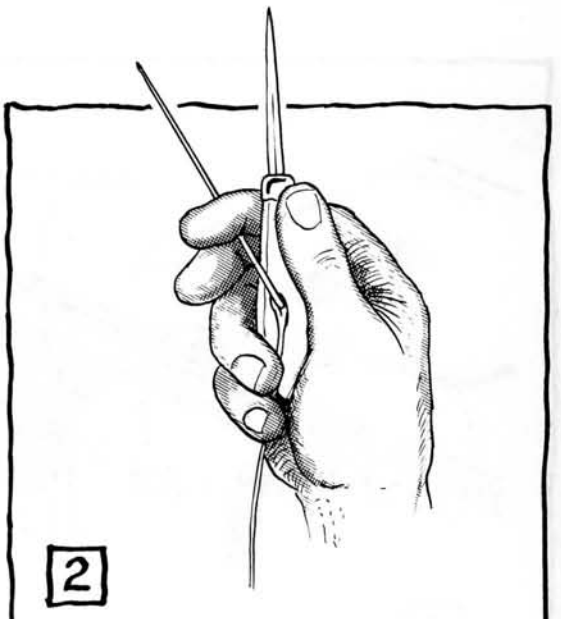
I

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

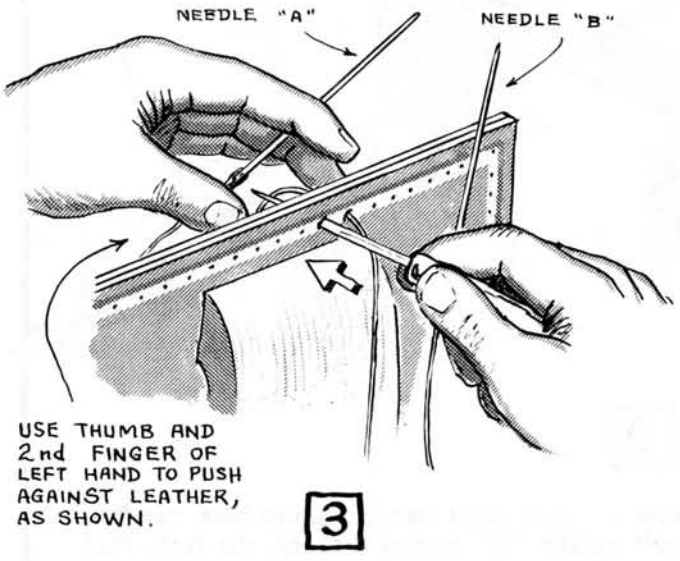


Pick up the needles and hold in the fingers as shown above. Let the full length of the thread, on each side, drop down.

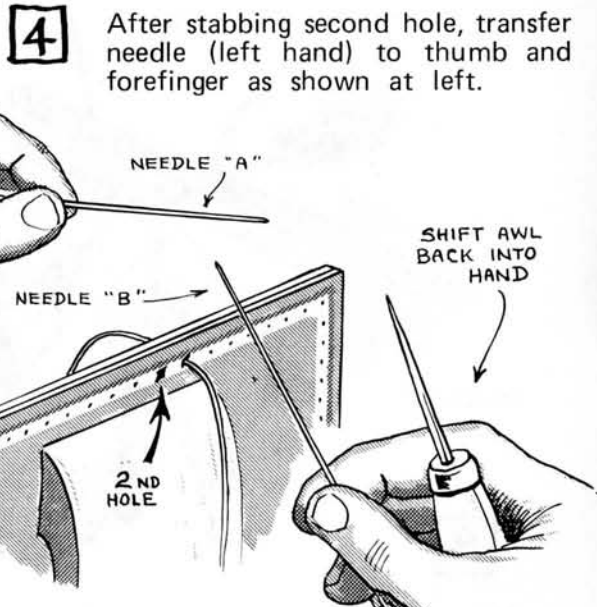


Now . . . place awl in right hand as shown. Hold with thumb. Close little finger on awl handle. Keep needle between fingers, as illustrated.

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.



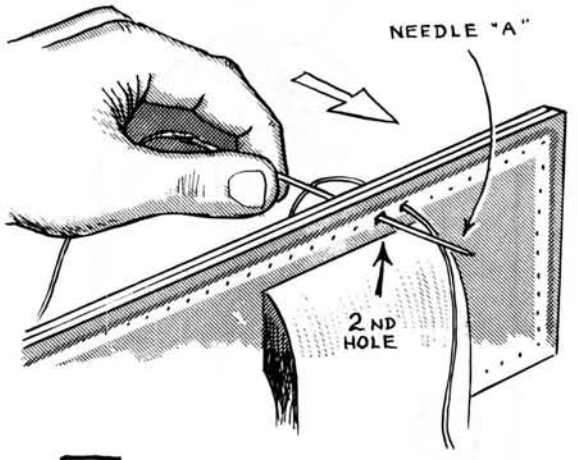
Turn hand and stab second hole with awl as shown above. Be sure to stab proper angle with the awl blade. Use left hand to assist. *Do not lay the needles down!*



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

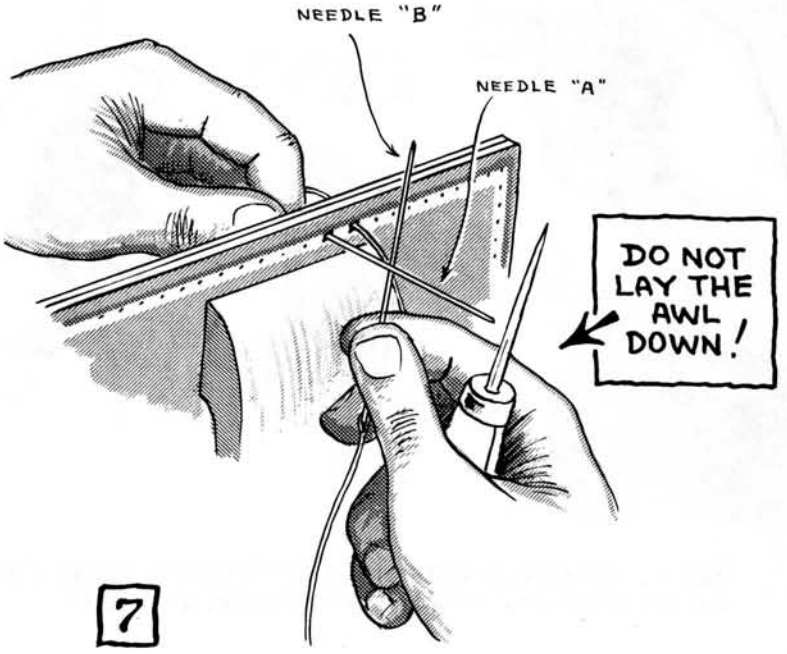
Transfer needle (right hand) to thumb and forefinger as shown. **KEEP AWL IN HAND . . . DO NOT LAY IT DOWN!** Each hand must manipulate needle and/or awl by itself without the aid of the other hand.

SEWING THE LEATHER



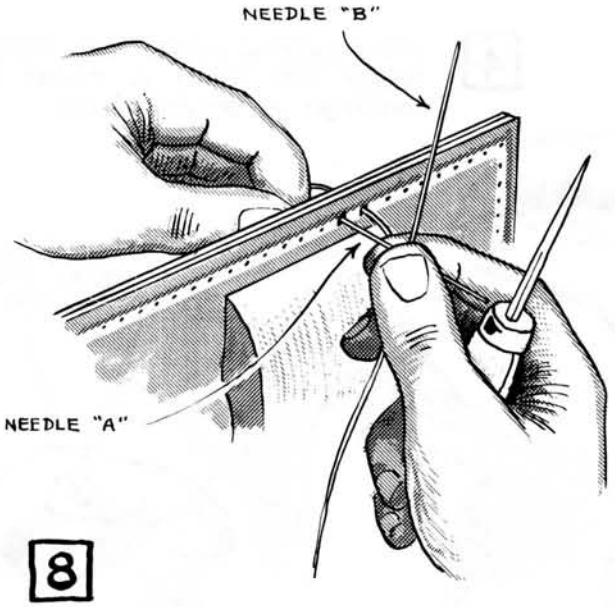
6

Push needle "A" through second hole from *back* side, as shown. **ALWAYS PUSH BACK-SIDE NEEDLE THROUGH HOLE FIRST!**



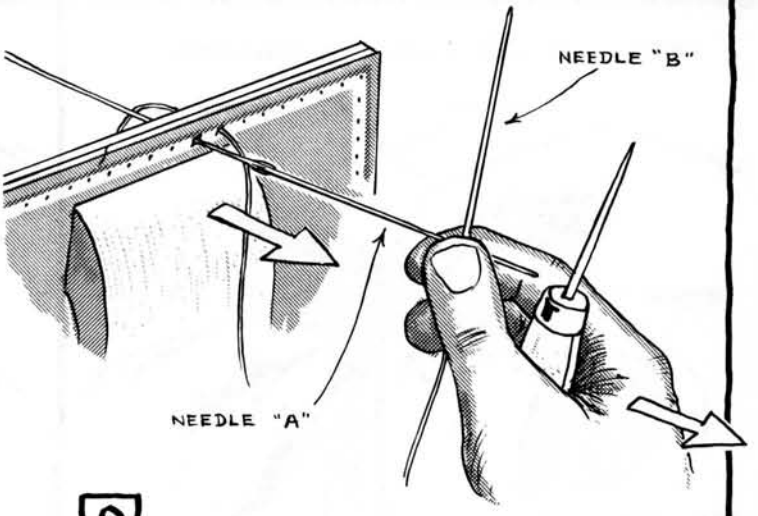
7

Place right hand needle "B" . . . *under* needle "A" . . . as shown above.



8

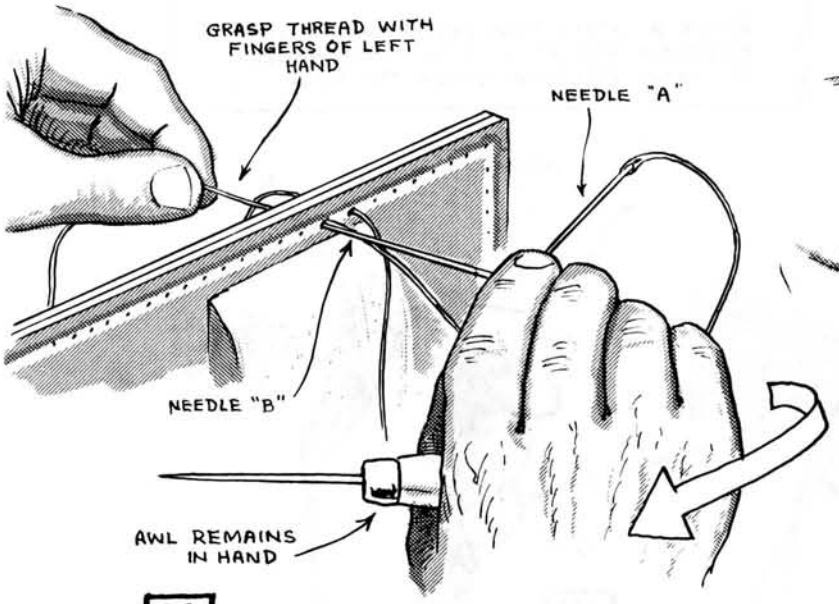
Move right hand up . . . so that fingers can grasp needle "A". Needle "B" must still remain *under* needle "A".



9

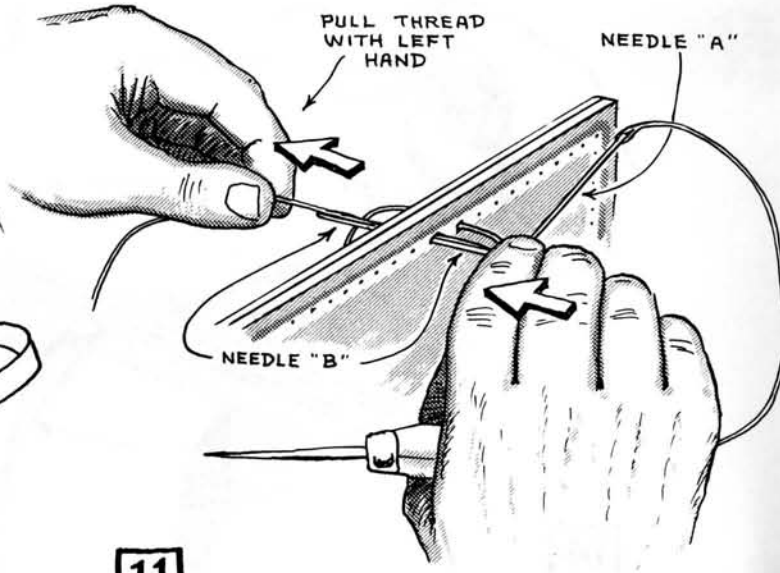
Now . . . pull right hand, holding *both* needles, until needle "A" comes through the hole. Pull several inches of thread through the hole.

CONTINUE WITH THE SEWING



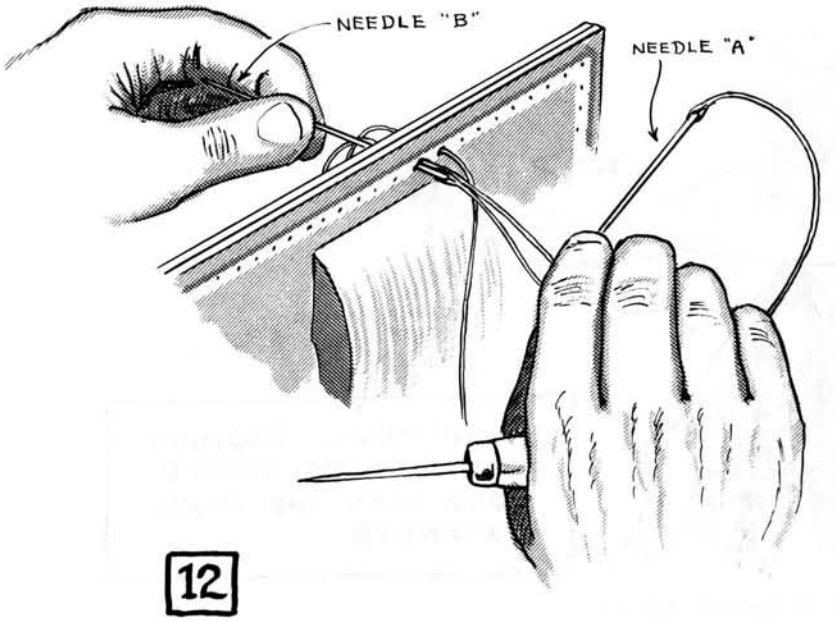
10

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!



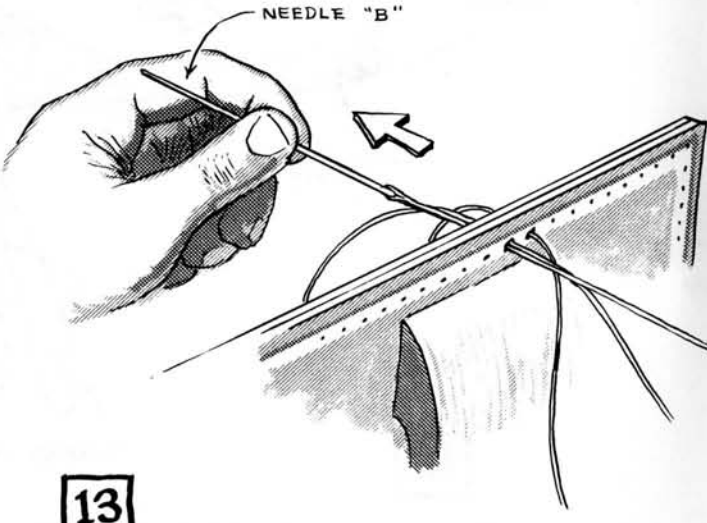
11

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.

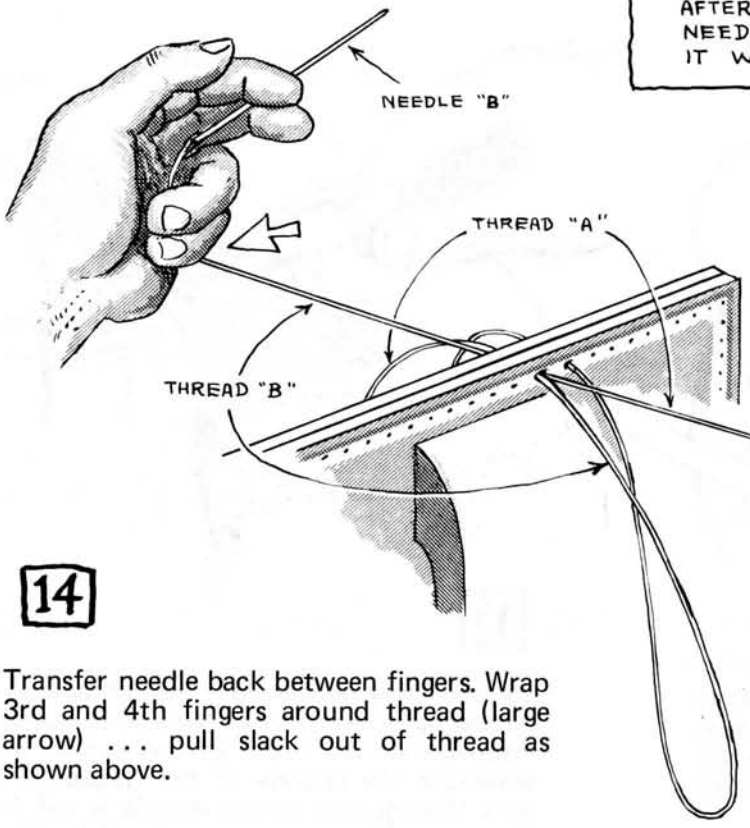


13

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

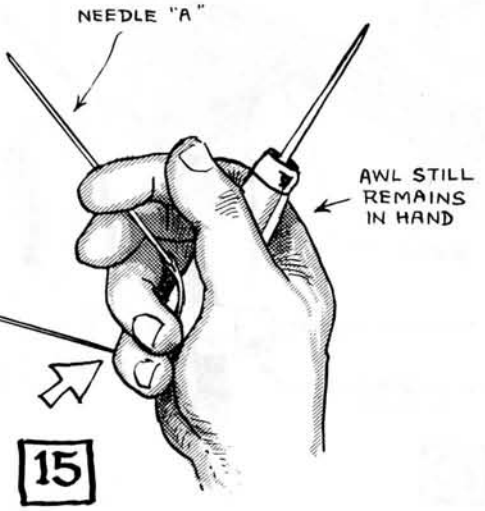
CONTINUE WITH THE SEWING

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



14

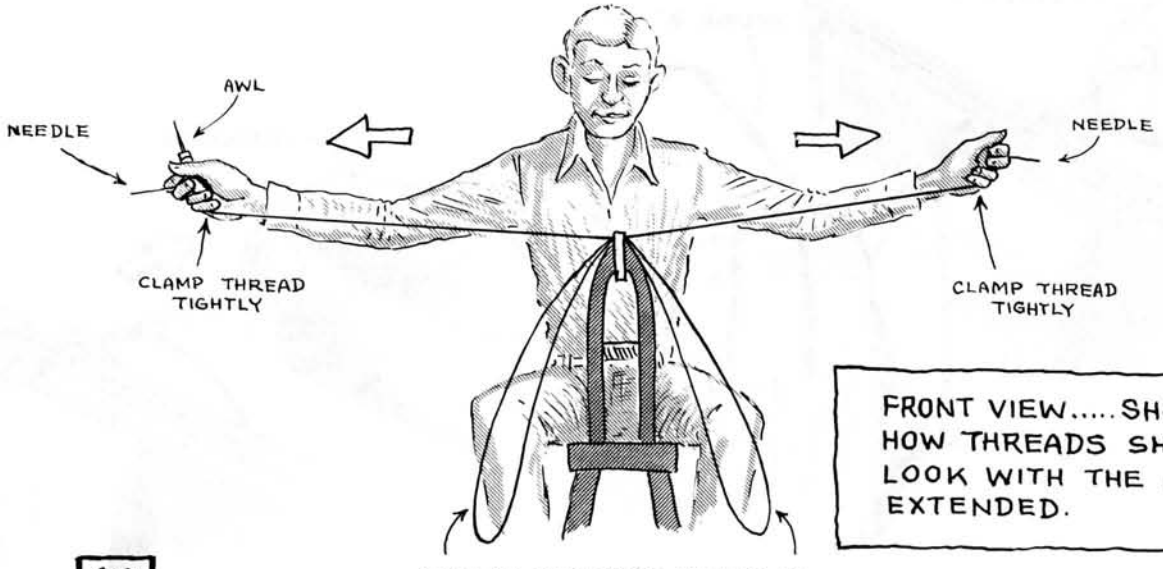
Transfer needle back between fingers. Wrap 3rd and 4th fingers around thread (large arrow) . . . pull slack out of thread as shown above.



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!



FRONT VIEW..... SHOWING HOW THREADS SHOULD LOOK WITH THE ARMS EXTENDED.

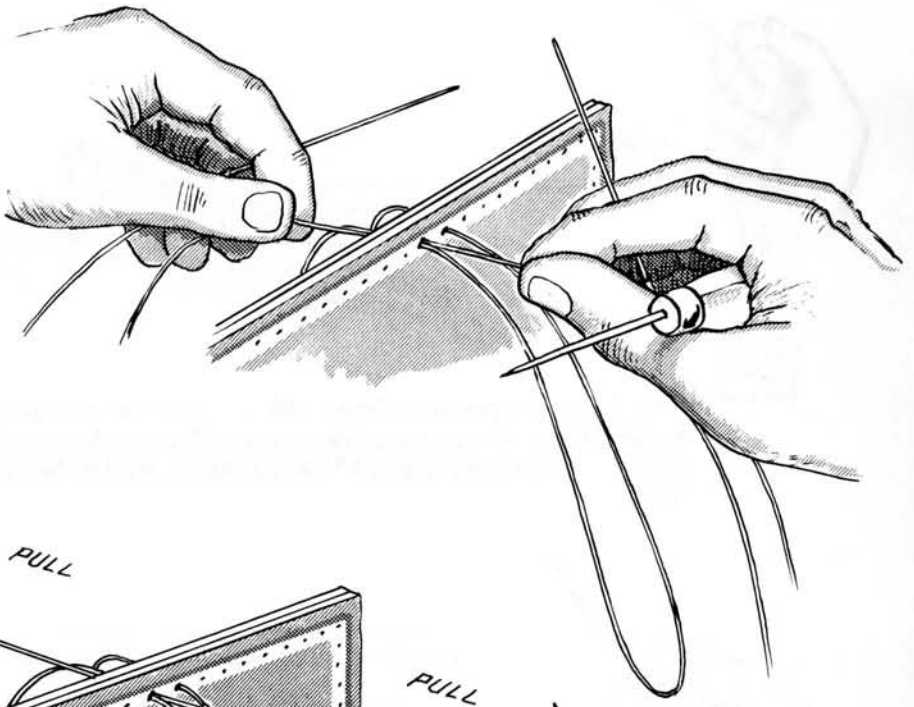
16

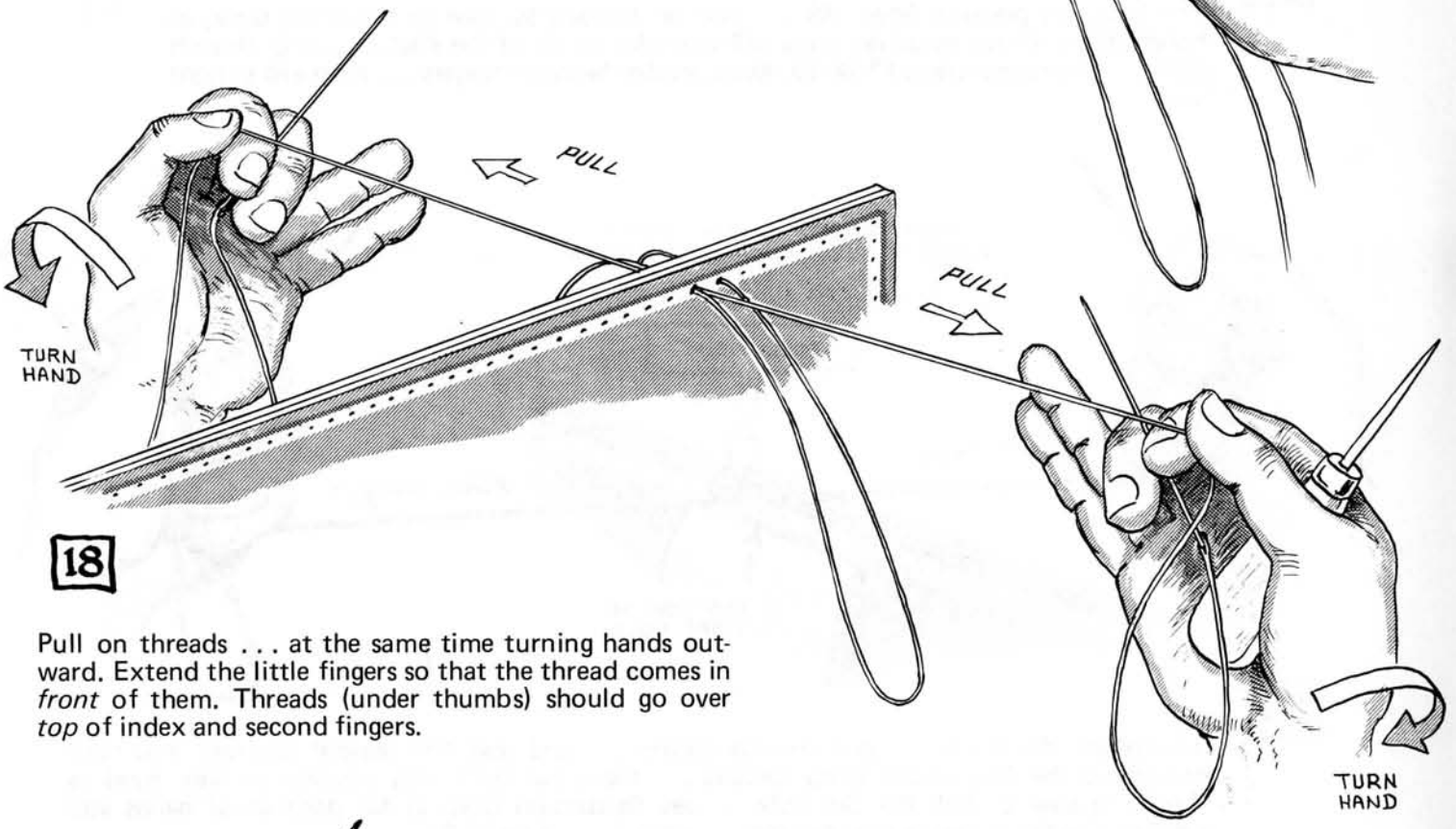
Now . . . pull arms out to full length . . . to take up the slack in the thread. This will take up about half of the total thread length. Pull arms generally straight out from the project, as shown. This makes for easier sewing and has less wear and friction on the thread being pulled through the holes.

CONTINUE WITH THE SEWING

17

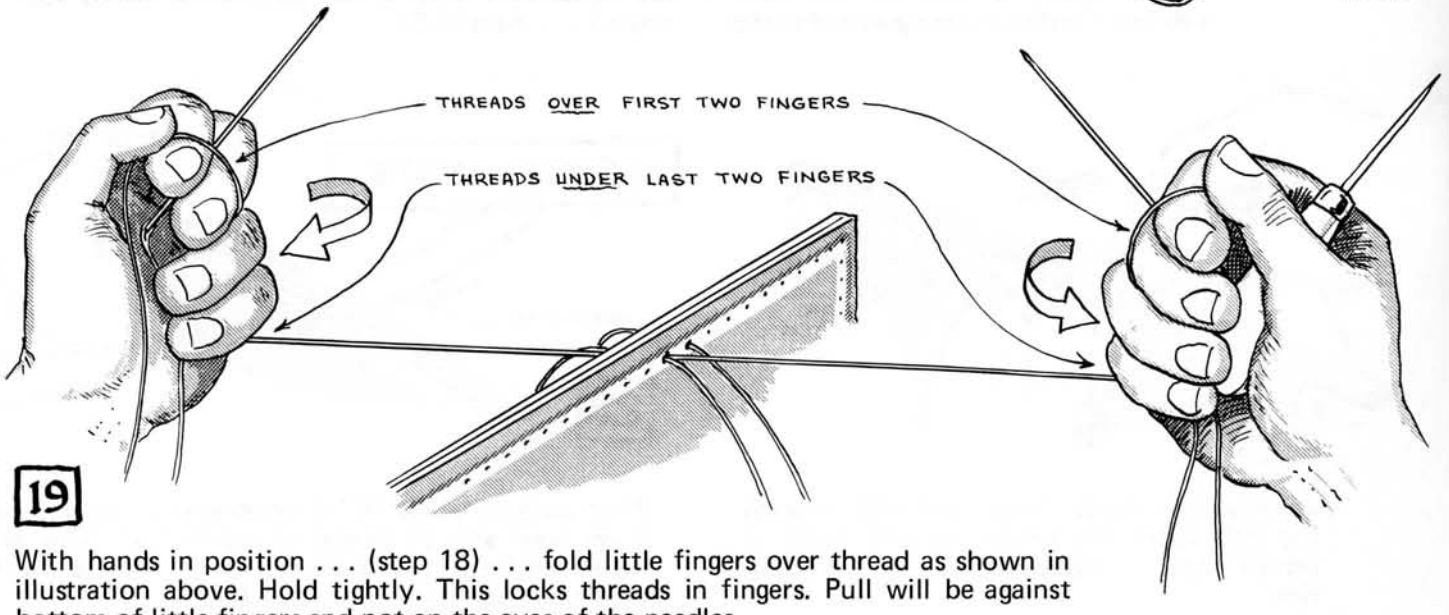
After pulling threads (as in step 16) move hands back to project. Let threads drop out from under little fingers. Re-grip threads close to leather, as shown. Grasp the *same* threads you had been previously pulling.





18

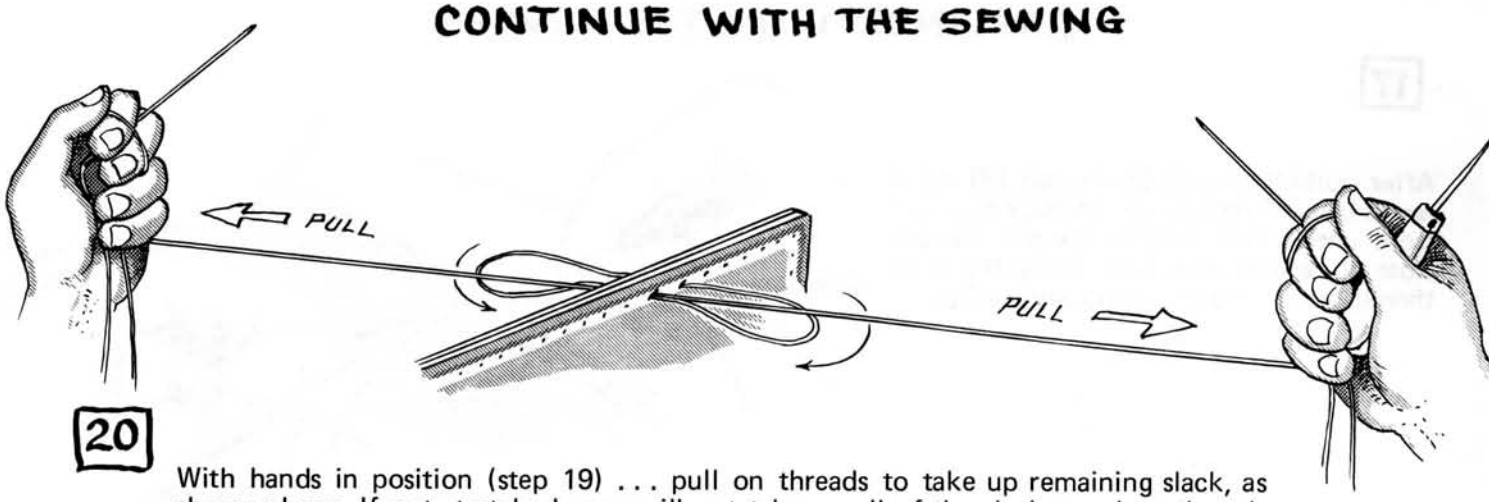
Pull on threads . . . at the same time turning hands outward. Extend the little fingers so that the thread comes in *front* of them. Threads (under thumbs) should go over *top* of index and second fingers.



19

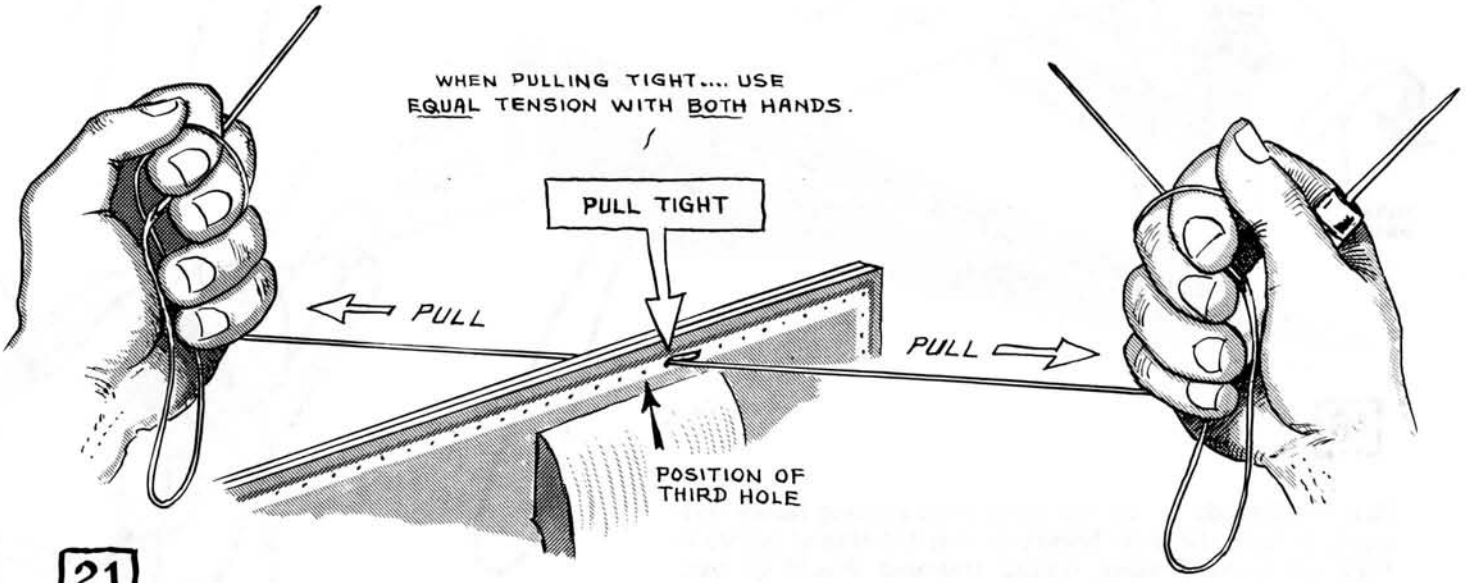
With hands in position . . . (step 18) . . . fold little fingers over thread as shown in illustration above. Hold tightly. This locks threads in fingers. Pull will be against bottom of little fingers and *not* on the eyes of the needles.

CONTINUE WITH THE SEWING



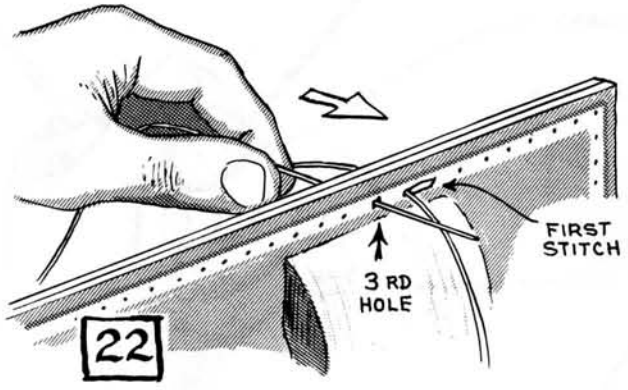
20

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!



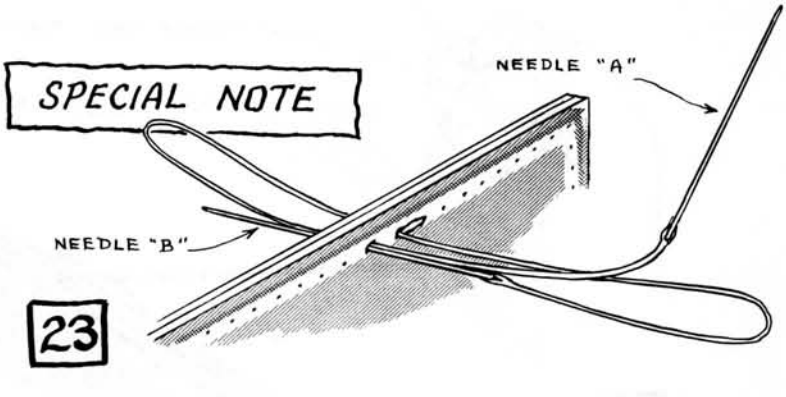
21

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 3 . . . through 21.



22

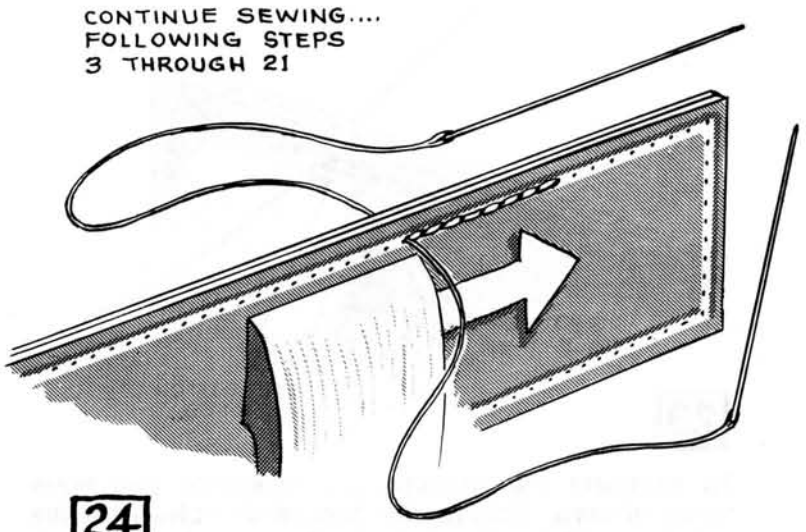
Always push needle from *back side* through the hole *first!* Try always to stab holes at proper angle . . . come out in channel on back side.



23

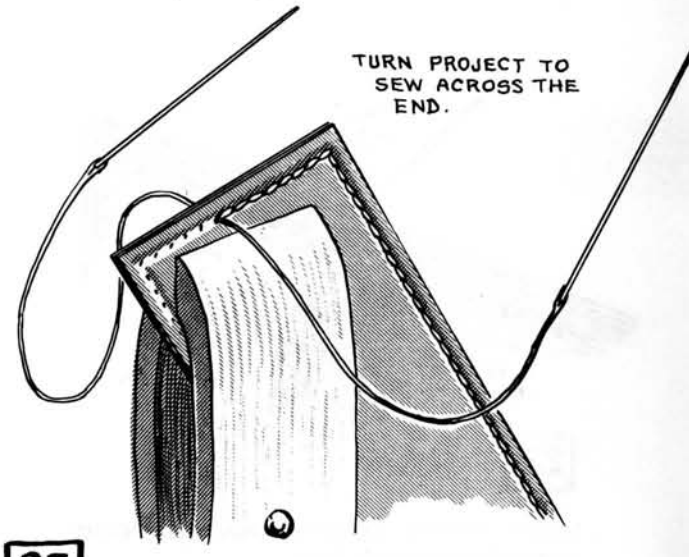
When putting needle "B" through hole . . . *always* put it on same side of thread of needle "A". This will insure uniform appearing stitches. *Always* bring needle through from *back side first!*

CONTINUE WITH THE SEWING



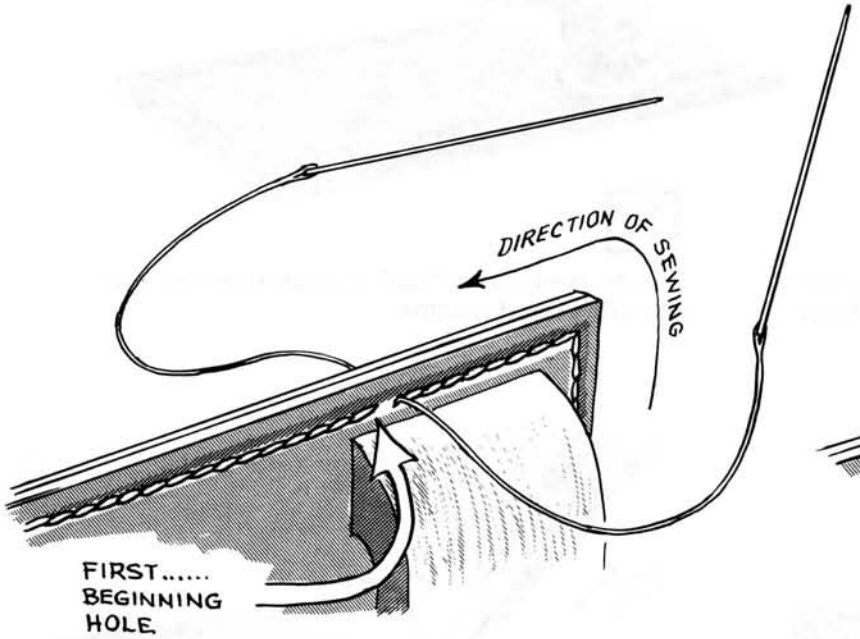
24

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.



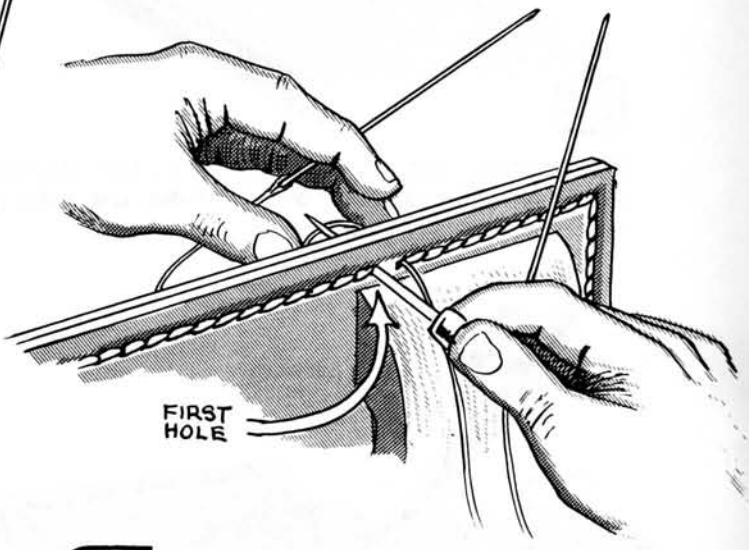
25

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

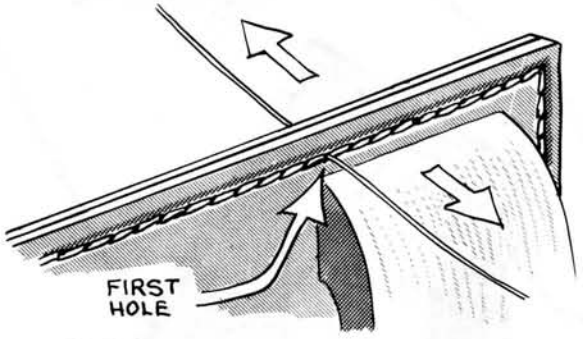
Continue sewing completely around the project . . . until you are one stitch away from the beginning hole. Clamp project in stitching horse so you are always above the jaws.



27

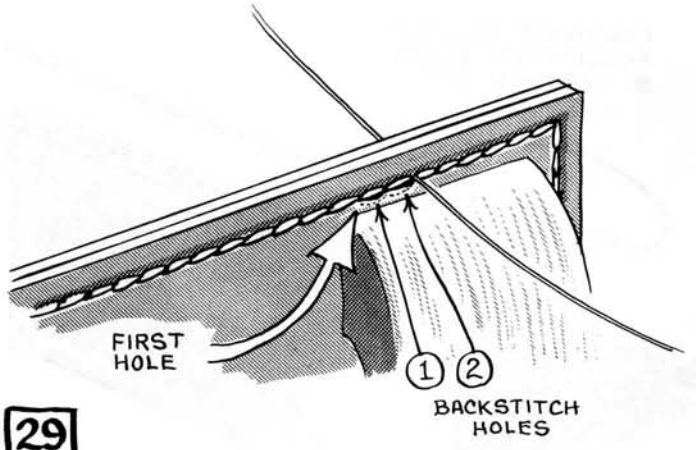
Carefully work awl into first hole so as not to cut the thread. After you have had some practice, you will be able to "feel" with the awl without cutting thread.

CONTINUE WITH THE SEWING



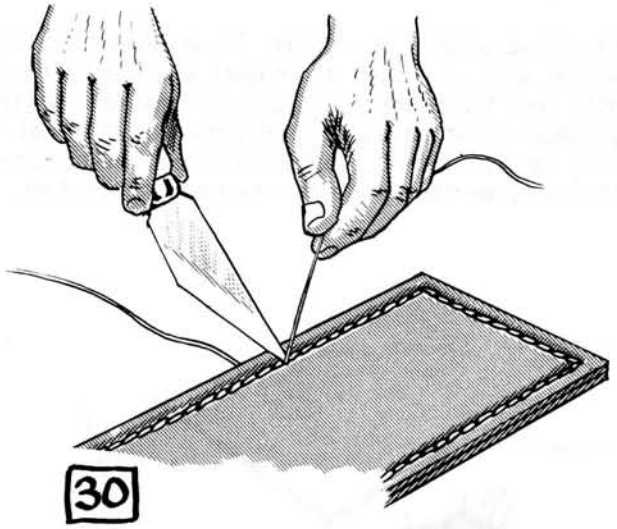
28

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



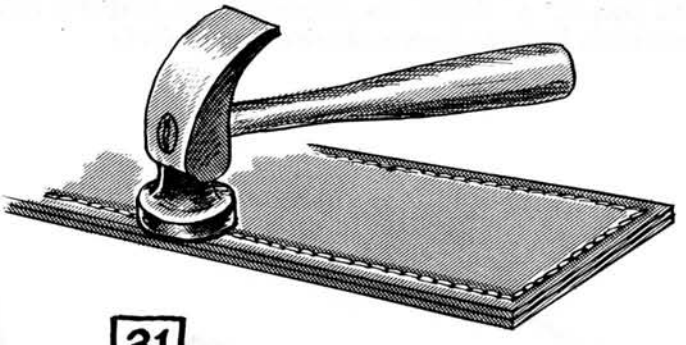
29

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.



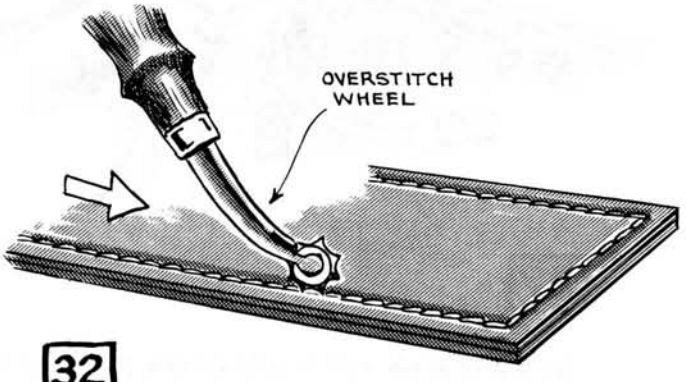
30

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



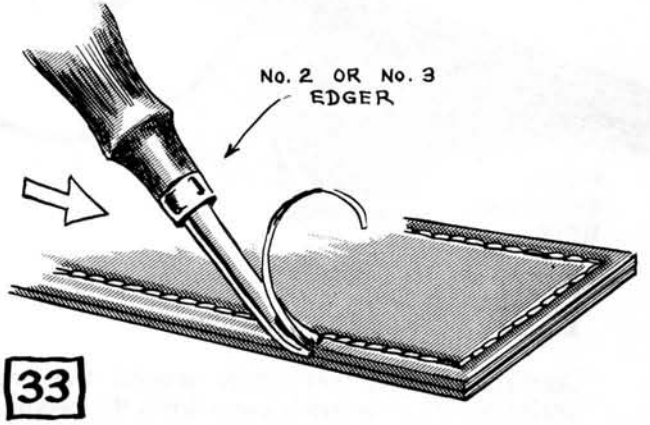
31

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



32

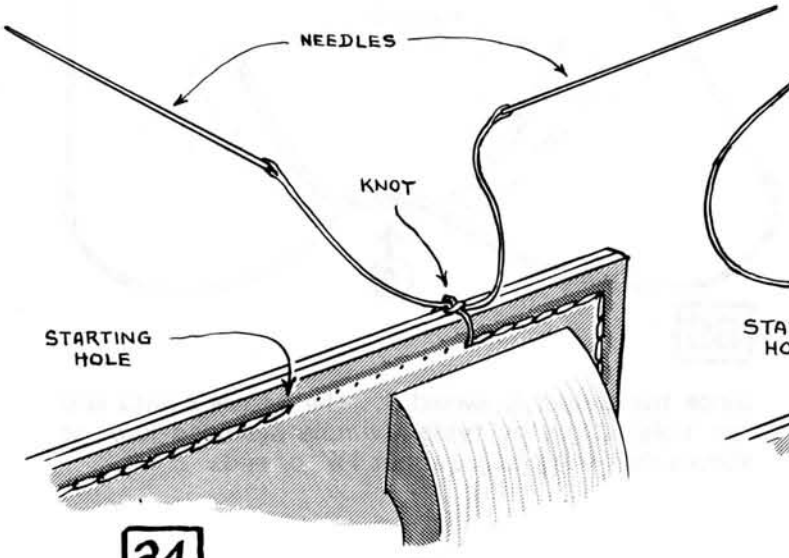
Run the overstitch wheel over all of the stitches. This adds the final touch of professionalism, it actually helps the appearance of any slightly irregular stitches.



33

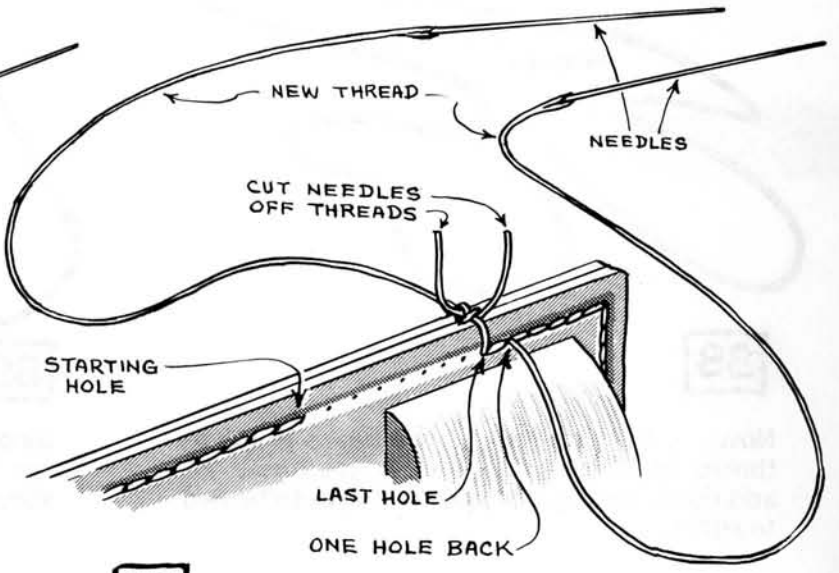
The final step . . . on the sewn project . . . round the edges on both sides as shown above. Moisten edges and burnish with a cloth, or an edge slicker.

CONTINUE SEWING ... RUNNING OUT OF THREAD



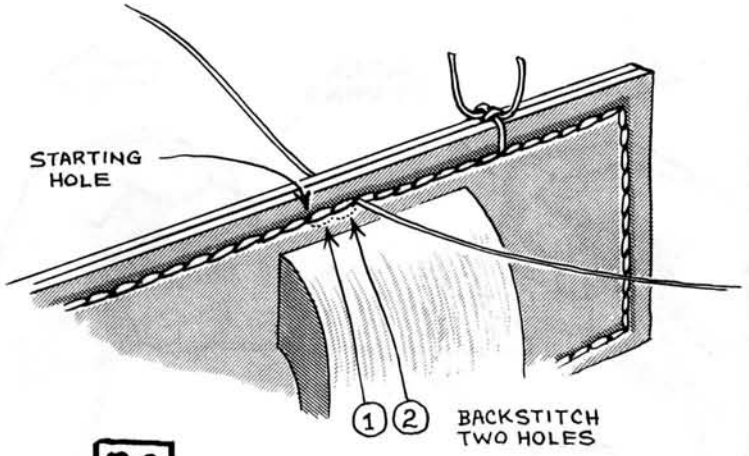
34

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.



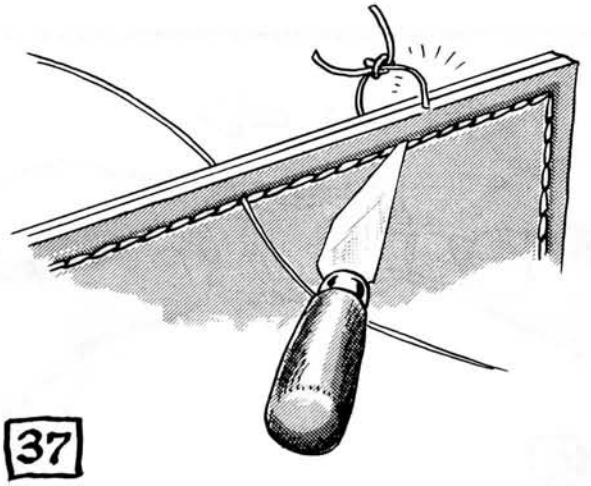
35

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 permissable to push first needle through from front side. Beginning one hole back . . . "locks" the last hole-threads in place.



36

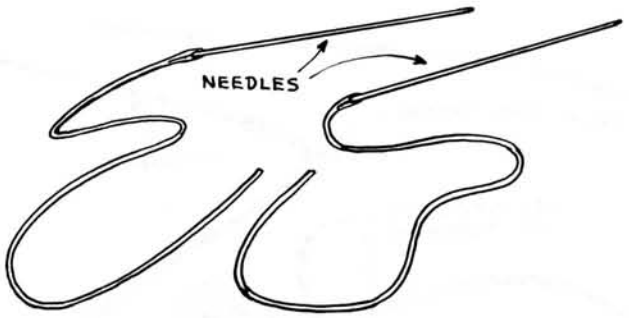
Continue sewing to starting hole, as previously described. Keep sewing area above jaws. Back-stitch two holes . . . as in step 29.



37

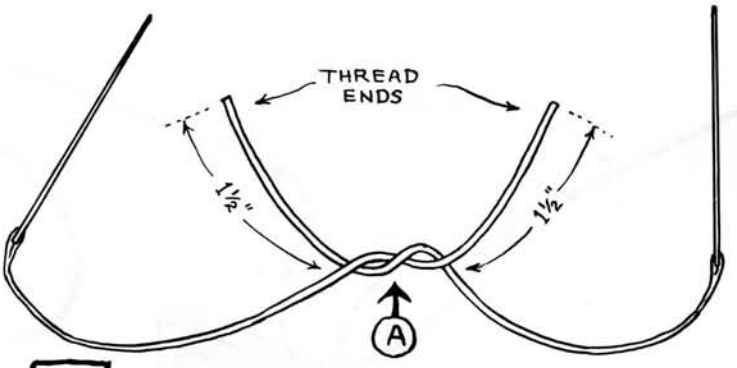
Cut off the threads as described in step 30. Do not cut into the stitched threads. With sewing completed, follow through steps 31-32-33.

TYING THE THREAD ENDS TOGETHER



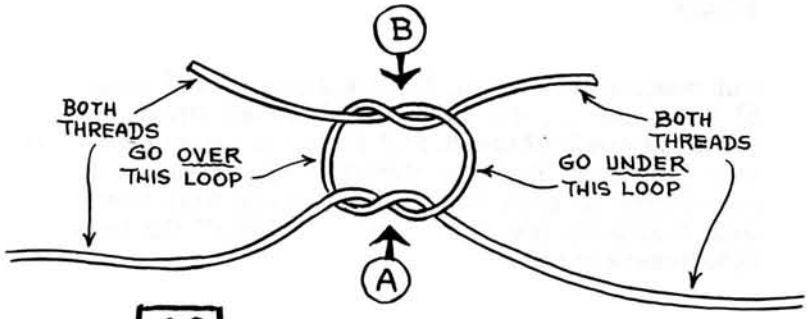
38

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.



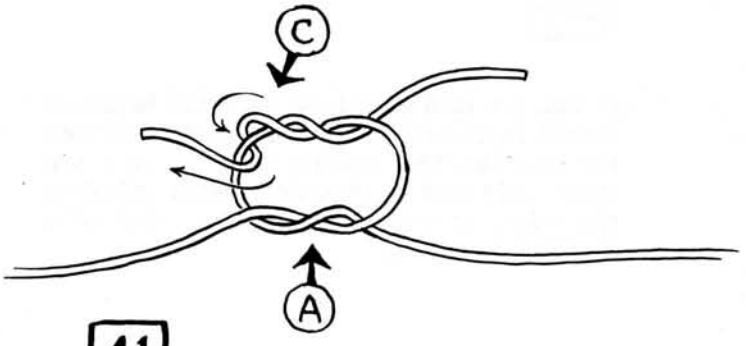
39

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 1½" of ends.



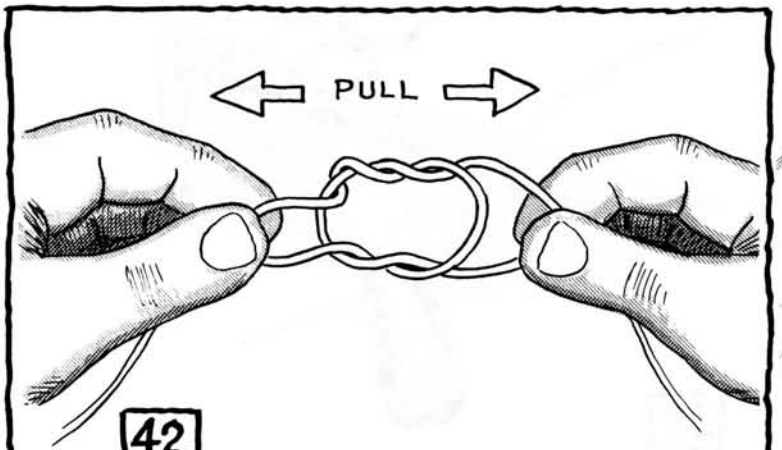
40

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



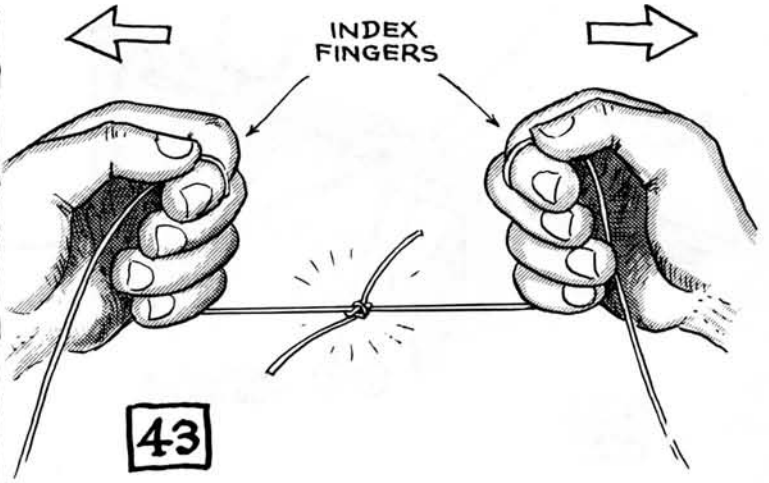
41

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



42

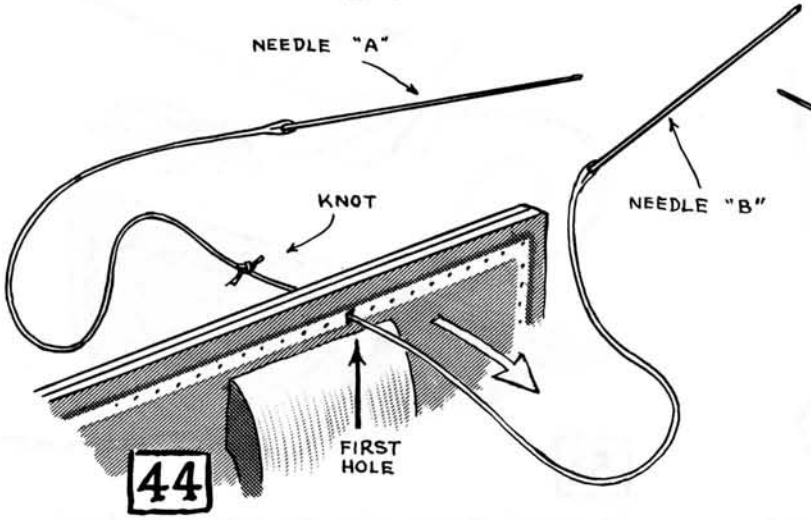
Now . . . grasp both threads . . . on each side, as shown above. Pull as tight as possible with the fingers.



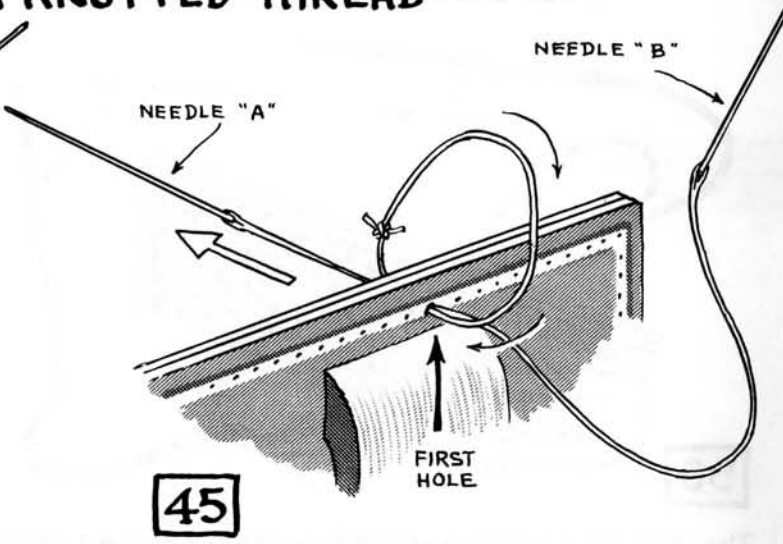
43

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

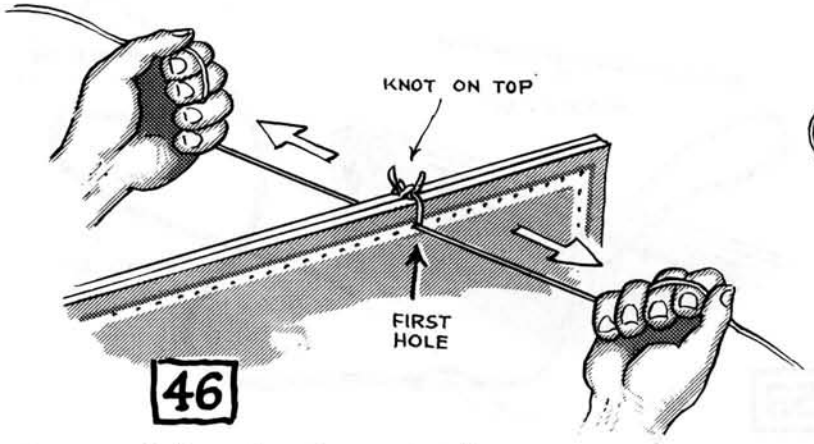
BEGINNING WITH A KNOTTED THREAD



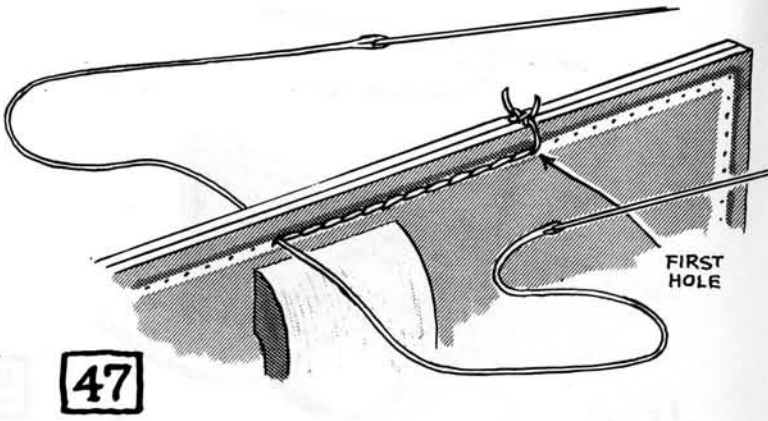
To start a new project with a knotted thread . . . stab hole and pull thread through from *back* side, pulling knot up close to leather as shown above.



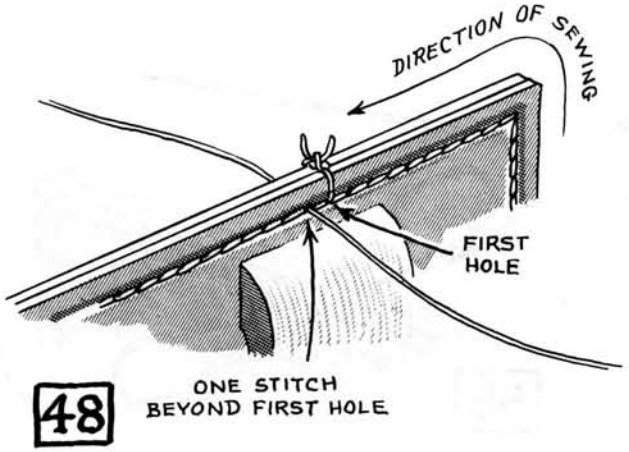
Take needle "A" *over* top edge of project . . . and back through the *same* hole. Be careful not to pierce the thread.



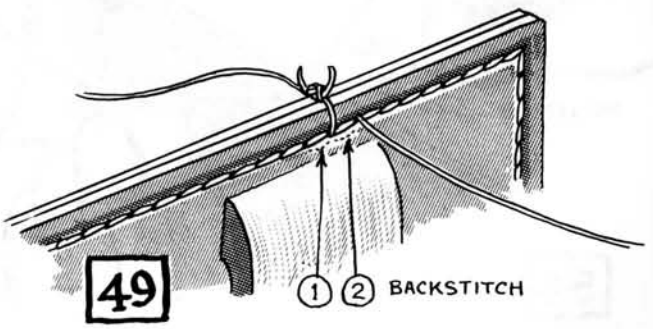
Adjust threads so that knot comes on top edge. Pull threads tight.



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.

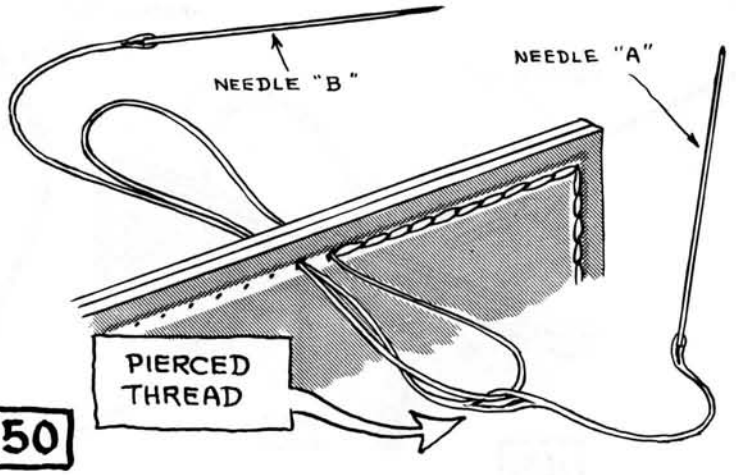


Sew around project . . . through first hole . . . then take one extra stitch beyond first hole, as shown. Pull tight. This locks ends of knotted thread.



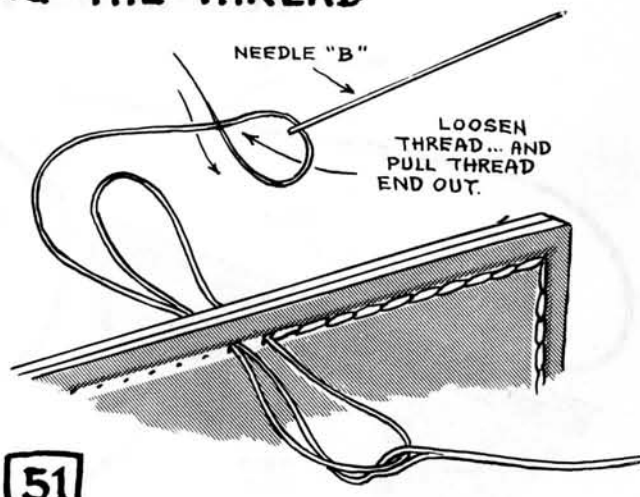
Now backstitch two holes . . . same as step 29. Cut off the threads as previously described.

TROUBLE SHOOTING — PIERCING THE THREAD



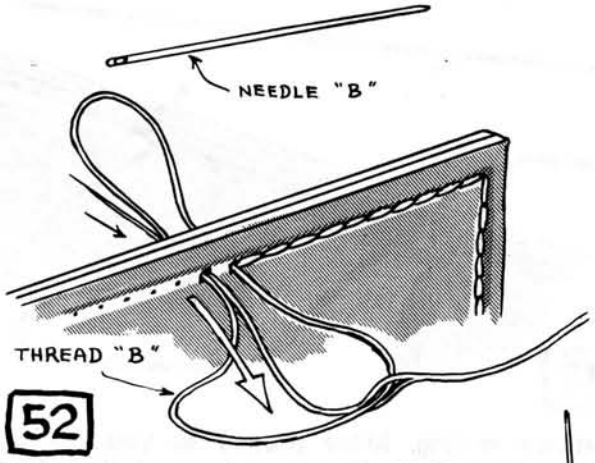
50

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.



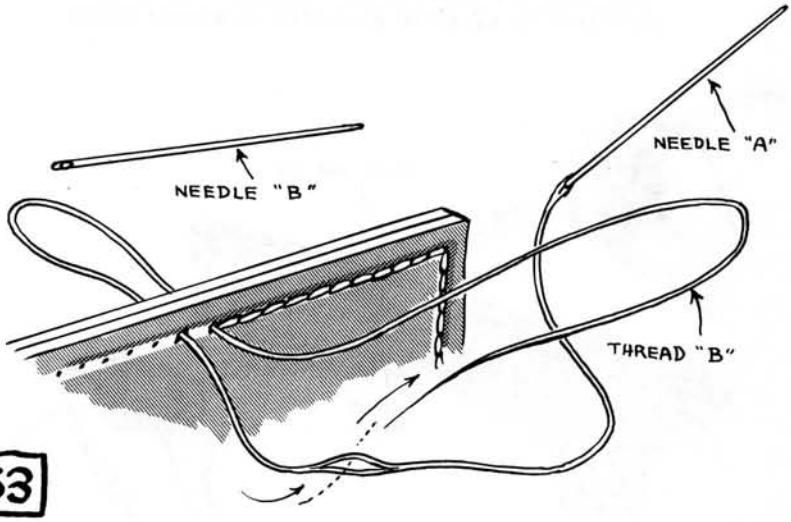
51

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



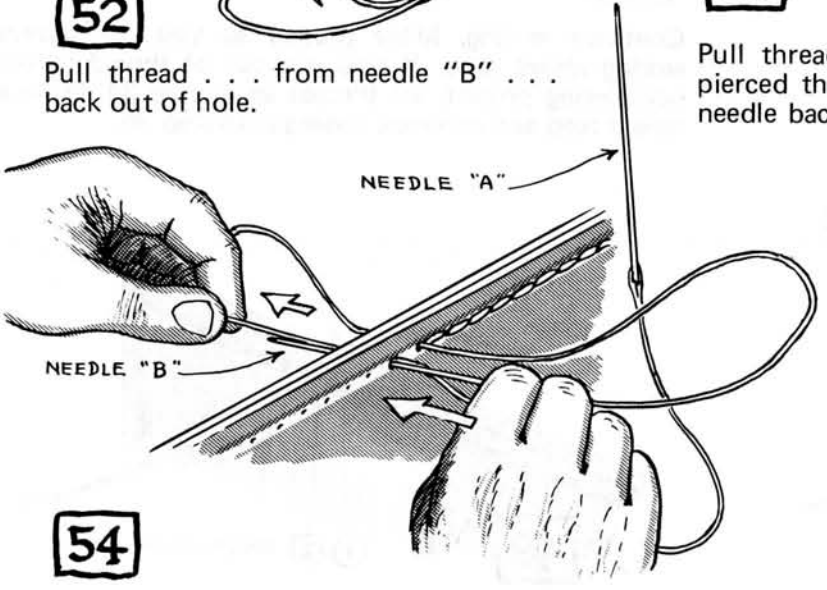
52

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



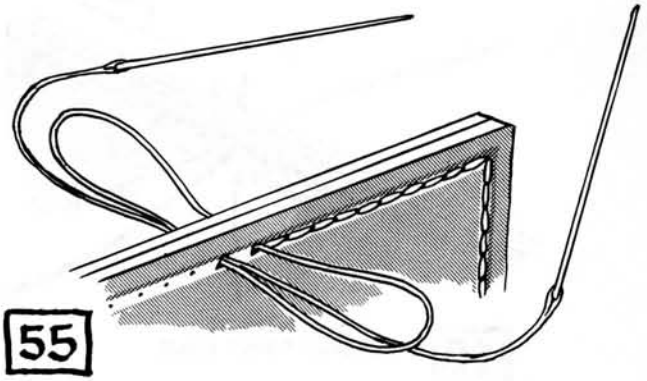
53

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

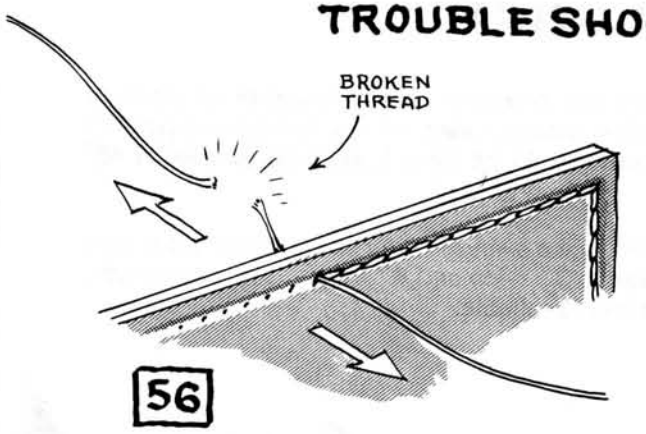
Push needle "B" back through hole. Simultaneously pull on thread with left hand, as shown. Use same procedure as steps 11-12-13.



55

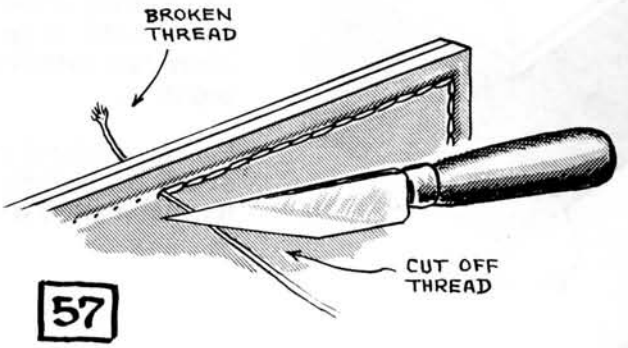
Project should now be back to normal, appearing as above. Continue sewing as in step 14.

TROUBLE SHOOTING — BROKEN THREAD



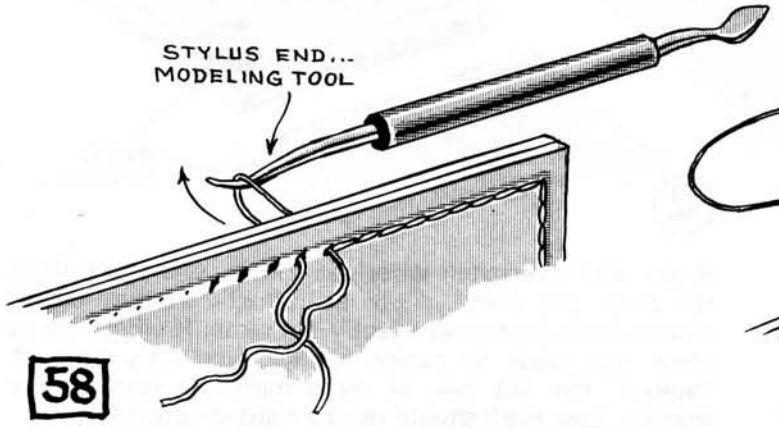
56

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



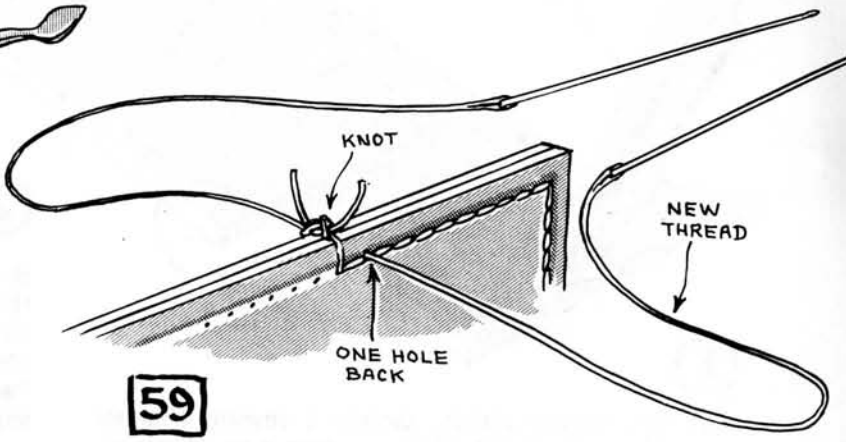
57

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



58

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.



59

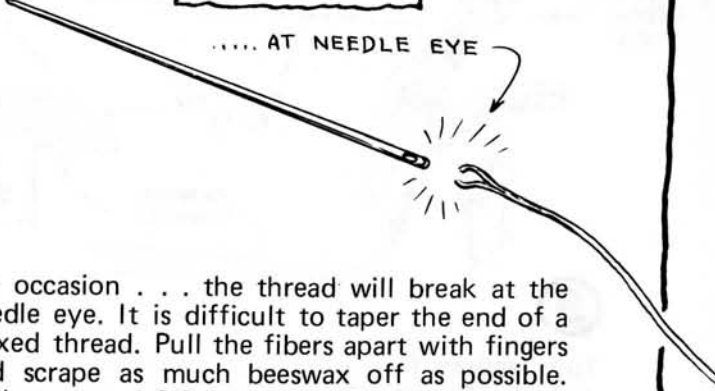
Tie the ends on top edge, as shown. Make a new thread. Pull to center, one hole back from knotted ends. Continue sewing as in step 35.

SPECIAL NOTES

SORE FINGERS

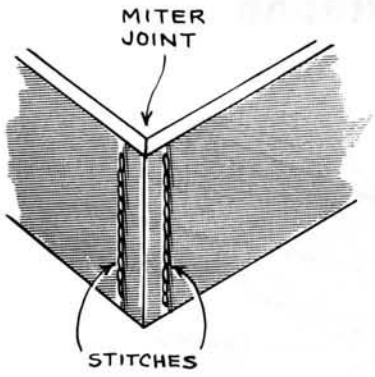
If you have followed the instructions . . . by now the outside of your little fingers will be sore from pulling on the threads. Continued sewing will build up callouses. However, you can use tape, band-aids, or make a leather finger stall, if desired, to aid this problem.

BROKEN THREAD



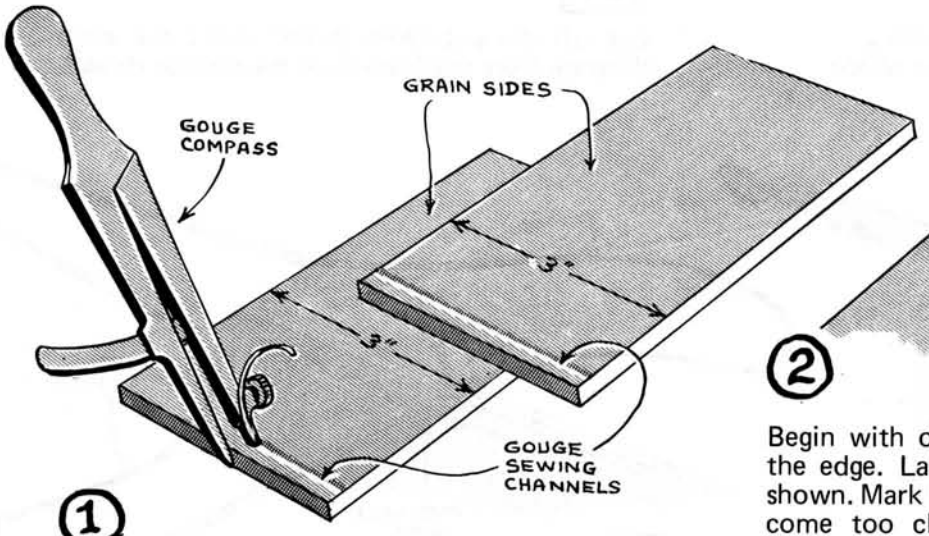
On occasion . . . the thread will break at the needle eye. It is difficult to taper the end of a waxed thread. Pull the fibers apart with fingers and scrape as much beeswax off as possible. Follow steps 1-2-3-4 on pages 5 and 6. Re-wax; put back on needle.

SEWING A MITER JOINT



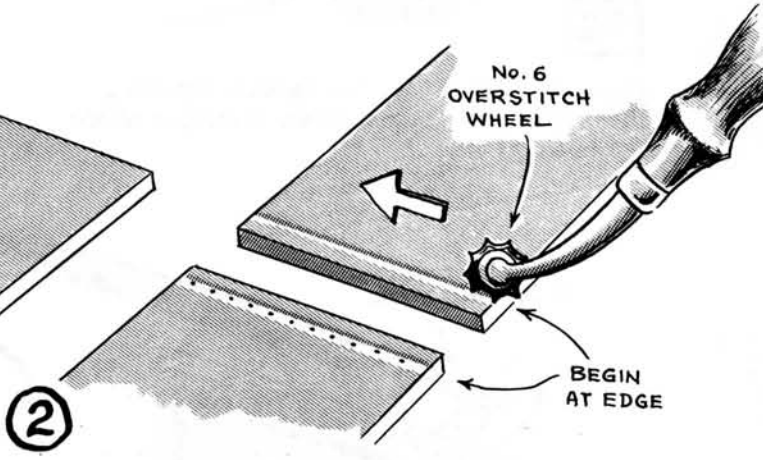
This method of sewing is used to secure two pieces of leather together where they join at a 90° angle. It is used on leather boxes, cases, or any specialized project where two such leathers join. The leathers, to be joined, must be beveled at 45° angles.

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.



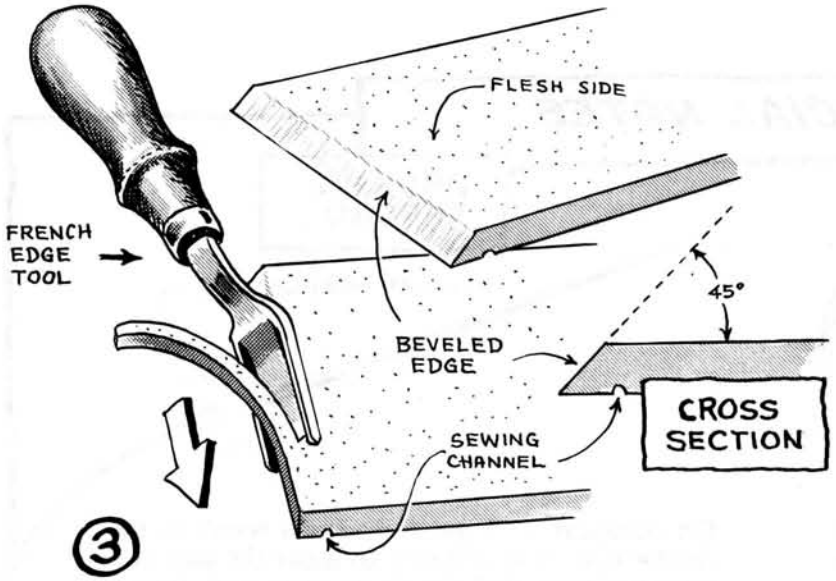
1

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.



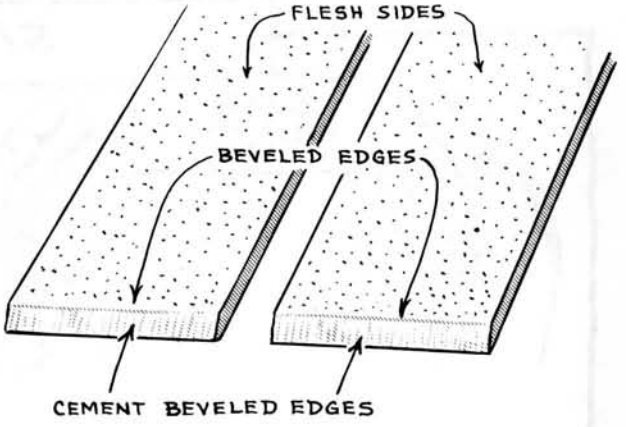
2

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 amy have to "adjust" the last two or three marks to equalize the spacing. Last mark should not be right-on-the edge.



3

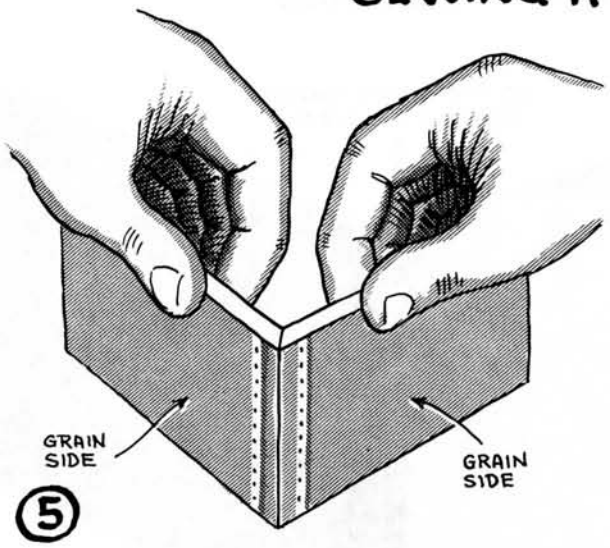
Turn leathers flesh side up and bevel the ends at a 45° angle with the French edge tool. Bevel the ends with the sewing channels, as shown. Place leathers on a smooth, firm surface . . . try to hold edger at a 45° angle.



4

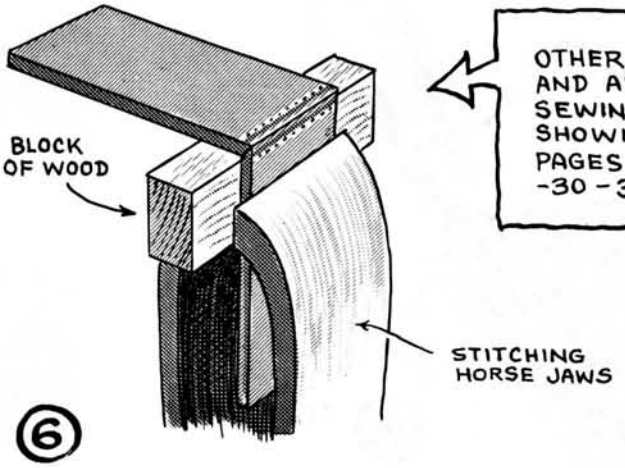
Apply all-purpose cement (strong bonding) to both beveled edges. Allow to "set" some minutes to insure adhesion.

SEWING A MITER JOINT— Continued



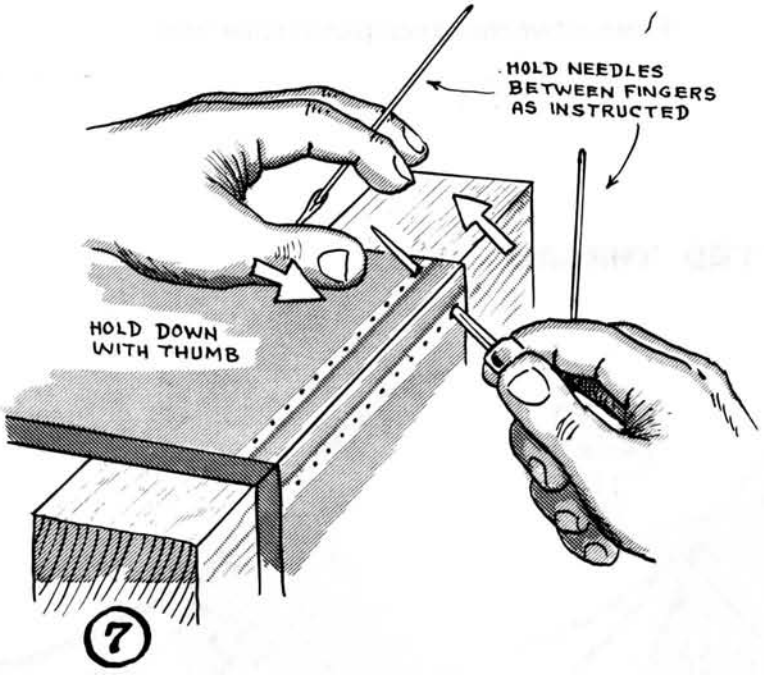
⑤

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



⑥

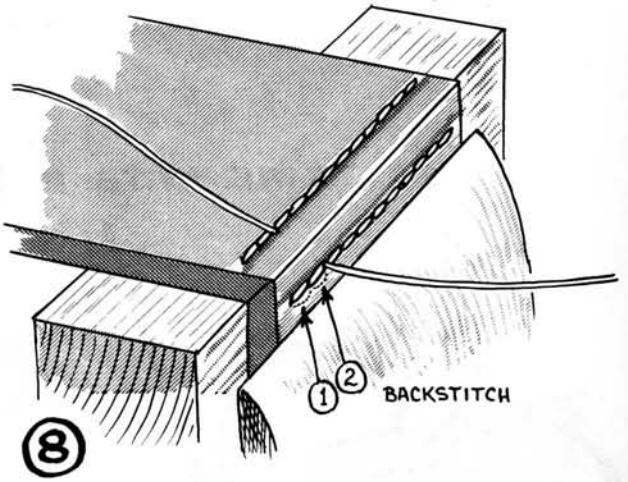
Fit a block of wood inside the miter joint . . . and clamp the project in the stitching horse, as above. The block of wood will insure a square corner, and aid in the sewing.



⑦

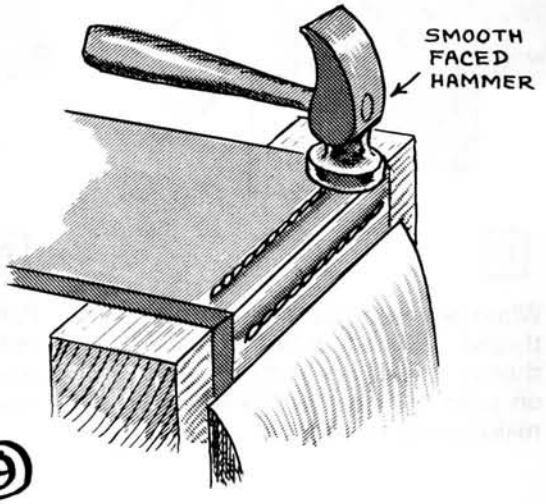
Stab first hole, upwards, at a 45° angle. The awl blade should come out in the opposite channel . . . at the wheel mark. You may have to back the awl off a few times until you get the correct angle. With a little practice you will get the "feel" . . . and will exit in the opposite wheel mark with regularity.

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

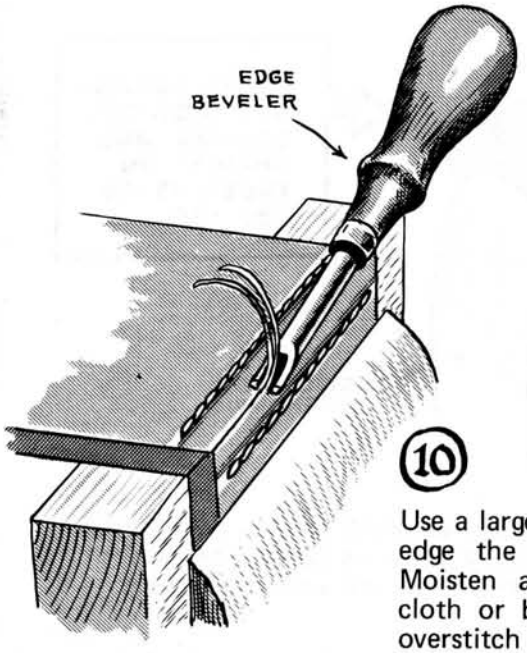
Sew to end . . . and backstitch two holes. Cut off threads.



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.

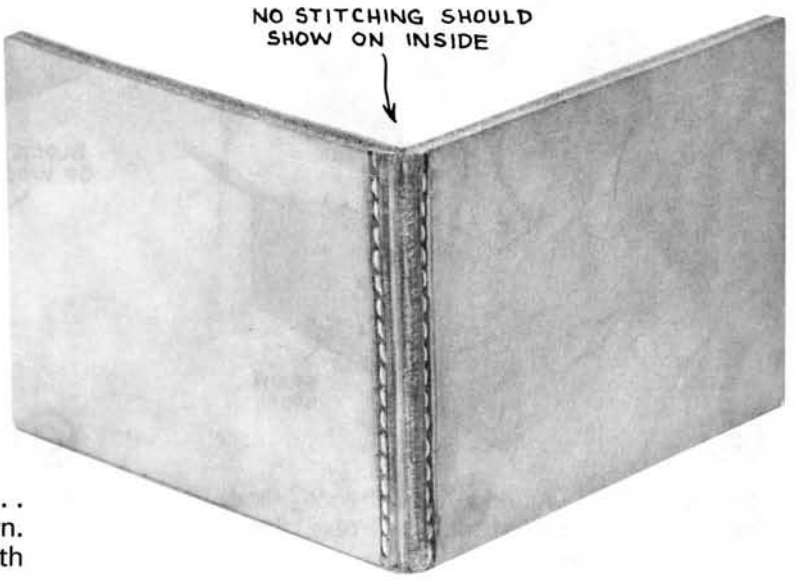
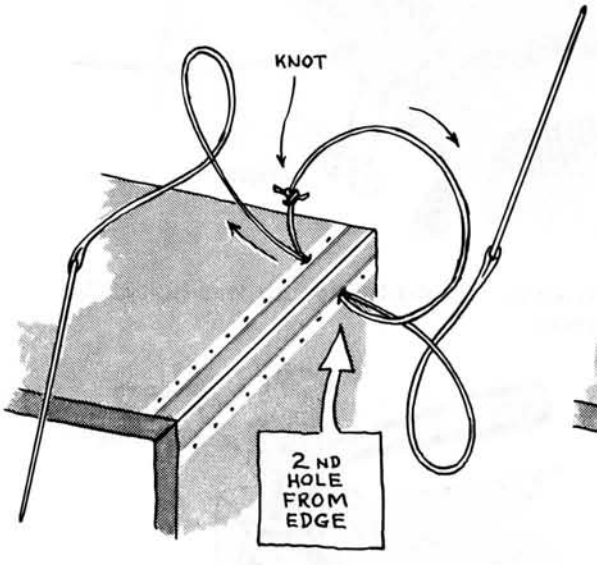


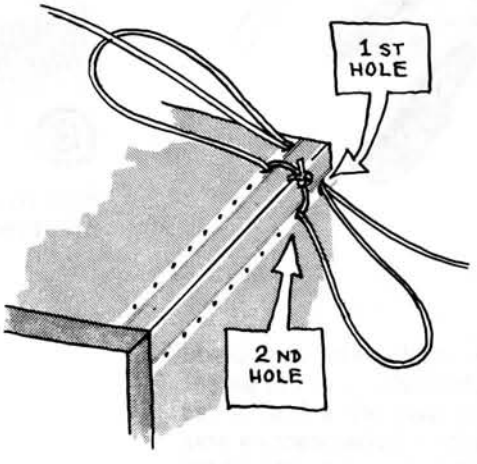
Photo above shows completed miter joint.

STARTING WITH A KNOTTED THREAD



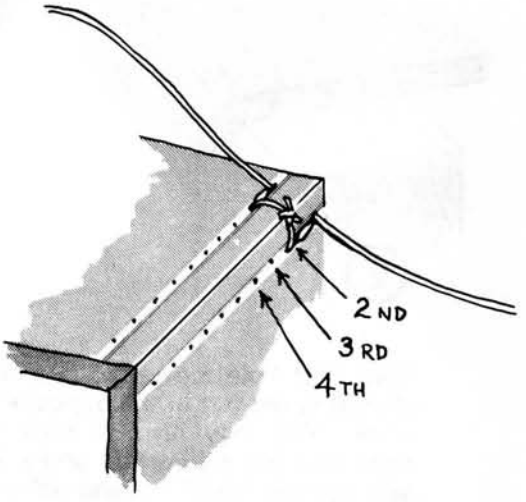
A

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

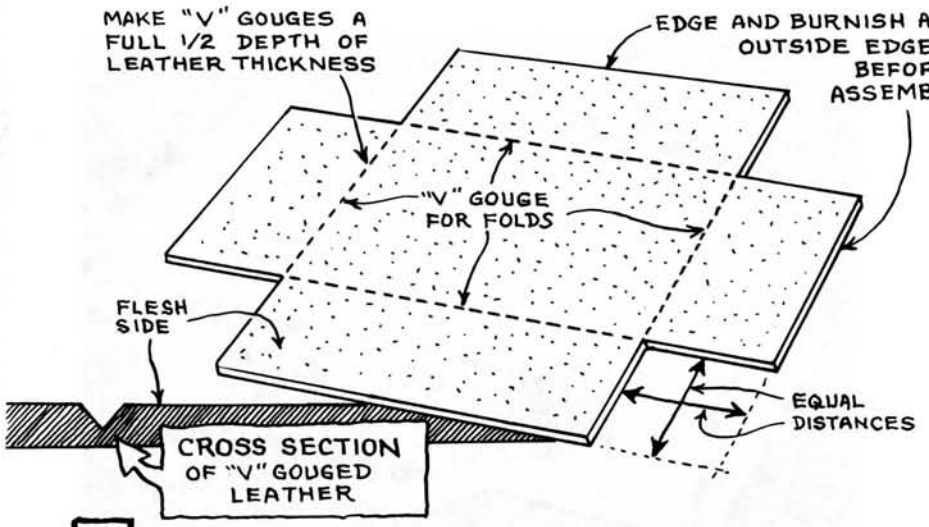
Pull knot down tight on top of miter joint. Stab first hole and push needles through in the regular manner.

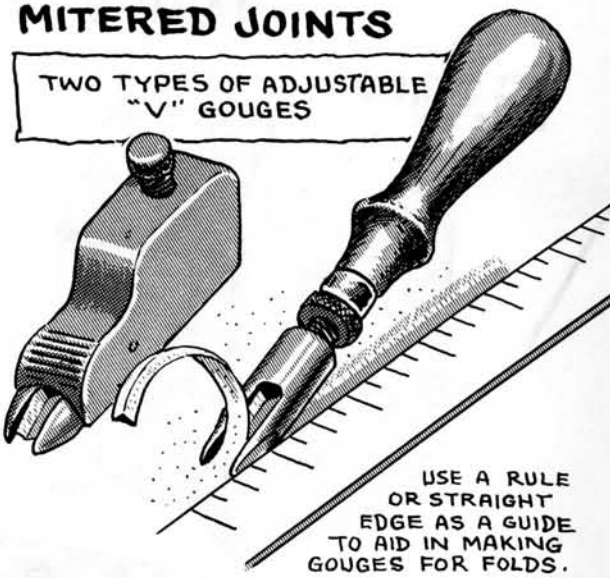


C

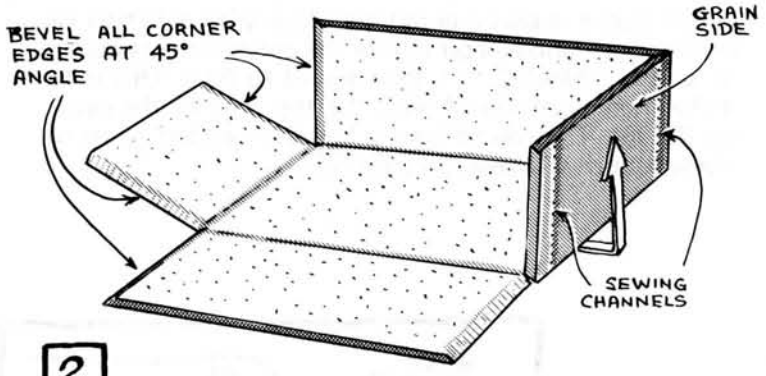
Pull stitch tight. Now go back through 2nd hole . . . pull stitch tight. This locks ends of knotted threads. Continue sewing . . . 3-4-etc . . . to end of project.

MAKING LEATHER BOXES WITH MITERED JOINTS



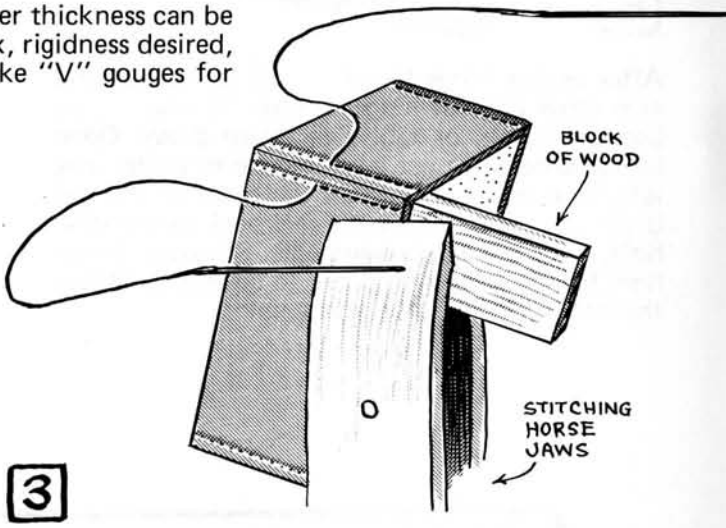


1 A simple leather box can be made as shown above. Leather thickness can be from 6 oz. to 12 oz. . . . depending on the size of the box, rigidness desired, etc. Use a carpenter's square to lay out dimensions. Make "V" gouges for folds. Study sketch above before beginning.



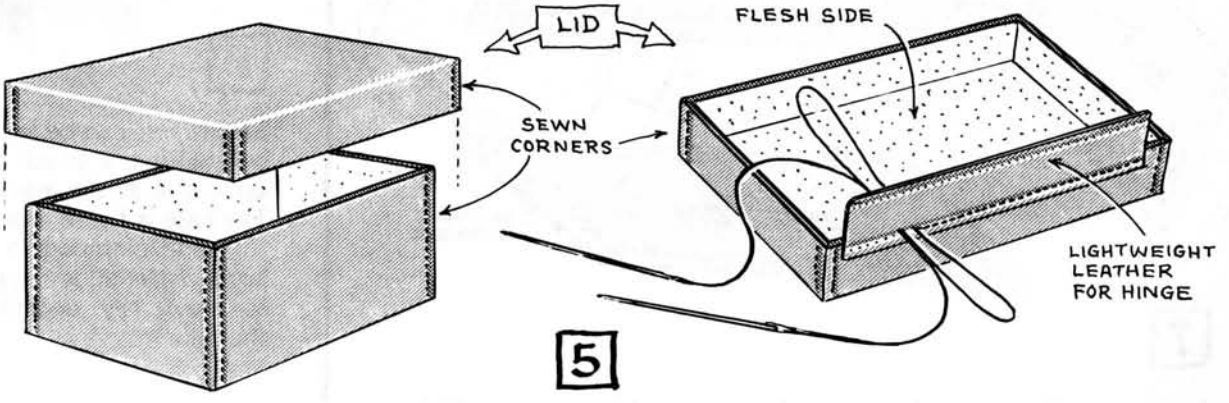
2

Gouge sewing channels on grain side. Mark with overstitch 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).

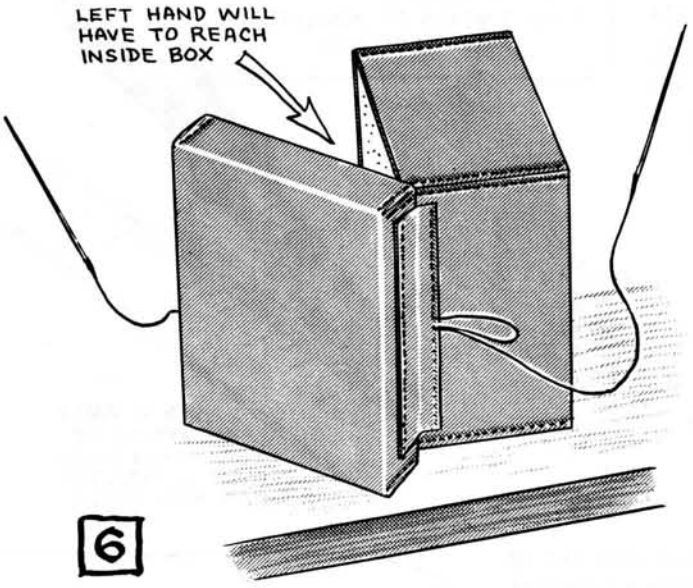


4

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.



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.

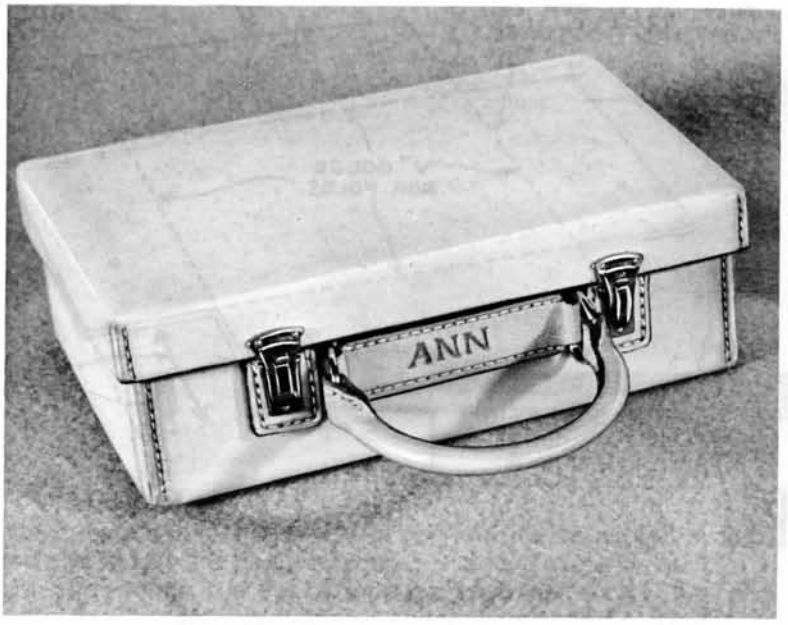
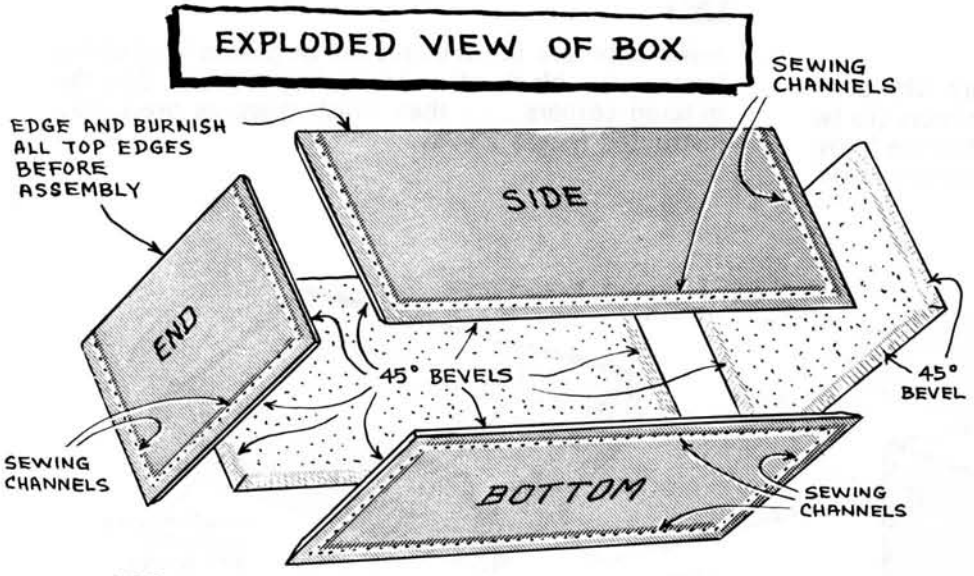
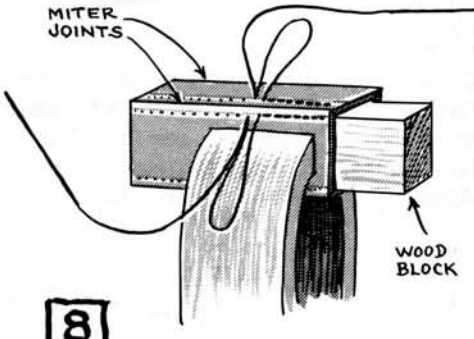


Photo above shows a completed box with addition of catches and handle. You'll note the catches are fastened to leather "blocks" . . . then sewed to box. This is to make them operational with the top part of the catch, on the lid. The round handle has been added. How to make rounds is shown on page 56.



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.

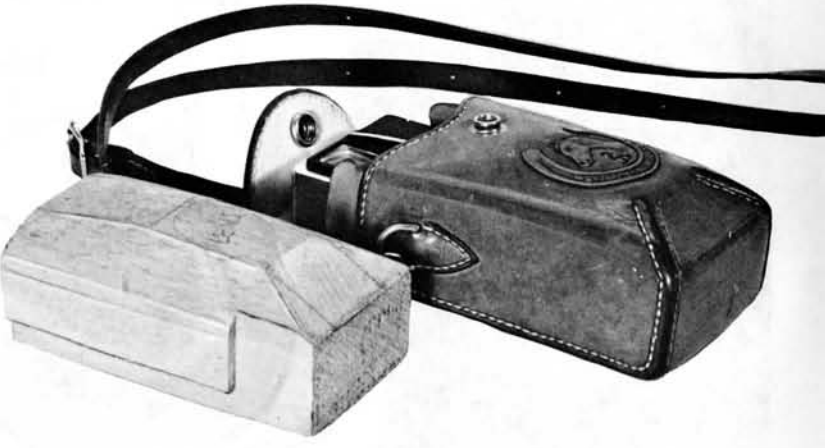
A few examples of simple wooden forms are shown on this page. With the wooden form . . . the leather can easily be fitted and trimmed for a perfect fit on any given project.

BINOCULAR CASE

This form was made from three pieces of standard board (¾" 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

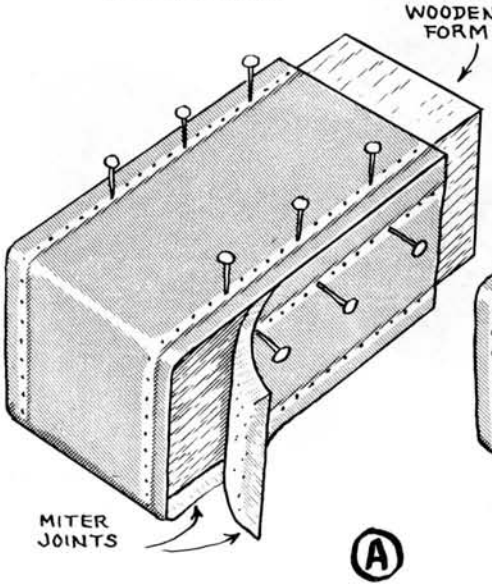
This form was made from careful measurements of the camera. Cut out, at side, was for camera trigger. A leather plug was used here (inside case) so trigger could not be tripped. Install snaps and strap dees before assembly.

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

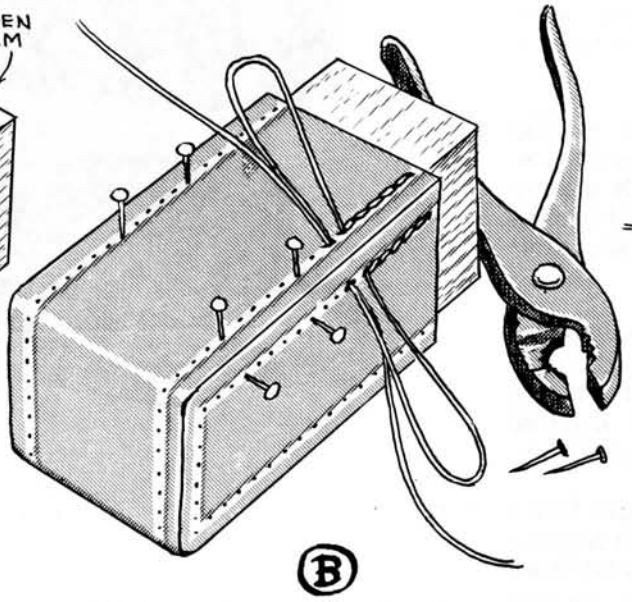
HAND SHOE TACKS ..... AS SEWING AIDS

ACTUAL SIZE

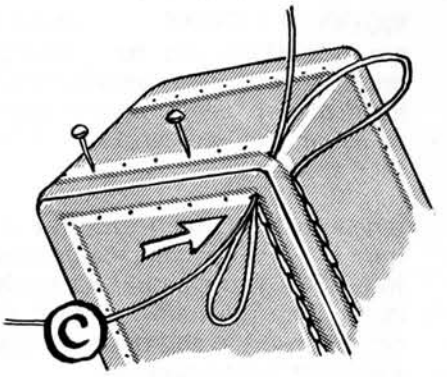
HAND SHOE TACKS have a definite place in hand sewing. They are especially useful where wooden forms are involved . . . as the leather can be tacked to the form, and gluing of the joints can be eliminated. The 3 oz. tack is a good all-around size. Other illustrations of their uses are shown in this book.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



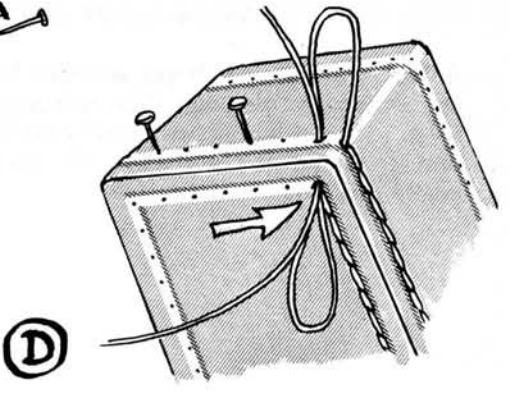
Prepare leather for sewing as previously described. Fit over wood form, and tack in place. Place tacks in overstitch wheel marks. Tap into wood with a tack hammer.



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.

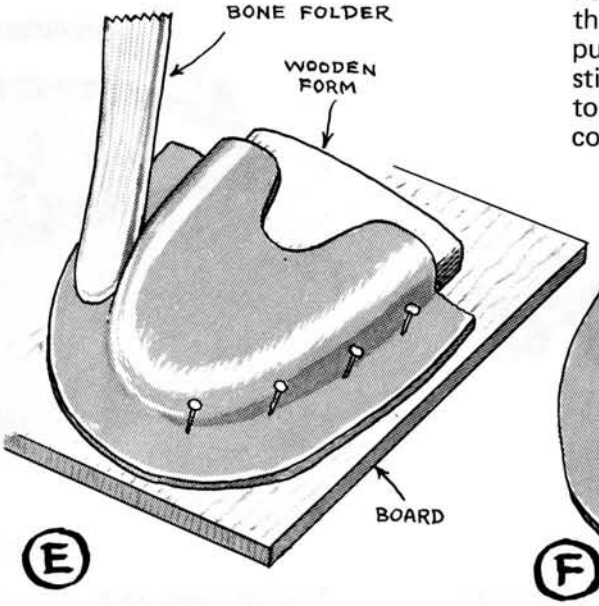


To sew around corner, stab through corner hole again on front side; pull threads through as shown.

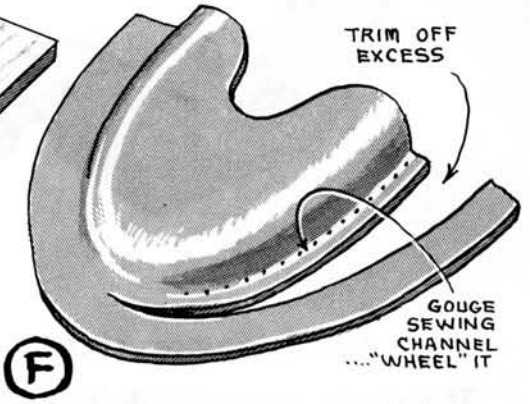


Pull stitch tight. Stab once more through corner hole on front side; pull threads as shown. Two or three stitches like this may be necessary to get back-thread around the corner, continue sewing.

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



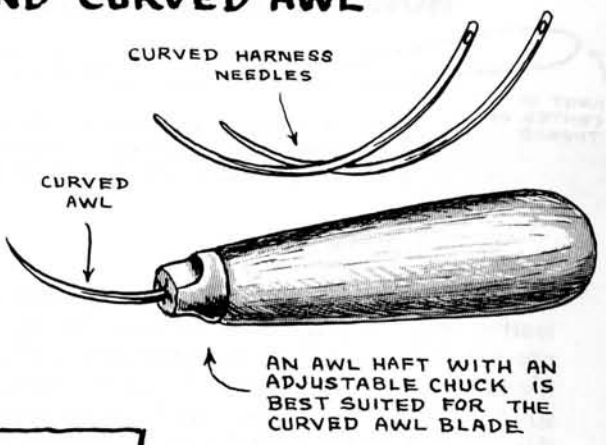
Thoroughly wetted leathers can be shaped over wooden forms with a bone folder. Cut leather over-size . . . tack in place; allow to dry.



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

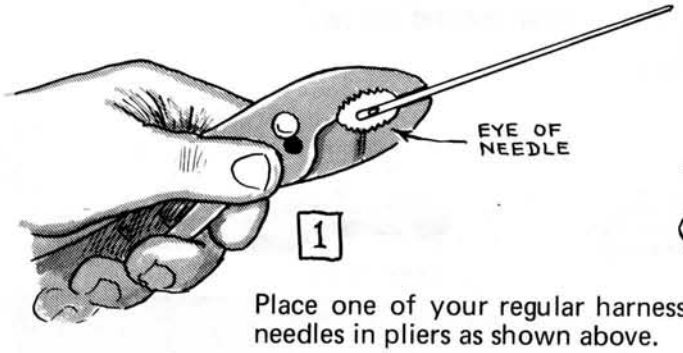
THE CURVED NEEDLES AND CURVED AWL

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.

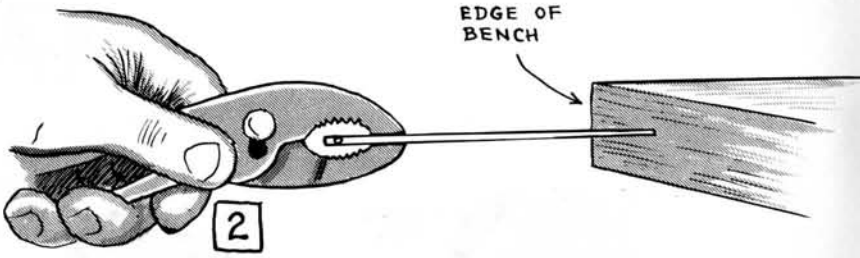


HOW TO MAKE CURVED NEEDLES AND AWLS

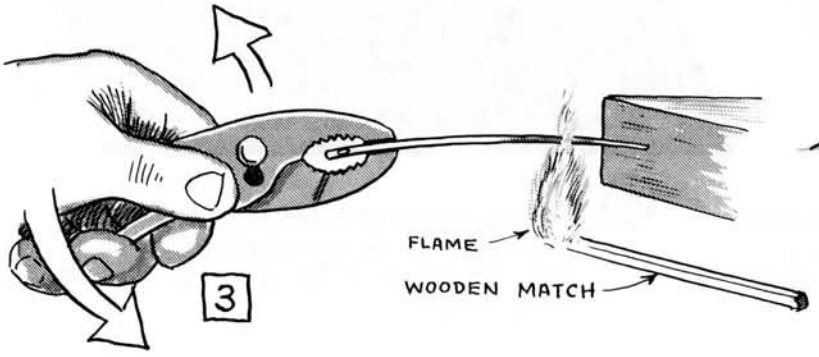
ALL YOU NEED IS A PAIR OF PLIERS, SOME WOODEN (*KITCHEN*) MATCHES.....OR A CIGARETTE LIGHTER.



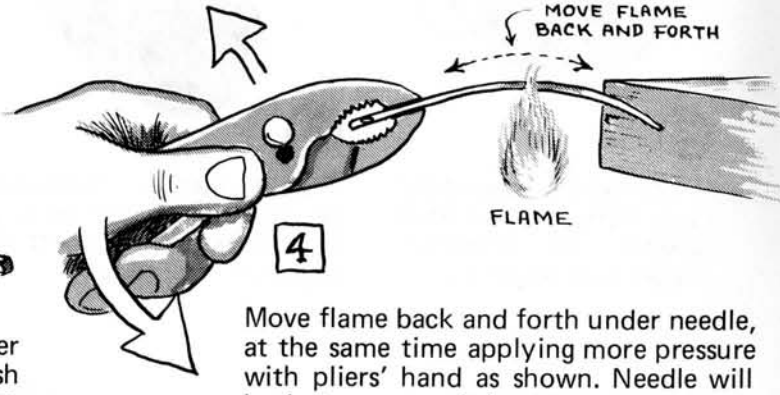
Place one of your regular harness needles in pliers as shown above.



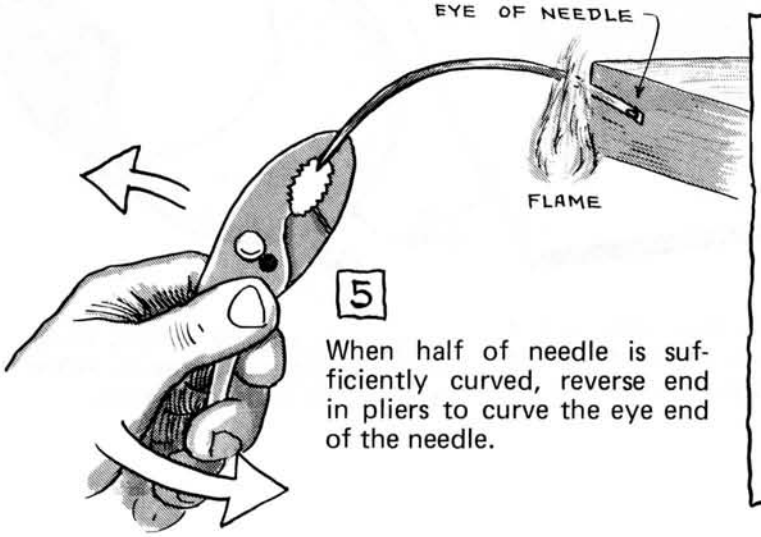
Stick end of needle in bench, or secured board, as shown. About 1/16" depth is all that is required.



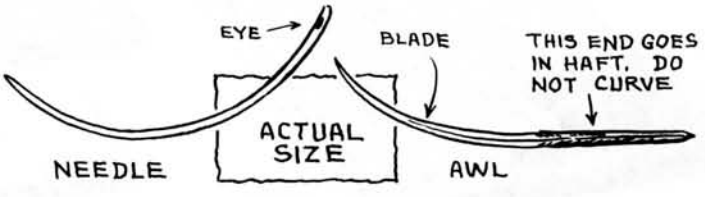
Strike match or use cigarette lighter. Hold flame under needle. Hottest part of fire is near tip of flame. Push needle tightly against bench and begin applying pressure with pliers hand, shown by arrows.



Move flame back and forth under needle, at the same time applying more pressure with pliers' hand as shown. Needle will begin to curve as it heats up.

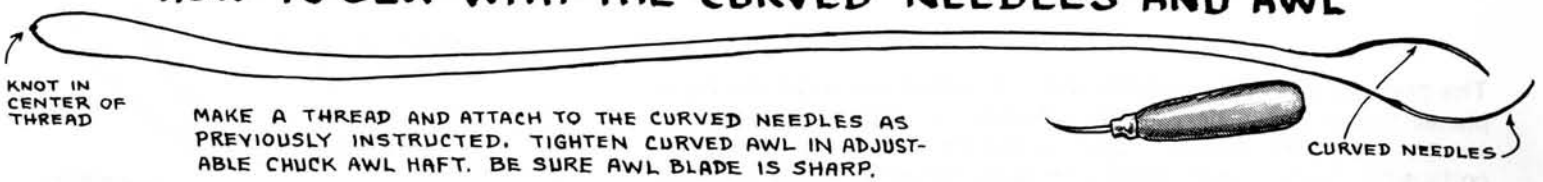


When half of needle is sufficiently curved, reverse end in pliers to curve the eye end of the needle.



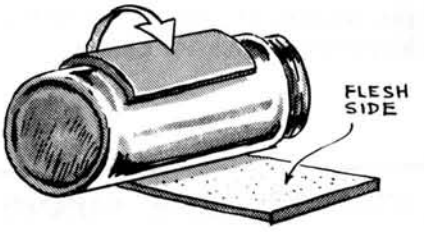
Your needles should look something like the above curve. When cool, polish with fine emery cloth and jeweler's rouge impregnated in cloth or leather. Curve the awl blade in the same manner. Heating the needles and awl will take out some of the temper, but will not affect their use.

HOW TO SEW WITH THE CURVED NEEDLES AND AWL

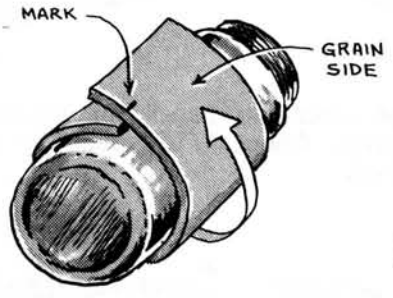


MAKE A THREAD AND ATTACH TO THE CURVED NEEDLES AS PREVIOUSLY INSTRUCTED. TIGHTEN CURVED AWL IN ADJUSTABLE CHUCK AWL HAFT. BE SURE AWL BLADE IS SHARP.

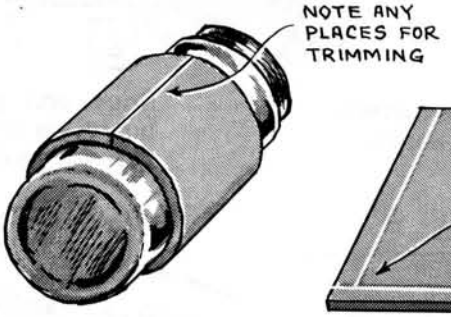
For instructional purposes, we will make a leather cup to show how to use the curved needles and awl. Select an object about 2½" in diameter . . . and form 4" to 6" long. A suitable object would be a jar from the pantry. Almost any round object can be used as long as it does not have a protruding rim, 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.



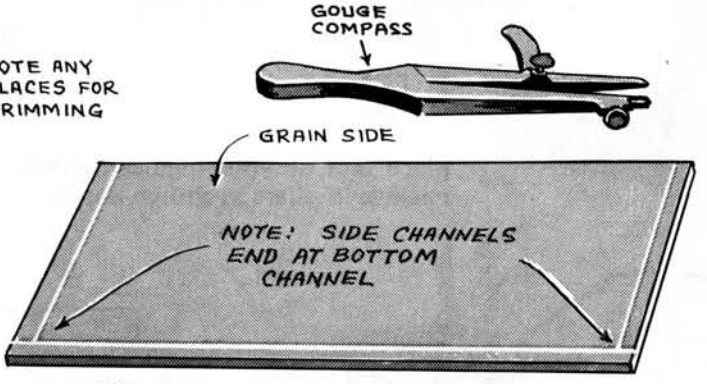
① Cut a piece of 8/9 oz. leather about 4" wide and a little longer than is required to wrap around the jar.



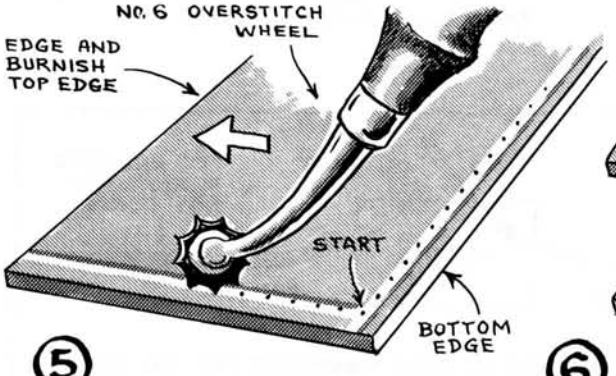
② Fold tightly around jar and mark where leather should be trimmed. Edges butt together.



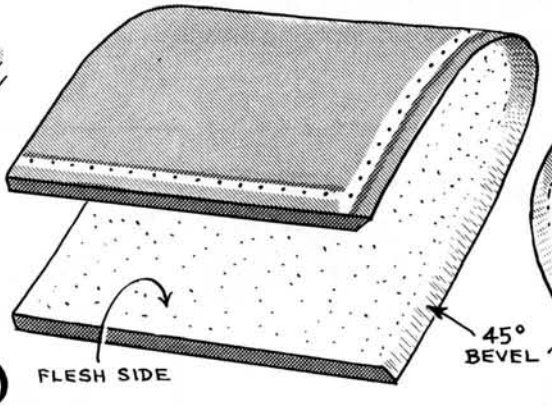
③ Trim on mark . . . fold around jar again. Trim any areas . . . so that both edges butt flush together; snug to jar.



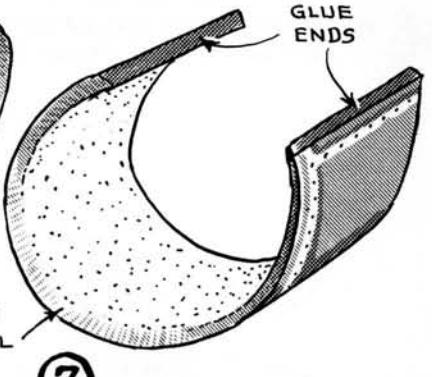
④ Gouge bottom channel from end to end. Side channels do not cross bottom channel. See page 7 for gouging distance from edges.



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.

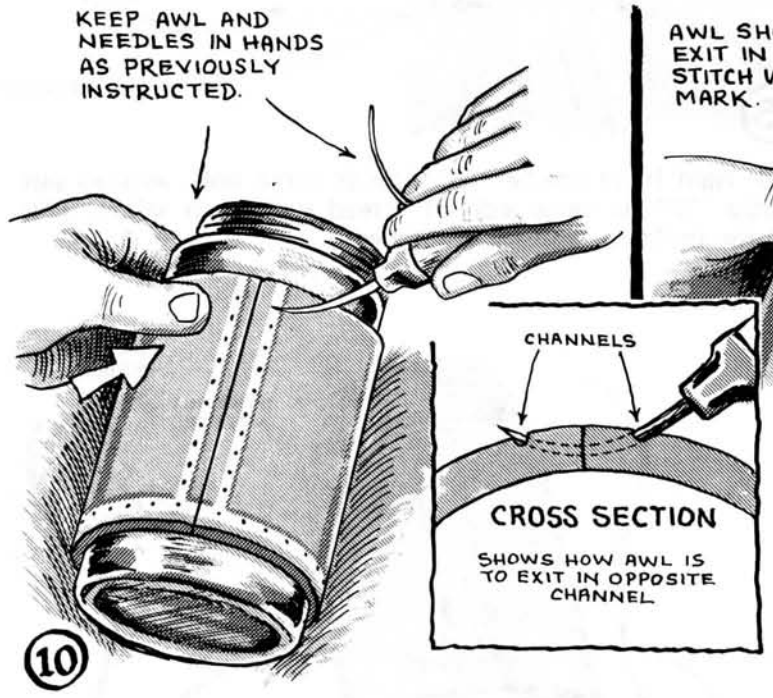
SEWING WITH CURVED NEEDLES — Continued

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.

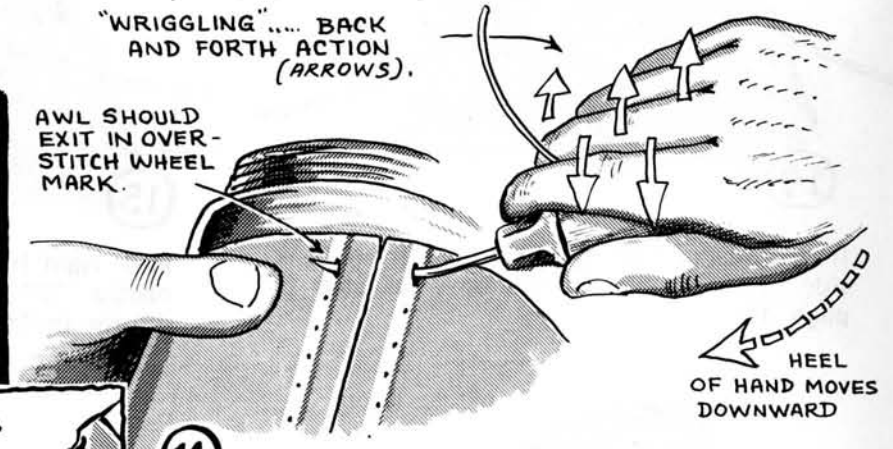
⑨

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.

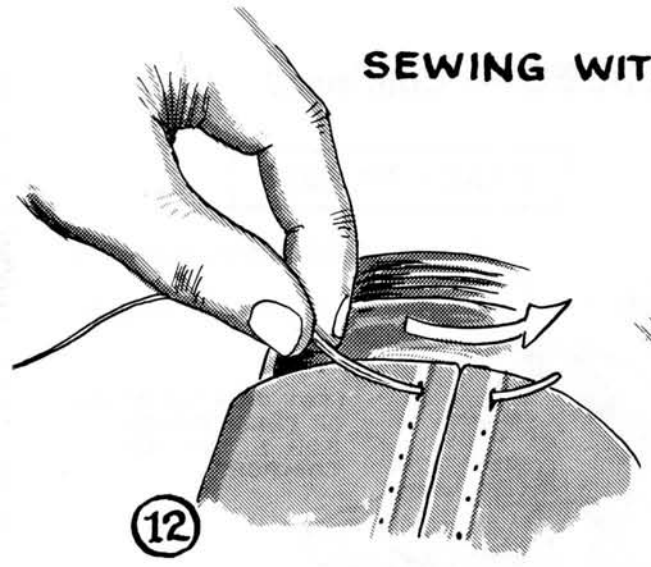


⑪

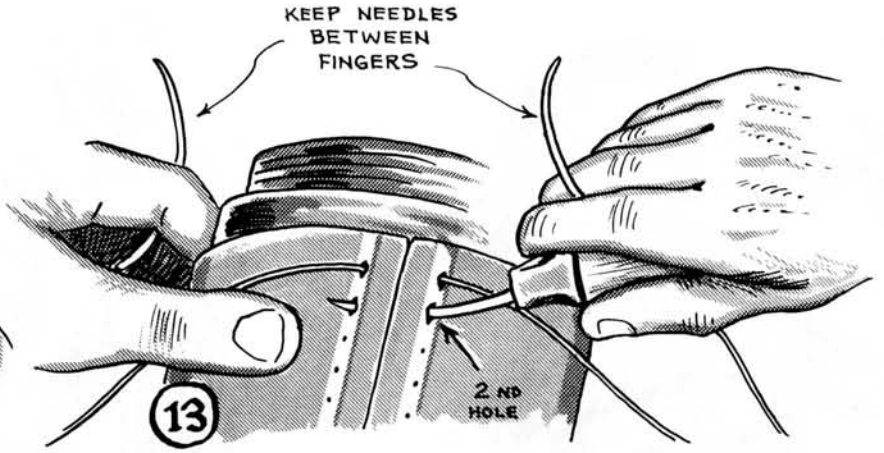
As you apply pressure to the awl, a slight wriggling, or back-and-forth, action of the hand may be necessary to force the blade through the leather. As blade enters leather, the hand will simultaneously have to move downward, (broken arrow) and forward, so that the point of awl will come out in wheel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

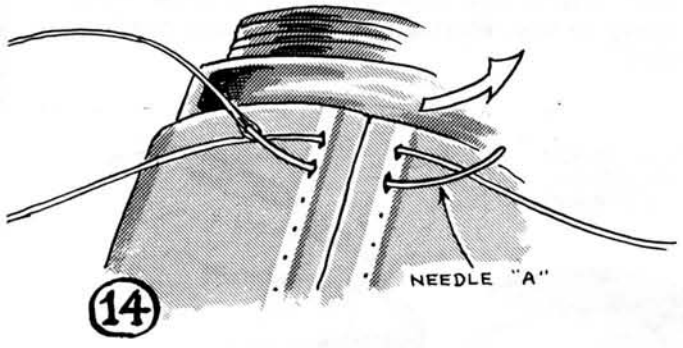
SEWING WITH CURVED NEEDLES— Continued



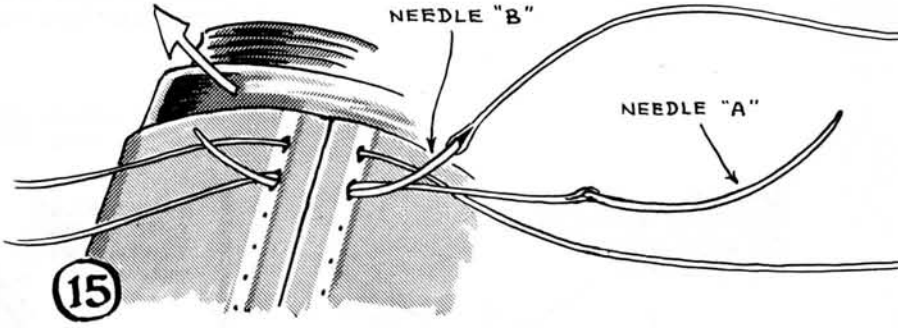
Push needle through first hole and pull thread to center, as previously instructed.



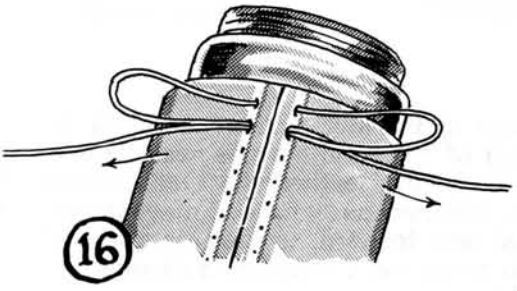
Stab second hole. Note . . . you hold the needles and awl in hands exactly as with all previous sewing. Being curved, the needles will feel a bit awkward, but persist in this practice.



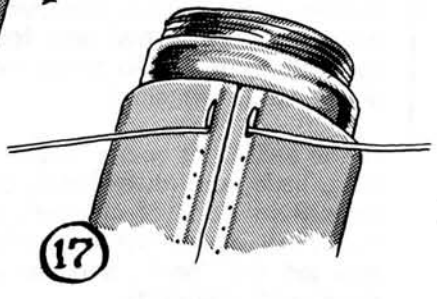
Insert needle "A" through hole from back side. This is exactly the same as step 6, page 10.



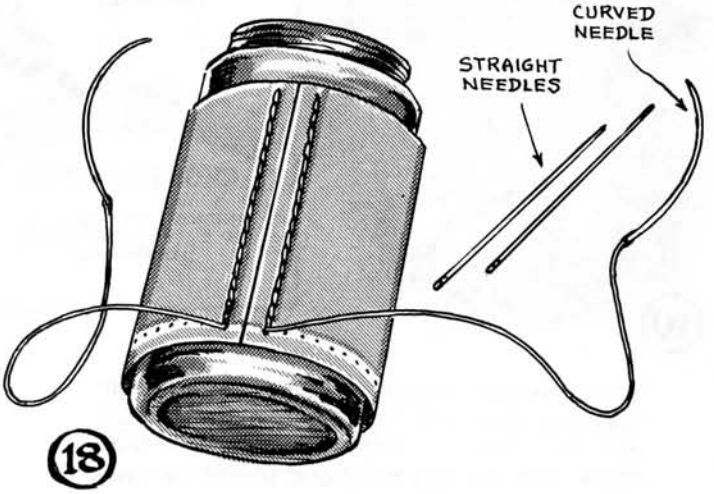
Push right hand needle "B" through same hole. *Always* put needle "B" on same side of thread with each stitch. This insures uniform appearing stitches.



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

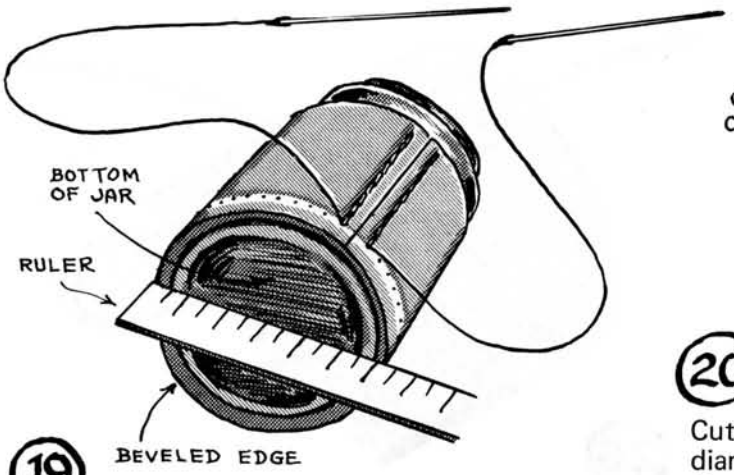


Pull first stitch tight . . . same as step 21, page 14.



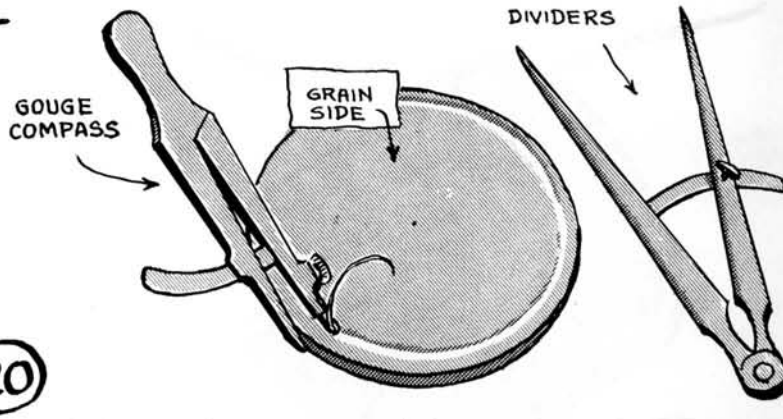
Continue sewing down to bottom channel. Pull the last stitch up tight. **Do not cut off threads!** Now . . . take curved needles off the threads. Re-wax ends and put the straight needles on the threads.

SEWING IN THE BOTTOM



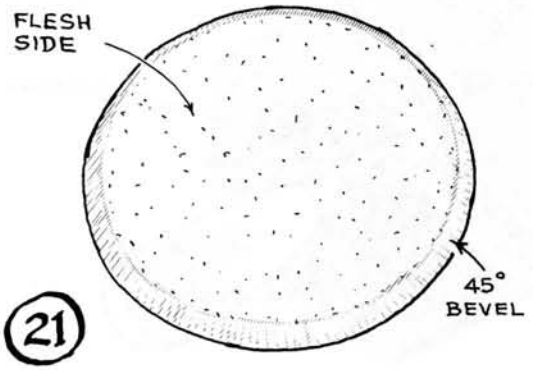
19

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



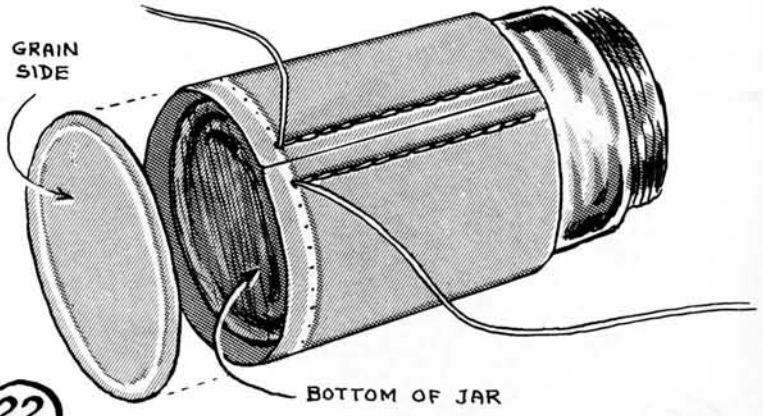
20

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



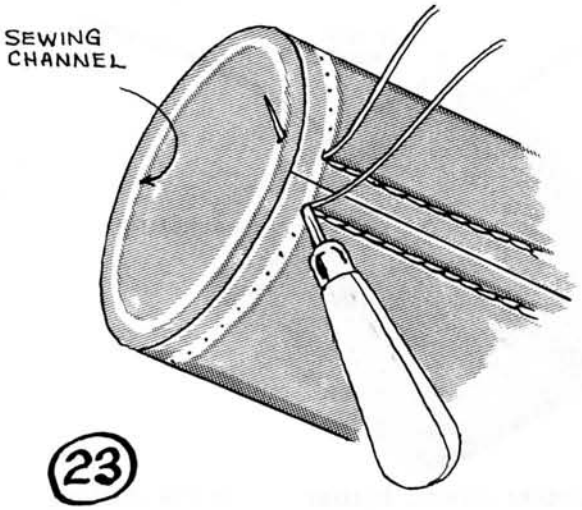
21

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



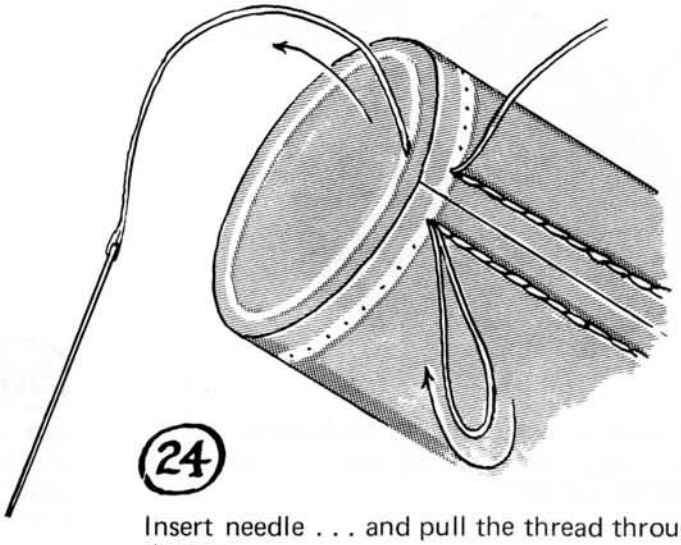
22

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

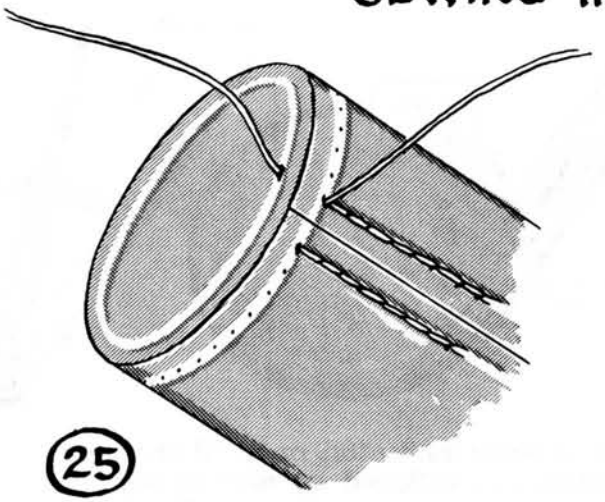
With the straight awl blade . . . stab through last hole, as shown, angling outwards to come out in channel . . . *opposite* the other thread.



24

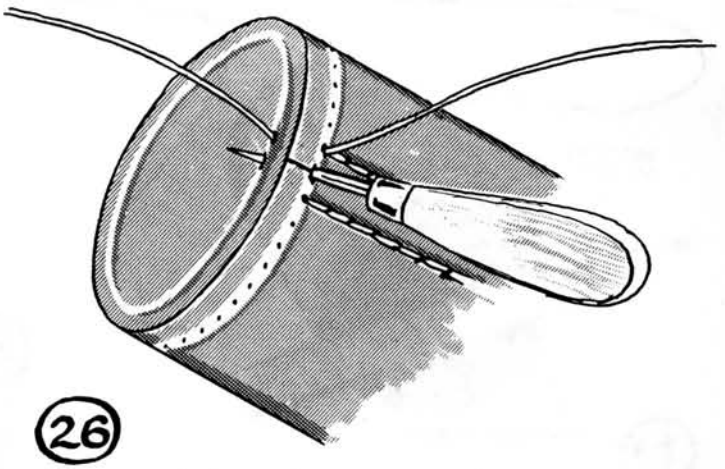
Insert needle . . . and pull the thread through, as shown.

SEWING IN THE BOTTOM — Continued



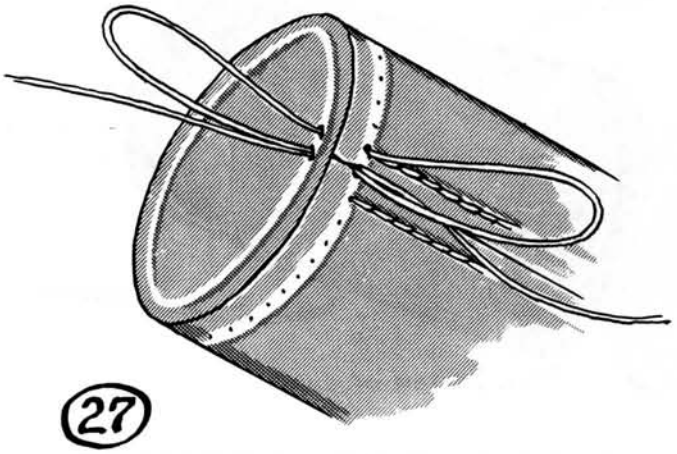
25

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



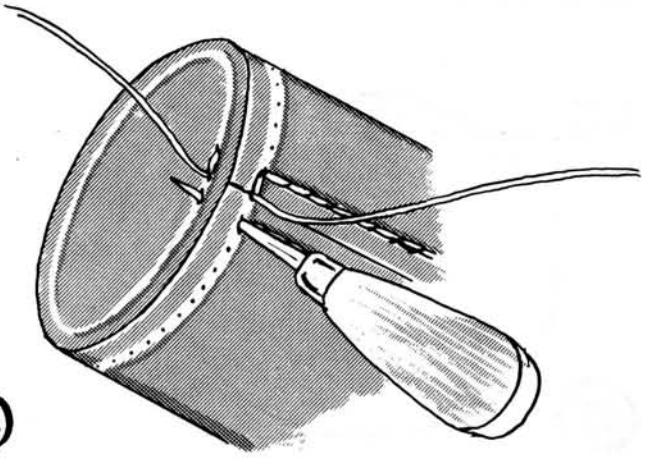
26

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



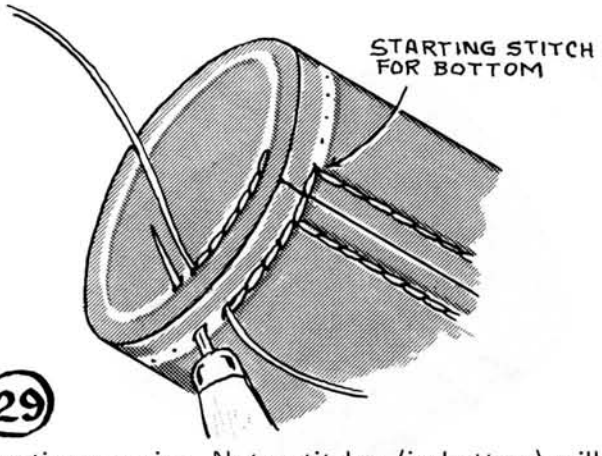
27

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



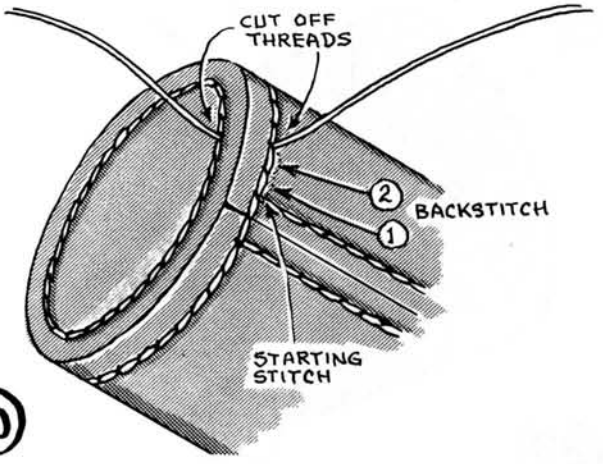
28

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



29

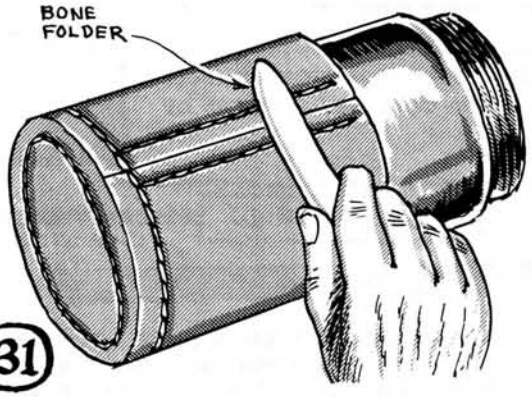
Continue sewing. Note: stitches (in bottom) will be shorter than cylinder stitches . . . as the circumference is smaller.



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

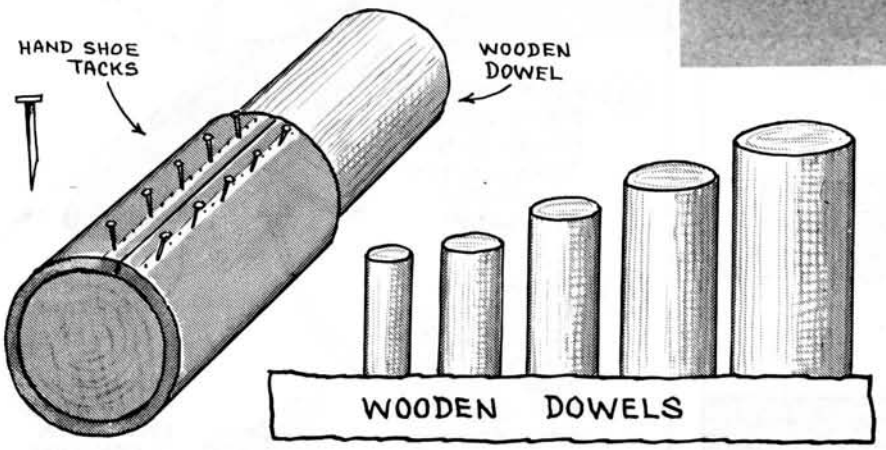


31

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.

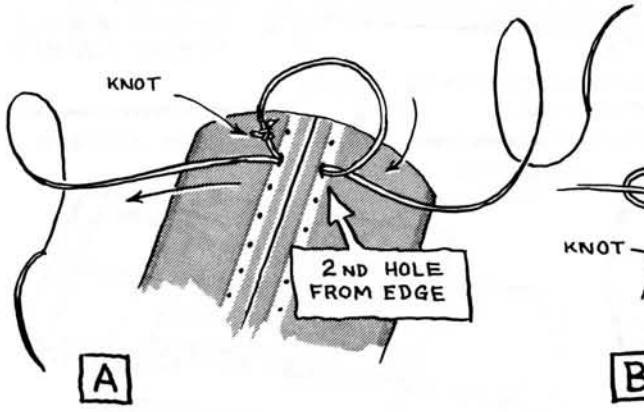


Most helpful . . . for making round cases for cylindrical objects . . . are wooden dowels. It is good to have a large range of sizes from 2" to 4" or larger. The leather can be tacked to these, eliminating the gluing. Other aids can be lengths of different sized water pipes, etc.

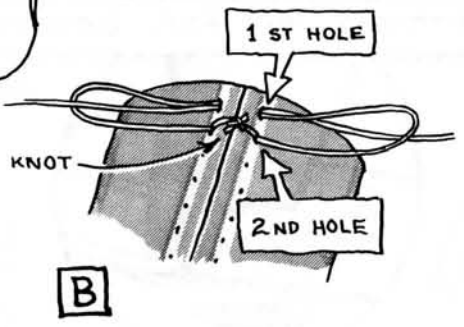
DICE CUPS

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.

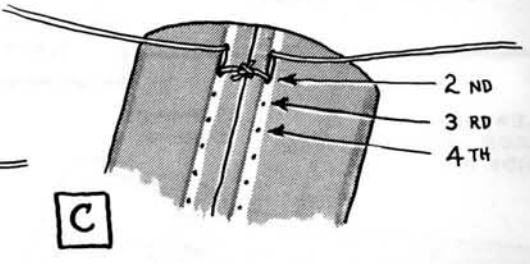
STARTING WITH A KNOTTED THREAD



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

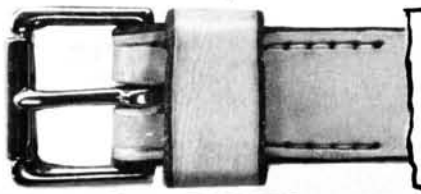


Pull knot down on top of seam. Stab first hole and push needles through in the regular manner.



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.

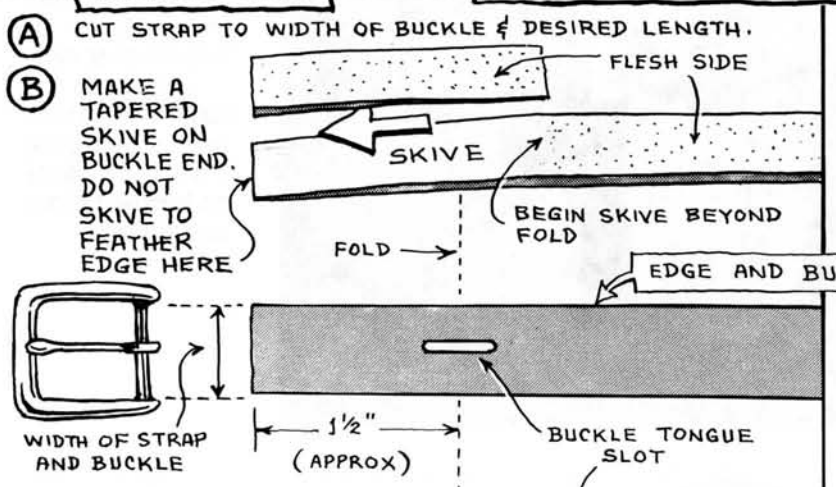
SEWING BUCKLES AND LOOPS TO STRAPS



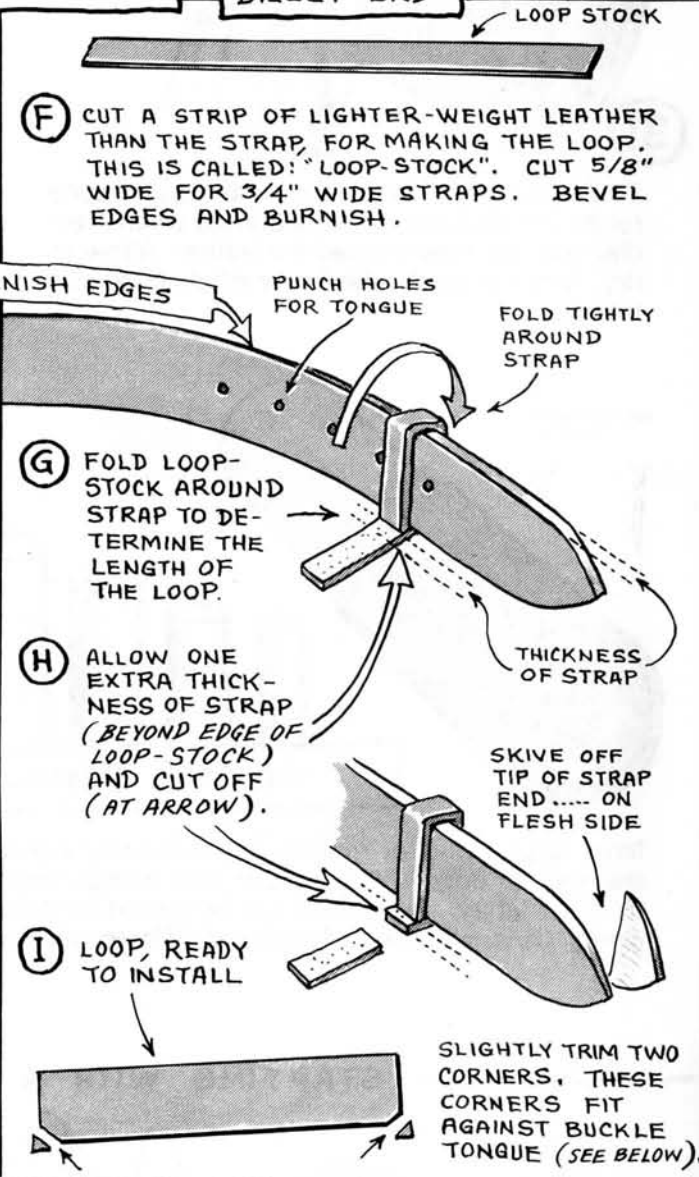
There are many types of harness, saddlery, and belt straps requiring buckles and leather loops (keepers). Hand sewing is more durable than machine sewing . . . and often times the only way they can be sewn.

PREPARING THE STRAP

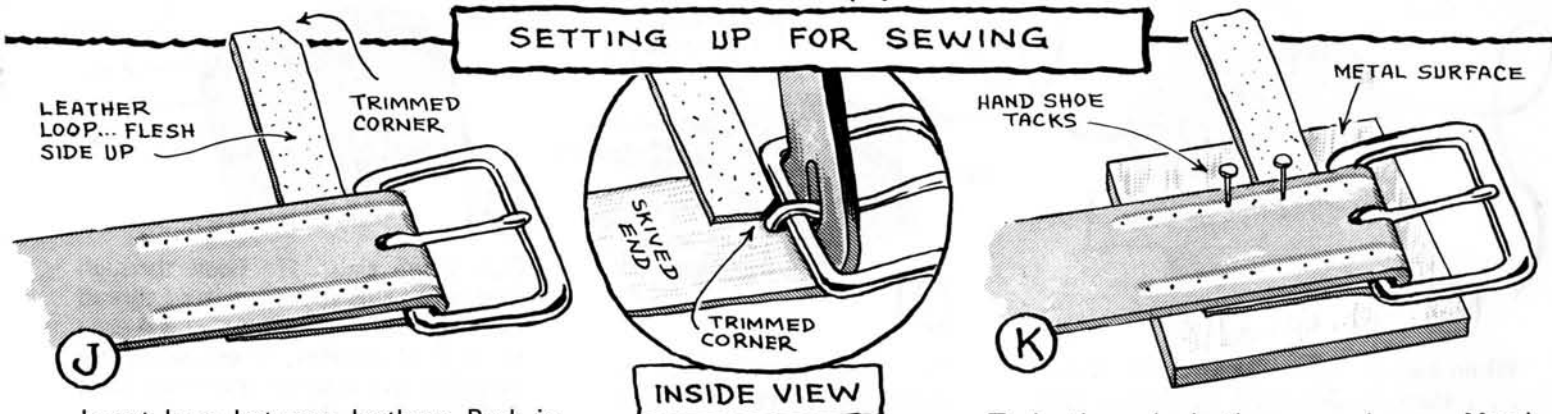
BUCKLE END



BILLET END



SETTING UP FOR SEWING

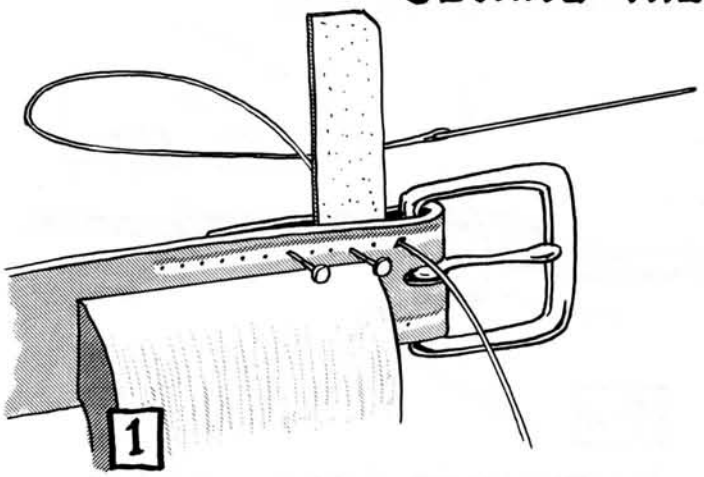


Insert loop between leathers. Push in half-way of strap, up to buckle tongue. Trimmed corner faces buckle.

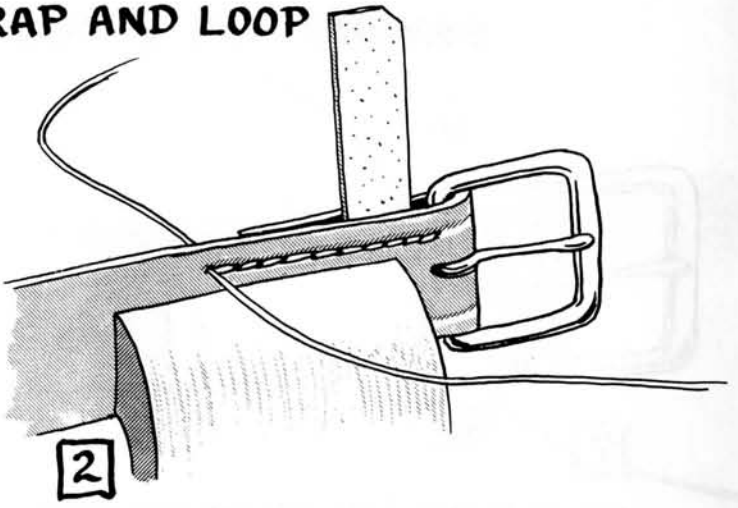
Note how trimmed corner rests against buckle tongue.

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

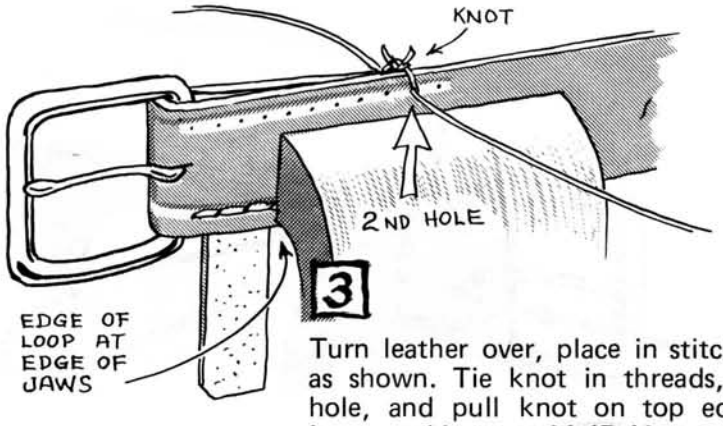
SEWING THE STRAP AND LOOP



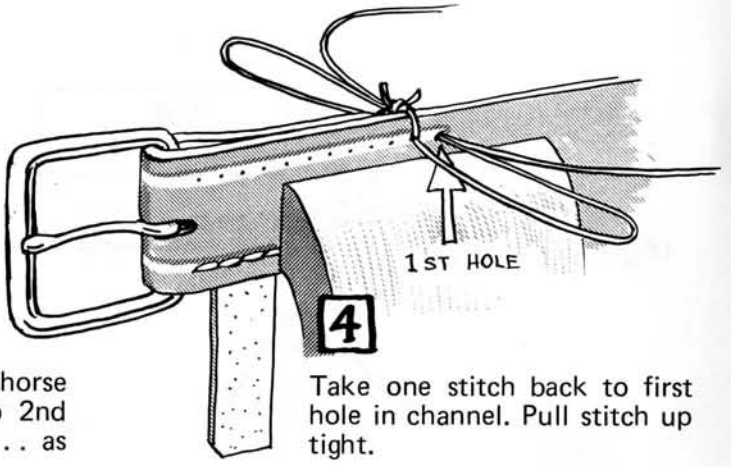
Place project in stitching horse as shown above. Make a thread, stab hole close to buckle . . . and pull thread to center.



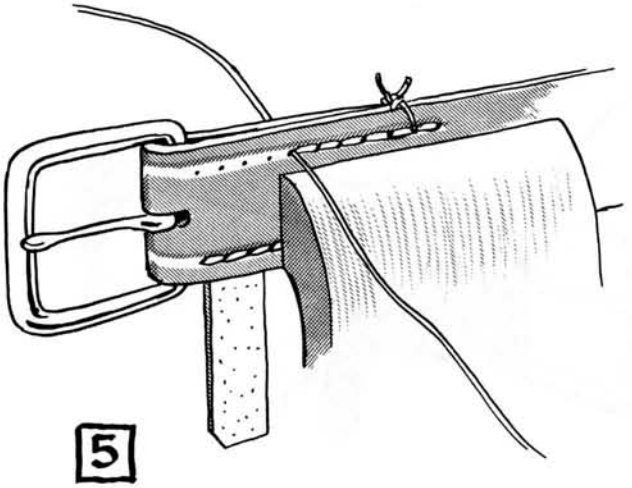
Sew to end of channel . . . pull tacks as you go. Backstitch one or two holes; cut off threads.



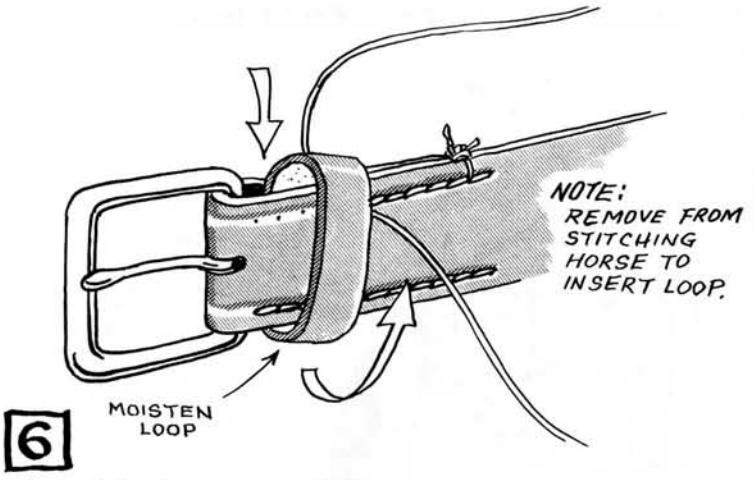
Turn leather over, place in stitching horse as shown. Tie knot in threads, stab 2nd hole, and pull knot on top edge . . . as instructed in steps 44-45-46, page 19.



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



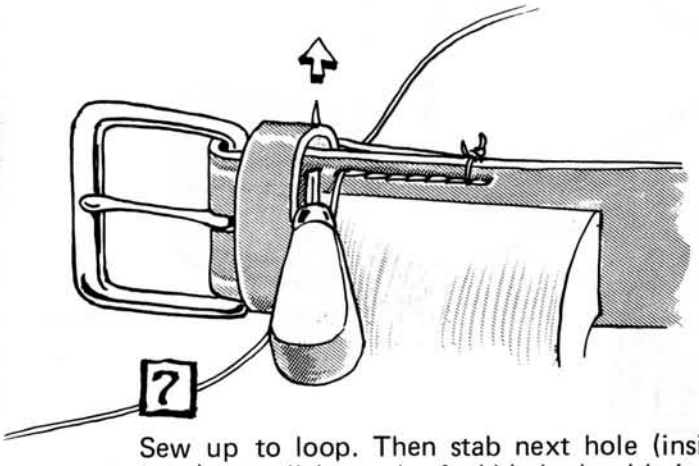
Now . . . continue sewing almost to edge of the stitching horse jaws, as shown above.



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.

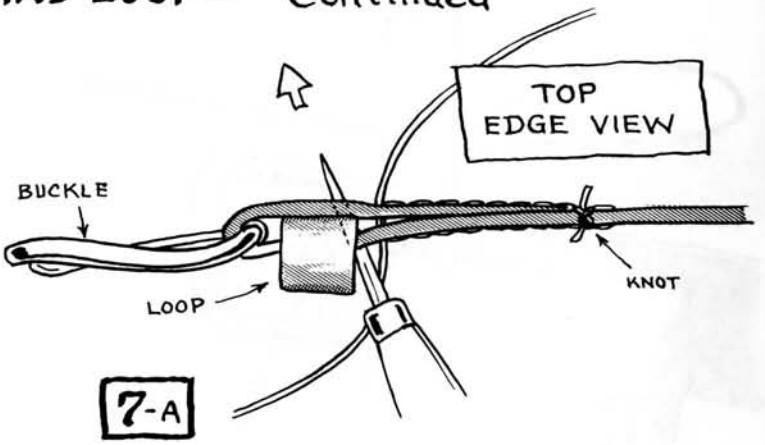
TIP: Moistening the loop will aid in folding it into place.

SEWING THE STRAP AND LOOP — Continued



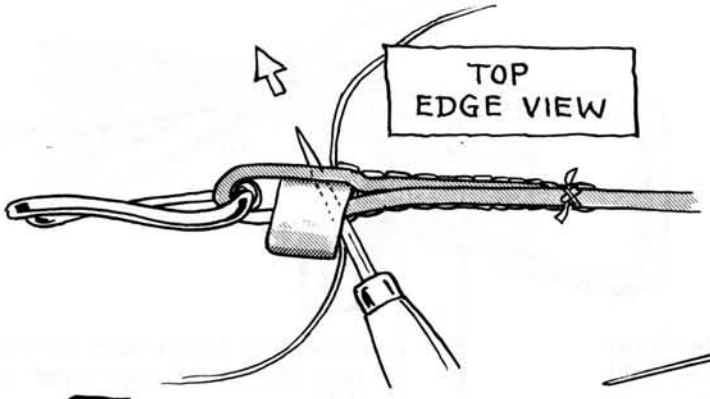
7

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.



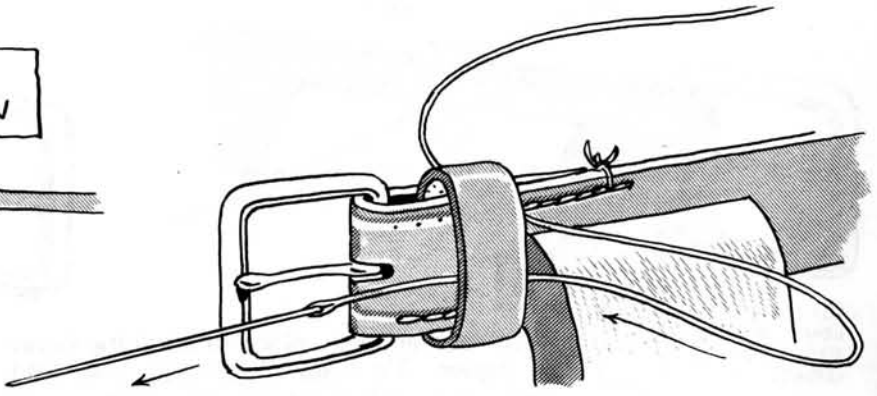
7-A

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



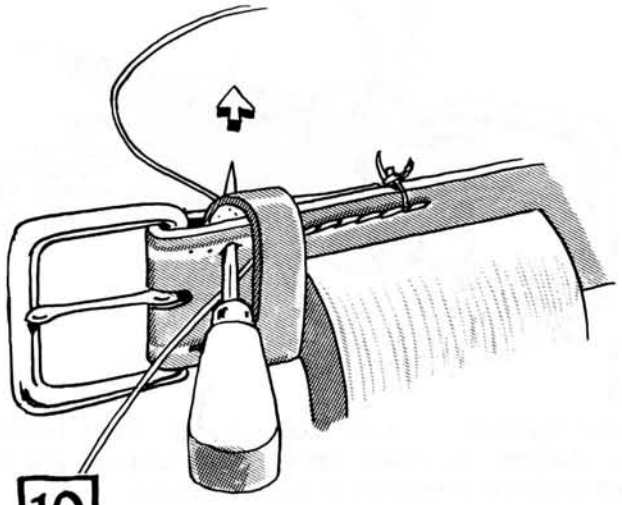
8

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



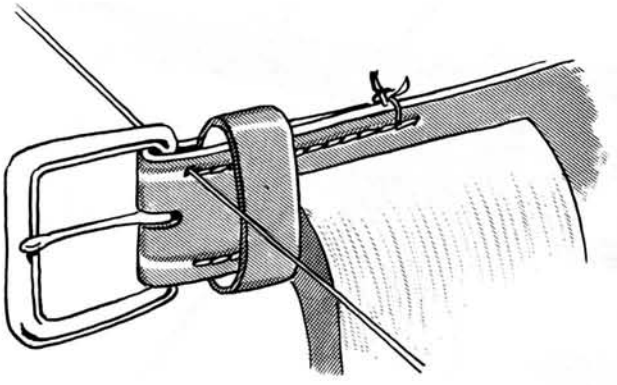
9

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



10

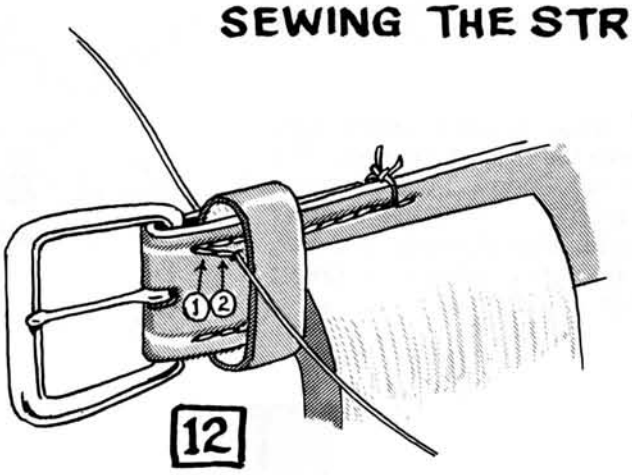
Stab next hole . . . angling back through loop, as shown, coming out in backside channel. Insert needles; pull stitch tight.



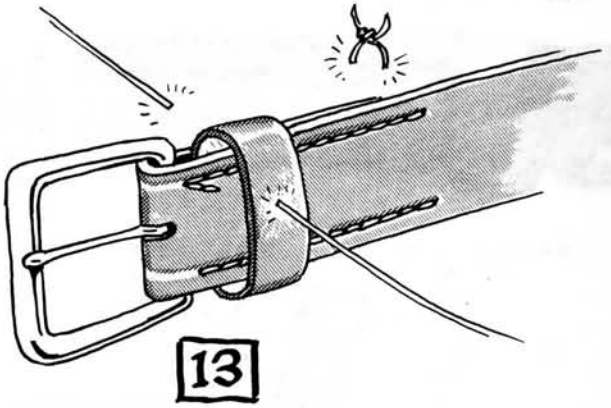
11

Sew up to buckle. Pull the last stitch tight.

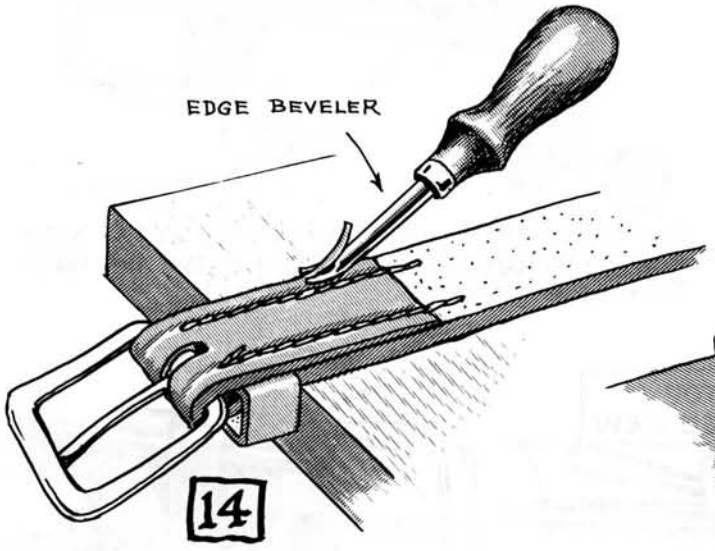
SEWING THE STRAP AND LOOP — Continued



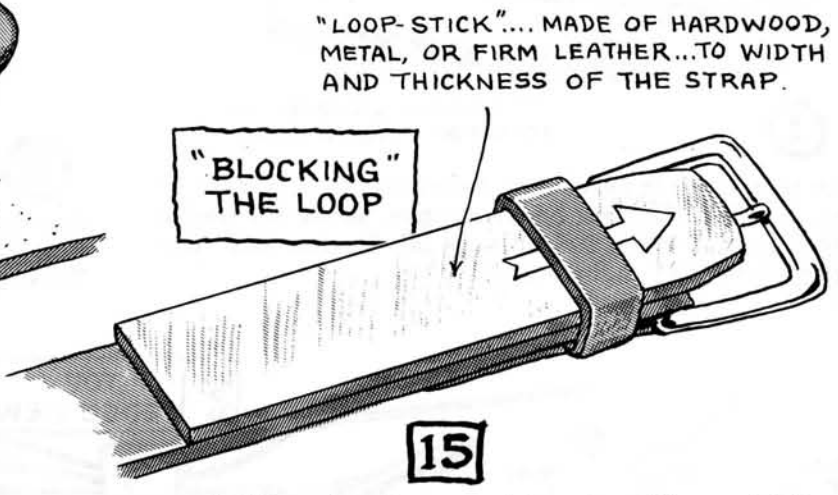
Backstitch one or two holes. Note: when backstitching here, stab holes below previous stitches . . . to be sure you do not cut threads with awl blade.



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

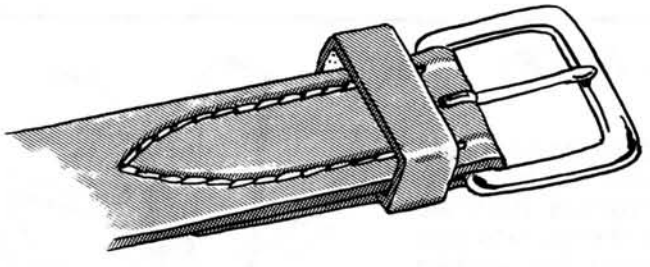


Turn strap over, and lay on bench as shown. Edge bevel the ends of the fold. Tap stitches with hammer.

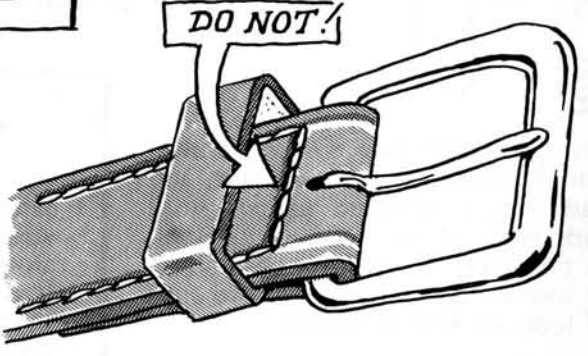


Moisten the loop and insert a "loop-stick" as shown. Tap the loop with hammer (top and sides) to shape (block) the loop. Remove; allow to dry before oiling or finish coating.

SPECIAL NOTES

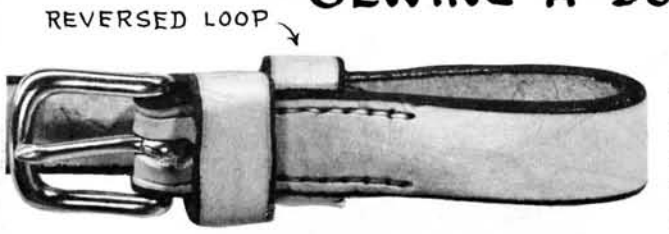


On narrow straps . . . sewing channel can taper to a point, midway on strap, as shown above. This eliminates cutting threads and re-starting with knot. Sewing is continuous.

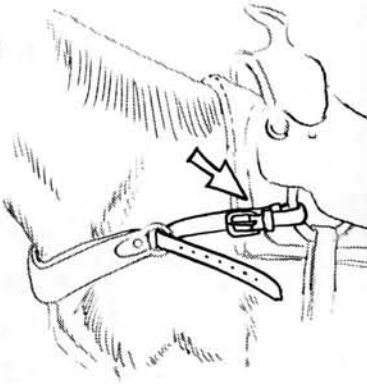


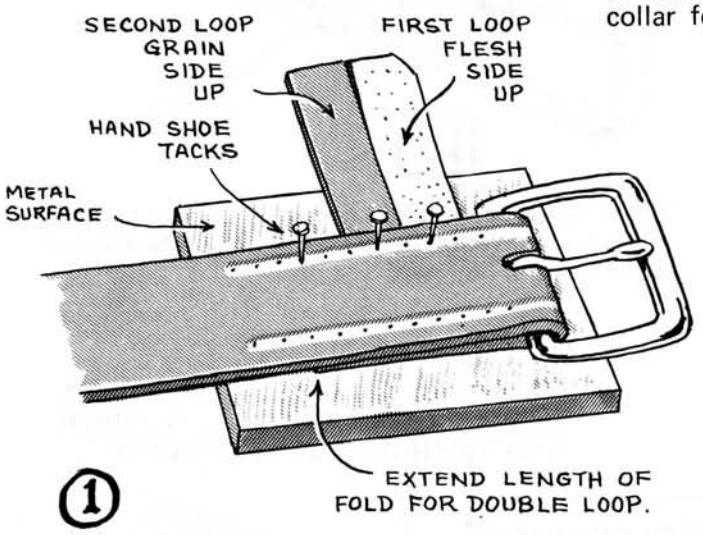
Do not sew across straps . . . as shown above. This weakens the leather . . . much as a perforated stamp . . . taking away some of the strength of the strap.

SEWING A DOUBLE (Reversed) LOOP

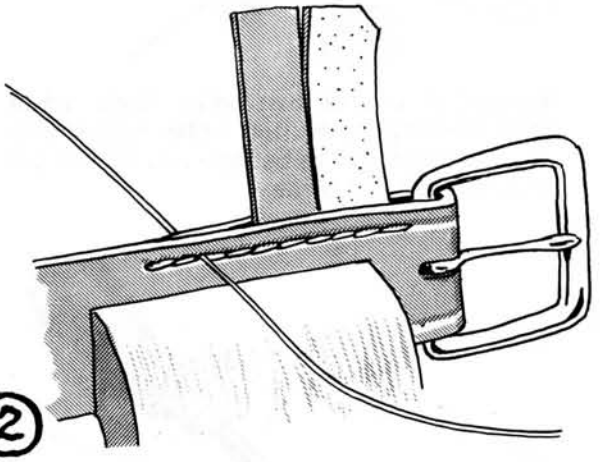


This type of strap is used where easy attachment and removal is desired. The strap loops around a ring . . . back through the reversed loop . . . through another ring; into buckle. One example is shown in sketch at right . . . used on a breast collar for horse and saddle.

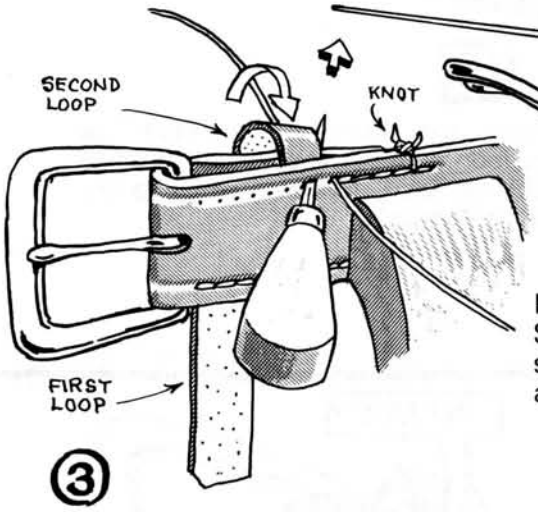




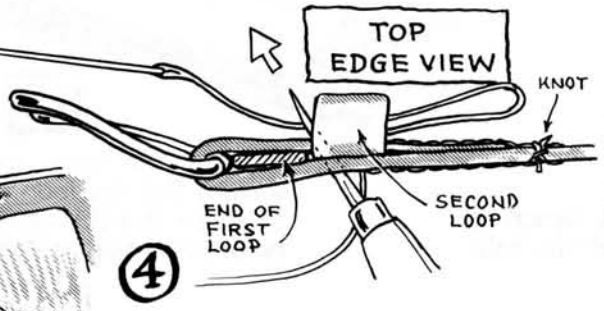
Make two loops as previously described. Trim corners on one . . . this fits against buckle tongue. Set up for sewing as instructed in steps J-K on page 36. Second loop rests next to first loop, grain side up.



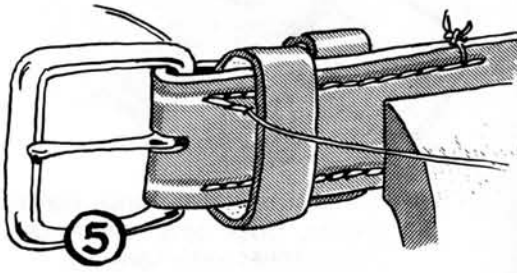
Sew to end of channel. Backstitch one or two holes. Cut off threads, turn project over in stitching horse. Tie knot in threads.



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.



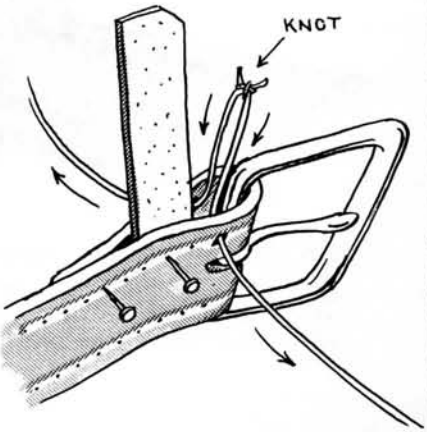
Pass back side needle through loop. Stab next hole, angling as shown. Take stitch. Fold first loop into position . . . as instructed in step 6, page 37.



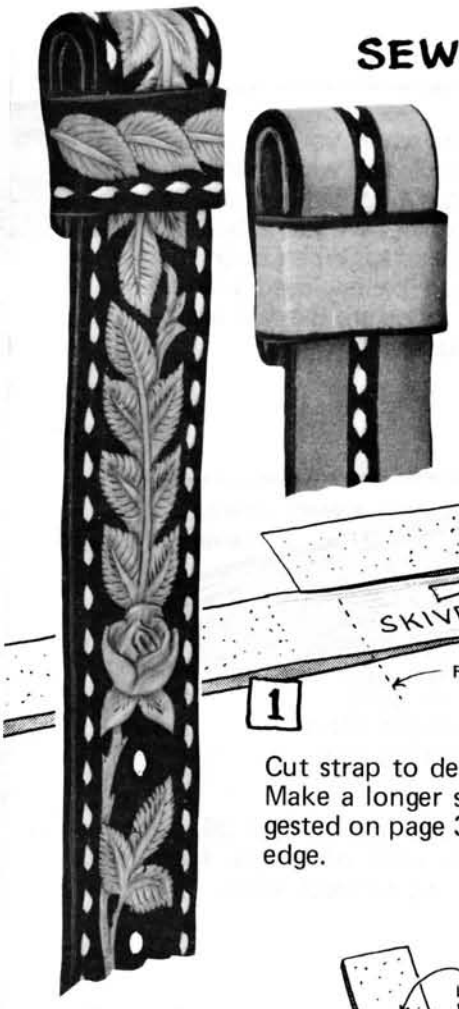
Continue sewing as described in steps 6 through 12 on pages 37-39. Block the loops, etc., as shown with single loop.

SPECIAL NOTE:

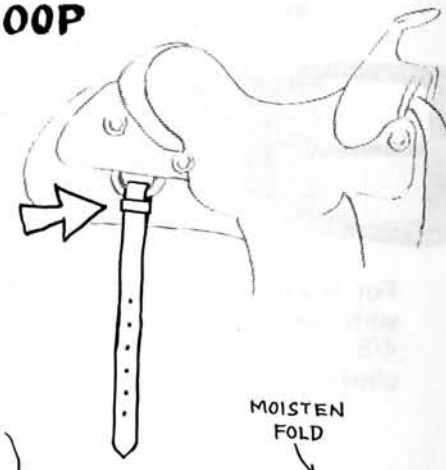
When starting with a knotted thread, stab first hole and insert needles from *inside* the leathers. Push needles outward, as shown, and pull knot down between the leathers. Continue sewing in the regular manner.



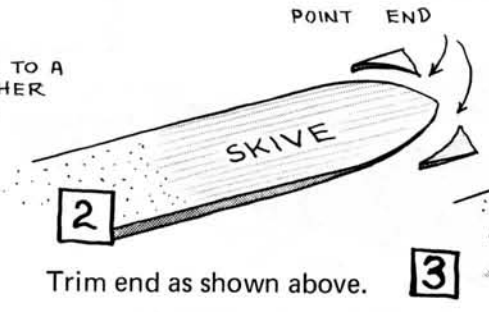
SEWING THE REVERSED SLIDE LOOP



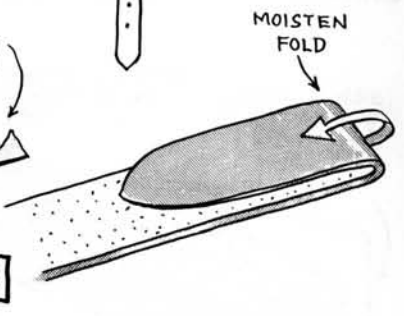
This loop is used on billet straps for their easy installation and removal. One example is shown in sketch at right . . . the flank cincha billet, used on saddles. Photo at left illustrates decorative examples.



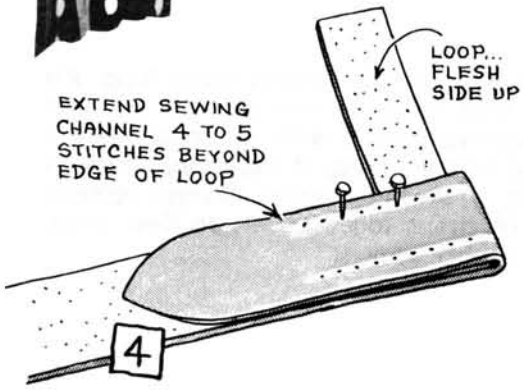
Cut strap to desired width and length. Make a longer skive, on end, than suggested on page 36. Skive to a "feather" edge.



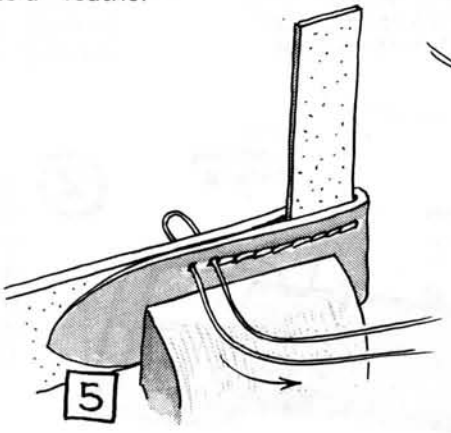
Trim end as shown above.



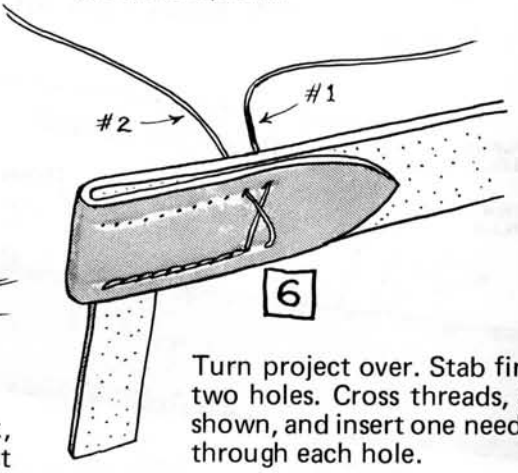
Moisten fold area and tap with hammer. Length of folded end should be about double that for the ordinary buckle/loop end.



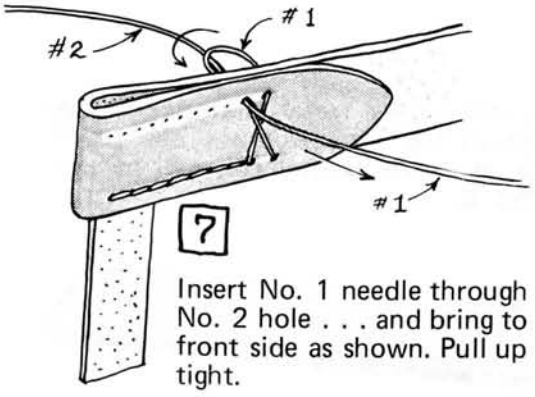
Make a loop. Gouge the sewing channels; wheel. Insert loop to half-way of strap. Tack in place. See page 36 . . . follow procedures outlined.



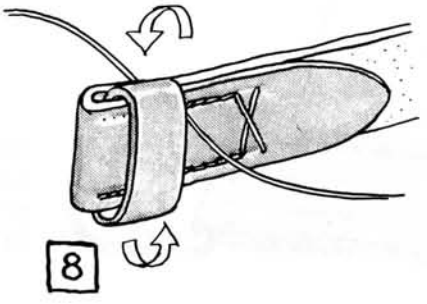
Sew up to last wheel mark, pull stitch tight. Stab last hole, bring thread (from back side) through to front . . . as shown above.



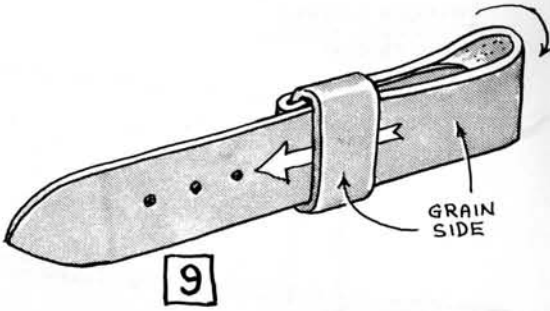
Turn project over. Stab first two holes. Cross threads, as shown, and insert one needle through each hole.



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

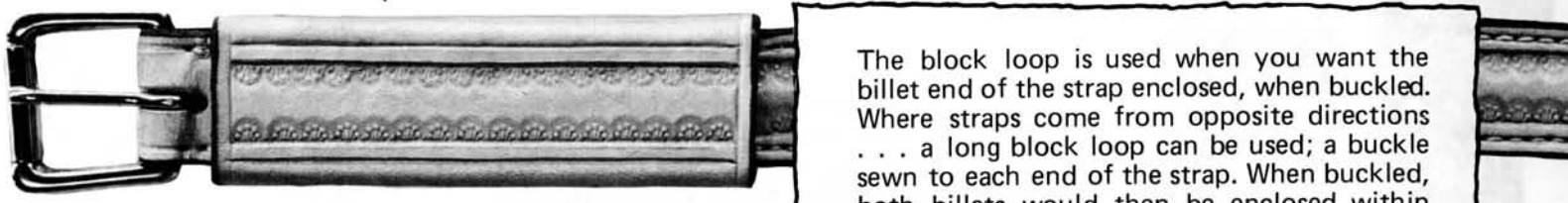


Sew up to loop. Fold loop and push down between leathers. Complete sewing as instructed on pages 37-39.



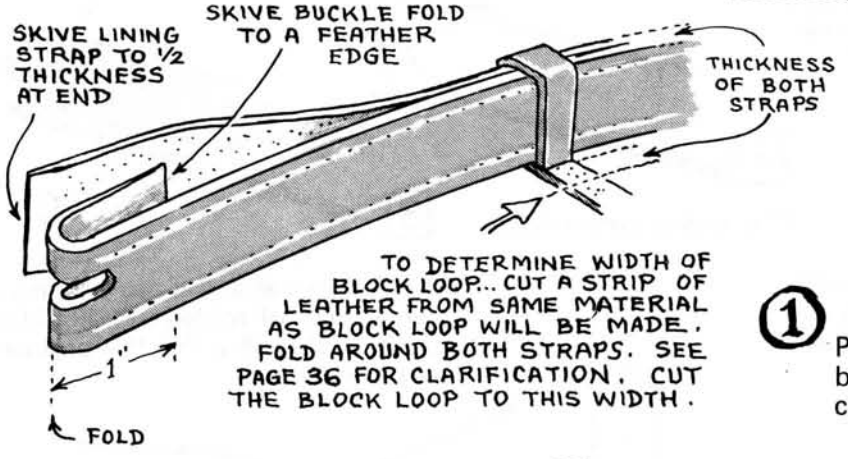
Moisten loop and adjacent area. Run strap through loop and pull up snug (see photos above). Be sure skived end also goes inside loop. Tap with hammer to "block" the loop. Allow to dry in this position.

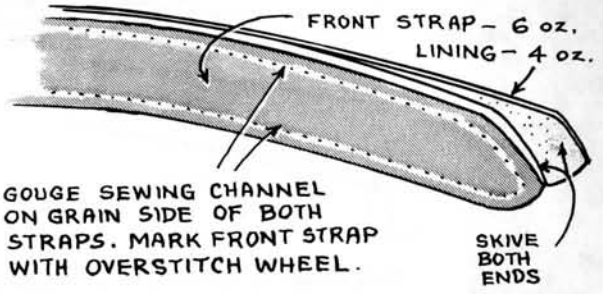
SEWING THE BLOCK LOOP



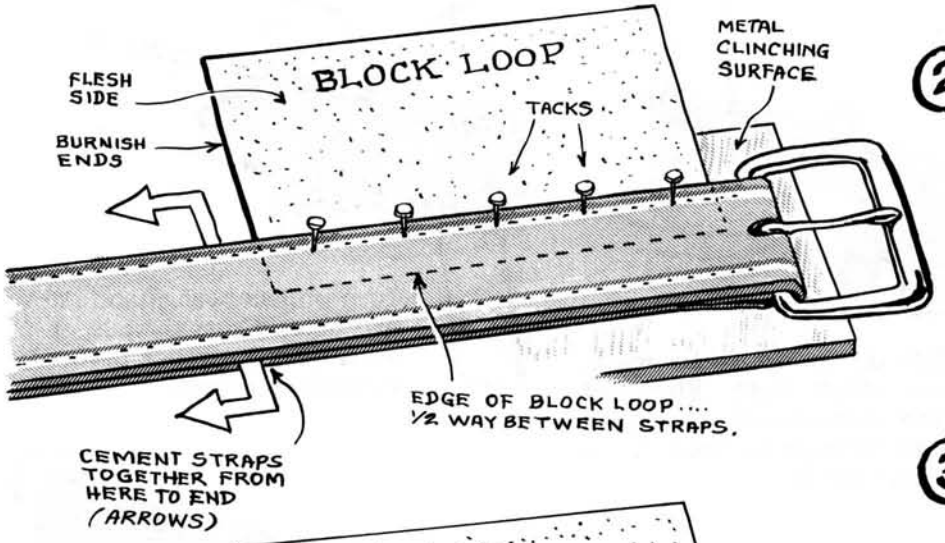
The block loop is used when you want the billet end of the strap enclosed, when buckled. Where straps come from opposite directions . . . a long block loop can be used; a buckle sewn to each end of the strap. When buckled, both billets would then be enclosed within the block loop. These loops are used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

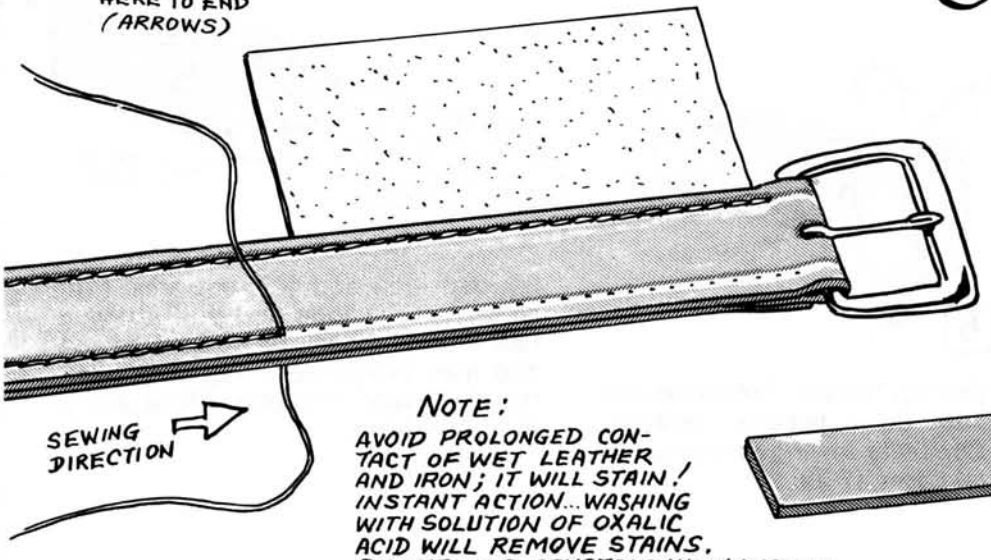




1 Prepare straps as instructed on page 36. Edge and burnish grain sides only of straps. Flesh sides cement together . . . up to block loop.



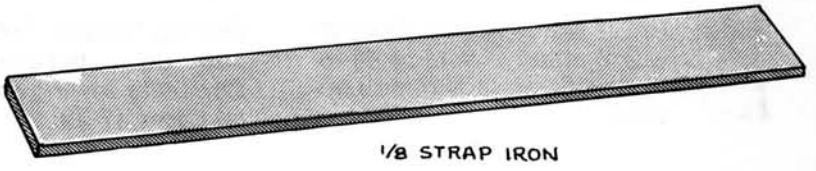
2 Edge and burnish ends of block loop. Fit the loop between the straps . . . with bottom edge to ½ width of strap. Mark a guide line on loop, if necessary. Tack in place, in sewing channel. Cement remainder of straps together . . . on flesh sides. Use rubber cement.



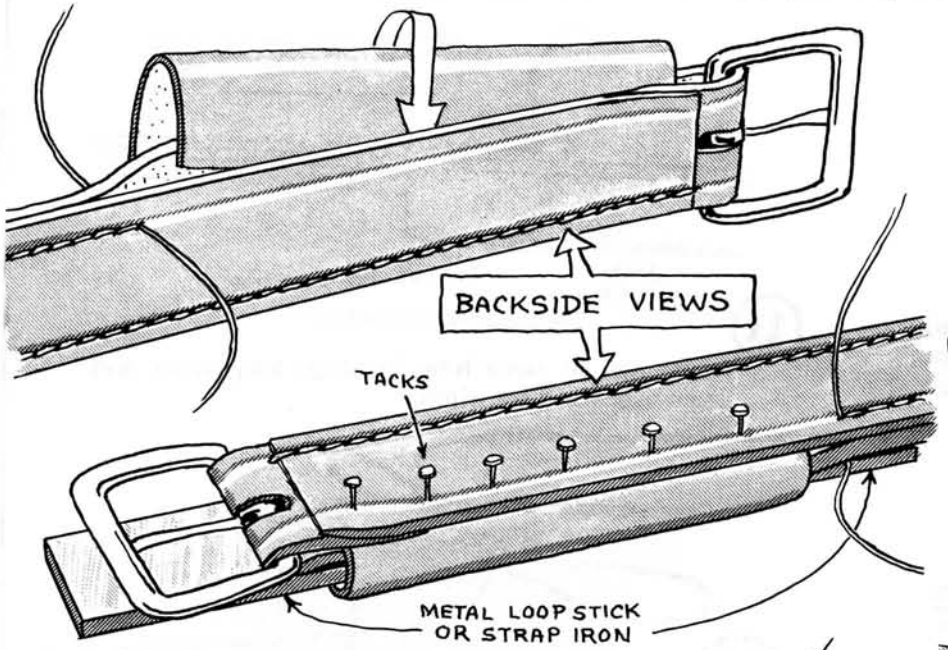
3 Place in stitching horse . . . and sew first side of block loop. Continue sewing around strap until you reach position shown in sketch . . . opposite the edge of the block loop.

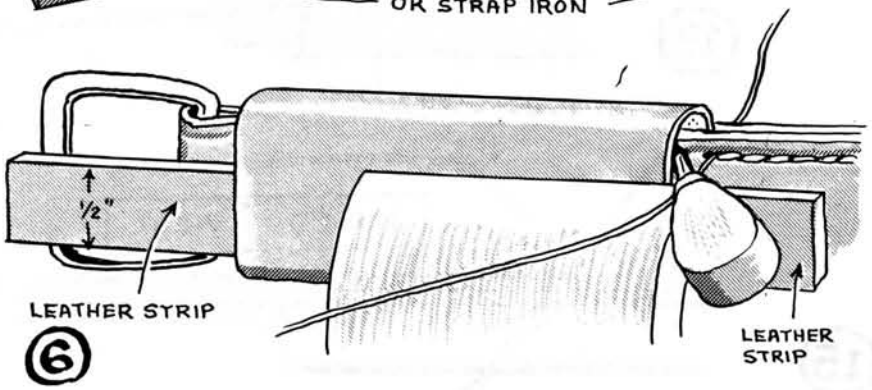
You will need a metal loop-stick . . . or length of 1/8" strap iron . . . 3/4" or 1" wide, as shown below. This will be used in step 5.

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

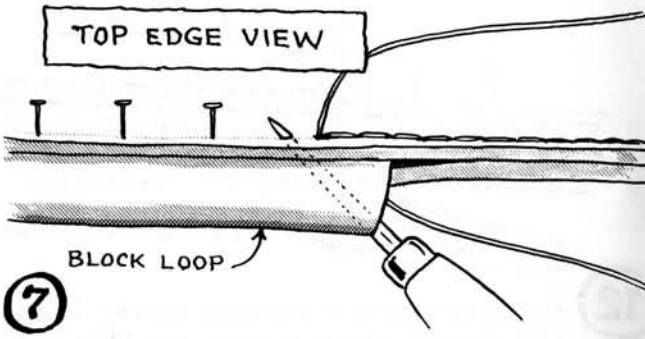




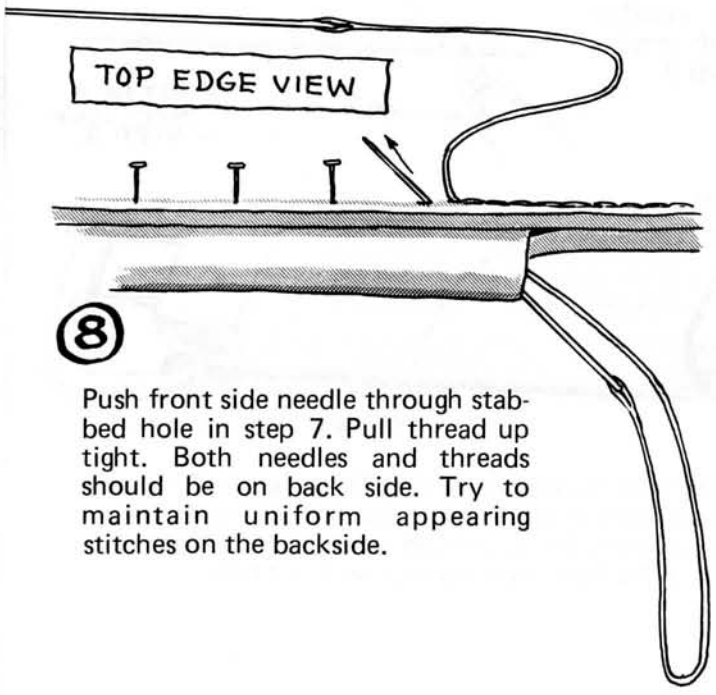
6 Remove metal from loop. Insert a ½" wide length of heavy leather inside loop. Keep to lower side of loop, as shown. This keeps loop open when clamped in stitching horse. Sew up to loop . . . then angle awl in loop, as shown. Follow steps 7-8 on page 38.

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.

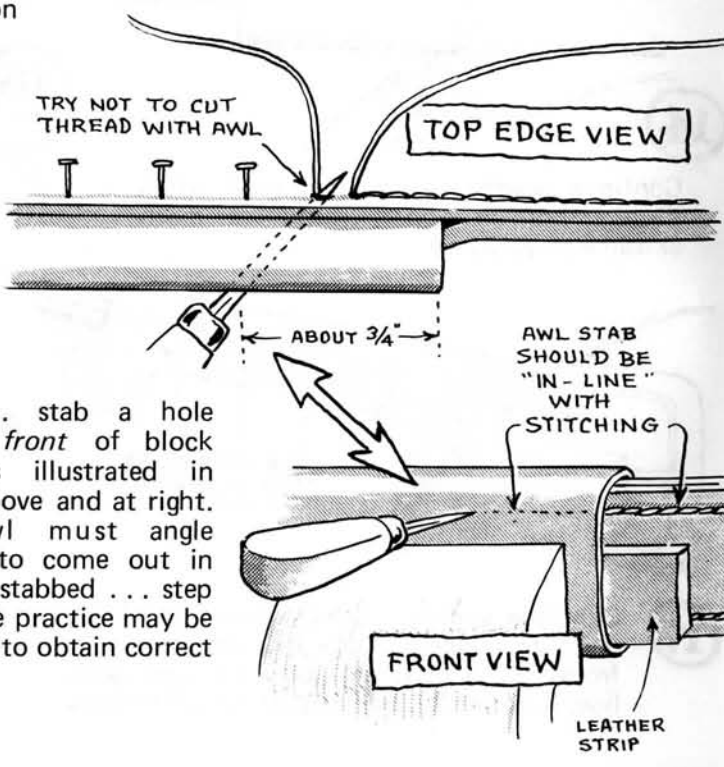
5 Slide metal loop stick inside block loop, as shown. Be sure leather loop is held in place. Tack in the sewing channel. Tacks clinch on metal.



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.

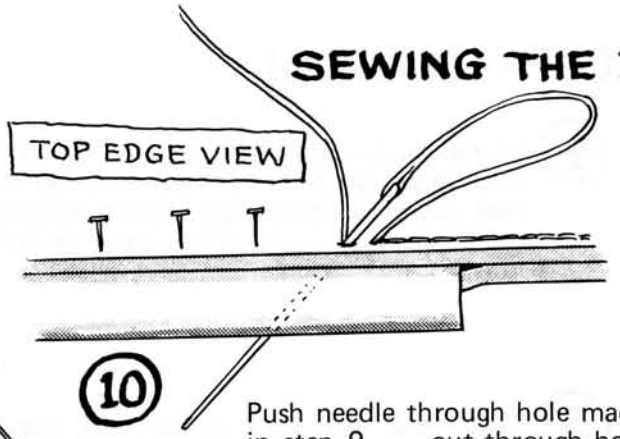


8 Push front side needle through stabbed hole in step 7. Pull thread up tight. Both needles and threads should be on back side. Try to maintain uniform appearing stitches on the backside.

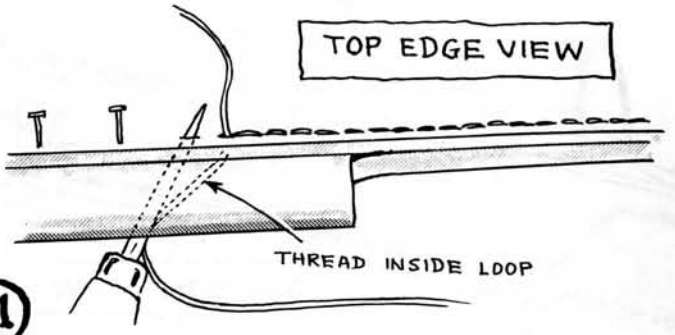


9 Now . . . stab a hole through *front* of block loop as illustrated in sketch above and at right. The awl must angle through to come out in last hole stabbed . . . step 7-8. Some practice may be necessary to obtain correct angles.

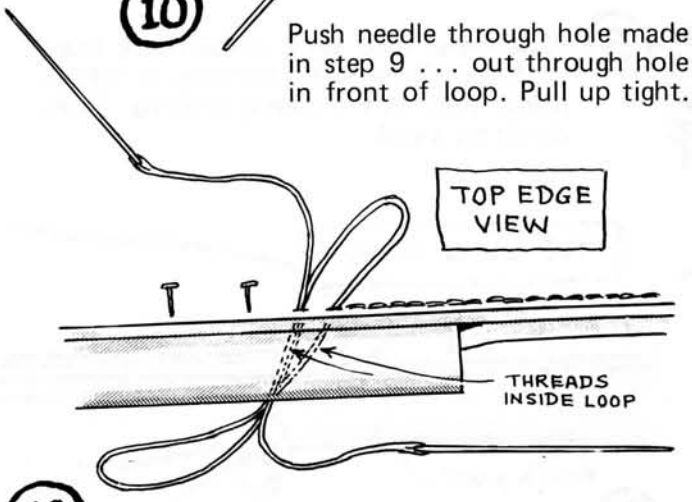
SEWING THE BLOCK LOOP – Continued



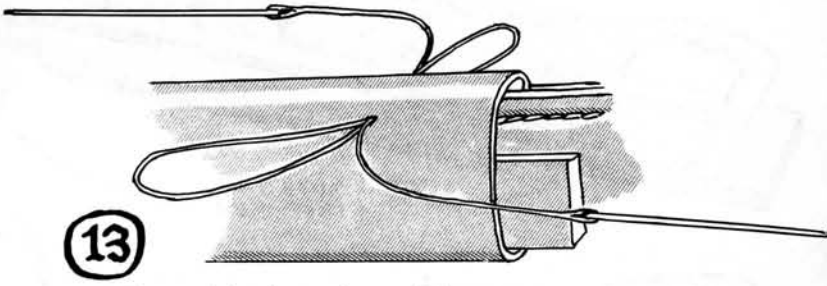
10 Push needle through hole made in step 9 . . . out through hole in front of loop. Pull up tight.



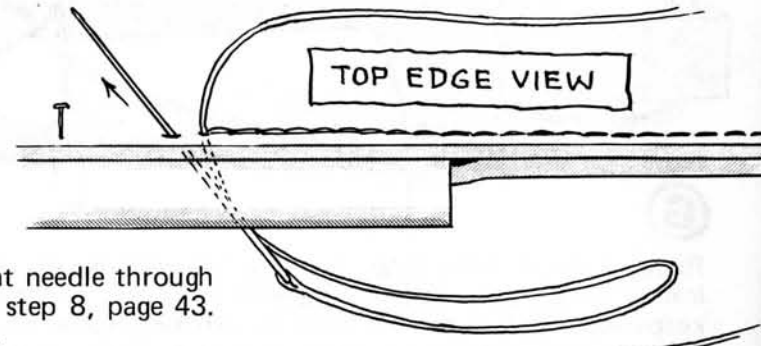
11 Insert awl in *same* hole in block loop front and angle over for next stitch.



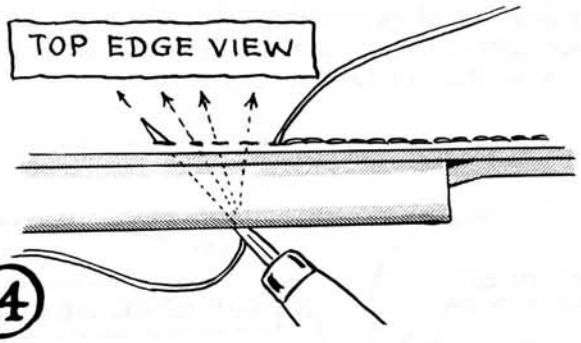
12 Continue sewing in the usual manner. Needles and threads exit and enter the hole in the front of the block loop.



13 Front side view of step 12.

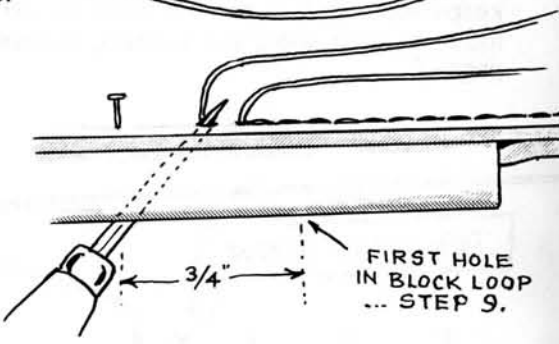


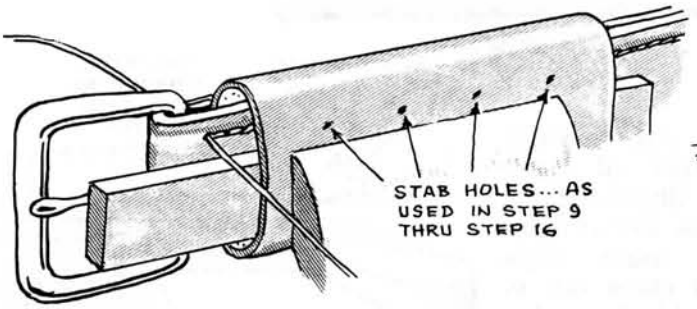
15 Push front needle through . . . as in step 8, page 43. Pull tight.



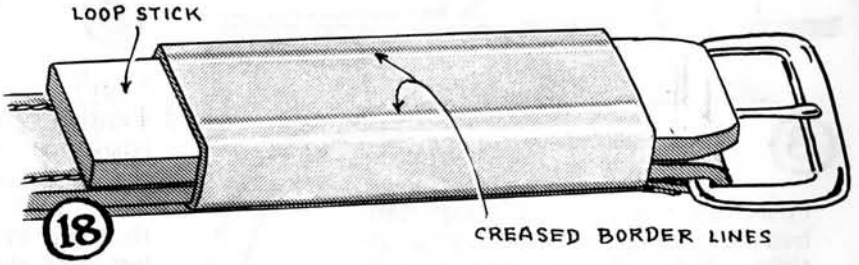
14 Continue sewing . . . angling each stitch through hole in loop . . . until you reach extreme angle above.

16 Move awl over another ¾" . . . and stab angling hole; same as step 9.





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.



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

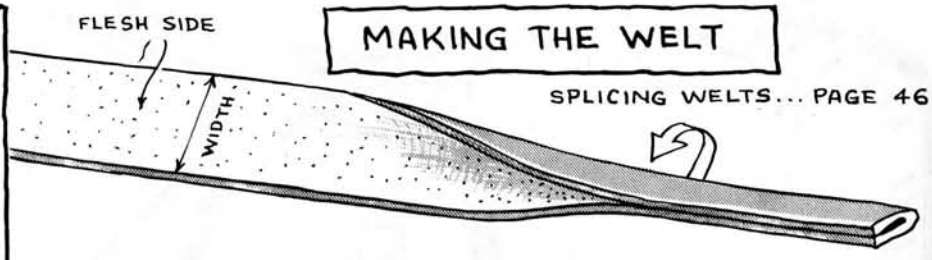
BOAT SEAT: This project was made of vinyl material, with vinyl welts. 4" of foam rubber was used for padding. Seat fits bow of boat.

Welts are used where two pieces of material join. This strengthens the seams and adds to the general pleasing appearance. When the shape of an object cannot be covered with one piece of leather, it must be split, or made of several parts. This is where welts are used. Two examples are shown with photos at left and right. Both were sewn by hand.

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).

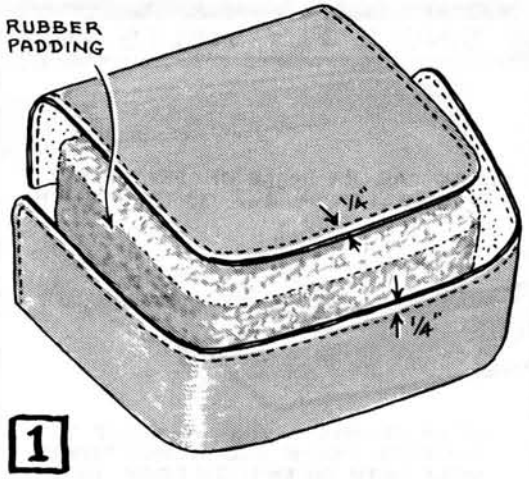
MAKING THE WELT



SPLICING WELTS... PAGE 46

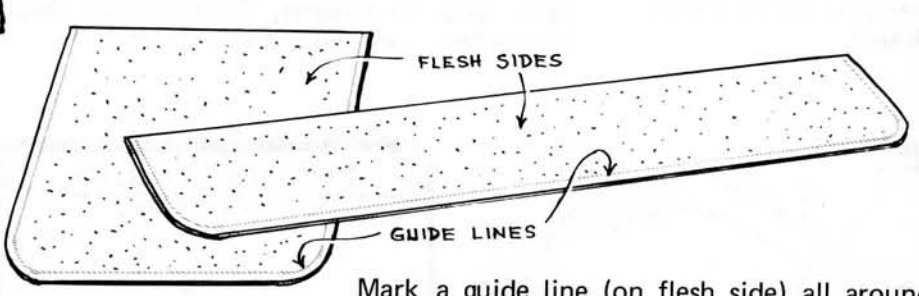
The width of the welt is determined by the materials to be sewn. Welts can be from ½" to 1" wide. Cement flesh side . . . fold and adhere as shown above. Make welts full length of seams to be sewn. Extra length can be trimmed later.

MAKING A CUSHION SEAT

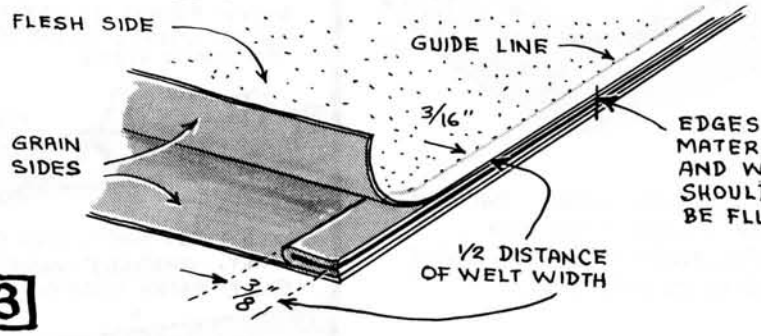


1

Measure rubber . . . and cut out covering material. Allow ¼" 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.



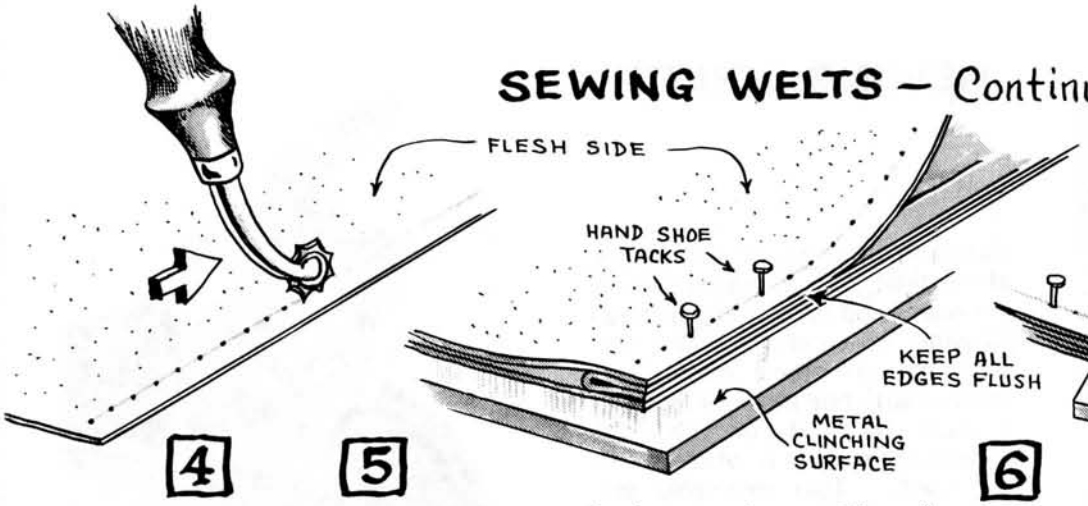
2 Mark a guide line (on flesh side) all around edges to be sewn. See below for correct distance.



3

Guide line should be ½ of the width of the folded welt . . . from the edge (see above). If folded welt is ½" wide . . . guide line should be ¼" from edge. Welt fits between materials as shown above.

SEWING WELTS – Continued

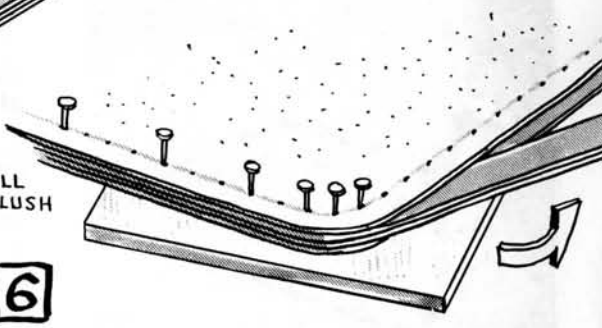


4

Mark guide lines with overstitch wheel.

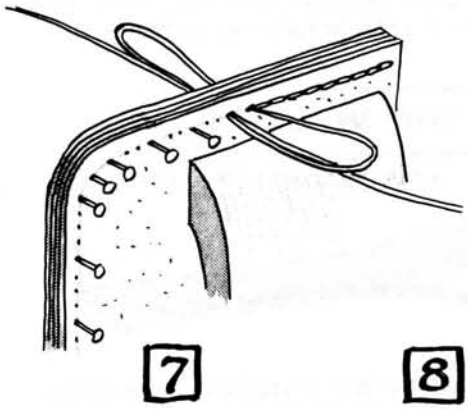
5

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



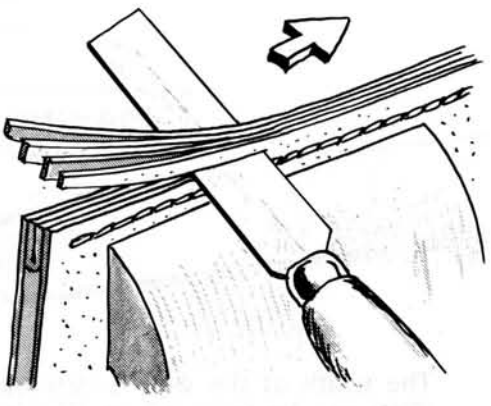
6

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



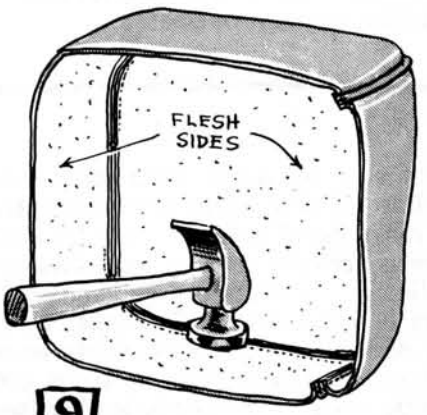
7

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



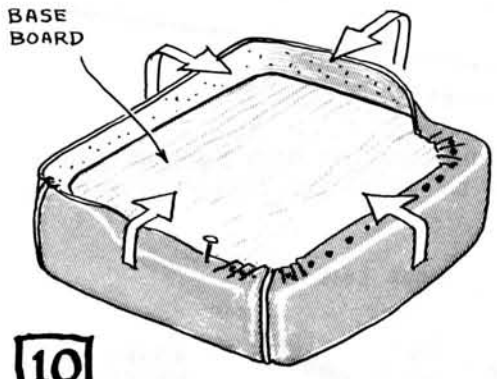
8

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

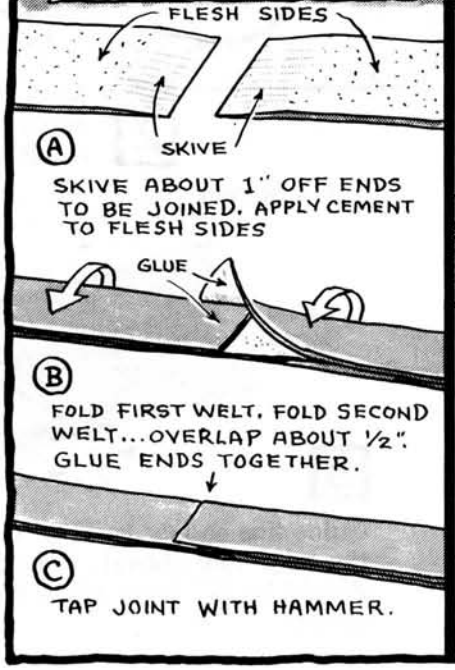
Turn project right side out. Moisten welt areas and tap with a hammer. Do not "pound" the welts; stitches might break.



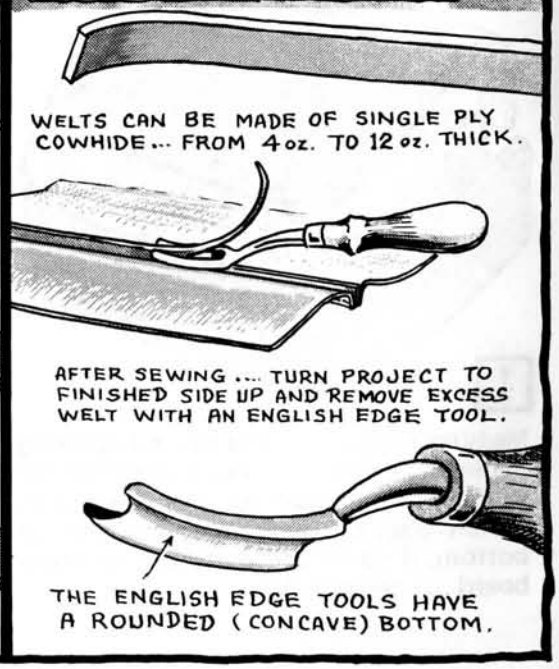
10

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

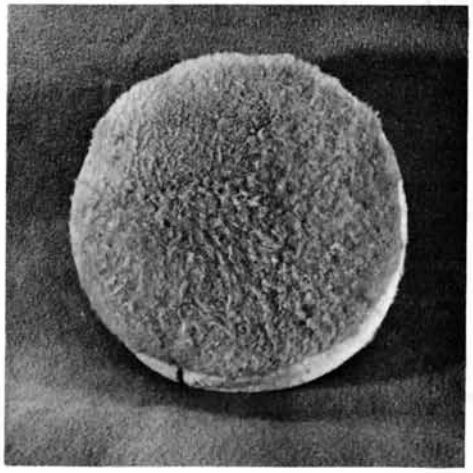
SPLICING WELTS



SINGLE PLY WELTS



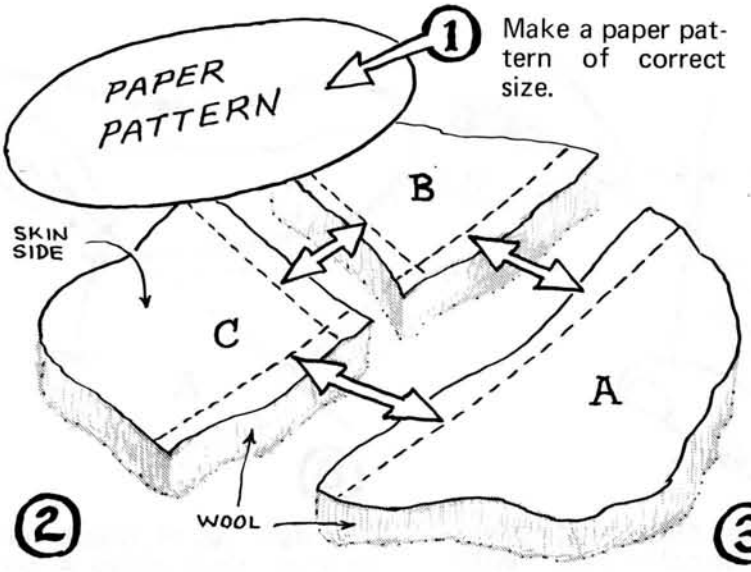
SEWING THE BASEBALL STITCH



This pillow top was made from three pieces of ¾" shearling. Seams are almost undetectable.

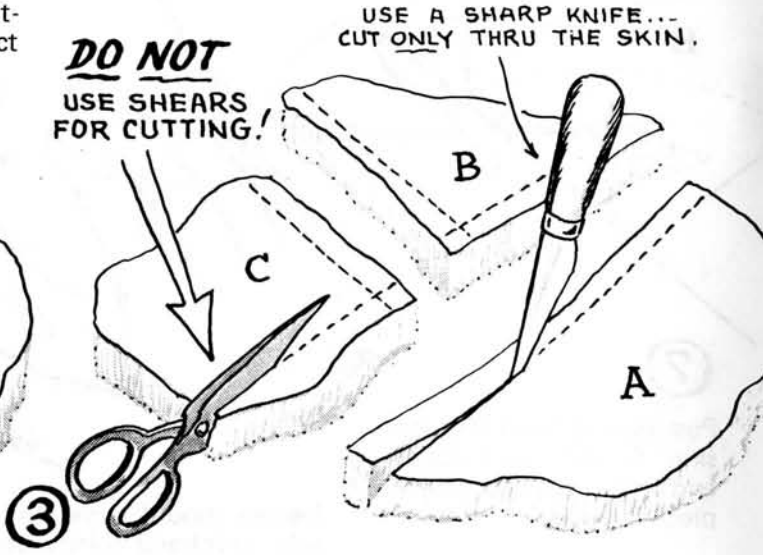
This stitch is used for joining two or more pieces of shearling together. It is sometimes used when shearling is not large enough to line a saddle skirt. It is used here to make the pillows shown. This allows one to use up odd pieces of shearling for various projects. These pillows were made from ¾" shearling.

This pillow was made with whi shearling. The brand was of crea colored shearling . . . inset and sew with baseball stitch.

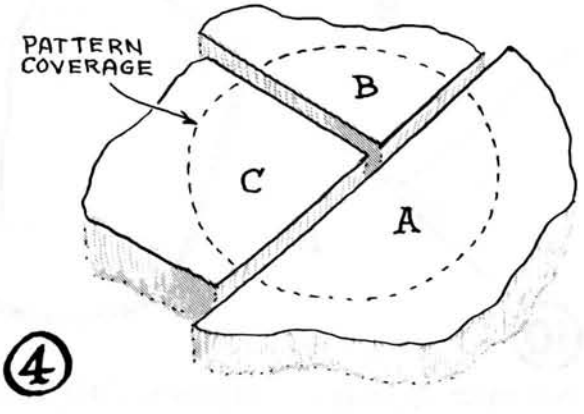


Make a paper pattern of correct size.

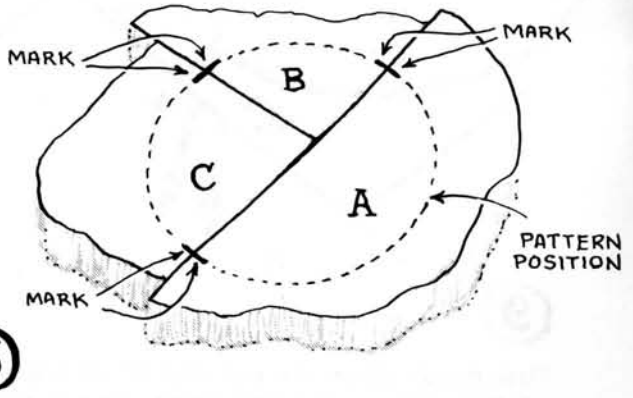
Select pieces of shearling large enough for pattern. Note . . . the areas to be joined must parallel each other, indicated by arrows, on broken lines.



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

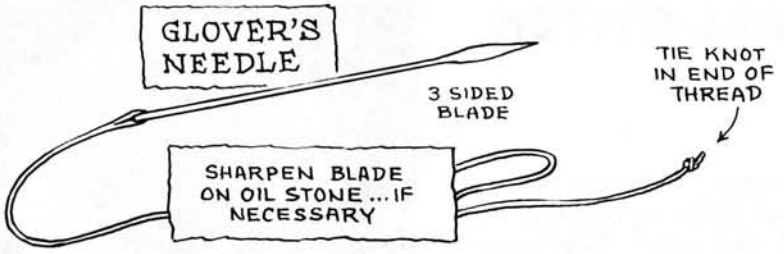


After making parallel cuts . . . fit pieces together and check for any trimming required. Be sure you have enough area for the pattern.

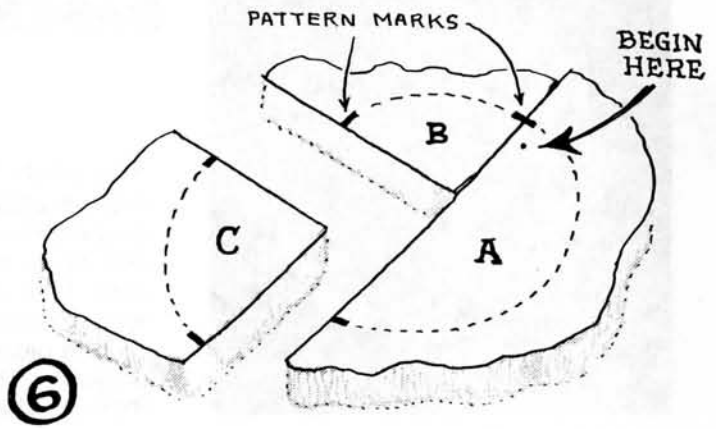


Snug pieces together. Place pattern in position and mark the skins at all seams, at pattern edge, as indicated above.

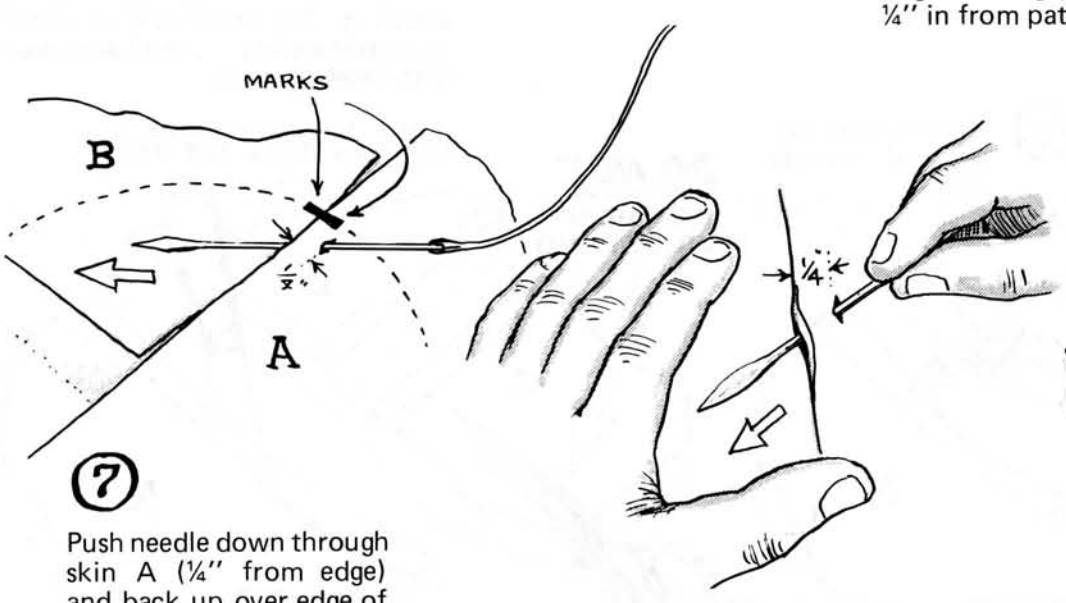
SEWING THE BASEBALL STITCH— Continued



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.

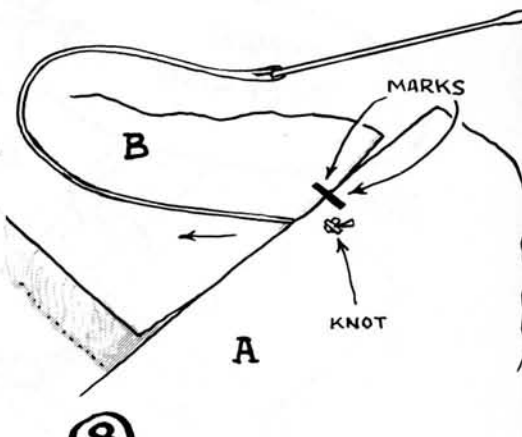


⑥ Begin sewing pieces A and B together. Begin about ¼" in from pattern mark and ¼" in from edge.

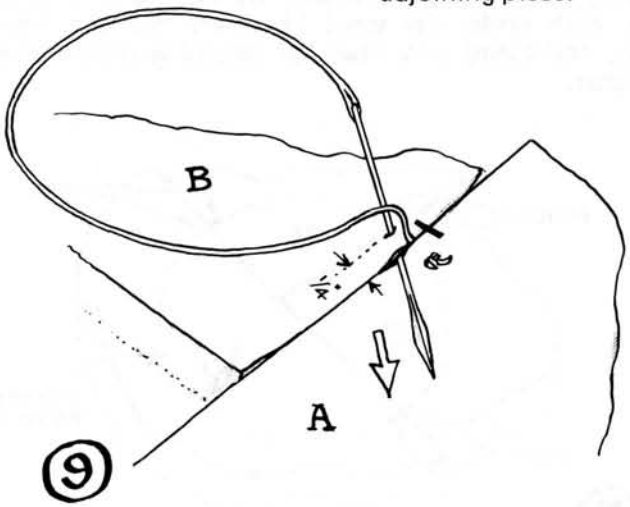


⑦ Push needle down through skin A (¼" from edge) and back up over edge of piece B.

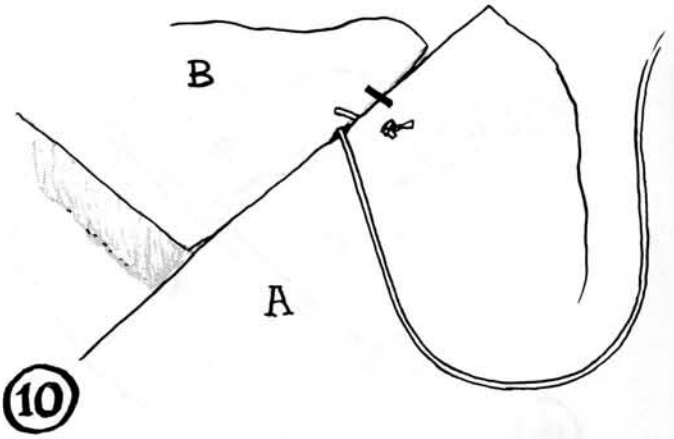
Needle should come out right under edge of skin. Left hand holds material in place. Needle must be lifted up . . . to come out on top of adjoining piece.



⑧ Pull slack out of thread. Pull down to knot. Keep pieces A and B in position . . . with marks.

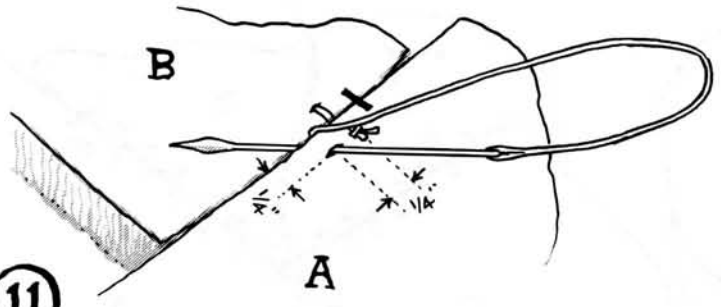


⑨ Push needle down through skin of piece B and up over piece A as shown above. Be sure to go *under* thread, as shown.



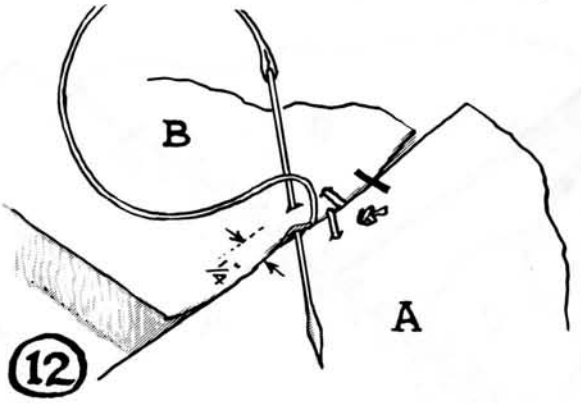
⑩ Pull stitch up snug . . . as shown. CAUTION: some sheepskins will easily tear. Experience will teach you how tight to pull the stitches.

SEWING THE BASEBALL STITCH — Continued



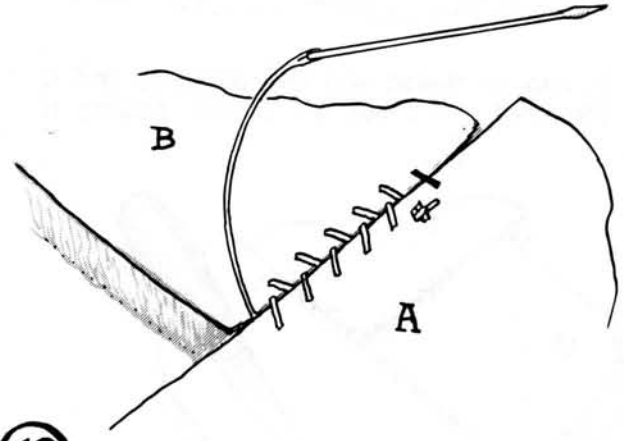
(11)

Push needle down through piece A, about ¼" from edge, and ¼" from knot . . . and back up over piece B as shown. Pull stitch up snug.



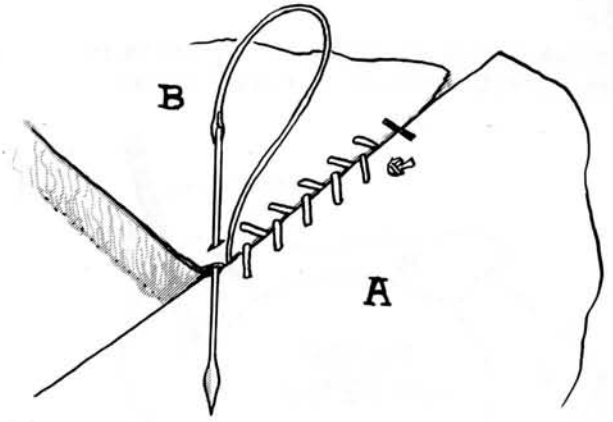
(12)

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



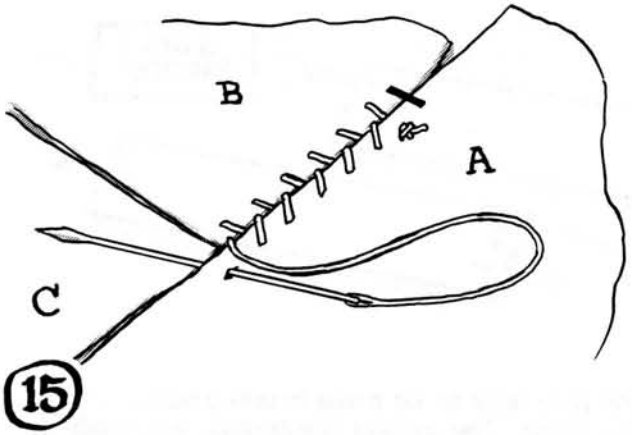
(13)

Continue sewing in this manner . . . down to end of piece B. Space stitches about ¼" apart and ¼" from edges.



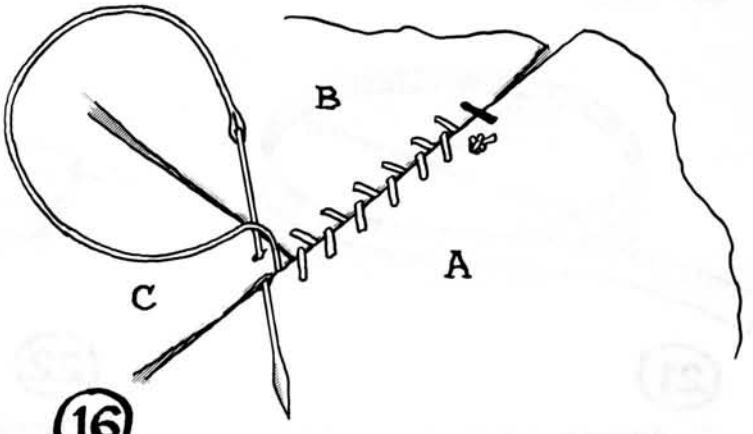
(14)

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



(15)

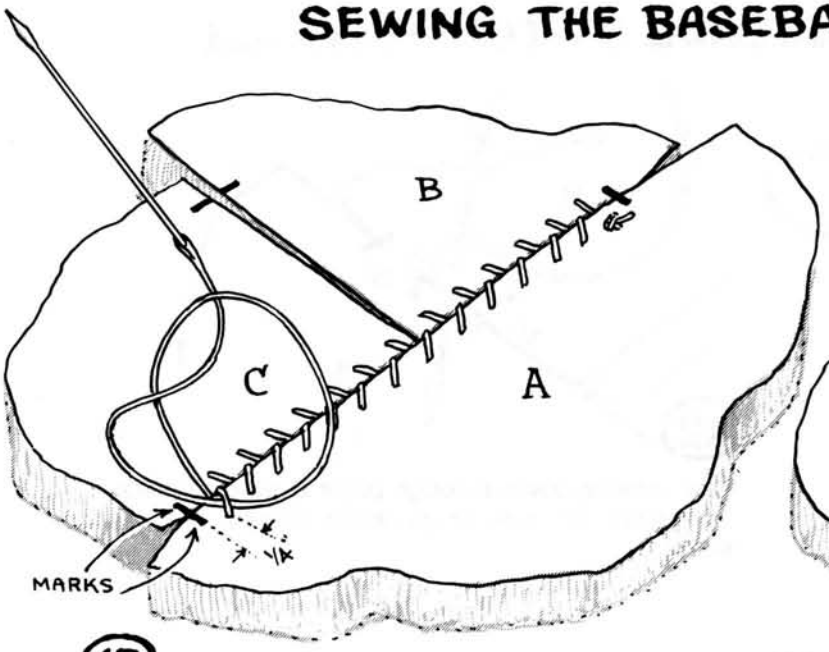
Fit piece C in position. Push needle down through piece A . . . up over piece C. Pull stitch snug.



(16)

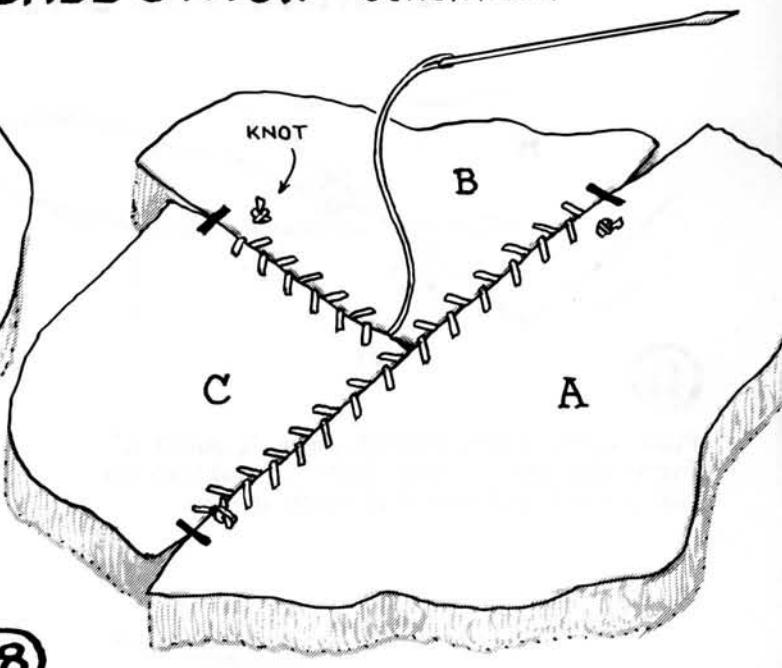
Push needle down through corner of piece C . . . up over piece A.

SEWING THE BASEBALL STITCH – Continued



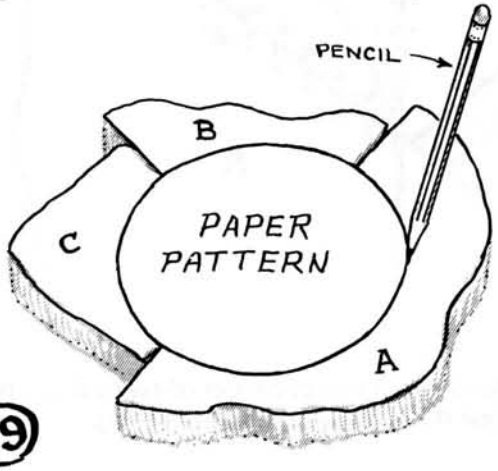
17

Continue sewing to within ¼" of marks on pieces A and C. Tie knot . . . cut off thread.



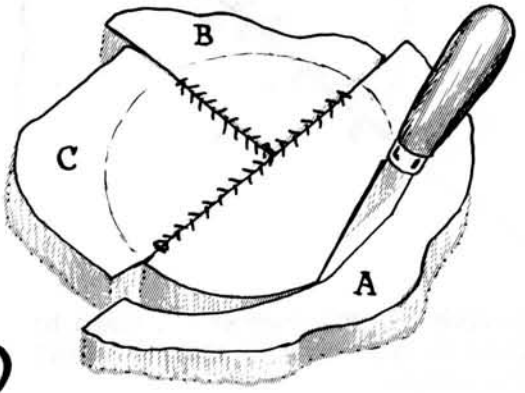
18

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



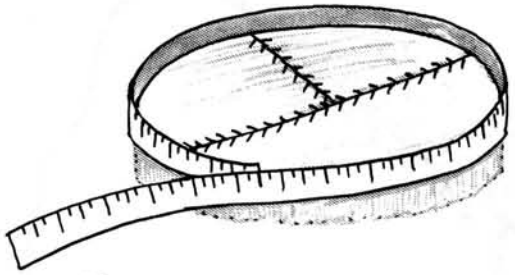
19

Place pattern in position and draw around with pencil.



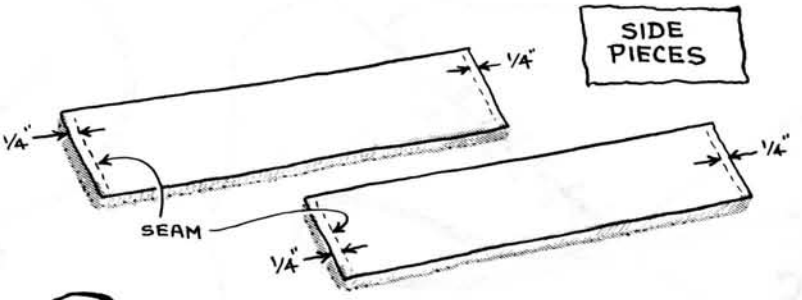
20

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



21

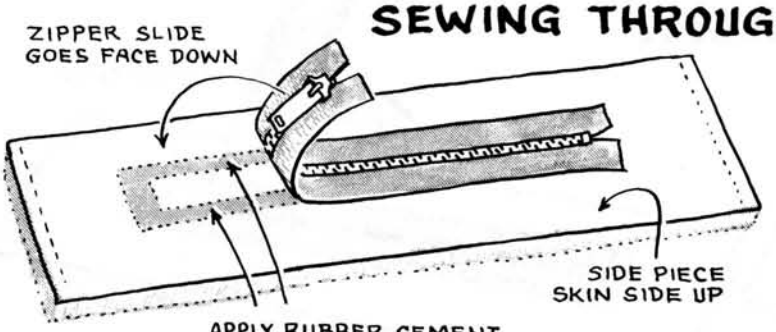
To determine length of side piece . . . measure around cover. Allow ½" extra length for seams. (¼" on each end.)



22

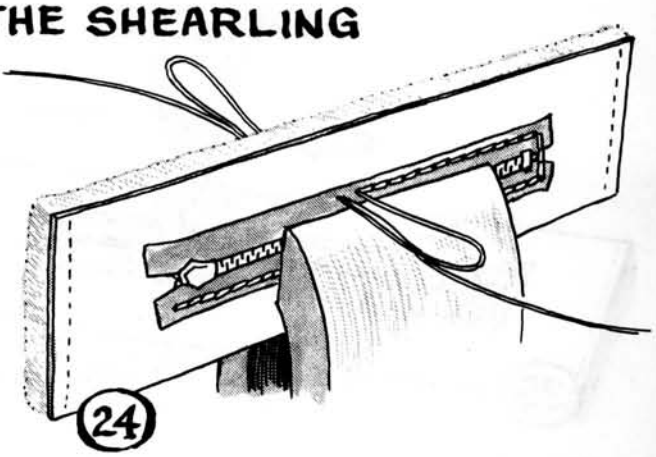
The side piece may have to be made in two pieces . . . for a large diameter cover. The project illustrated, was made in two pieces . . . of ¼" shearling. It was cut 4" wide to accomodate the foam rubber padding used. Allow ¼" at each end . . . for seams.

SEWING THROUGH THE SHEARLING



23

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!



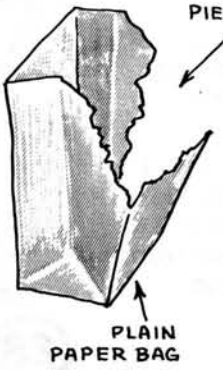
24

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

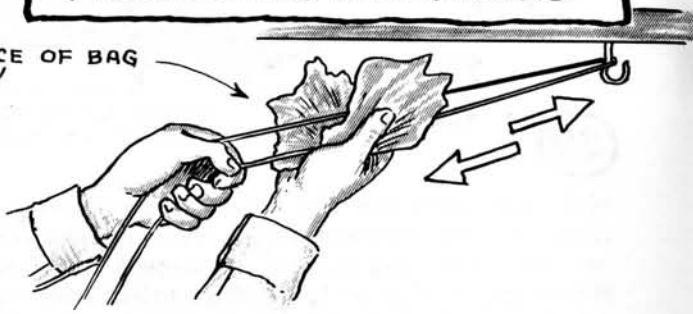
SEWING THROUGH THE WOOL

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.

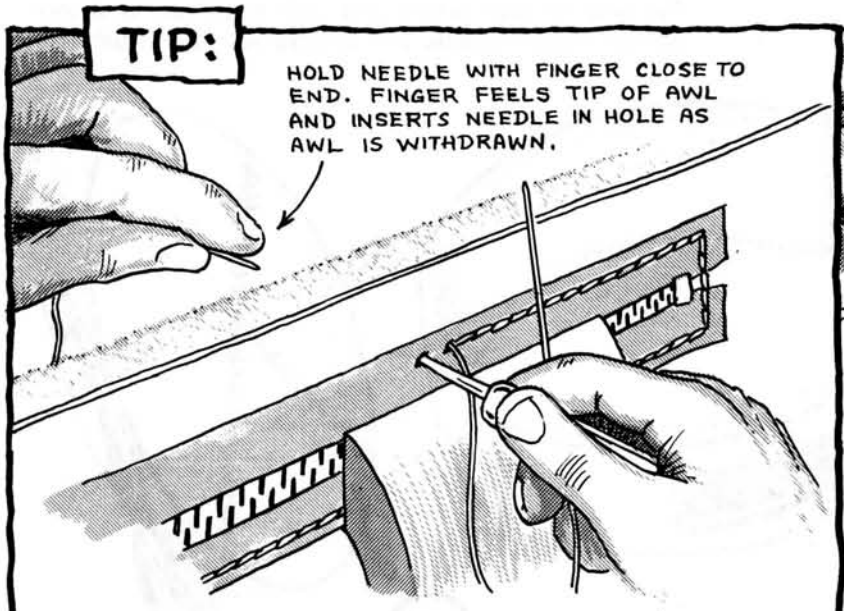


PREPARING THE THREAD

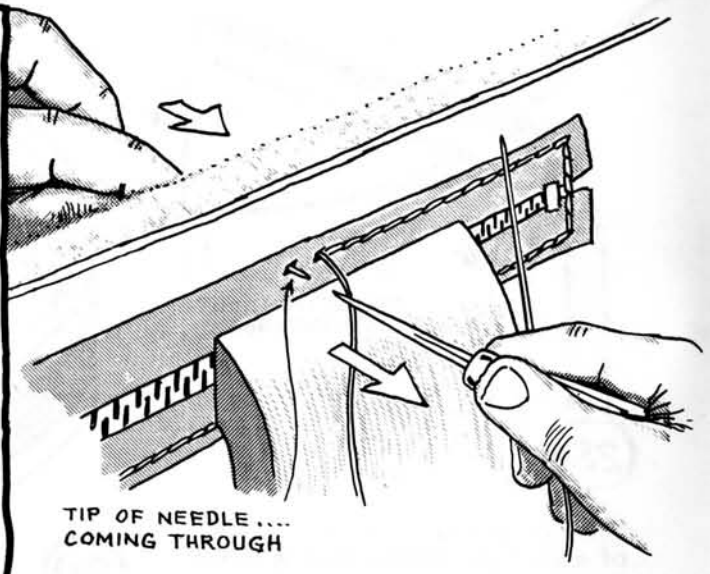


Rub vigorously back-and-forth over the thread. This hardens and burnishes the wax . . . and the threads will easily pass through the holes.

TIP:

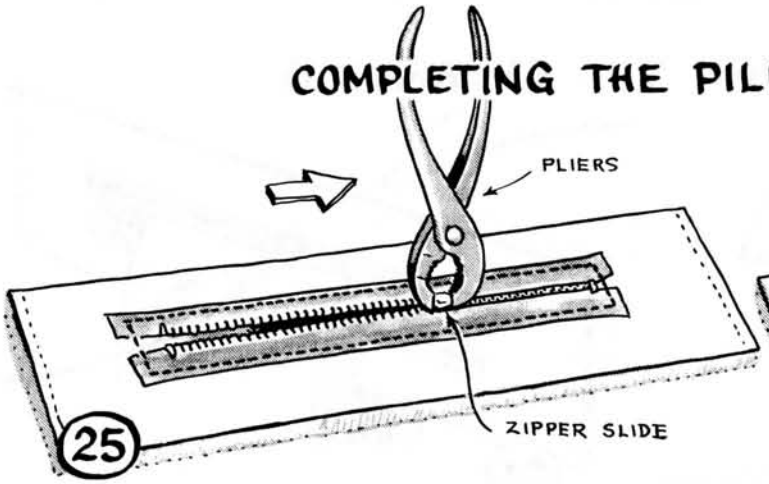


When sewing through wool . . . the back side awl hole cannot be seen. Therefore, as the awl is about to be withdrawn, the index finger of left hand must feel tip of awl blade . . . and left hand needle must follow awl as it is withdrawn.

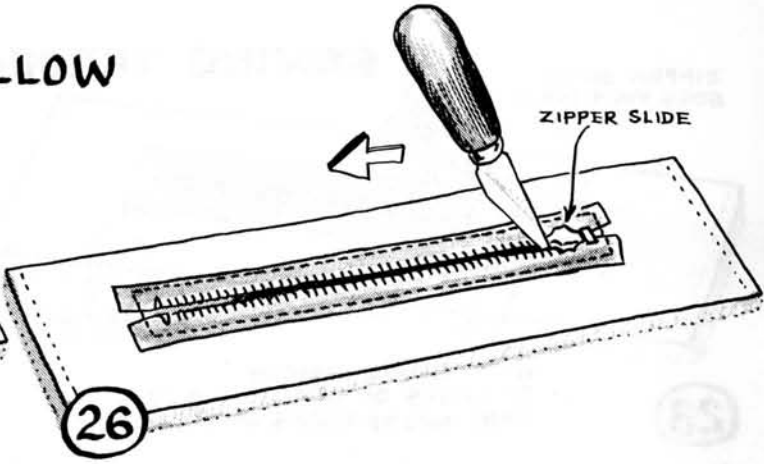


Some practice will be necessary to become proficient. This practice will benefit your regular sewing . . . as you should seldom look at the back side, while sewing.

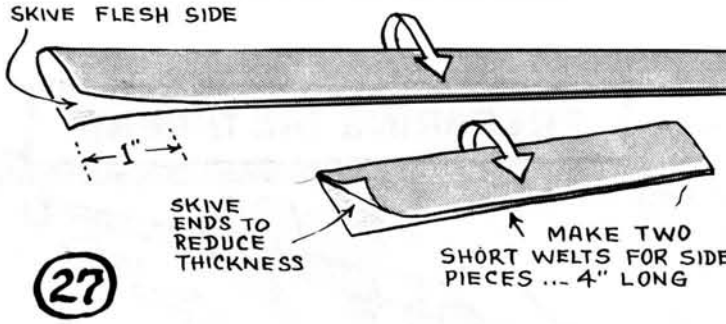
COMPLETING THE PILLOW



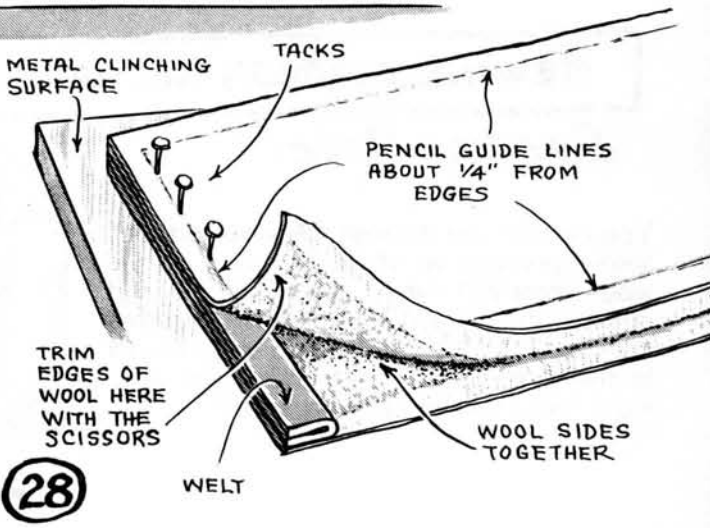
With zipper sewn in place . . . grasp bottom of zipper slide with pliers and pull zipper open.



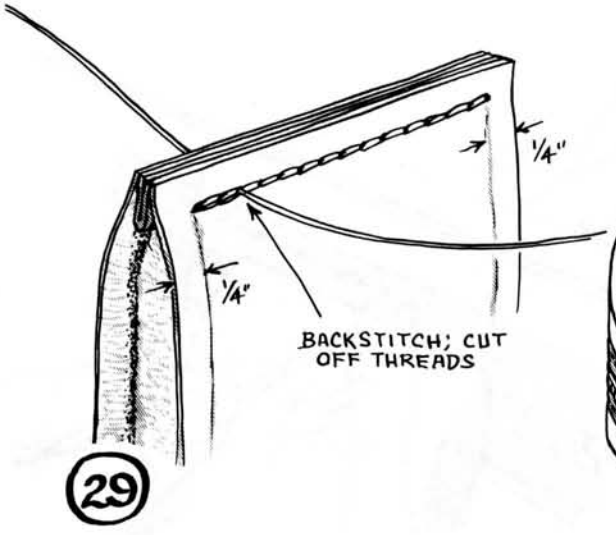
Take a sharp knife and cut a single slit, through the wool skin, the full length of the zipper. No more cutting is necessary.



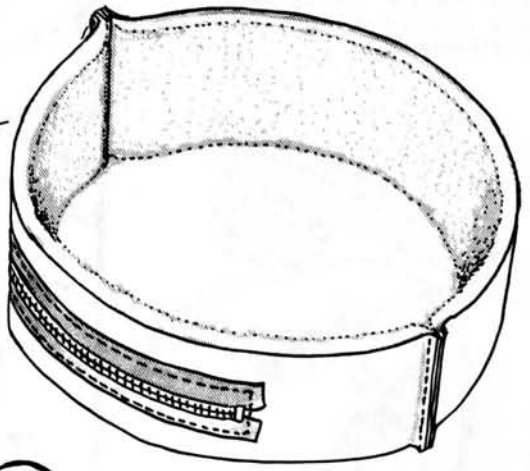
Make the welts for the covers (two required). Cut 1" wide and about an inch longer than measurement. Skive one end. Fold and cement . . . except for about 1", as shown above. The welts for this project were made from cream cowhide. Make two short welts for end pieces.



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



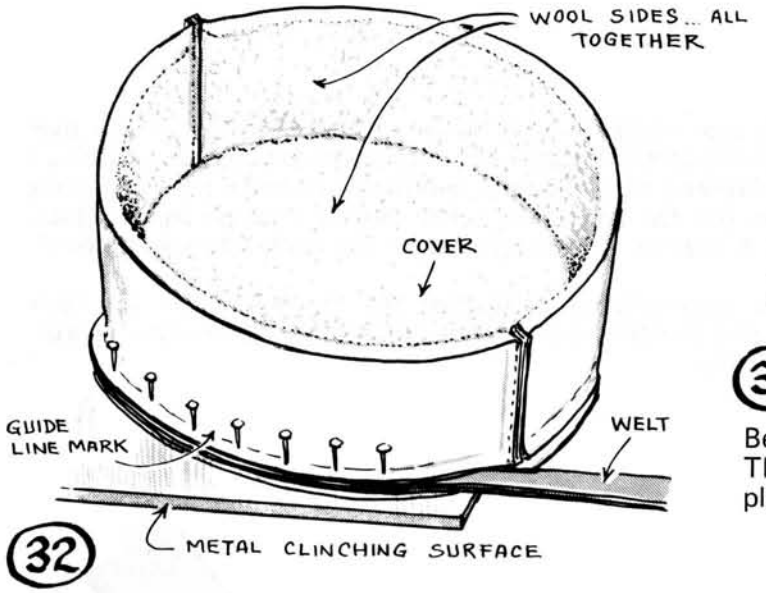
Sew across end. Sew to within ¼" of each side. Before sewing other ends together . . . fit around cover to check measurements. Sew welt in other ends of side pieces.



Sides . . . ready to install.

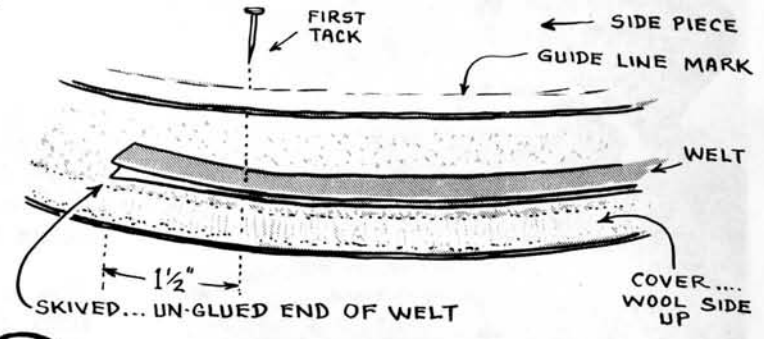
With scissors, trim off fringe of wool around outside edges of the covers.

COMPLETING THE PILLOW – Continued



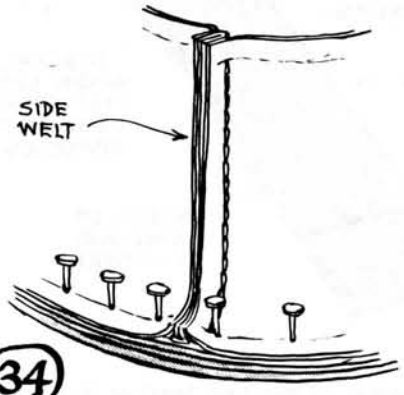
32

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



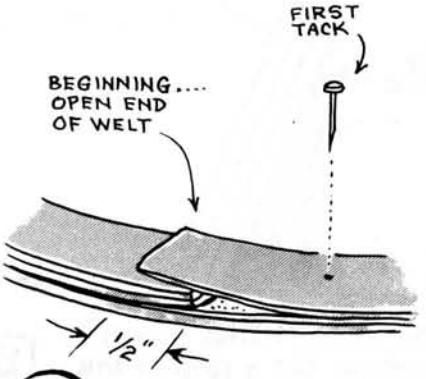
33

Begin first tack about 1½" 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.



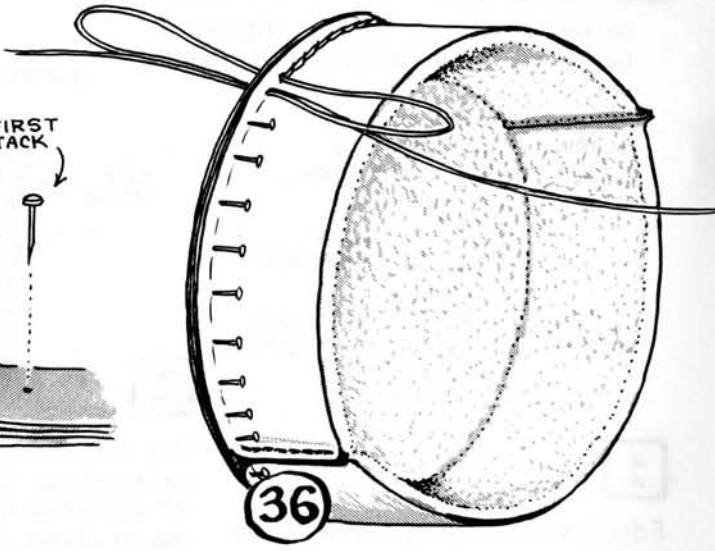
34

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



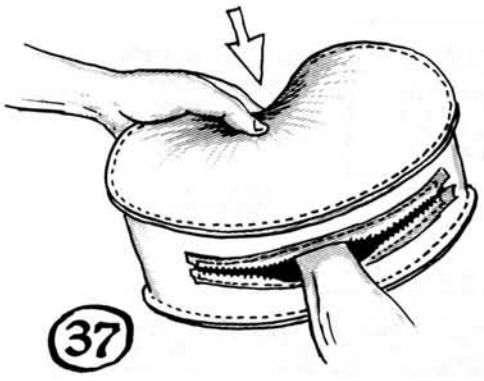
35

To complete, trim end of welt, allowing ½" overlap. Insert in open end of welt; complete tacking.



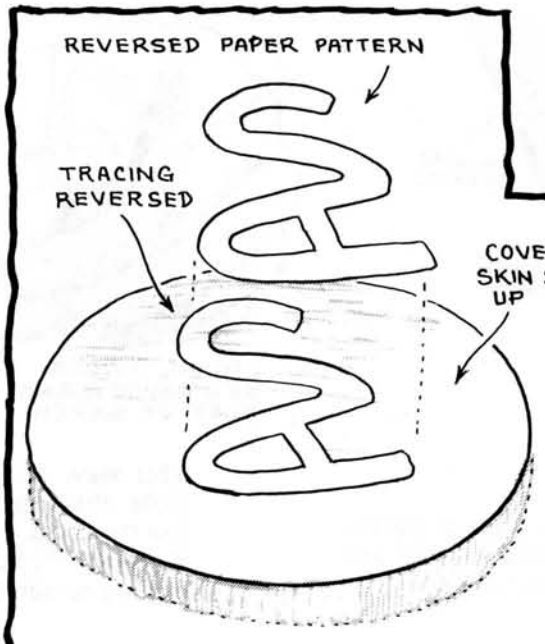
36

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:

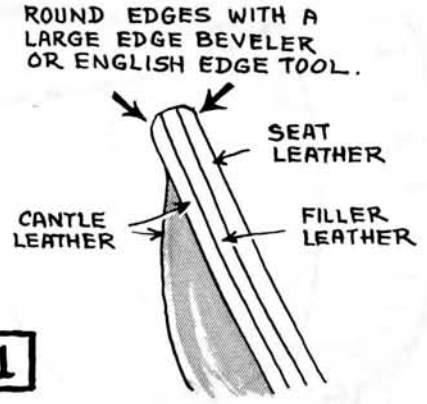
When insetting initials or brands . . . make a pattern and trace it in reverse to the skin side of shearling. Trace in reverse, also, to contrasting colored shearling. Sew in with baseball stitch.

THE HIDDEN STITCH

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

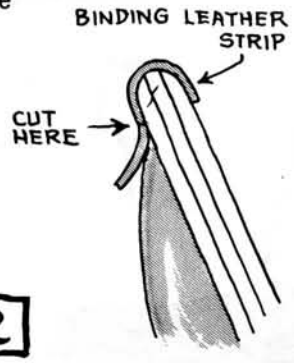
The hidden stitch is used when a binding leather is put over several thicknesses of leather . . . to cover the edges . . . making a more finished edge. Since it is difficult to make even appearing stitches (on the back side) when sewing through several thicknesses of leather . . . the stitches on the back side are "hidden".

This is accomplished by slitting the binding leather (on back side), and bringing the stitches out in this cut. Follow instructions below.



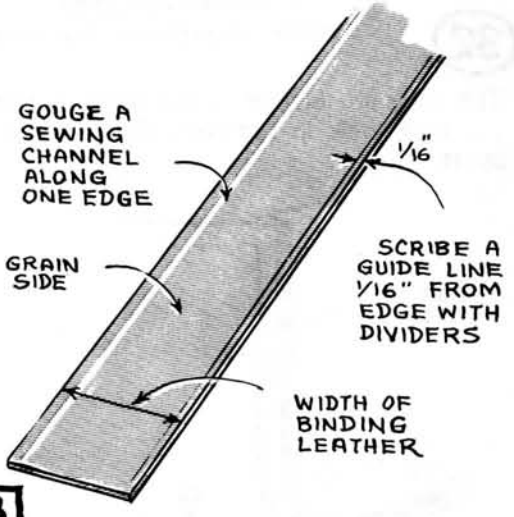
1

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



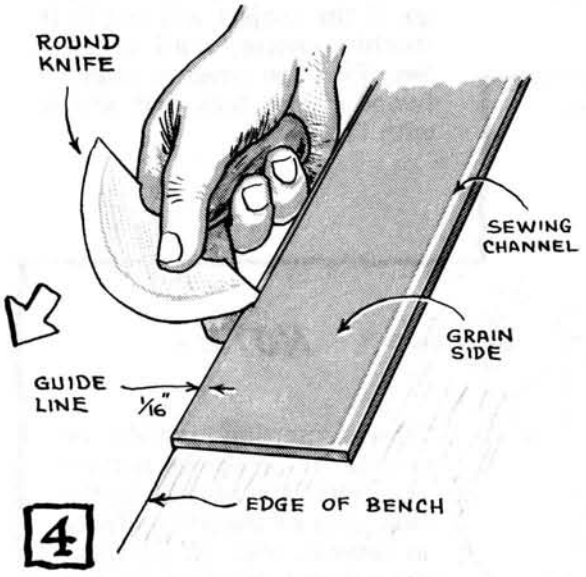
2

Cut the binding leather from 6/7 oz. cowhide. Cut a strip of this ½" wide and fold over cantle, as shown above, to determine how wide to cut the binding leather.



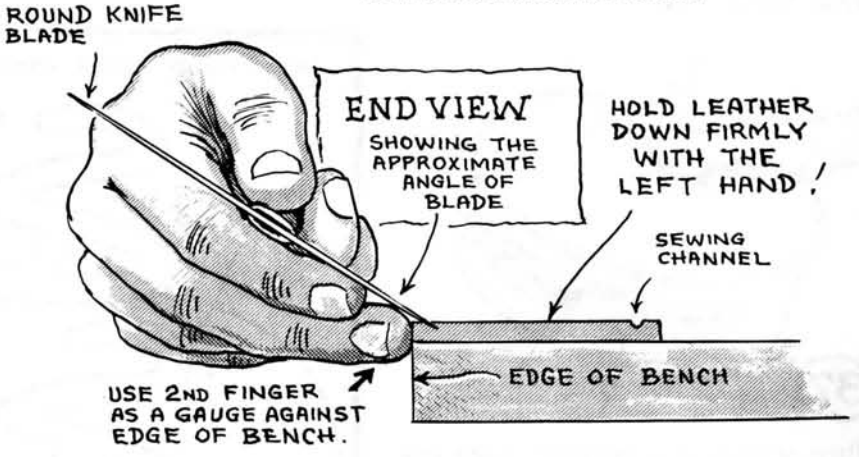
3

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.



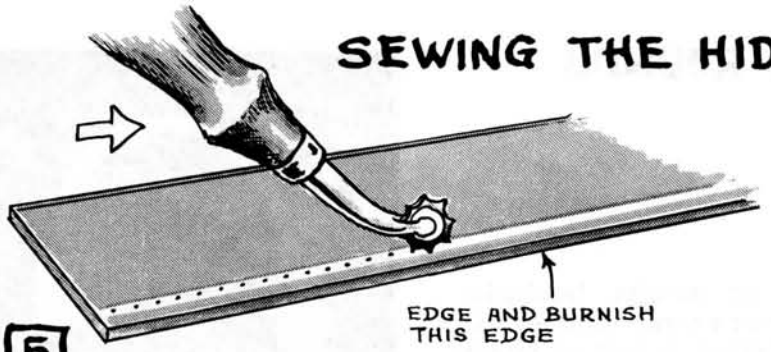
4

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.



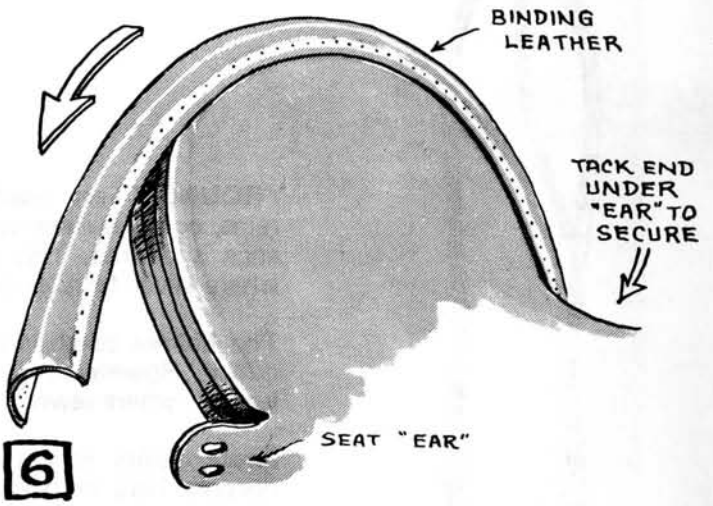
This view shows the angle to hold the blade. Note the angle. Use finger against the edge of the bench as a gauge. Cut into the leather about ½ depth. Follow the 1/16" guide line. Practice cutting on scrap leather first.

SEWING THE HIDDEN STITCH



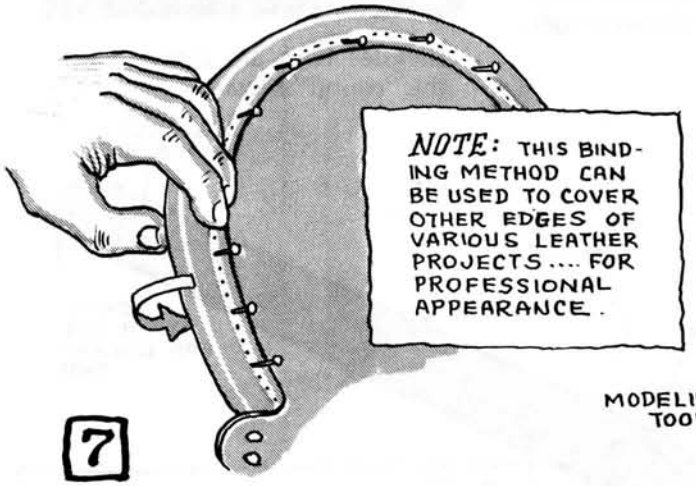
5

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.



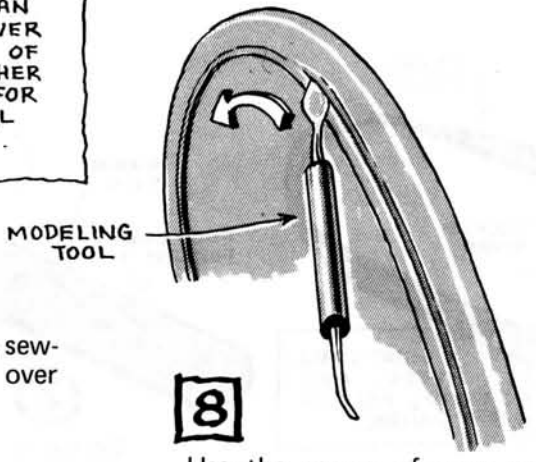
6

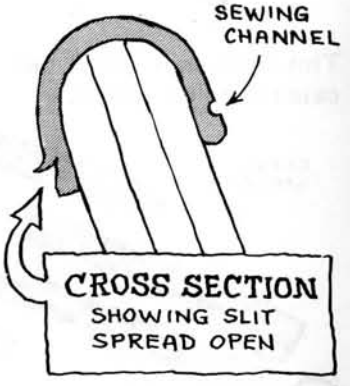
While leather is still moist . . . stretch over cantle leathers, as shown. Secure first end with tack, pull over cantle leathers . . . tuck under "ear" and secure other end with tack.



7

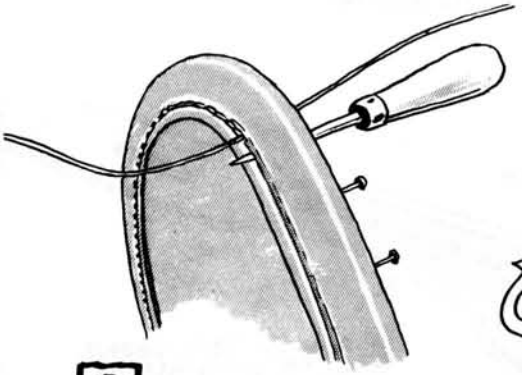
Tack binding in place . . . all around . . . in sewing channel. Use fingers to shape leather over back side of cantle.

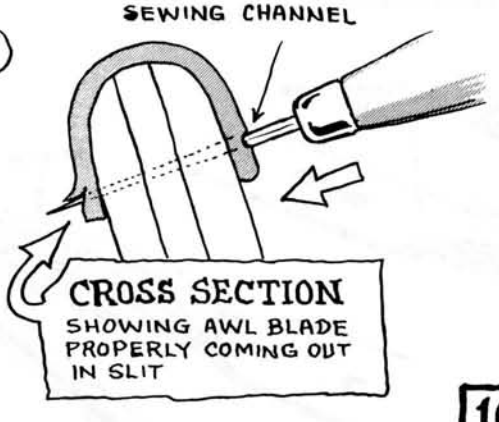




8

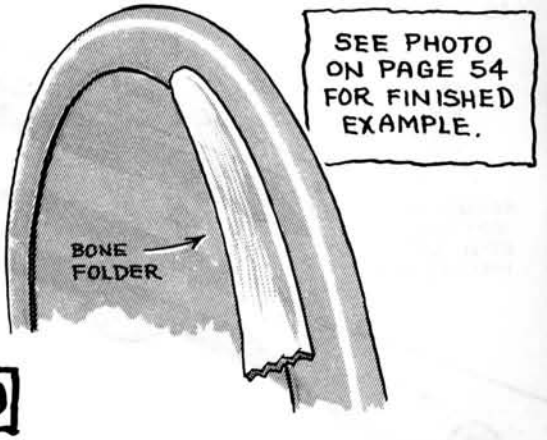
Use the spoon of your modeling tool to spread the slit open . . . on back side.





9

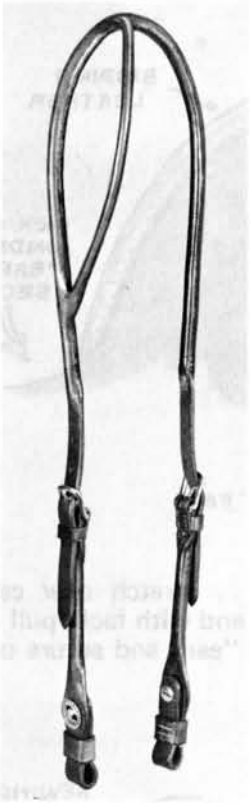
Make a thread . . . sew in the usual manner. Some practice will be required to make the awl come out in the open slit. Watch for point of awl blade . . . if it wants to come out in the wrong place . . . withdraw about half way and angle blade until it comes out in the slit.



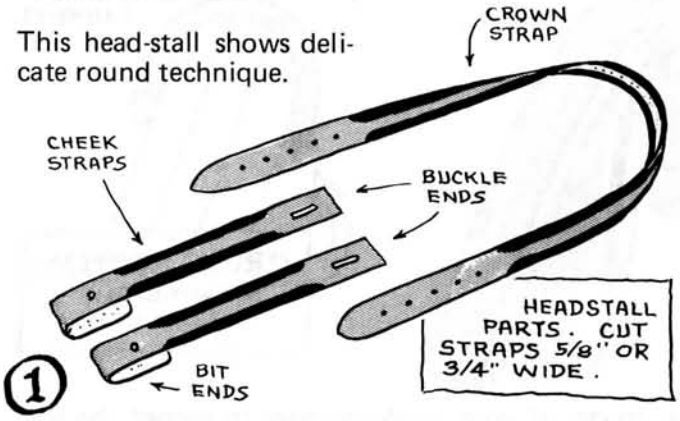
10

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.

SEWING ROUNDS



This head-stall shows delicate round technique.

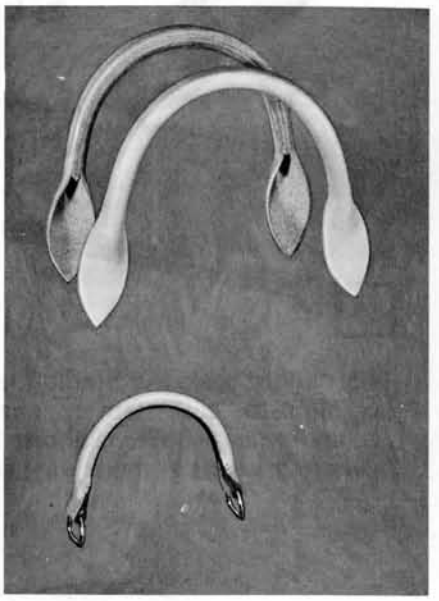


To make a head-stall . . . cut all straps to their proper lengths. Solid black (on sketch above) indicates areas to be rounded.

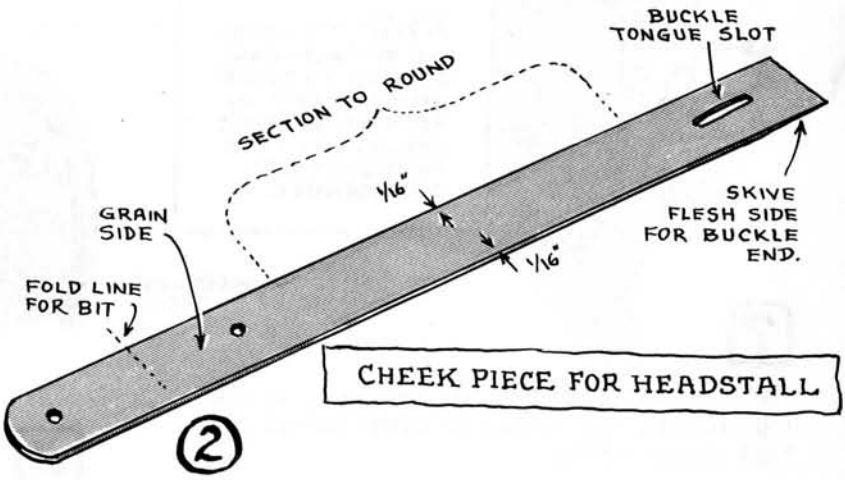
"ROUNDS" are used for handles, headstalls, reins, or other items where a trim, round appearance is desired. This method is used on bridles where silver ferrules are added for showy effect.

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

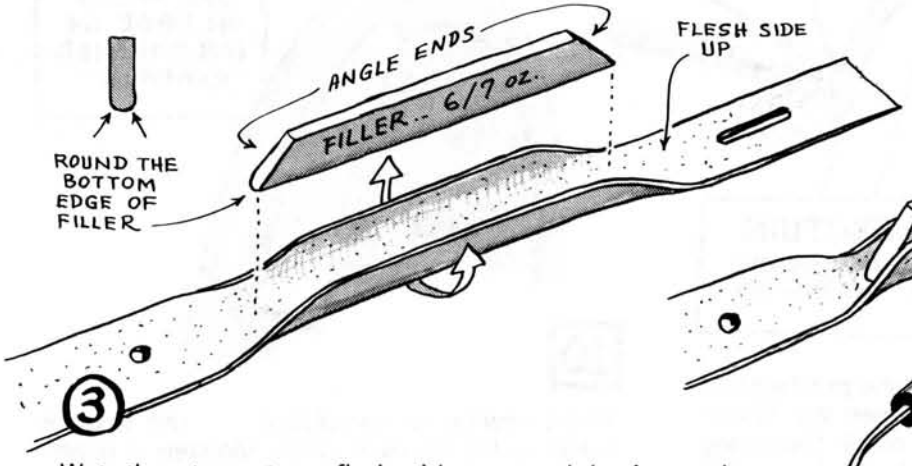
Space denies us patterns for bridles, etc. Our purpose here is to show you *how* to do it. Pattern dimensions, etc., can be obtained from other sources, or by measuring an old head-stall, handle, etc.



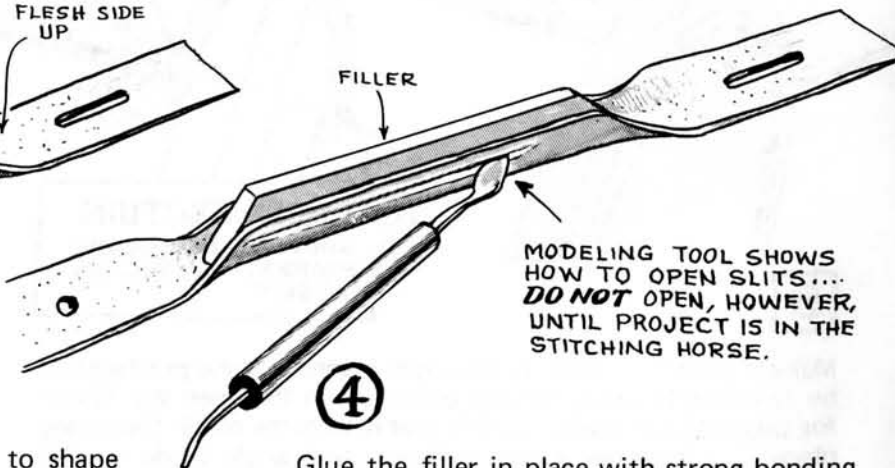
Handles here are shown with the "round" sewing.



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.

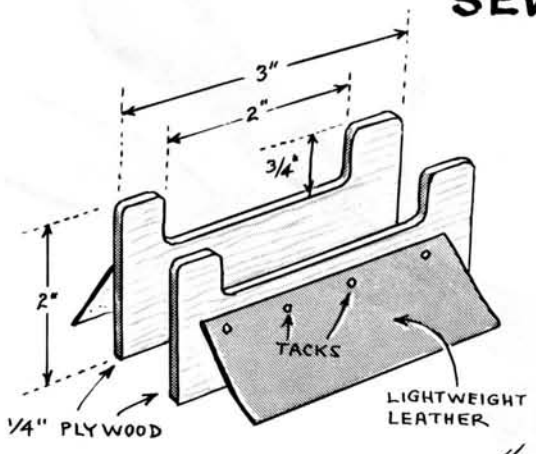


Wet the strap, turn flesh side up, and begin to shape section to be rounded, as shown above. Cut a filler strip about ¼" to 3/8" longer than the angled slits . . . and about 3/8" to ½" wide.

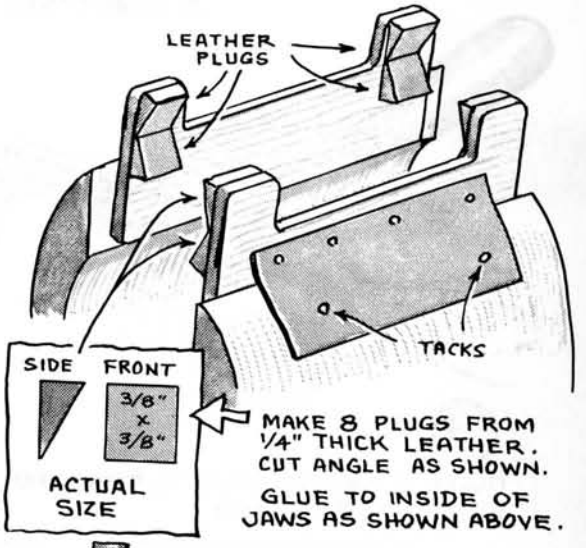


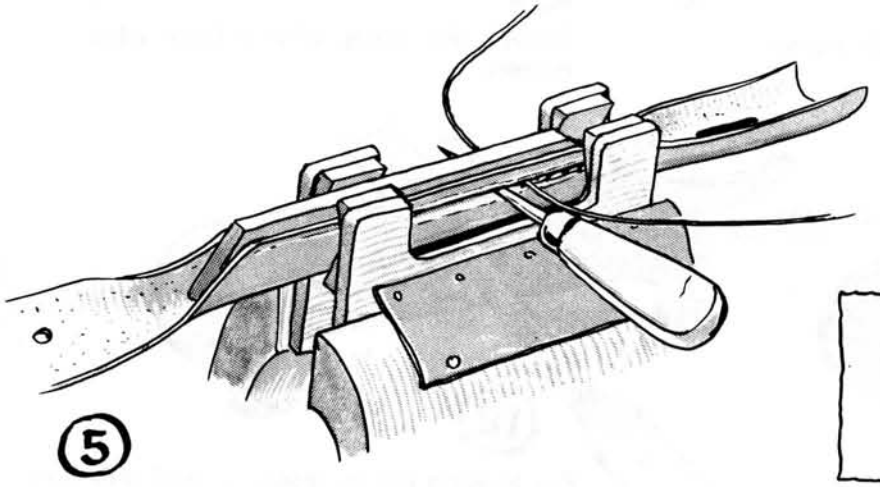
Glue the filler in place with strong bonding cement. Be sure filler rests in bottom of fold. Tap with hammer to insure adhesion. Do not open slits . . . until step 5.

SEWING ROUNDS —

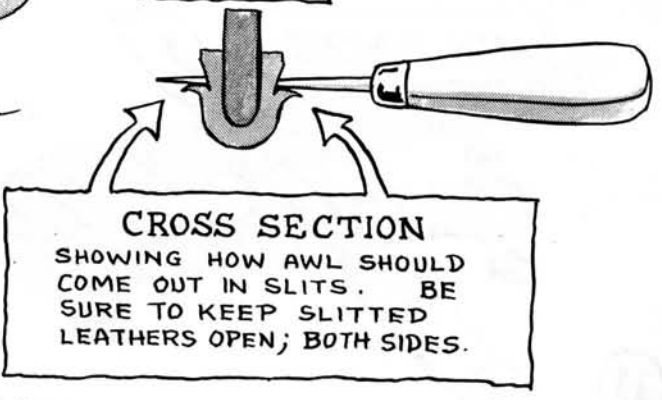


To aid in sewing rounds, cut two pieces of plywood as shown at left. Tack, or glue pieces of leather to them, as shown, at upper edge. Tack these to the jaws of your stitching horse as illustrated at right.

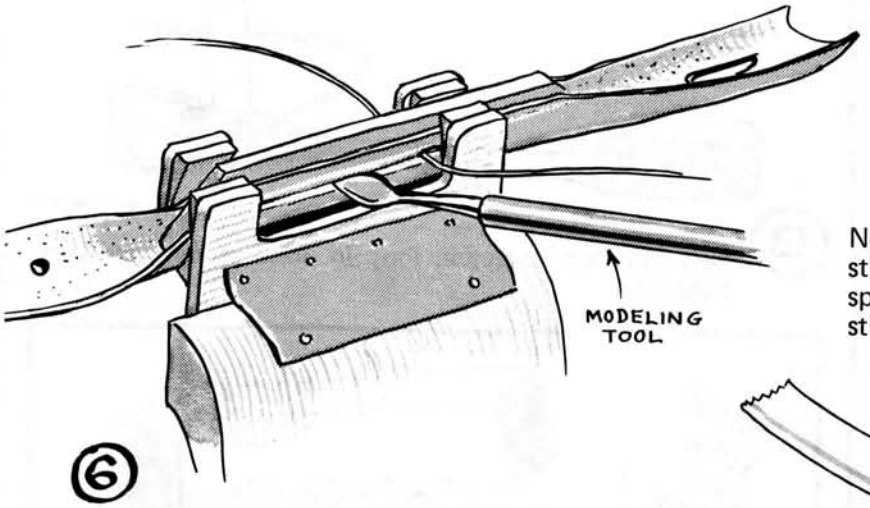




5

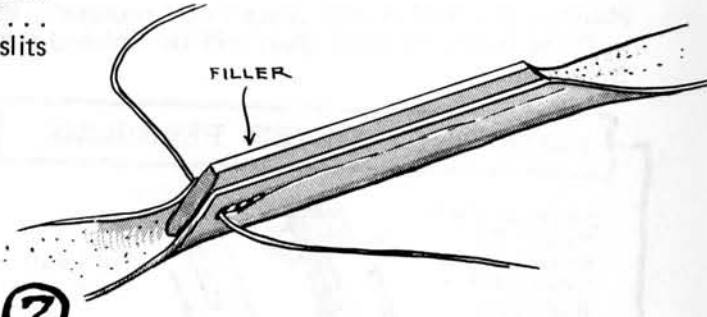


Place work in stitching horse. Open slits between modified jaws. Space stitches by eye; do not "wheel". Stab awl at base of slit . . . awl should exit in opposite slit in the same manner. Keep slits opened, between the modified jaws.



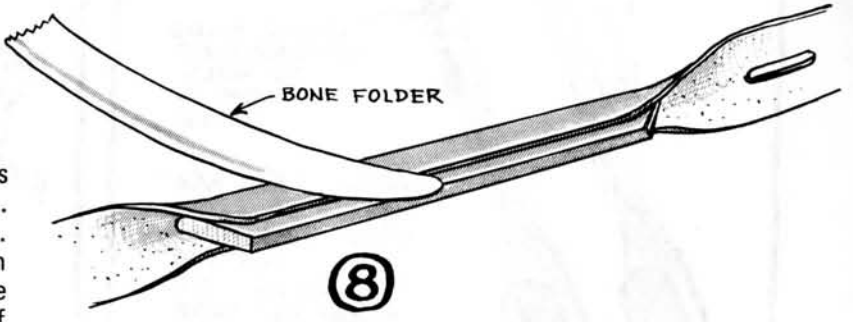
6

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

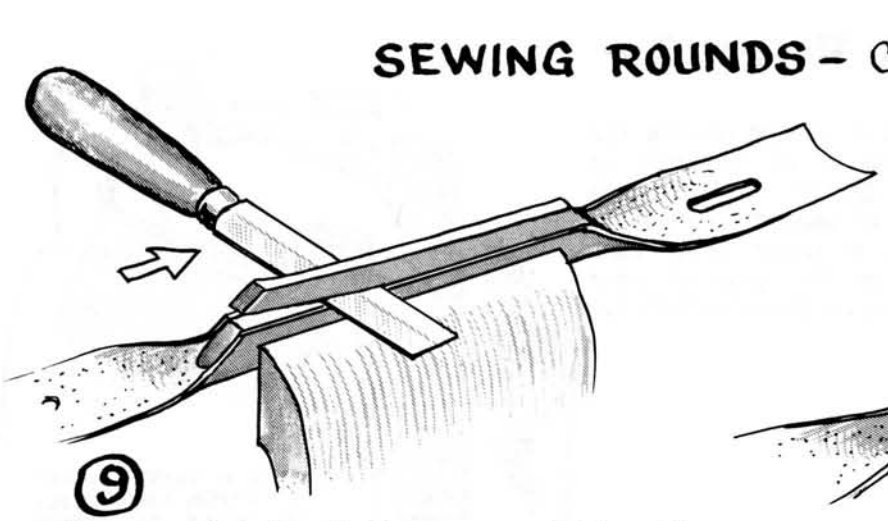
Note: Stitches should *not* go over end of filler. Backstitch one hole and cut off threads. Use modeling spoon to lay the slitted leather back down . . . over stitches.



8

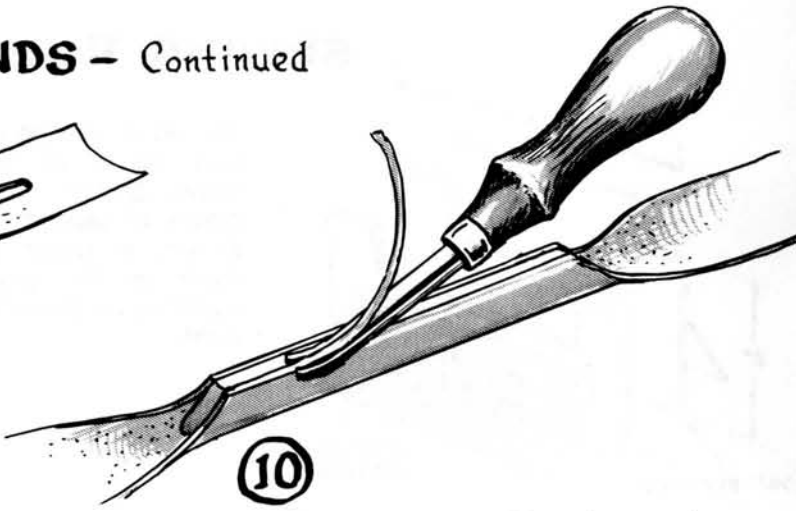
Wet the leather . . . tap with a hammer . . . and rub over sewn areas with the bone folder. Keep leather moist with a damp sponge.

SEWING ROUNDS – Continued



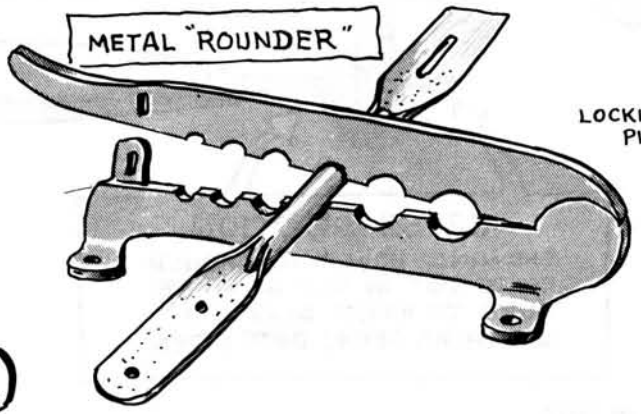
9

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



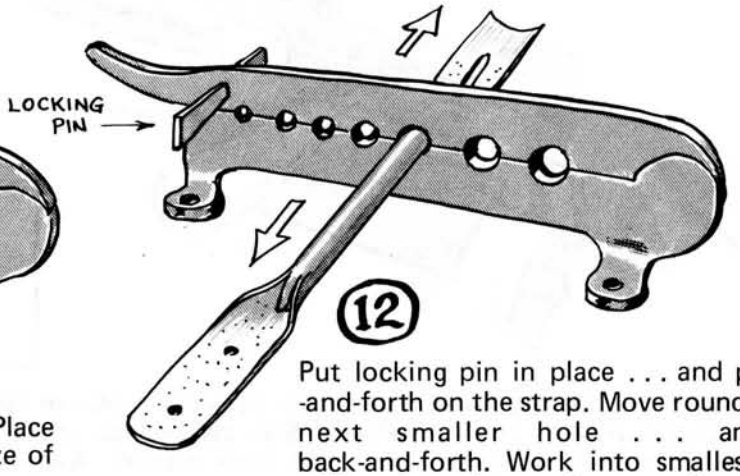
10

Round the edges with a large edge beveler.



11

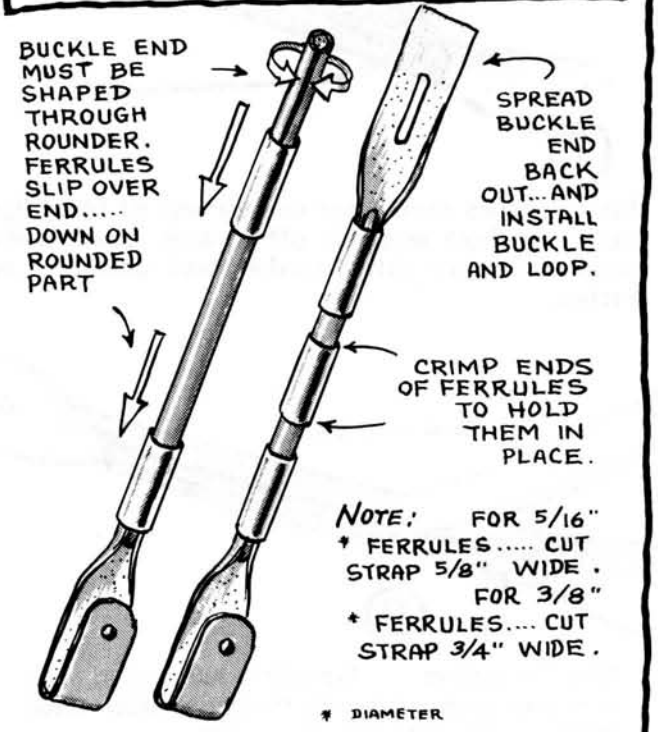
Moisten the leather and place into "rounder". Place in larger hole, to start, than will be finished size of the round.

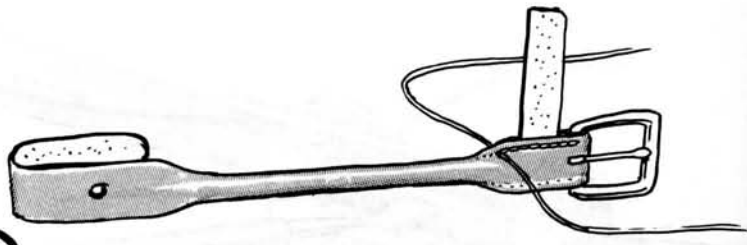


12

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

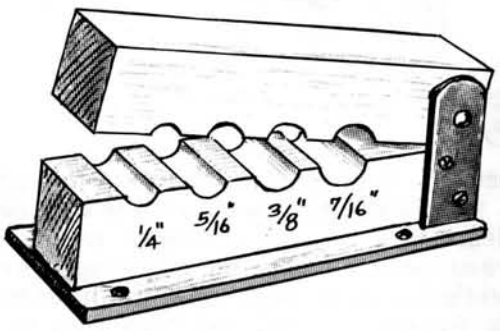




13

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

MAKE YOUR OWN ROUNDER!



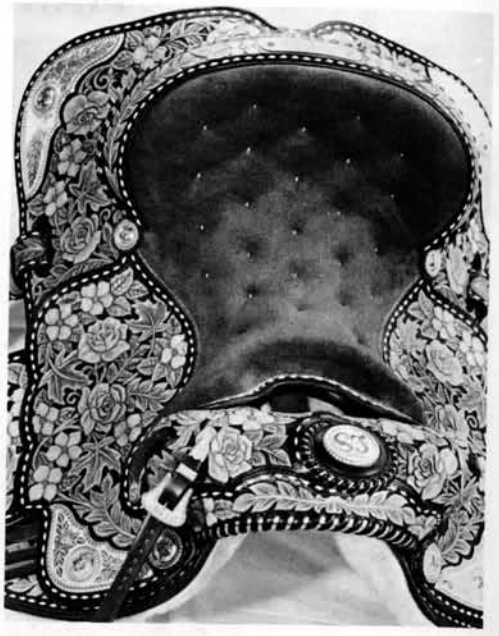
An improvised "rounder" can be made of two hardwood blocks. Clamp together; bore holes. Taper outside edges of holes; polish in holes. Hinge; rig up a locking pin. Use your ingenuity.

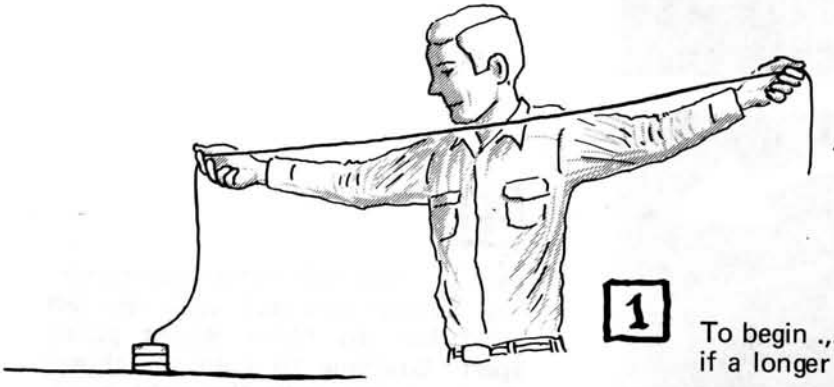
"MAKING" A THREAD

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.

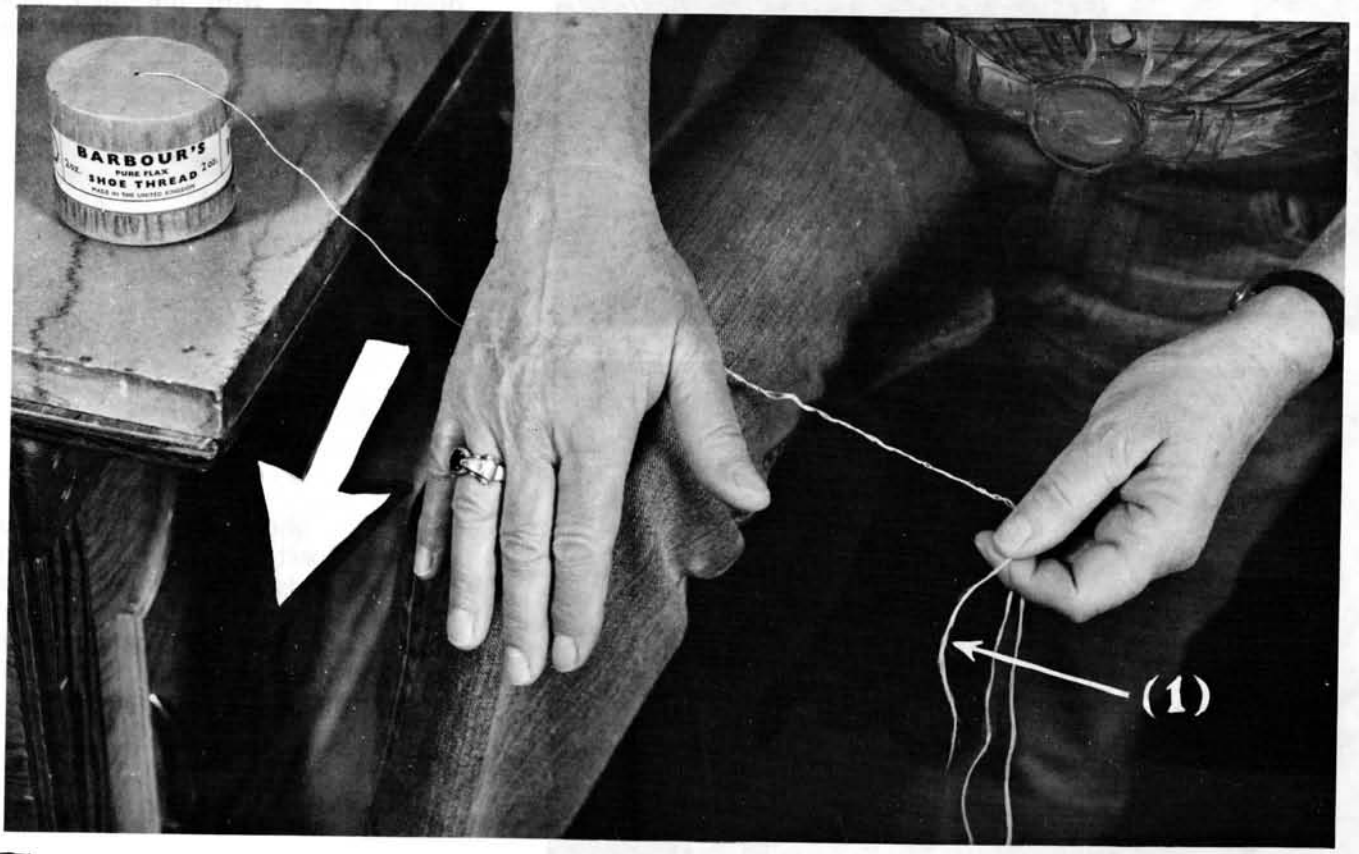
The illustration at right shows a hand-made (7 cord) thread for quilting the padding in a saddle seat. It was made from seven lengths of the 2 oz. pure flax shoe thread.





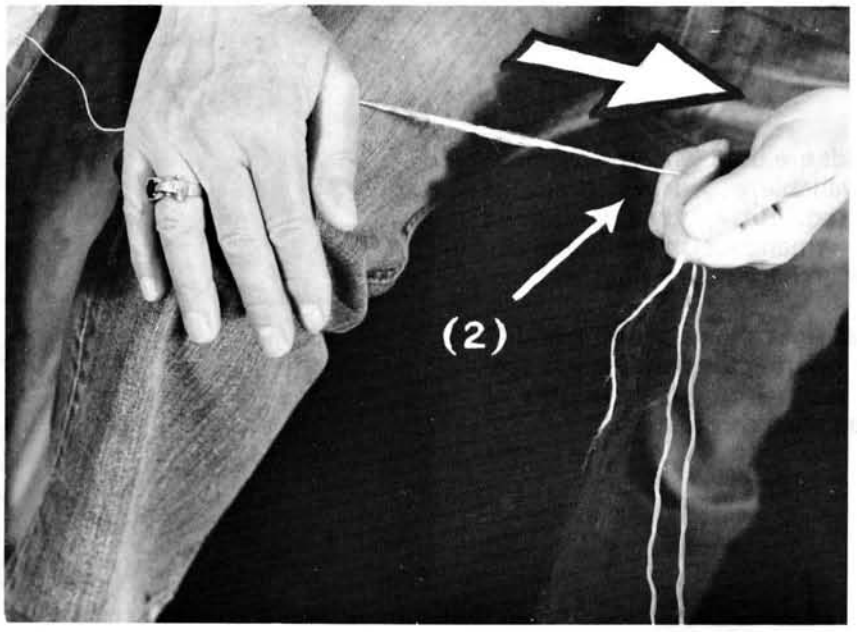
THIS END OF THREAD MUST BE TAPERED AS IN STEPS 1-2-3-4- PAGES 5 AND 6. OR, AS DESCRIBED BELOW... STEPS 2-3-4-5.

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



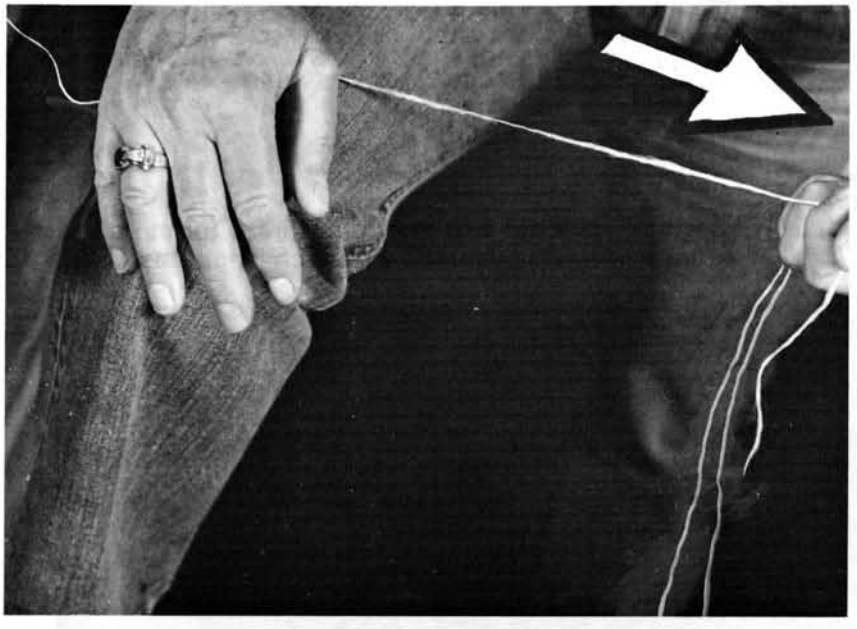
2 After pulling out desired length of thread . . . place on leg and roll forward with heel of right hand (arrow). Hold with the left hand. This untwists the fibers. Hold beginning end of thread between thumb and index finger . . . shown (1) above.

"MAKING A THREAD — Continued



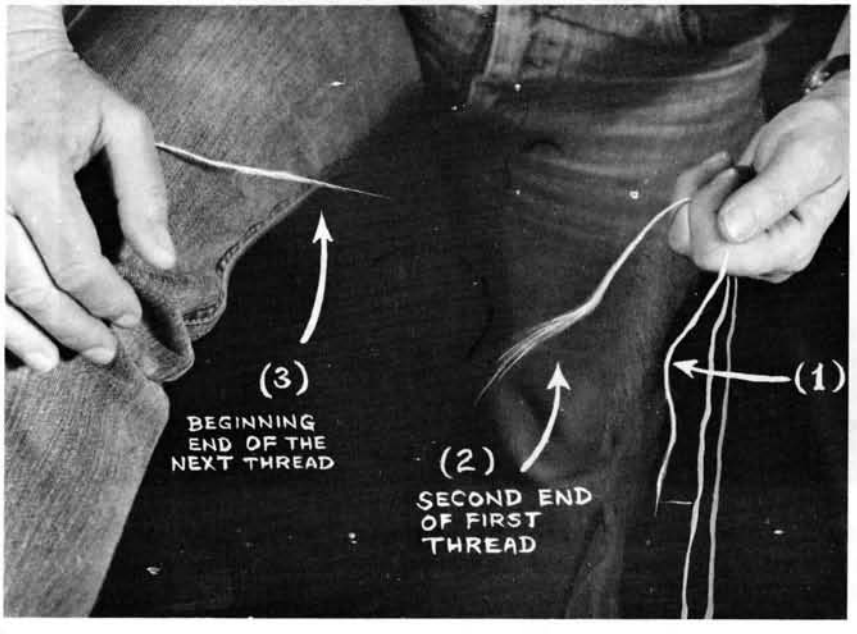
3

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

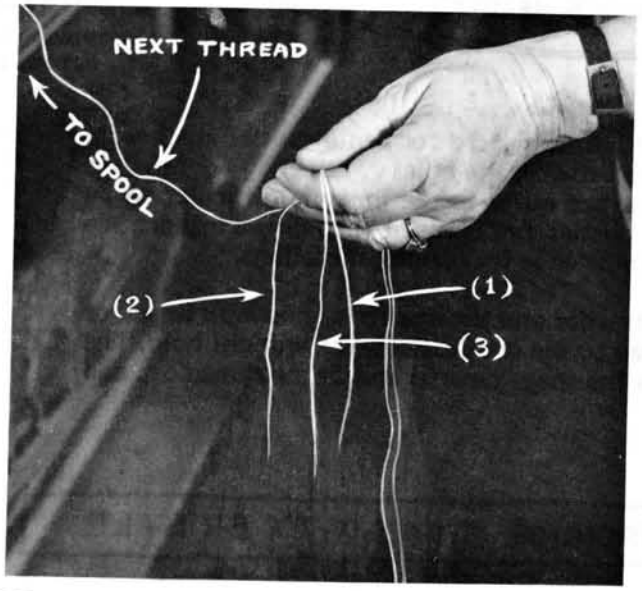
Here . . . you will notice that continued tension and pull with the left hand has the fibers almost pulled apart. Continue to hold the thread down on leg with the right hand. Moistening palm of right hand will aid in rolling the thread.



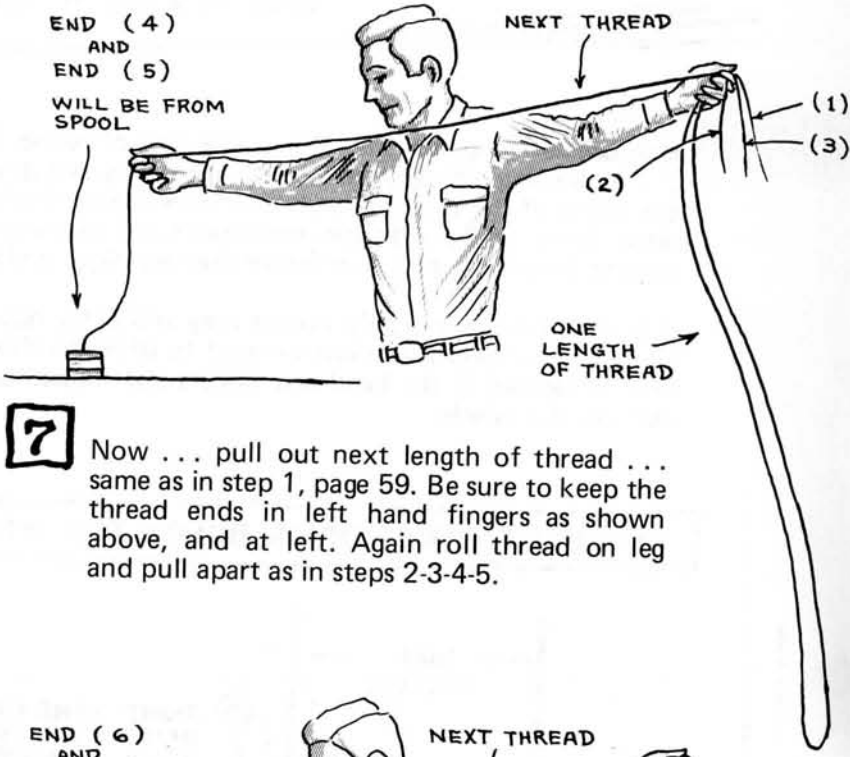
5

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.

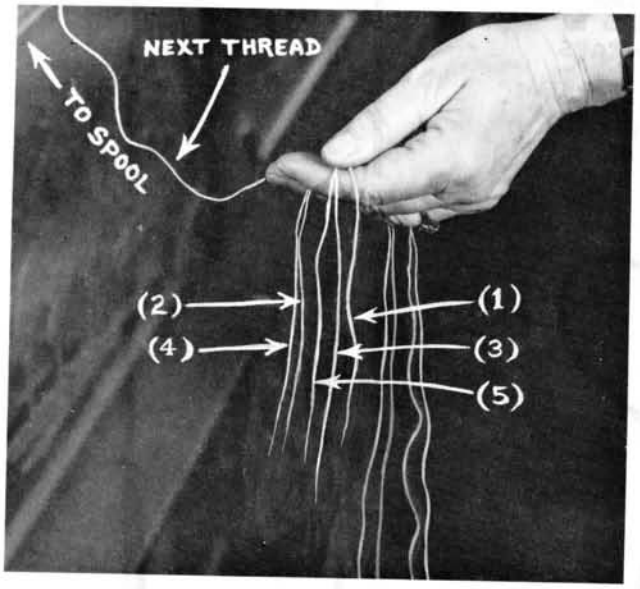
"MAKING" A THREAD — Continued



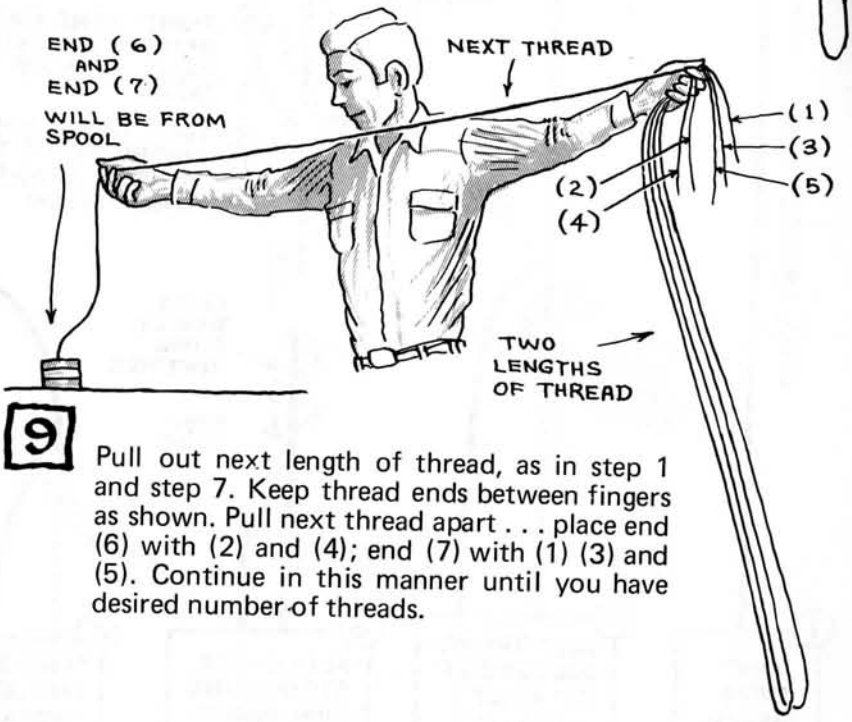
6 Place end (3) along with end (1) as shown above.



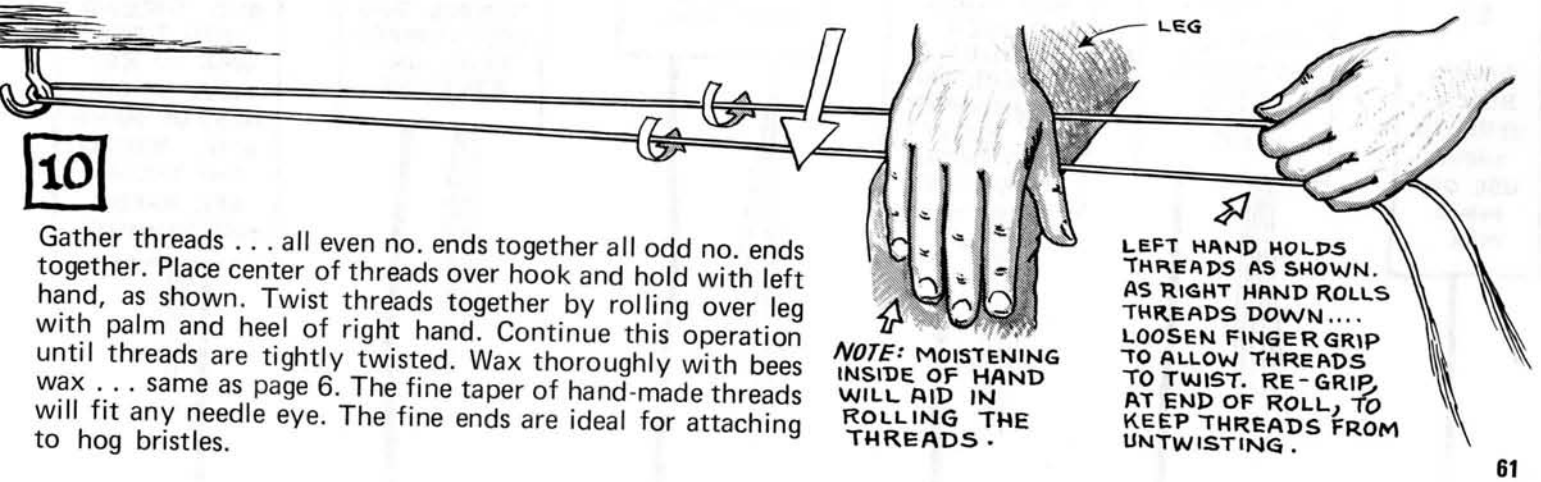
7 Now . . . pull out next length of thread . . . same as in step 1, page 59. Be sure to keep the thread ends in left hand fingers as shown above, and at left. Again roll thread on leg and pull apart as in steps 2-3-4-5.



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).



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 threads will fit any needle eye. The fine ends are ideal for attaching to hog bristles.

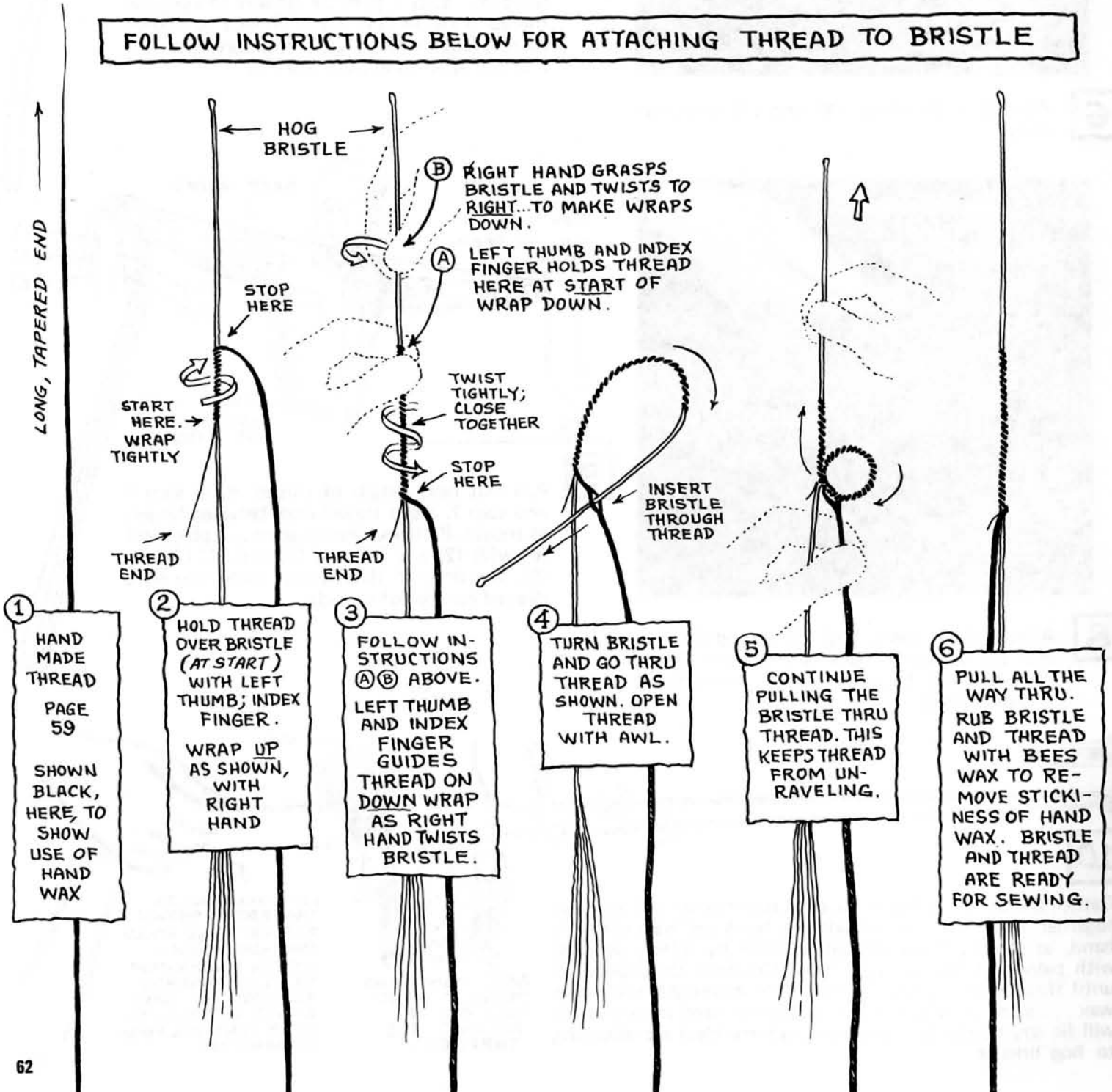
HOG BRISTLES

USED IN PLACE OF HARNESS NEEDLES

Hog bristle . . . 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.

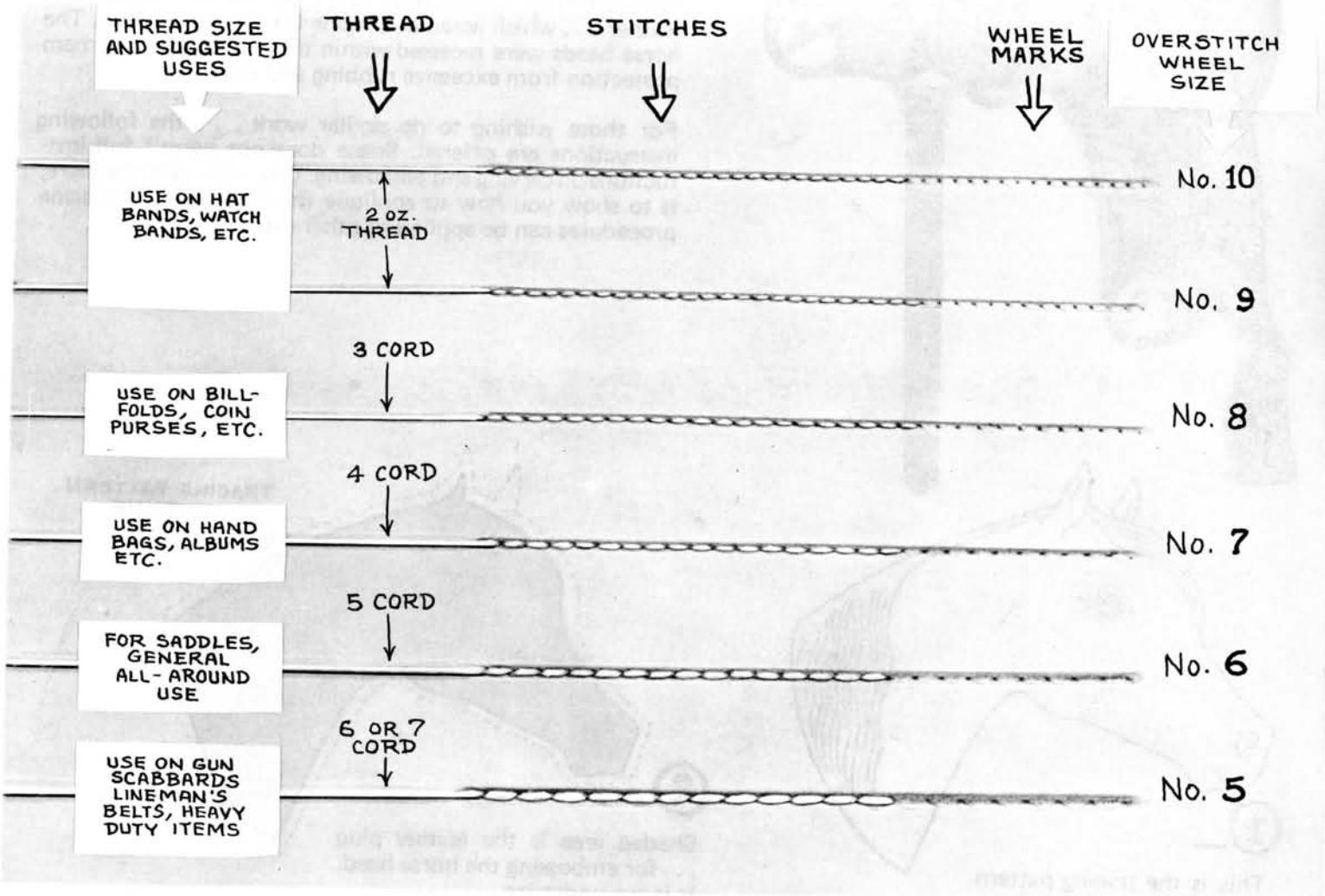
A few shoemaker's supply houses may still carry hog bristles and shoemaker's hand wax (black or brown). The hand wax must be used to stick the thread to the bristle. Bees wax will not hold. The wax is warmed in the hand and fingers and rubbed on the long, tapered end of the thread . . . and also on the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

FOLLOW INSTRUCTIONS BELOW FOR ATTACHING THREAD TO BRISTLE



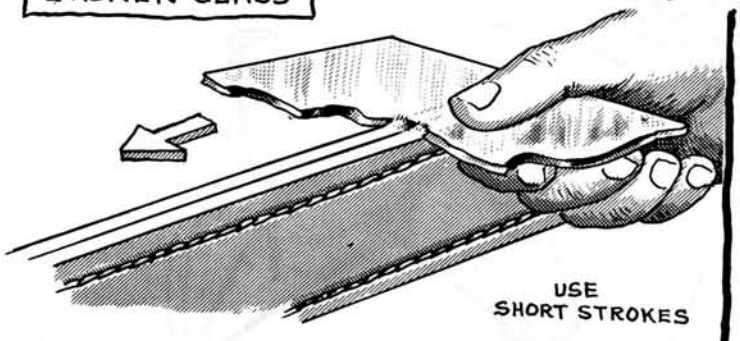
DIFFERENT SIZE OVERSTITCH WHEELS AND THREADS

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.



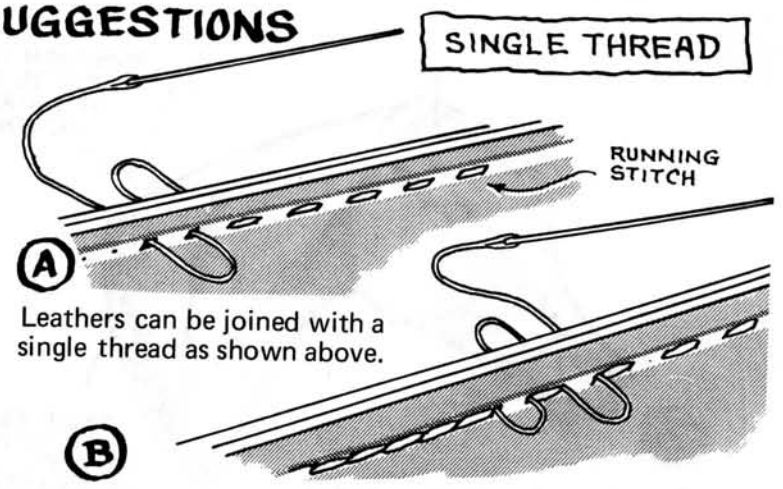
TIPS AND SUGGESTIONS

BROKEN GLASS



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.

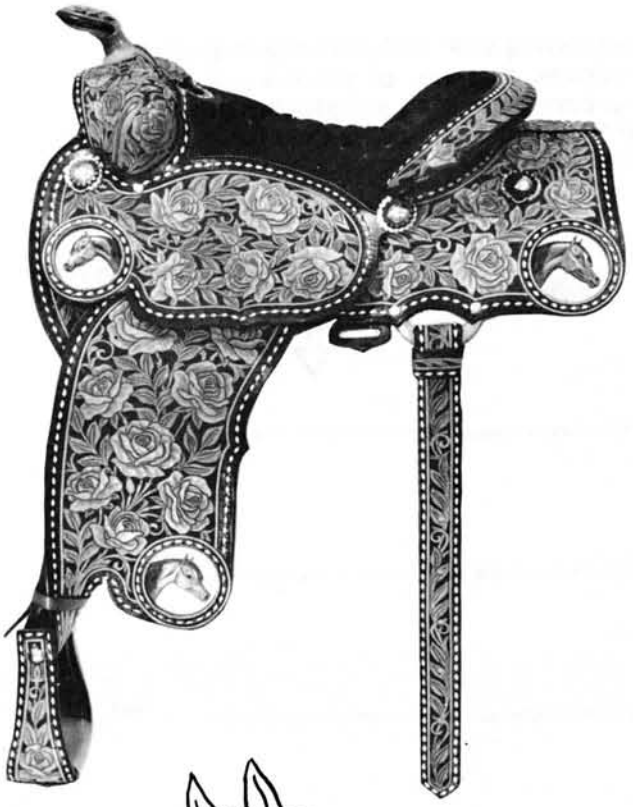
SINGLE THREAD



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

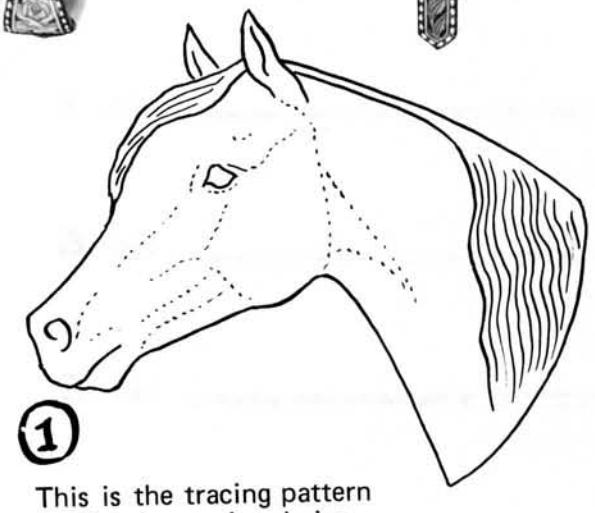
By going back through the *same* holes, in the *opposite* direction, you have the same stitch as if you had used two needles.

CONCEALED APPLIQUÉ STITCH



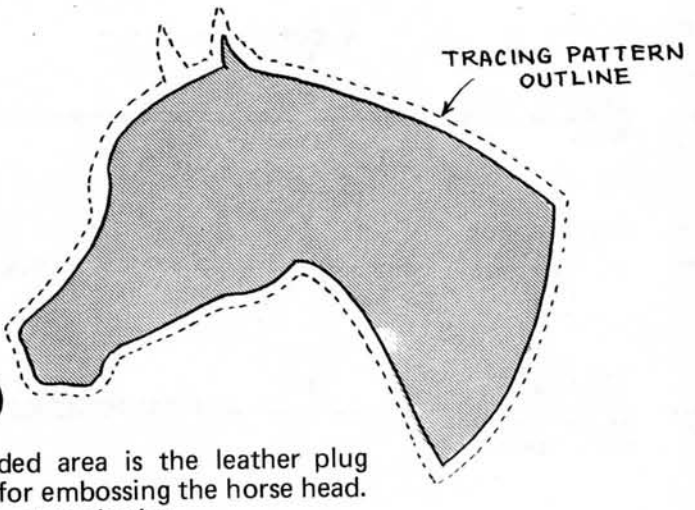
This custom-made saddle features embossed Arabian horse heads, as shown in photo at left. They were cut out and sewn to 23 K gold kid background . . . with a concealed applique stitch. Circles were cut out of the skirting (saddle) leather . . . which acted as a frame for the horse heads. The horse heads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



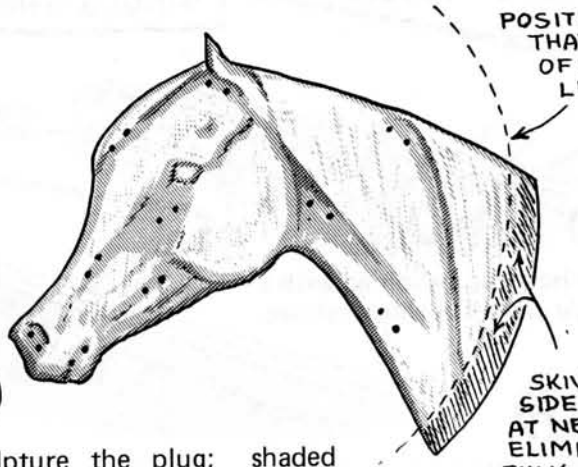
1

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



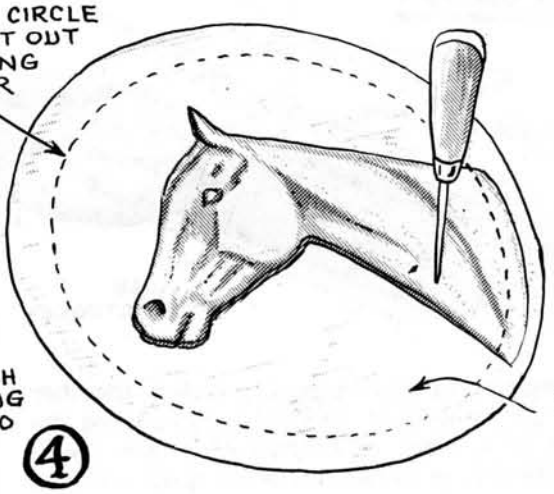
2

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



3

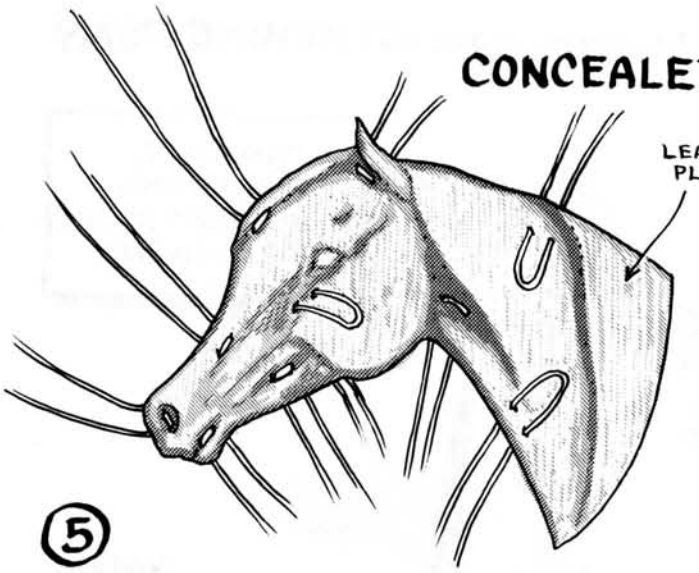
Sculpture the plug; shaded areas. Black dots indicate position of awl holes, step 4.



4

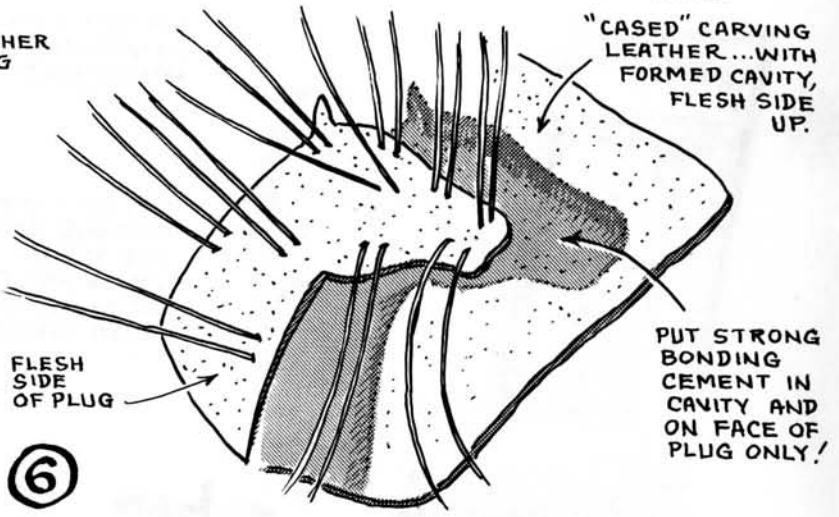
Place plug, in position, on background leather . . . and stab awl holes through plug and back-leather . . . positions shown; step 3.

CONCEALED APPLIQUÉ STITCH — Continued



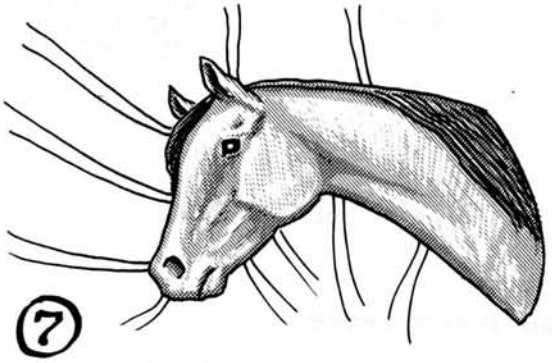
⑤

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.



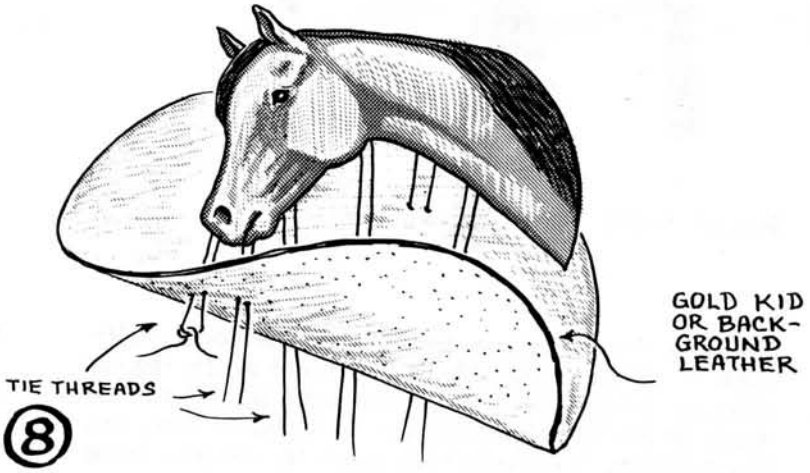
⑥

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.



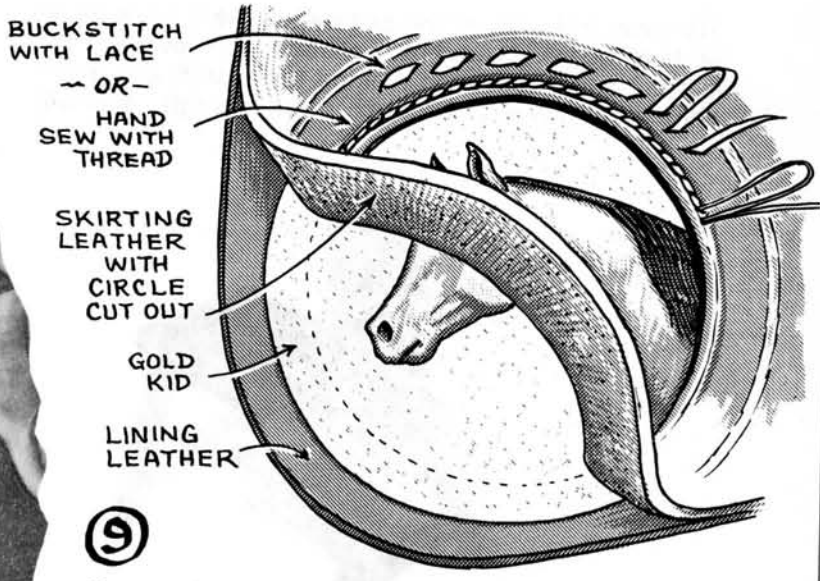
⑦

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

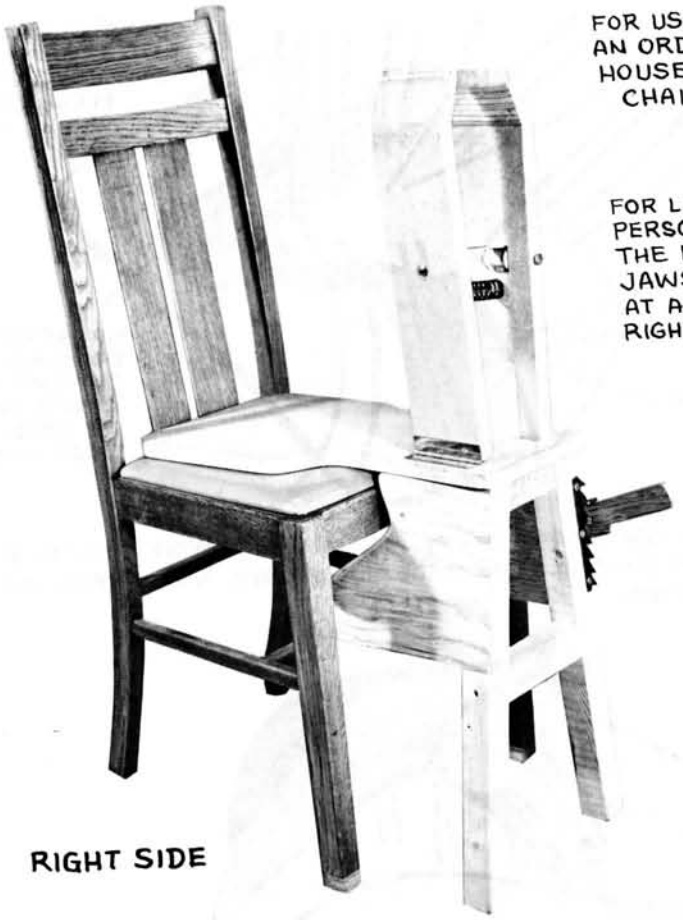
Now . . . put threads down through holes, in background leather, punched with awl in step 4. Pull threads up tight . . . and tie.



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 . . . actual size.

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

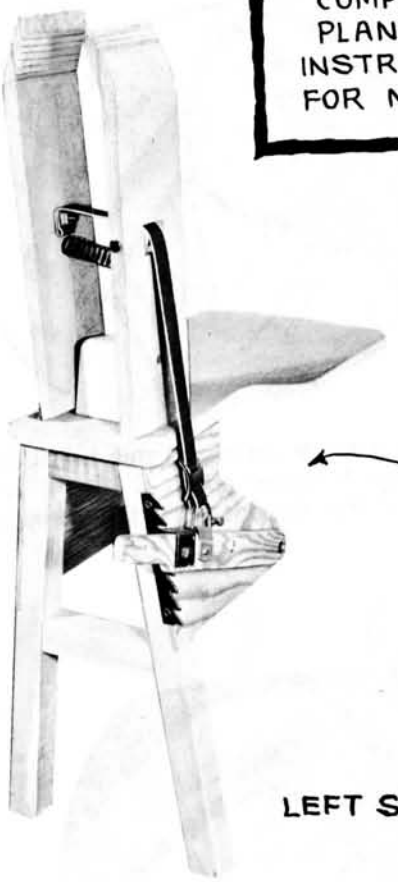


FOR USE WITH AN ORDINARY HOUSEHOLD CHAIR

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

RIGHT 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.

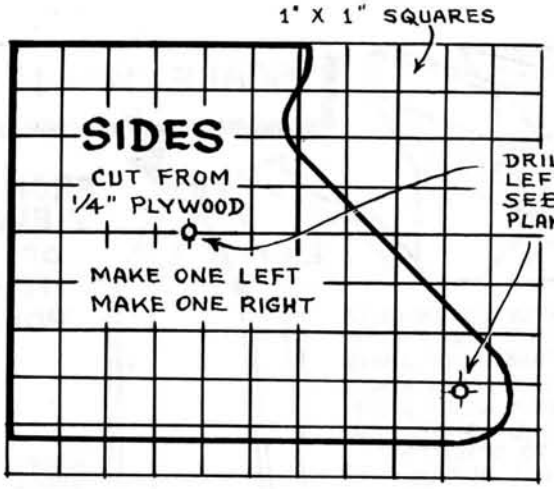
LEFT SIDE

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.

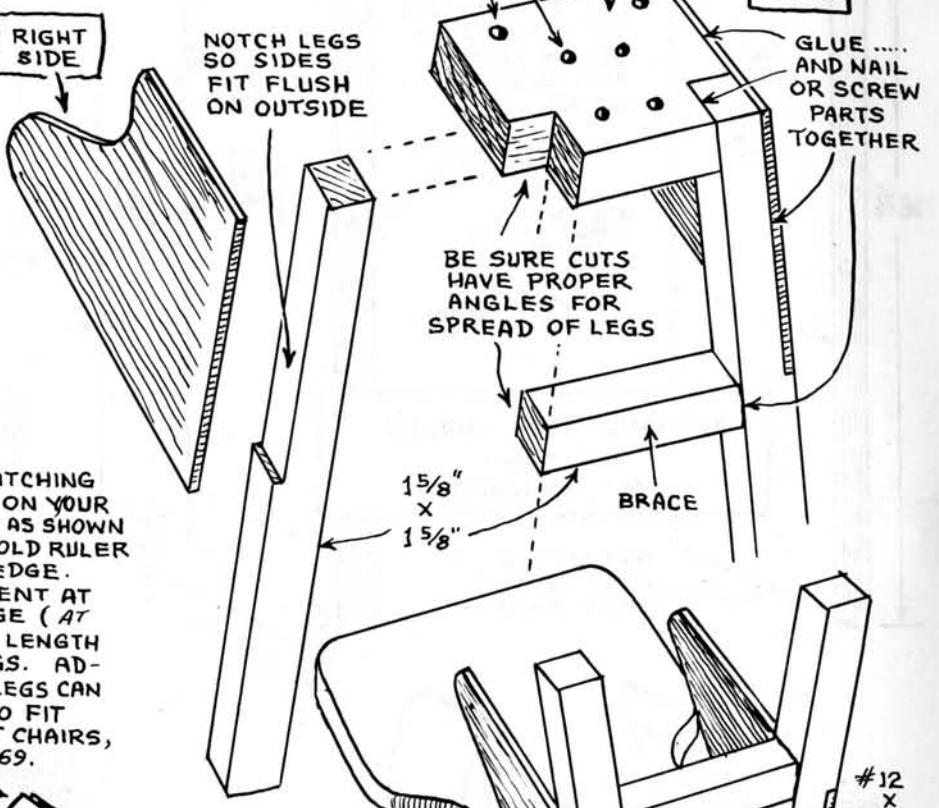
The jaws and seat, of the one shown, were made of ¾" particle board. It is quite satisfactory. However, our instructions recommend making these parts out of ¾" plywood. Plywood has much more strength, and will last for many years of service.

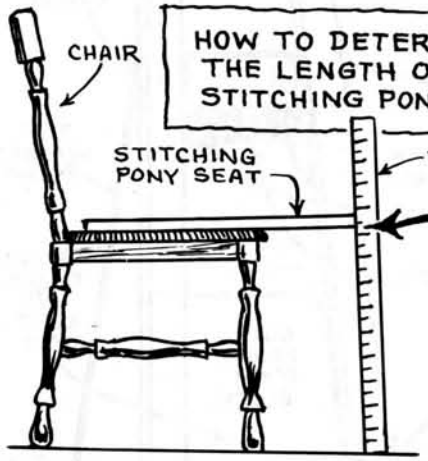
Study all of the pages and plans before beginning to make this project. All of the materials are readily available from your hardware and lumber sources. After completion, all parts should be thoroughly sanded. The project can be stained or varnished, if desired, for longer serviceability and pleasing appearance. If any measurements are in doubt, the plans are drawn in scale: ¼" 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.



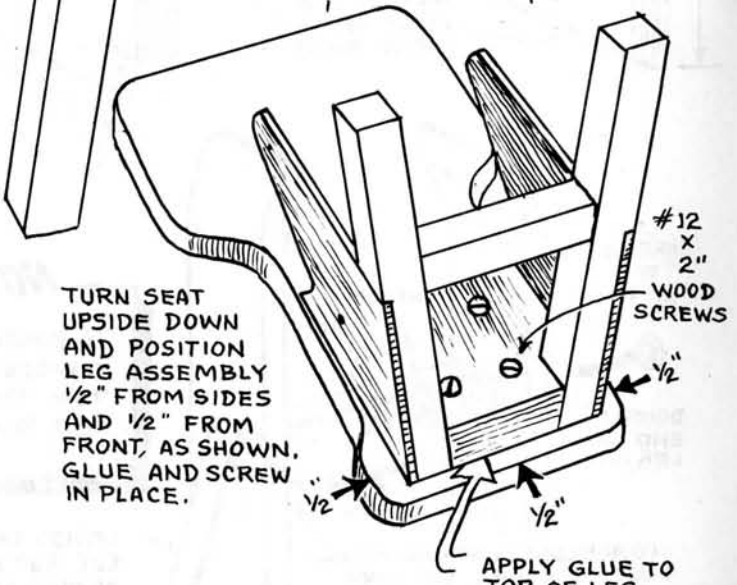
ASSEMBLY





HOW TO DETERMINE THE LENGTH OF YOUR STITCHING PONY LEGS

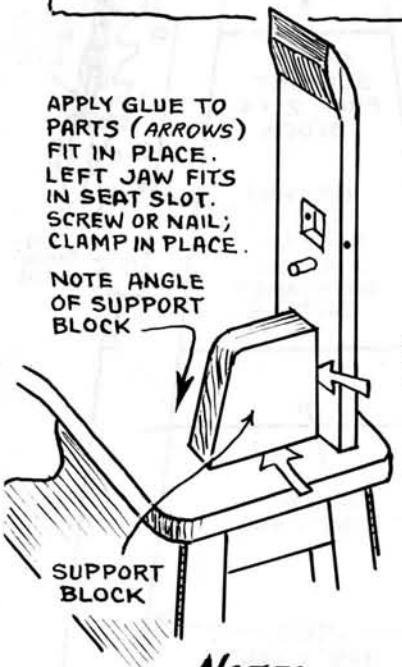
PLACE STITCHING PONY SEAT ON YOUR CHAIR SEAT AS SHOWN AT LEFT. HOLD RULER AT FRONT EDGE. MEASUREMENT AT BOTTOM EDGE (*AT ARROW*) IS LENGTH TO CUT LEGS. ADJUSTABLE LEGS CAN BE MADE TO FIT DIFFERENT CHAIRS, *SEE PAGE 69.*

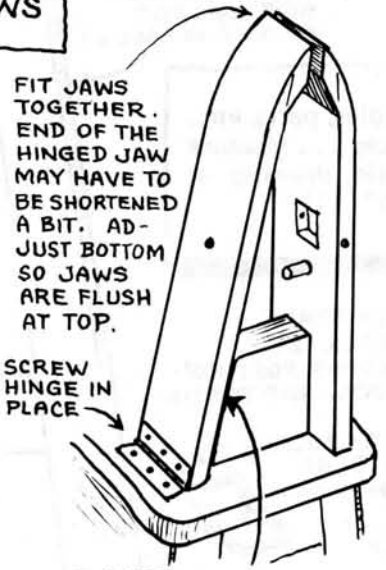


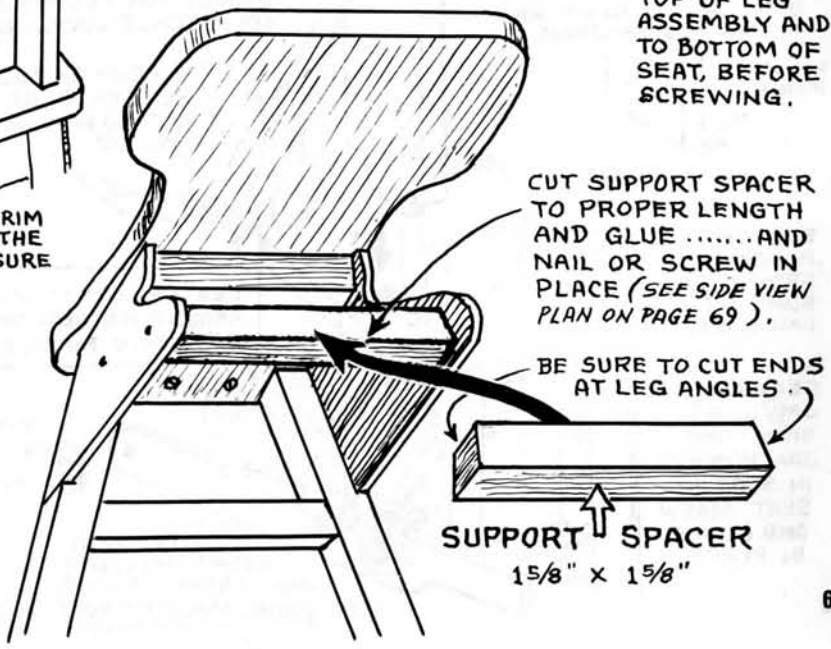
TURN SEAT UPSIDE DOWN AND POSITION LEG ASSEMBLY 1/2" FROM SIDES AND 1/2" FROM FRONT, AS SHOWN. GLUE AND SCREW IN PLACE.

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

ATTACHING THE JAWS

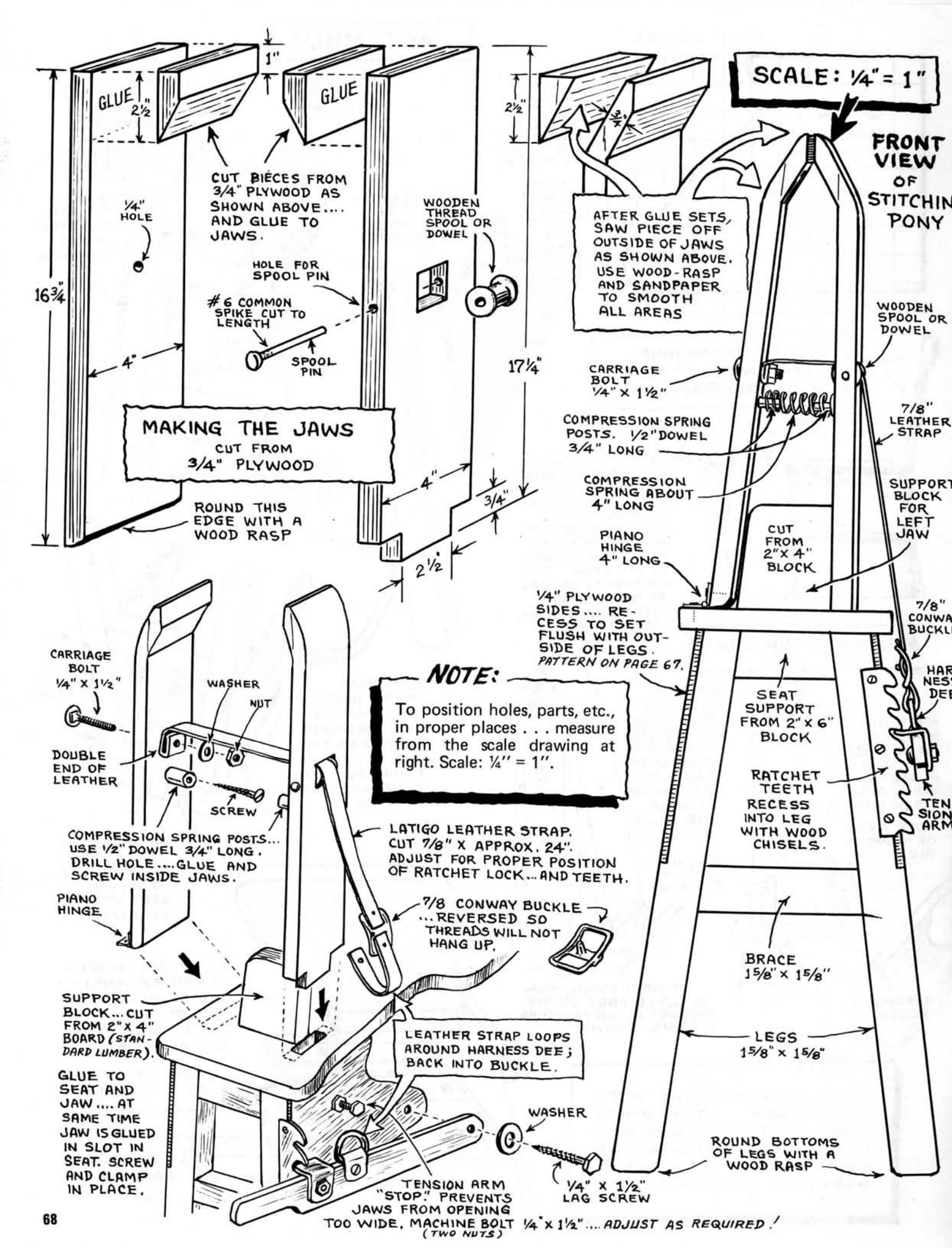


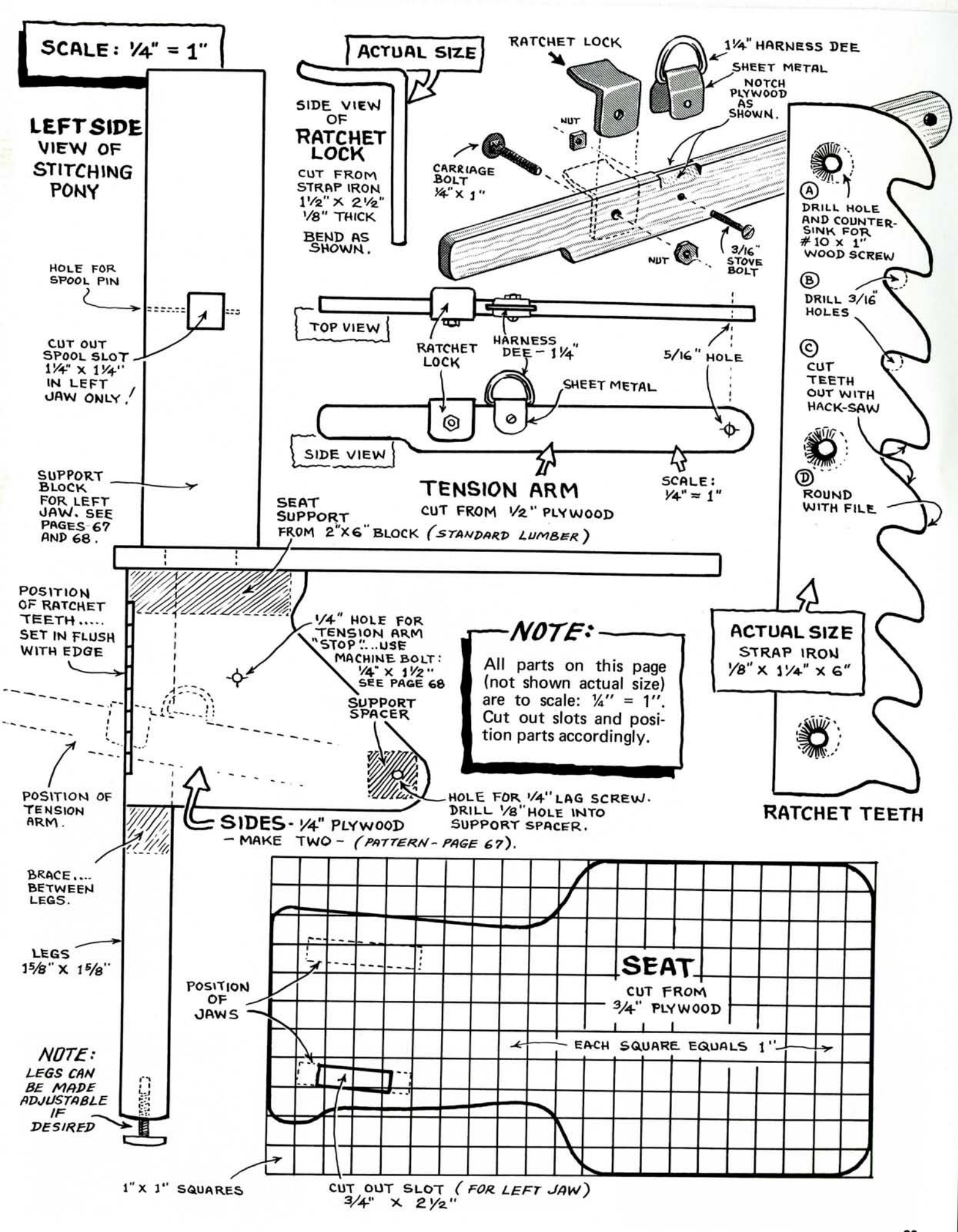




NOTE:

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.


SCALE: ¼" = 1"
FRONT VIEW OF STITCHIN PONY
GLUE
GLUE
1"
2½"
CUT PIECES FROM 3/4" PLYWOOD AS SHOWN ABOVE.... AND GLUE TO JAWS.
¼" HOLE
WOODEN THREAD SPOOL OR DOWEL
HOLE FOR SPOOL PIN
6 COMMON SPIKE CUT TO LENGTH
SPOOL PIN
16¾"
4"
17¼"
MAKING THE JAWS
CUT FROM 3/4" PLYWOOD
ROUND THIS EDGE WITH A WOOD RASP
4"
3/4"
2½"
AFTER GLUE SETS, SAW PIECE OFF OUTSIDE OF JAWS AS SHOWN ABOVE. USE WOOD-RASP AND SANDPAPER TO SMOOTH ALL AREAS
WOODEN SPOOL OR DOWEL
CARRIAGE BOLT ¼" X 1½"
7/8" LEATHER STRAP
COMPRESSION SPRING POSTS. ½" DOWEL 3/4" LONG
COMPRESSION SPRING ABOUT 4" LONG
SUPPORT BLOCK FOR LEFT JAW
CUT FROM 2" X 4" BLOCK
PIANO HINGE 4" LONG
¼" PLYWOOD SIDES.... RECESS TO SET FLUSH WITH OUTSIDE OF LEGS. PATTERN ON PAGE 67.
7/8" CONWA BUCKL
HAR NES DEE
SEAT SUPPORT FROM 2" X 6" BLOCK
RATCHET TEETH RECESS INTO LEG WITH WOOD CHISELS.
TEN SION ARM
BRACE 1⅝" X 1⅝"
LEGS 1⅝" X 1⅝"
ROUND BOTTOMS OF LEGS WITH A WOOD RASP
NOTE:
To position holes, parts, etc., in proper places . . . measure from the scale drawing at right. Scale: ¼" = 1".
CARRIAGE BOLT ¼" X 1½"
WASHER
NUT
DOUBLE END OF LEATHER
SCREW
COMPRESSION SPRING POSTS... USE ½" DOWEL 3/4" LONG. DRILL HOLE....GLUE AND SCREW INSIDE JAWS.
LATIGO LEATHER STRAP. CUT 7/8" X APPROX. 24". ADJUST FOR PROPER POSITION OF RATCHET LOCK... AND TEETH.
PIANO HINGE
7/8 CONWAY BUCKLE ...REVERSED SO THREADS WILL NOT HANG UP.
SUPPORT BLOCK... CUT FROM 2" X 4" BOARD (STANDARD LUMBER).
LEATHER STRAP LOOPS AROUND HARNESS DEE; BACK INTO BUCKLE.
GLUE TO SEAT AND JAW.... AT SAME TIME JAW IS GLUED IN SLOT IN SEAT. SCREW AND CLAMP IN PLACE.
WASHER
¼" X 1½" LAG SCREW
TENSION ARM "STOP" PREVENTS JAWS FROM OPENING TOO WIDE. MACHINE BOLT ¼" X 1½".... ADJUST AS REQUIRED! (TWO NUTS)


SCALE: 1/4" = 1"
LEFT SIDE VIEW OF STITCHING PONY
HOLE FOR SPOOL PIN
CUT OUT SPOOL SLOT 1¼" X 1¼" IN LEFT JAW ONLY!
SUPPORT BLOCK FOR LEFT JAW. SEE PAGES 67 AND 68.
POSITION OF RATCHET TEETH..... SET IN FLUSH WITH EDGE
POSITION OF TENSION ARM.
BRACE.... BETWEEN LEGS.
LEGS 1⅝" X 1⅝"
NOTE: LEGS CAN BE MADE ADJUSTABLE IF DESIRED
ACTUAL SIZE
SIDE VIEW OF RATCHET LOCK
CUT FROM STRAP IRON 1½" X 2½" 1/8" THICK
BEND AS SHOWN.
RATCHET LOCK
1¼" HARNESS DEE
SHEET METAL
NOTCH PLYWOOD AS SHOWN.
NUT
CARRIAGE BOLT ¼" X 1"
NUT
3/16" STOVE BOLT
TOP VIEW
RATCHET LOCK
HARNESS DEE - 1¼"
5/16" HOLE
SHEET METAL
SIDE VIEW
TENSION ARM
CUT FROM ½" PLYWOOD
SCALE: ¼" = 1"
SEAT SUPPORT FROM 2"X6" BLOCK (STANDARD LUMBER)
¼" HOLE FOR TENSION ARM "STOP"...USE MACHINE BOLT: ¼" X 1½" SEE PAGE 68
SUPPORT SPACER
HOLE FOR ¼" LAG SCREW. DRILL ⅛" HOLE INTO SUPPORT SPACER.
SIDES - ¼" PLYWOOD - MAKE TWO - (PATTERN - PAGE 67).
NOTE: All parts on this page (not shown actual size) are to scale: ¼" = 1". Cut out slots and position parts accordingly.
A DRILL HOLE AND COUNTER-SINK FOR #10 X 1" WOOD SCREW
B DRILL 3/16" HOLES
C CUT TEETH OUT WITH HACK-SAW
D ROUND WITH FILE
ACTUAL SIZE STRAP IRON 1/8" X 1¼" X 6"
RATCHET TEETH
SEAT CUT FROM ¾" PLYWOOD
EACH SQUARE EQUALS 1"
POSITION OF JAWS
1" X 1" SQUARES
CUT OUT SLOT (FOR LEFT JAW) ¾" X 2½"

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