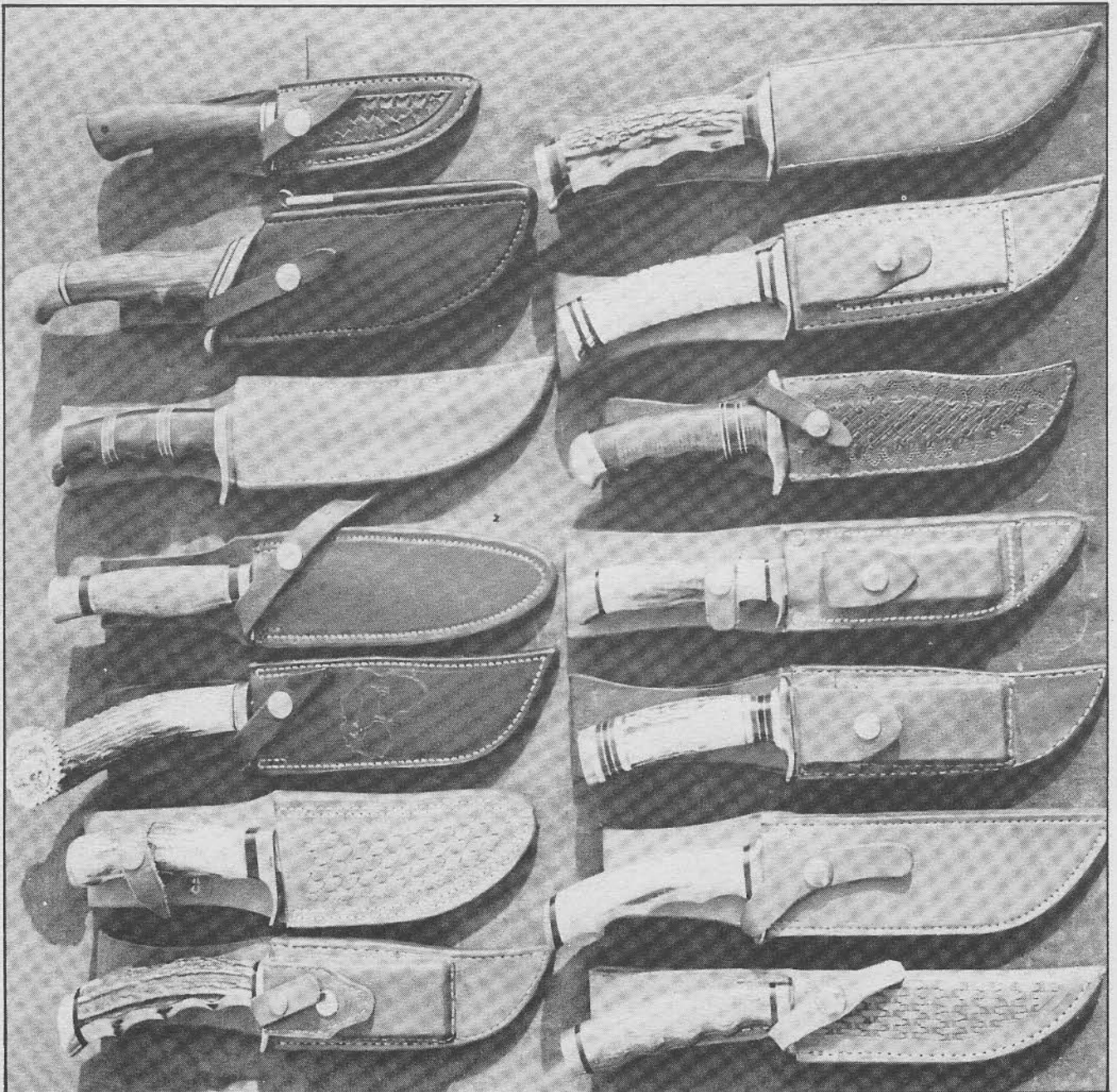
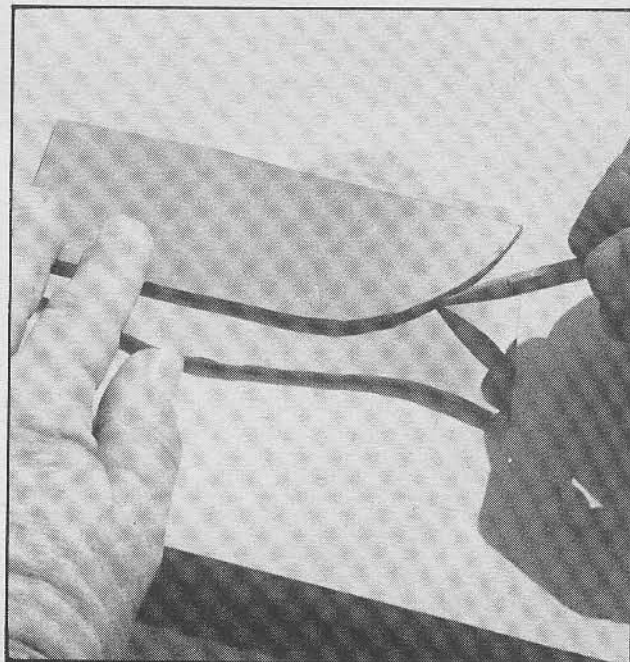
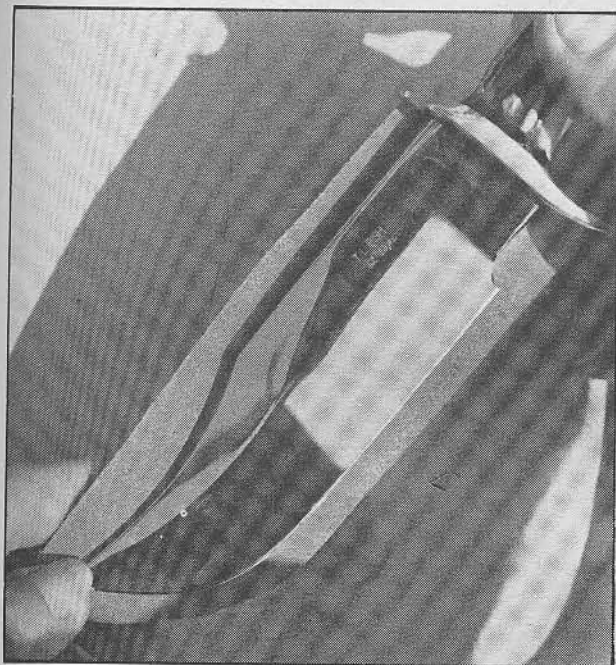


HOME FOR A BLADE



A Custom-Made Sheath Gives Your Knife The Care And Respect It Deserves



Left: The front panel of the sheath is cut from leather, allowing space around the blade to accept the welt and the stitching. (Right) Back panel is traced with front panel as pattern, then it is cut to form back and the belt loop.

MANY SHEATHS furnished with some commercially built hunting and sportsman-type knives are for the birds! The reasons for this skepticism on my part were arrived at after close examination of countless sheaths, the majority of which were constructed of inferior materials. The all-important stitching was done with cheap, flimsy cotton thread and the material used in the sheath itself was akin only to Tijuana leather!

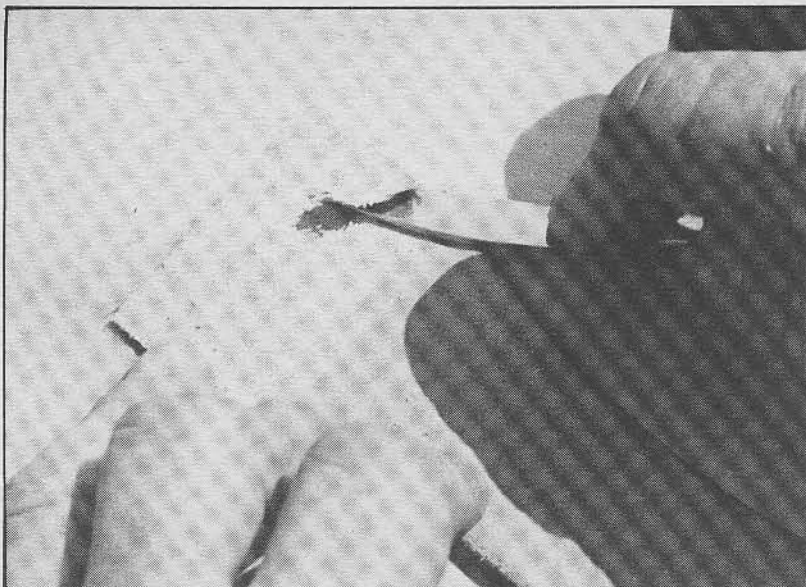
Despite that comment, not all commercial knife sheaths are constructed of poor materials. Some are quite good. As a rule, the bad ones are constructed of a leather-like material — possibly reclaimed, compressed leather fibers — that is too flimsy and too thin. The stitching makes the sheath unworthy and downright unsafe for carrying a sharp hunting-type knife. Should the wearer take a tumble down

a mountainside, the sharp blade could slice through this thin material and cause severe injury. It has happened.

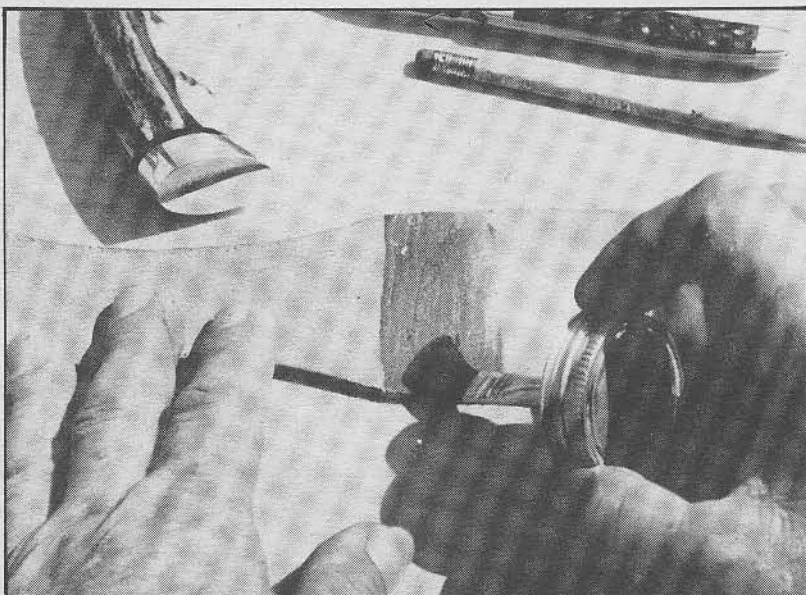
Admittedly, I'm hard to please when it comes to leather. I want that sheath to be of genuine leather, tough and thick enough to withstand years of use and even unintentional abuse.

I built my first knife sheath over a third of a century ago and have been building my own since. Should this one piece of equipment fail me, I have no one to cuss but myself!

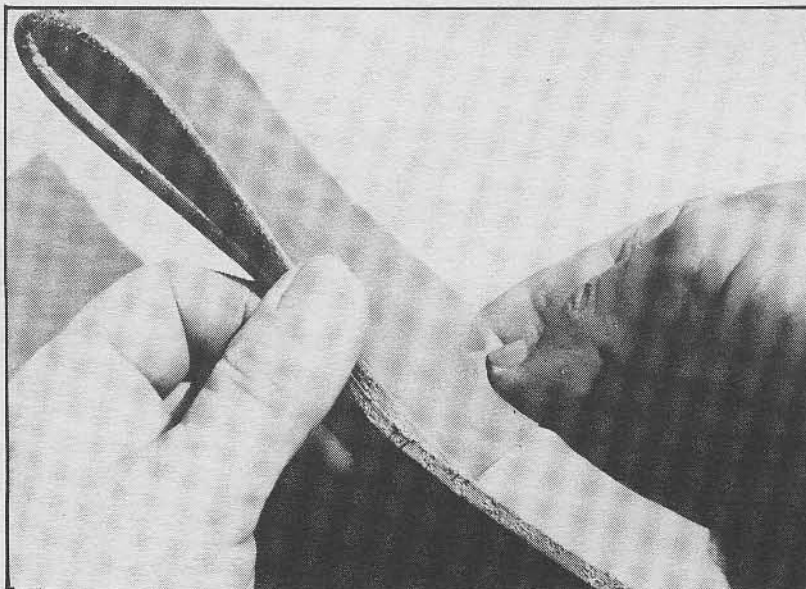
Construction of a durable, safe knife sheath involves more than cutting and sewing a couple of pieces of leather together, cutting a couple of slits in the back panel to serve as a belt loop, then letting it go at that. A really good knife sheath is built only after several hours of painstaking, careful workmanship and a little common, ordinary horse sense,



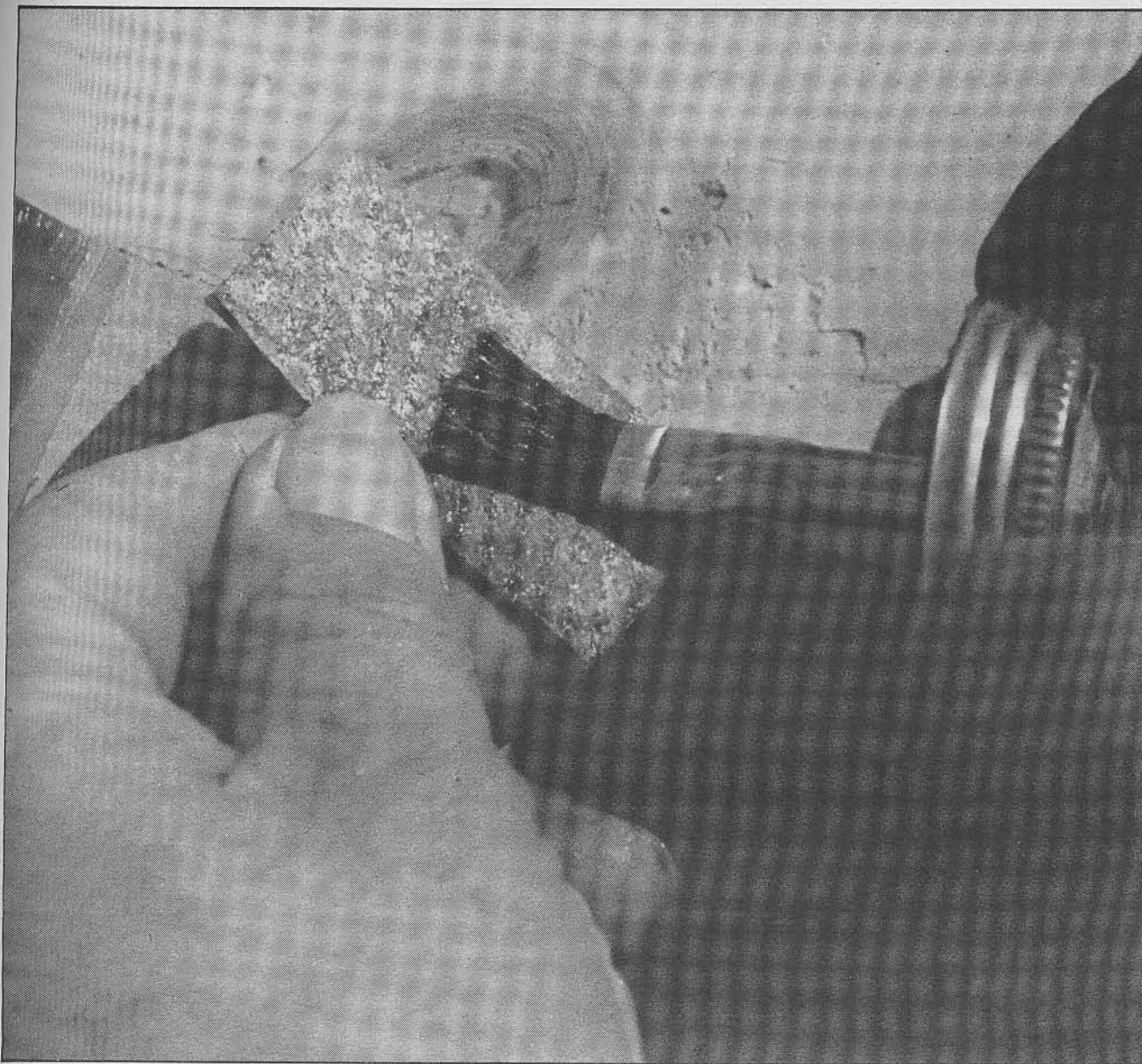
The end of the belt loop section of the leather is skived — or cut on a taper.



The skived section of belt loop then is coated with a good flexible leather cement. The author recommends type made by Barge.



When cement becomes tacky, the skived section of the belt loop is folded with the smooth side out, then it is pressed into place on designated sheath section.



A small leather block is cut and skived to form counter on which knife guard will rest. The block is coated with cement; it then is pressed into place and is left to dry.

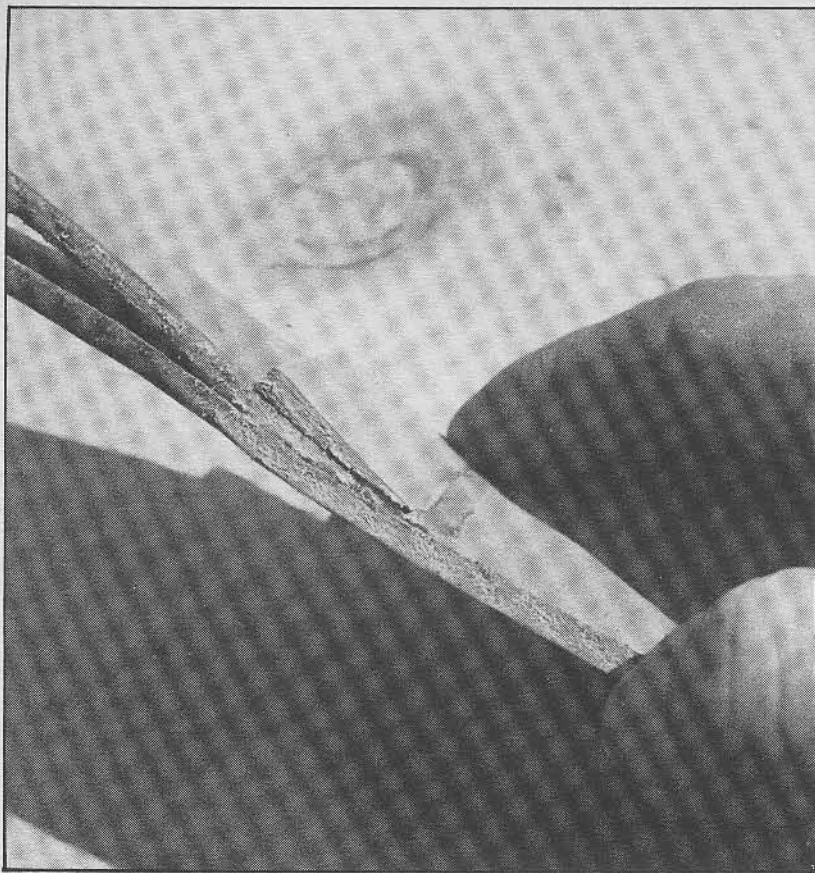
although variations in design certainly are the privilege of the individual maker.

Long ago, I found that the best, most durable leather for building such accessories as a holster, gunbelt or knife sheath is that which is known in the leather trade as rolled shoulders. This leather, the toughest part of the beef hide, is tanned carefully into what is known as California leather. It then is rolled with steel rollers under several tons of pressure. This gives it a toughness that will withstand years of hard use and repeated soakings in water. While this leather is available in several weights, the best to use for our purpose will be in either eight- or nine-ounce weights.

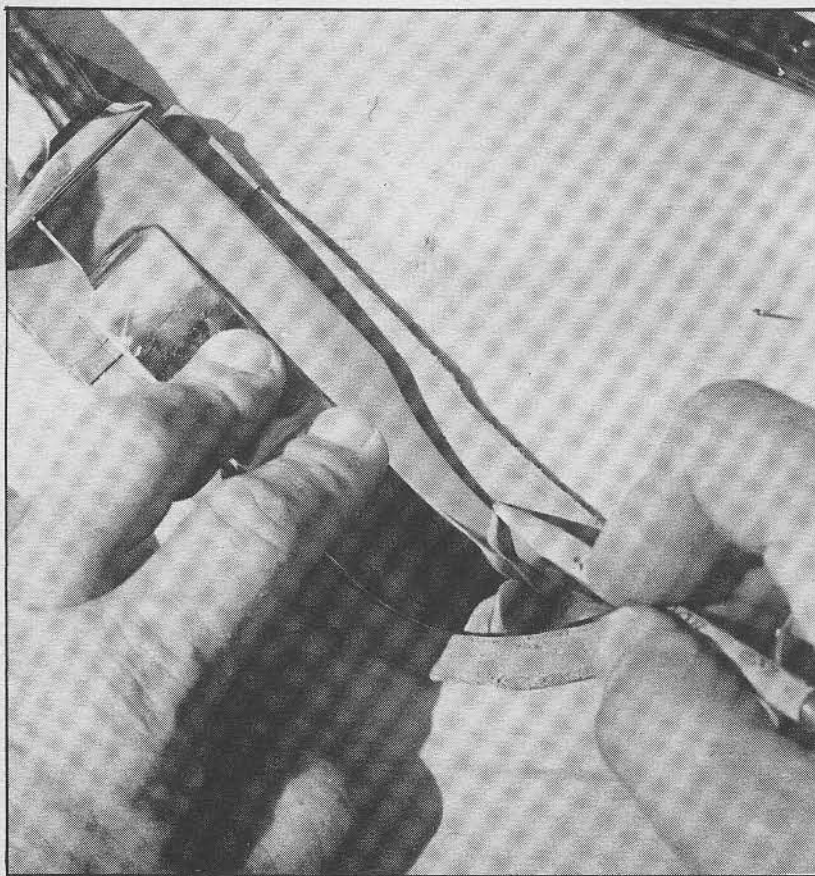
This means that the tanned leather will weigh eight or nine ounces per square foot. The quantity of leather needed for a sheath for a specific knife will depend upon the size and length of the blade.

One important feature in building a knife sheath is to attain a perfect blade fit. Therefore, the blade of the knife for which the sheath is intended must be used as a pattern in laying out the front and back panels of the sheath proper.

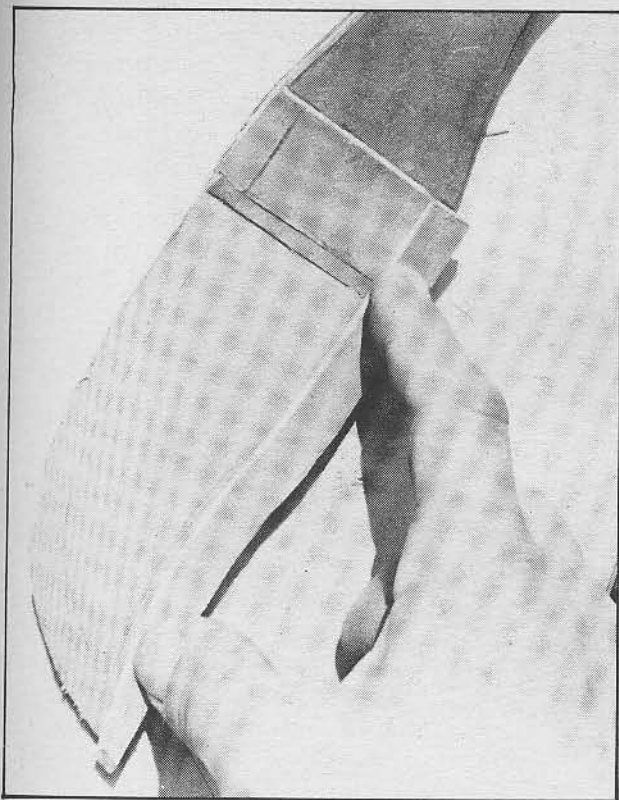
The back panel will consist of the sheath pocket to accept the blade and the belt loop. This section is drawn carefully onto the surface of the leather with a soft lead



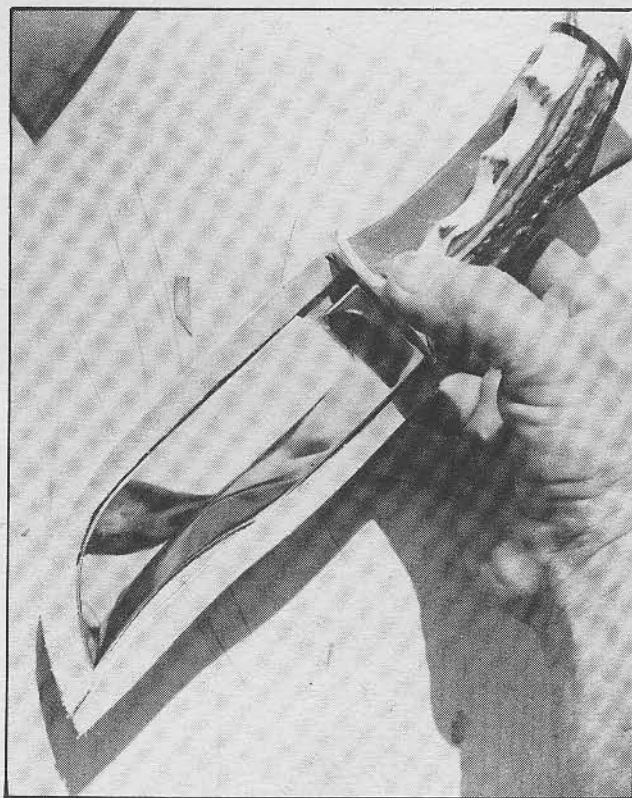
With belt loop and counter cemented in place next step is to cut and install the welts and front panel of the sheath.



Held snugly against the counter, the blade then is traced onto the sheath section with a soft-lead pencil.

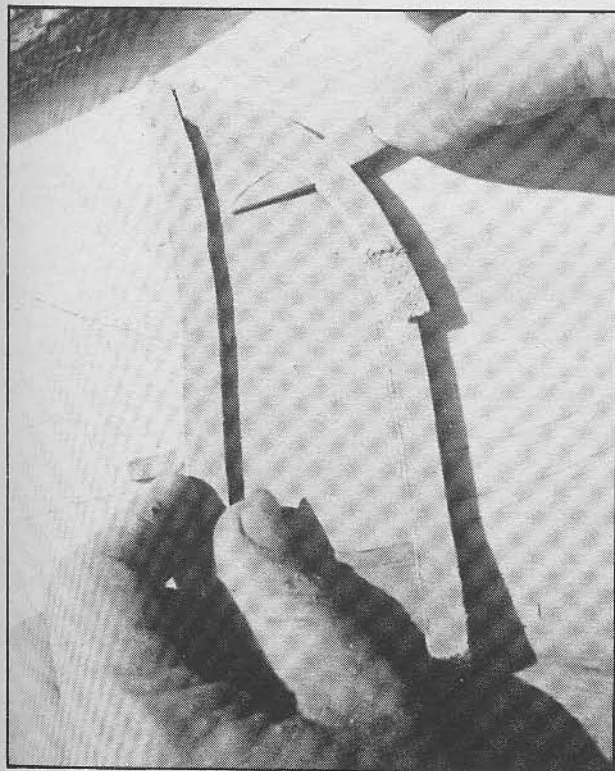


Strips of leather are cut to form the welts. These are cemented, using penciled outline of blade as the guide.



Both welts are cemented to the sheath, taking care that the blade of the knife will have ample clearance.

Starting at the center of the sheath, the welts must be skived in a uniform taper to compensate for blade taper.

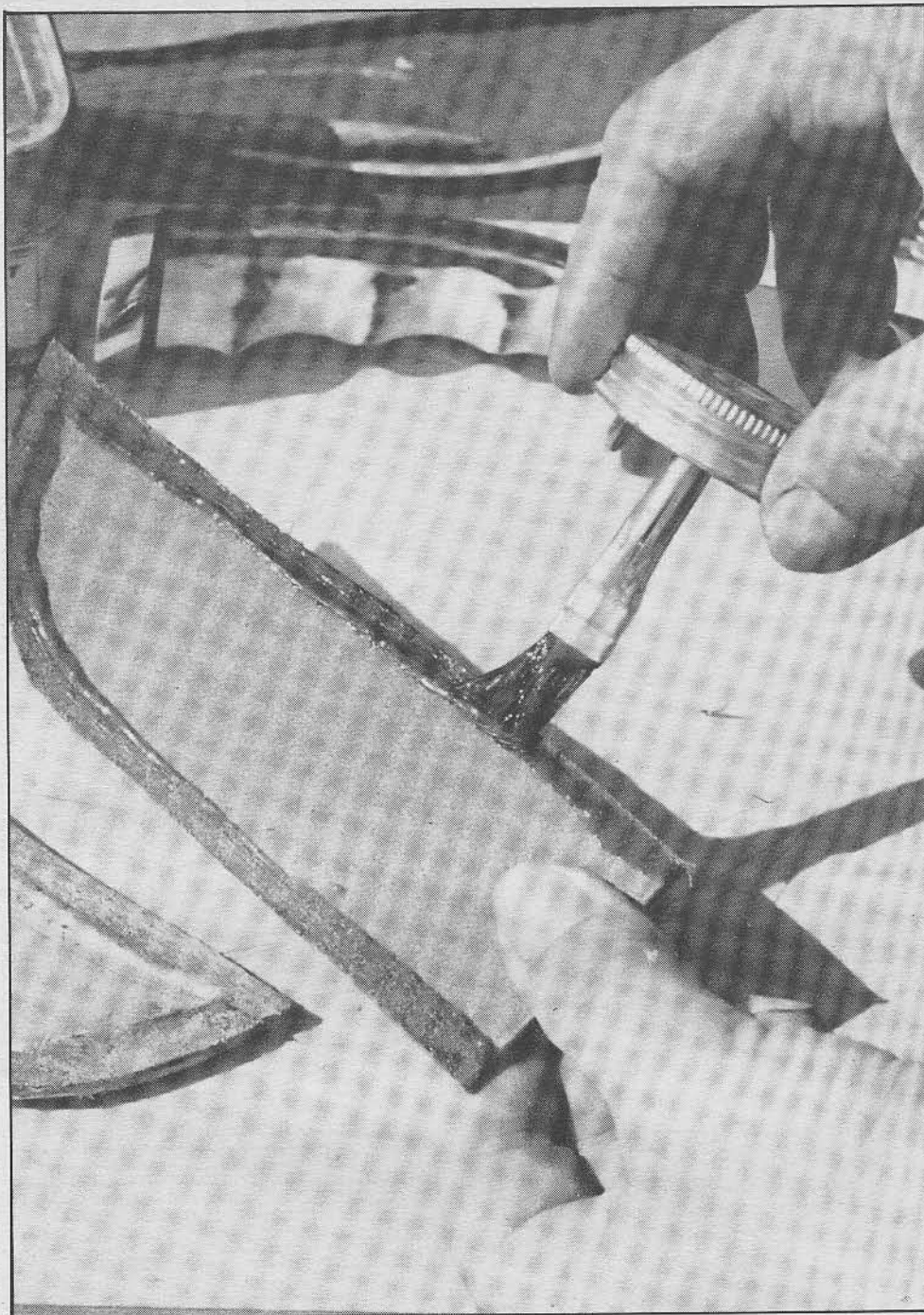


pencil, the blade outline being traced on the lower portion of the leather, with the proposed belt loop extending above.

The entire back panel and belt loop are cut out, using a sharp pocketknife. Make sure that the belt loop is twice its needed length, plus about one inch, on the finished sheath. Once cut out, the belt loop is dampened with water and folded to the front with the smooth side of the leather out. The additional one inch of leather is then skived to a sharp wedge shape, coated with leather cement — preferably Barges — allowed to set a few minutes, then is pressed into its position on the back panel.

During the blade-tracing operation, allow an extra half-inch of leather to extend out beyond the blade on each side. This area will accept the stitching later. The front panel then is traced, using the knife blade as a pattern and adding that all-important extra half-inch or so for stitching area. Then it is cut out as was the back panel.

At this point we have the front and back panel cut out, the belt loop skived, dampened and folded and cemented in place. The next step is to cut a small wedge-shaped piece of leather to be installed on the section of the belt loop just cemented. This wedge of leather will serve as a counter on which the guard of the knife will seat when the sheath is finished. Determine the exact location for placement of this wedge by holding the hunting knife in place on the back panel. This wedge should fit snugly against the guard on the underside.



The front panel of the knife sheath then is given a coating of a good leather cement in the area that will be in contact with the welts in sheath.

The next two pieces of leather cut and installed are known as the welt. They compensate for the thickness of the knife blade, allowing the sheath to retain an attractive contour and, at the same time, the blade will slide effortlessly in and out of the sheath. These leather strips may be cut from scrap leather to a width of approximately one-half inch, then cemented in place, using the previously traced

outline of the blade as guidelines. Firmly cemented in place on the back panel, the welt then is skived, starting at about the center of the sheath and tapering the cut out to the point. This rids the sheath of excess leather in the area where the blade thins down, resulting in a smooth-fitting sheath.

The welts in place and skived, the knife blade is slid back



The front of the sheath then is pressed into place on the back panel. The sheath is taking shape.

and forth into and out of the sheath channel. Should any obstructing section of leather be apparent in the welt, trim these away with a sharp knife until the blade slides freely.

The top, exposed surfaces of the welts are given a thorough coating of leather cement. The same is applied to the area of the front panel contacting the welts, when pressed into place. Allow the cement to dry until tacky, then press

the front panel firmly in place onto the welts. Make certain at this point that the front panel sits in exact alignment with the contour of the back panel. Once in place, lightly pound all cemented areas with a hammer to assure a positive bond of all cemented components.

Incidentally, should one desire to stamp or carve the front panel, this should be done prior to cementing the front

panel to the sheath proper.

The sheath assembled, all that remains is to hand-sew the entire perimeter of the blade area. For this, it is best to use four-cord linen saddlemaker's thread. A length of this is cut to about three feet in length, then drawn through a piece of beeswax. This length of thread will complete about one-half the length around a standard knife sheath designed for a six-inch blade; a new section of thread is brought into use to finish the job.

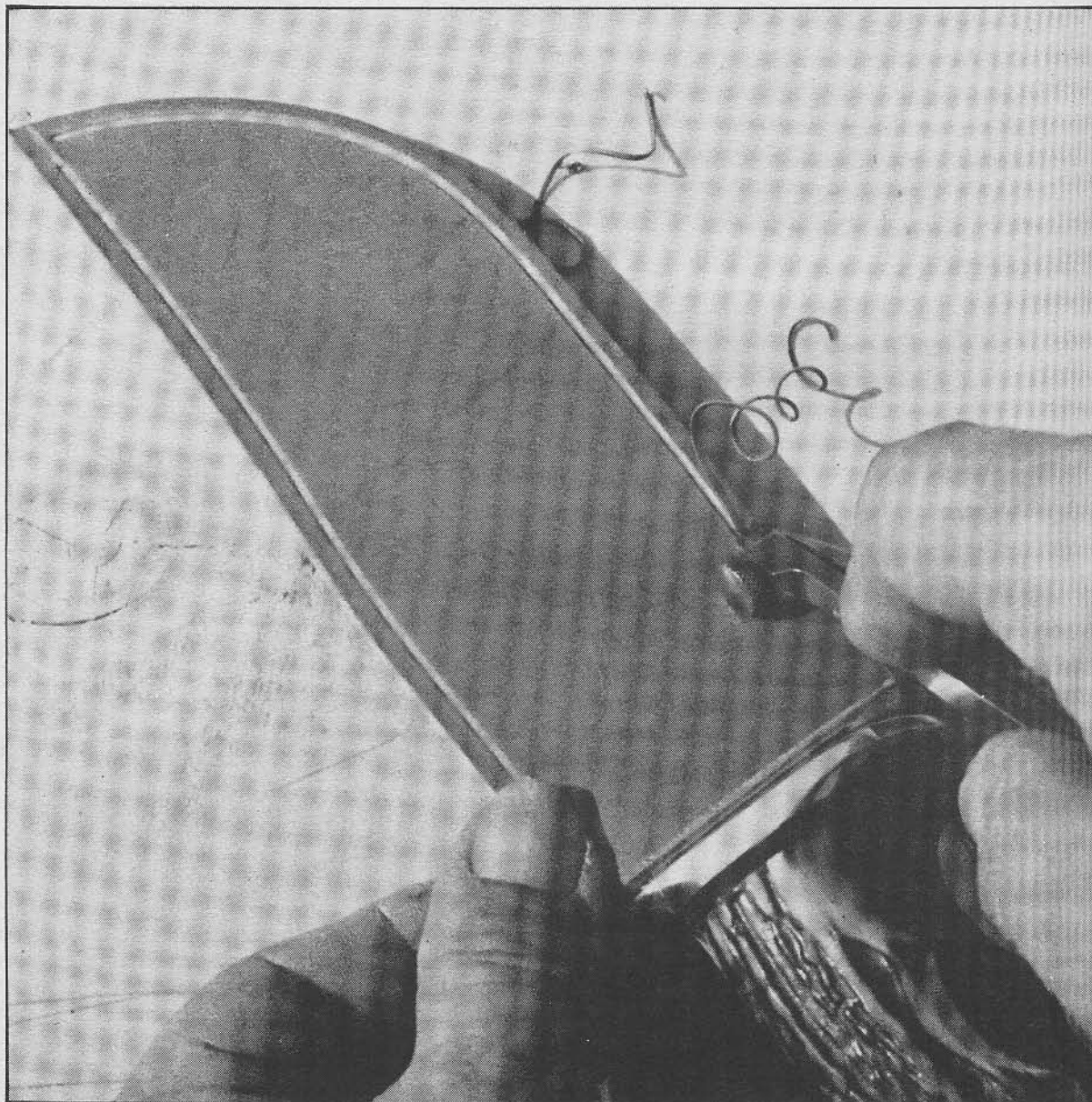
The saddlemaker's stitch is simple, involving the use of two needles. Also needed is a saddlemaker's awl, a gouge compass for marking the stitch area and an edger for trim-

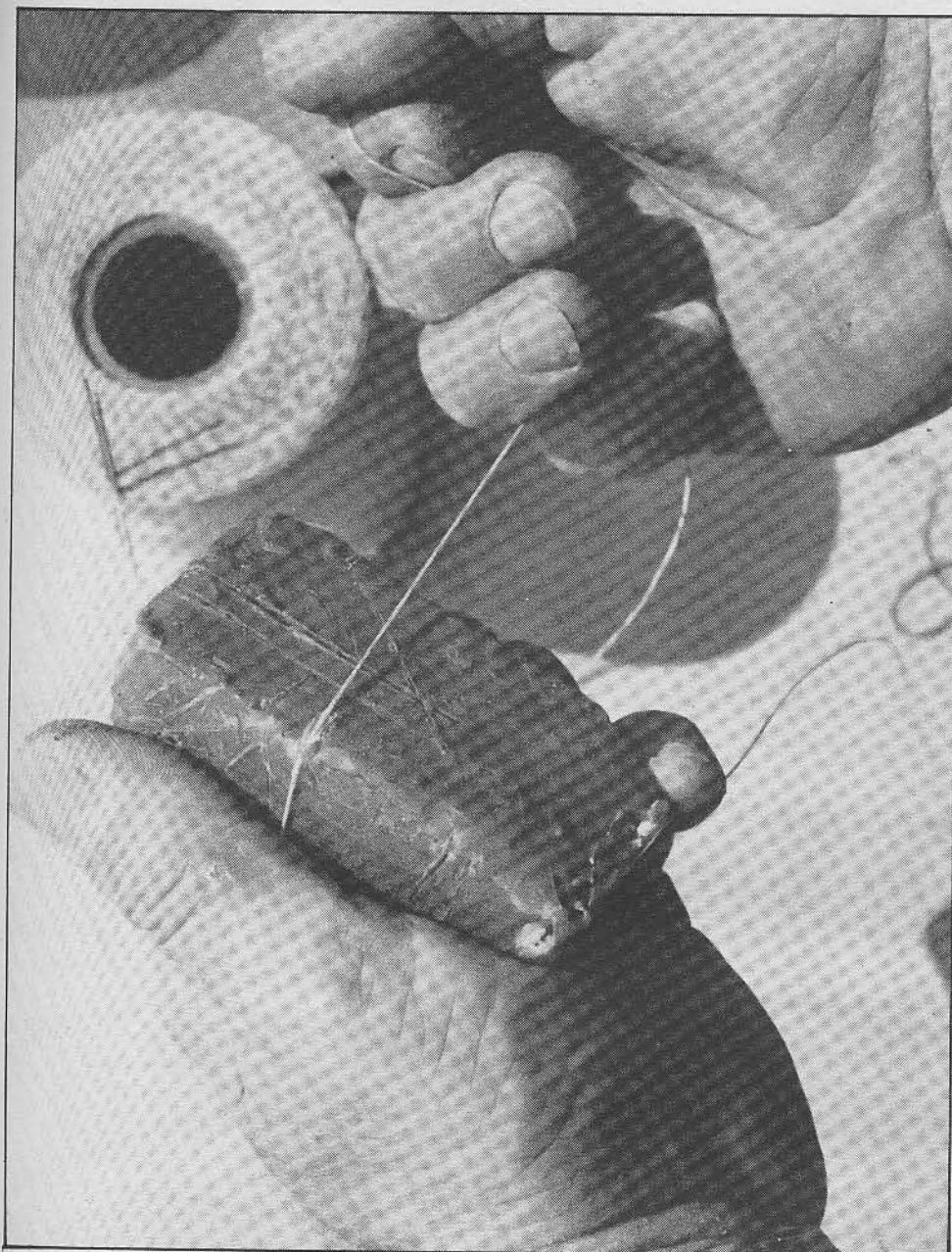
ming and rounding over all the sharp edges of leather once the stitching is completed.

While most home workshops are not equipped with an assortment of leather-working tools, most can be improvised in a few minutes.

Take, for instance, the correct spacing for the holes through which the stitches will be sewn. While there is a leather-working tool known as a stitching spacer wheel, this is not necessary, if one has reasonably good eyesight. The stitching holes are punched with the awl about three-sixteenths-inch apart. These holes must be perfectly perpendicular to assure that the visible stitching on the back of

A stitching groove is cut around the perimeter. All stitches will be taken in this cut groove.





Linen saddle cord is drawn through a cake of beeswax to assure durability and tighter stitches. This is repeated several times to be certain the cord is well coated.

the sheath is kept straight. Too, all stitches must be in perfect alignment so that each penetrates the welt between the front and back panels.

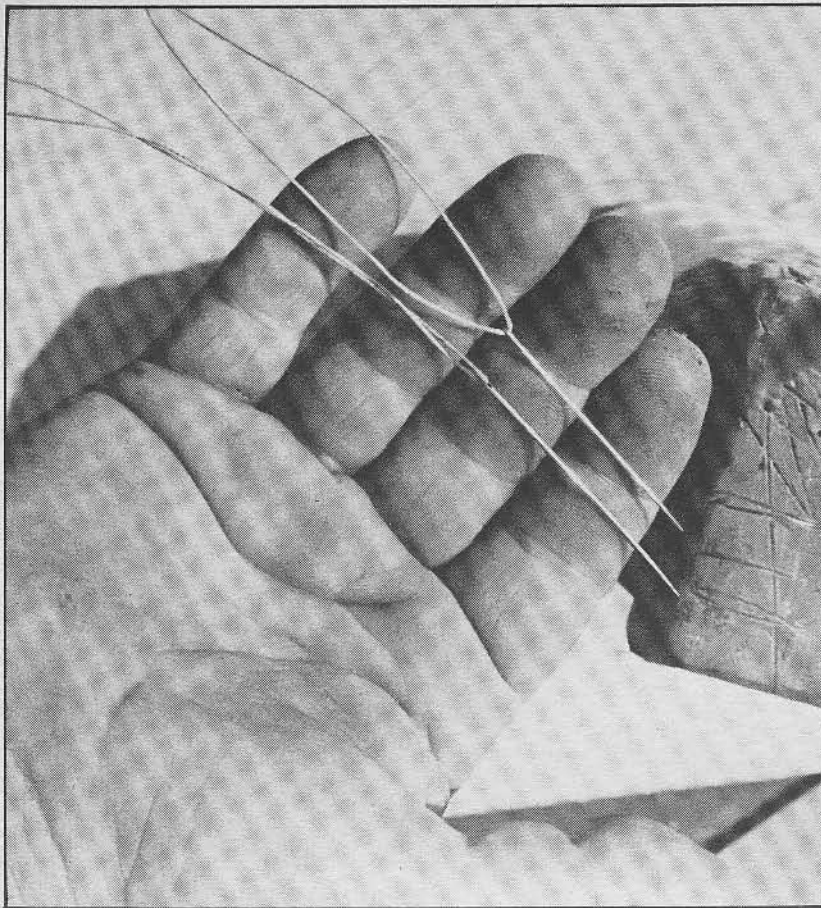
When hand-sewing leather, awling about six holes at a time results in a neater job. In other words, punch a series of six holes, all in perfect alignment, with the awl, stitch these, then punch six more holes. This is repeated until the entire perimeter of the sheath is sewn.

Let's assume that we have six holes awled through the sheath and are ready for the saddlemaker's stitch with two needles and four-cord linen.

One needle is passed through the first hole completely and drawn out until the thread is of equal length on both sides of the sheath. This same needle then is passed through the second hole, pulled reasonably snug.

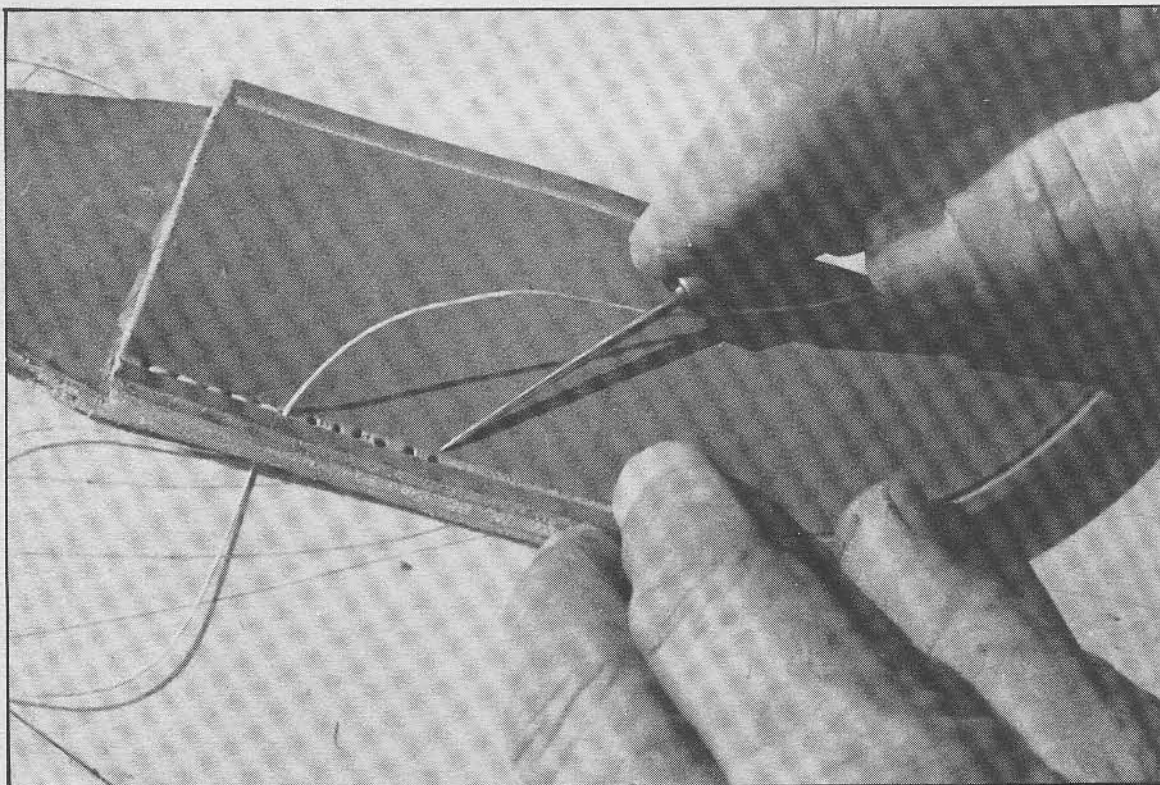
Now the second needle is passed through the second hole, forming a lock stitch. The first needle is passed through the third hole, pulled up snug, then is followed from the opposite side by the second needle. In a nut shell, this stitch consists of running each needle through the same preceding hole, but from opposite sides of the sheath.

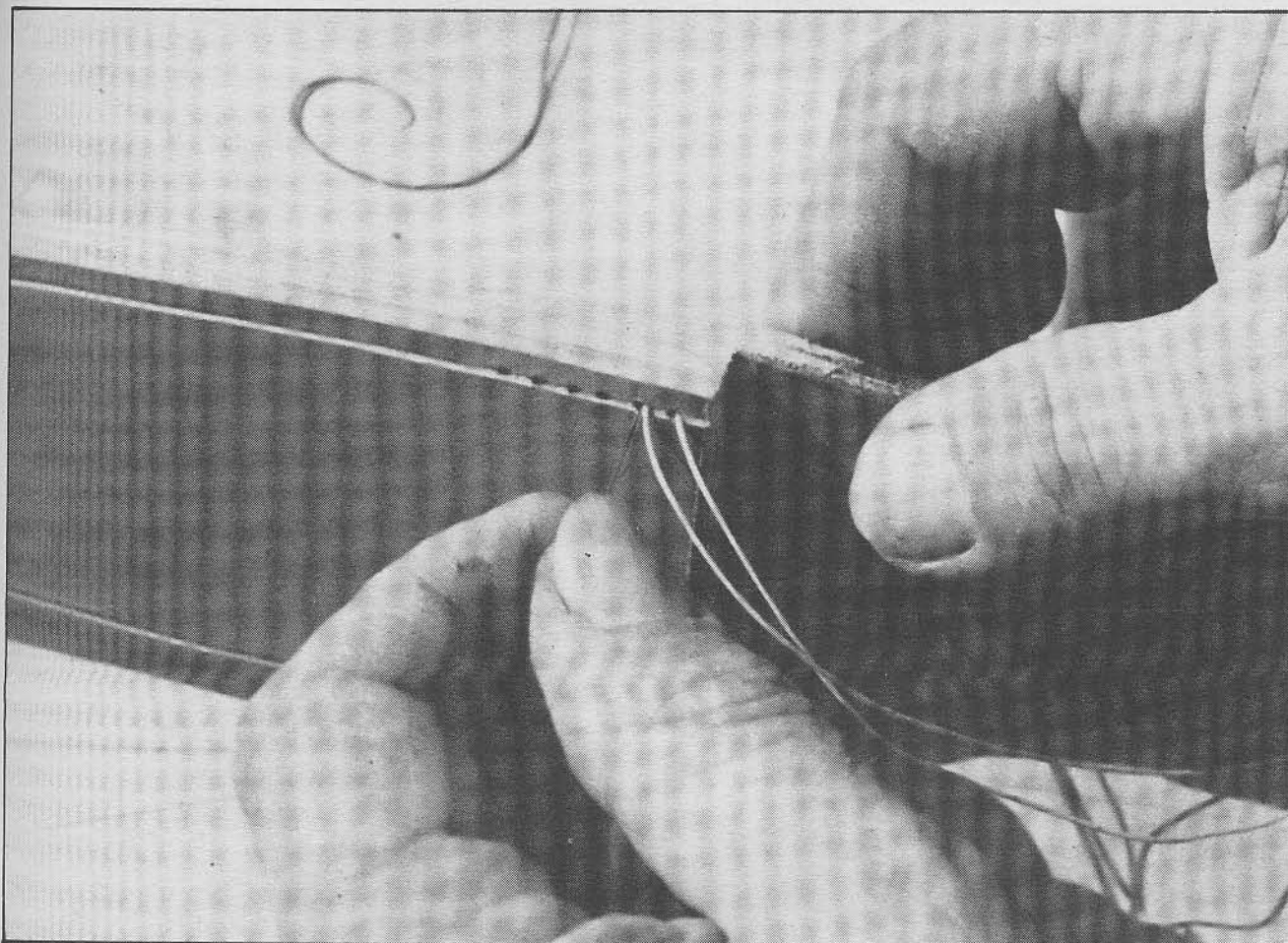
To use a thread longer than three feet could result in



A section of thread about three feet long and two medium-heavy stitching needles are required for the job. One of the needles is threaded into each end of the linen cord.

Only six holes should be punched and stitched at a time. This should assure a better appearance when job is done.





Saddlemakers' stitch calls for passing each needle through same hole from opposite side for a lock stitch.

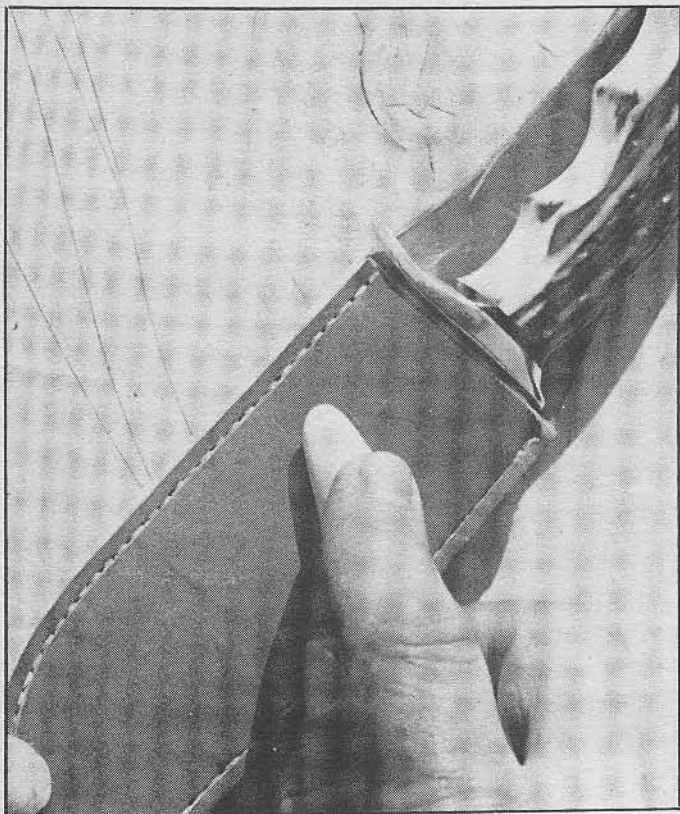
snarls and tangles. When this cord is used up, retrace the stitches back about two holes, then proceed as before. The loose ends of the thread may be trimmed flush with the surface of the sheath with a sharp knife.

If a disc sander is available, the outer edges of the sewn sheath may be dressed down quickly to the proper dimensions. Be sure to allow no less than one-eighth-inch of leather to extend beyond the stitched area. To cut any closer than this could result in the stitches being cut through by the sander.

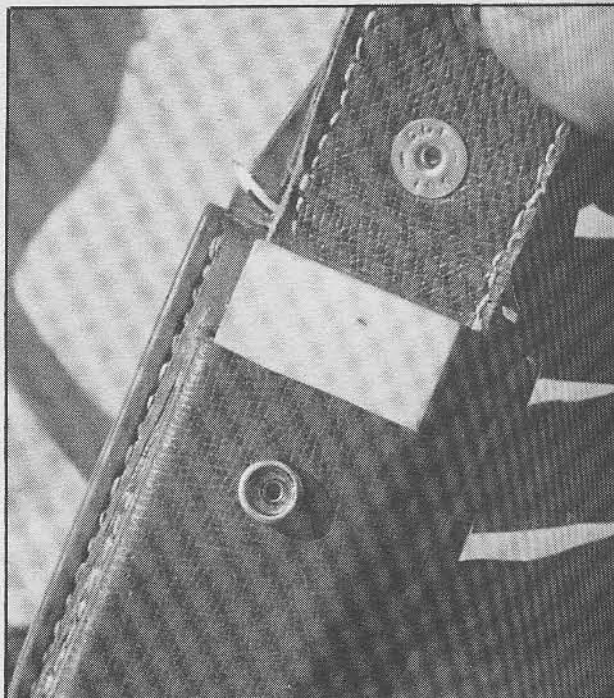
An edger of some sort, even a hand-made affair, may be utilized at this point to round over all sharp edges of the leather. This includes the belt loop and sheath proper. The



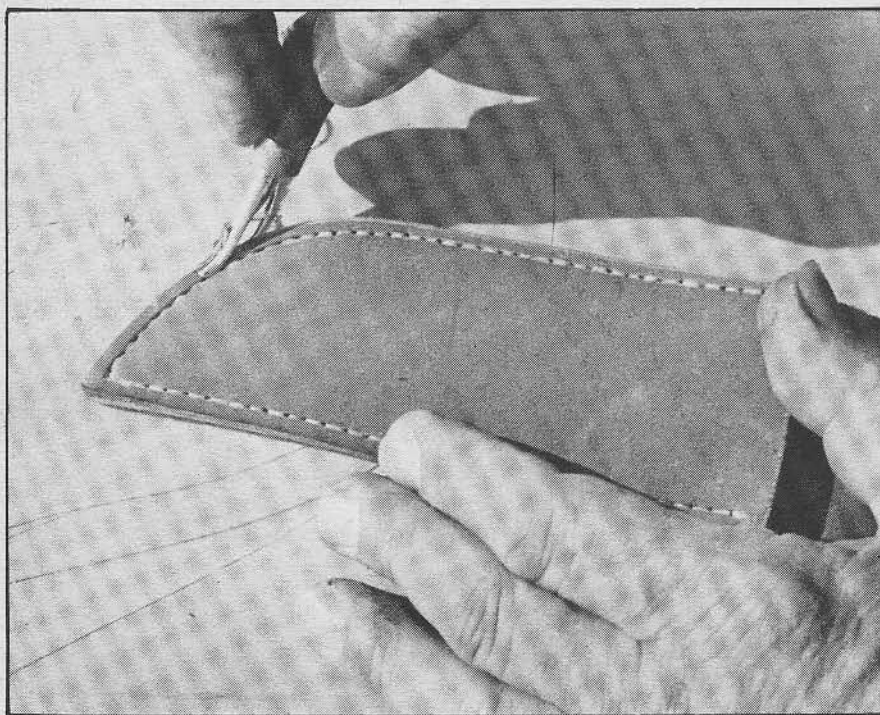
One method of holding work for sewing is to clamp the belt loop in a bench vise between cork jaws, but it is important that it be clamped only enough to hold firm.



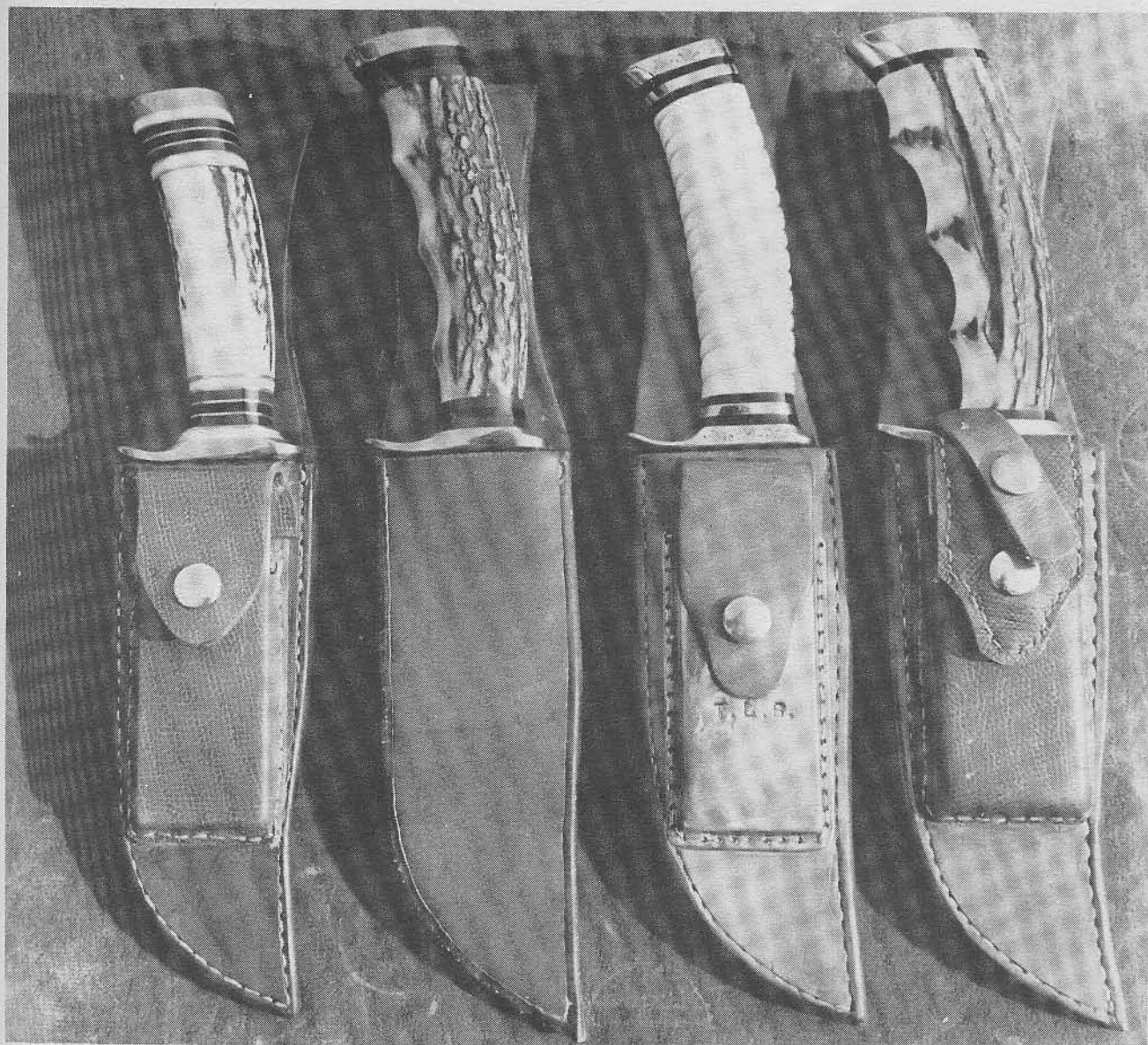
Leather edges rounded, sheath is dampened, rubbed briskly with ivory, smooth hardwood or even with a section of toothbrush handle. This smooths the surface.



An oil stone pouch can be added to the design. It is formed and sewn on before front section of the sheath is attached finally to the back section.



Once the sheath has been sewn, the sharp outer edges of the leather are rounded with an edger, using pressure.



Sheaths may vary in style, with or without pouches for oil stones. Second from left is sheath made in chapter.

sheath then is dampened well with water and all edges rubbed briskly with either a smooth piece of hardwood or an old toothbrush handle. The more the edges of the sheath are rubbed, the smoother and prettier they will become. To assure a perfect fit of the blade to sheath, the knife may be placed in the still-damp sheath and the entire blade area thoroughly rubbed in the same manner.

The sheath then is set aside. When dry, it can be given a light coating of neat's-foot oil, then polished with paste wax.

The final touch is to install a safety strap. The snap-button type extends from the belt loop down over the guard and snaps in place onto the sheath body. However, this is a

matter of personal choice.

Properly built, a knife sheath should last for several generations, with normal, proper care. Should it become water-soaked, never place it near a hot flame or heat of any type to dry out. Allow it to dry at a normal temperature.

On occasion, give it a thorough soaping with glycerine saddle soap, then buff with a soft cloth. Repeated baths in neat's-foot oil will only burn the leather and cause it to deteriorate at a rapid rate.

Finally, regardless of the quality of any knife sheath, never store any good knife for any length of time in it. Even though the blade may be well oiled, the leather is apt to rust it in time through condensation.