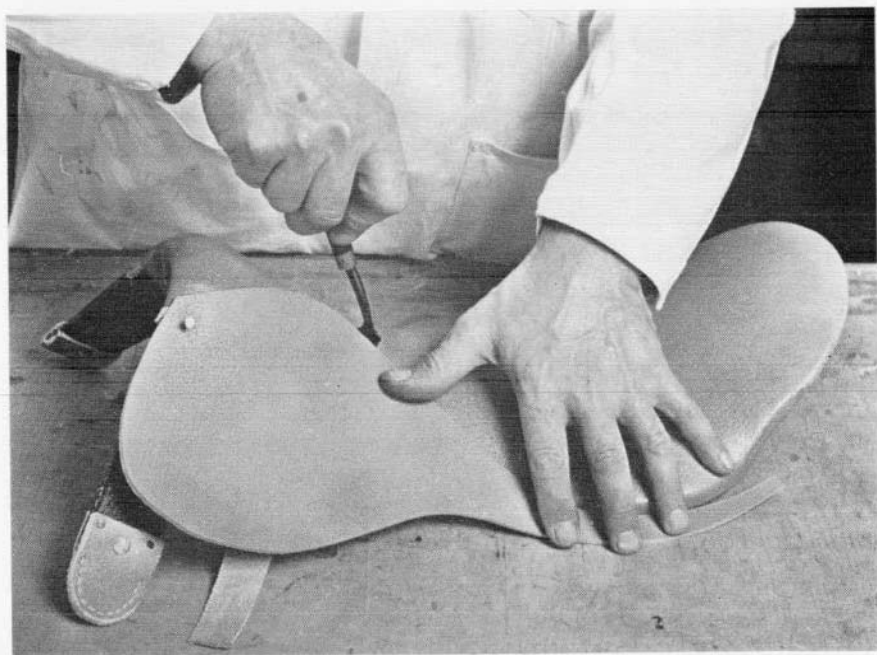


Fig 18

Fig 19



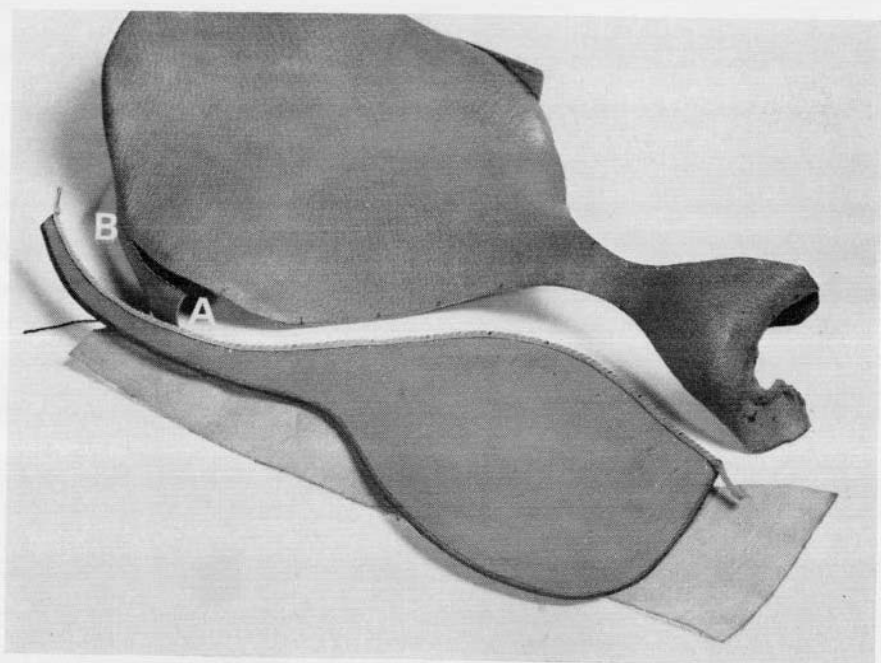
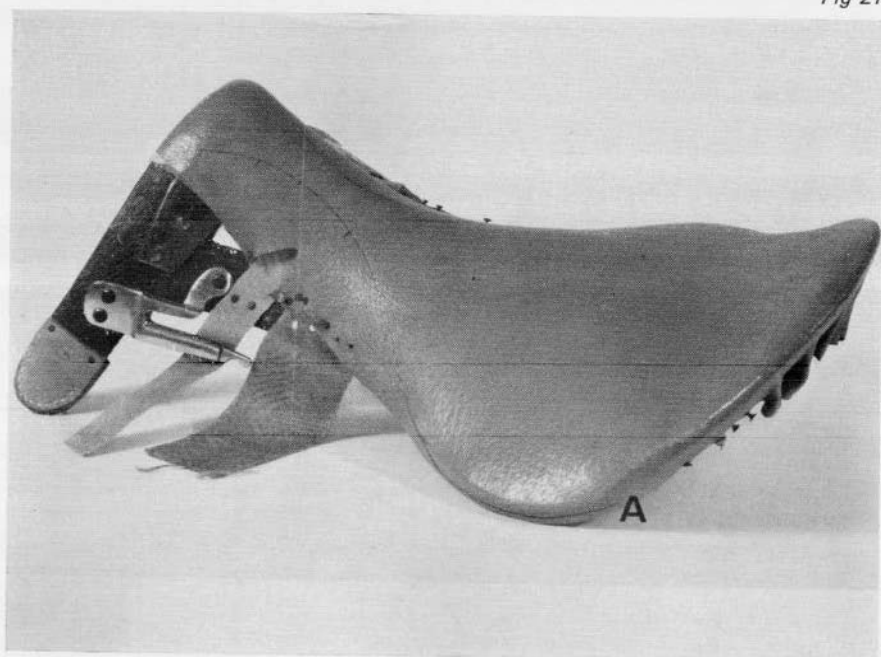


Fig 20

Fig 21



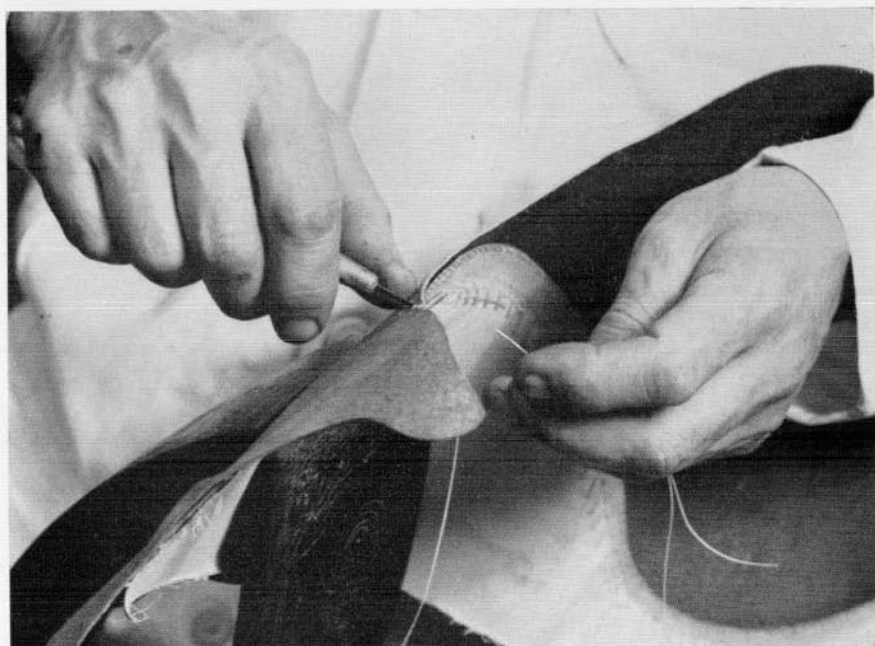


Fig 22

been reached in the stitching, so that an exact fit can be obtained. Before commencing the stitching, the left hand skirt should be lined up with the seat and, starting at the head, run a tacking stitch along the whole length through each of the corresponding marks on the skirt and seat (Fig 20). This will enable any necessary gathering of the seat, which may have stretched, as the stitching proceeds. Backstitch the skirt and seat together, using a pointed needle and thimble, picking up the overstretch holes in the welt. It is most important that this backstitching is pulled tight, otherwise the thread will show through when the seat is finally stretched to the tree (Fig 23).

When both skirts have been stitched on, the use of a seaming crease will round off the inside of the seat and facilitate fitting.

The folds at the cantle remain to be stitched. First the surplus material is cut away leaving the straight edges ready for stitching (Fig 16). Then a backstitch is used and the seams hammered lightly to flatten the folds. This area can be dampened and boned flat when fitting to the saddle (some

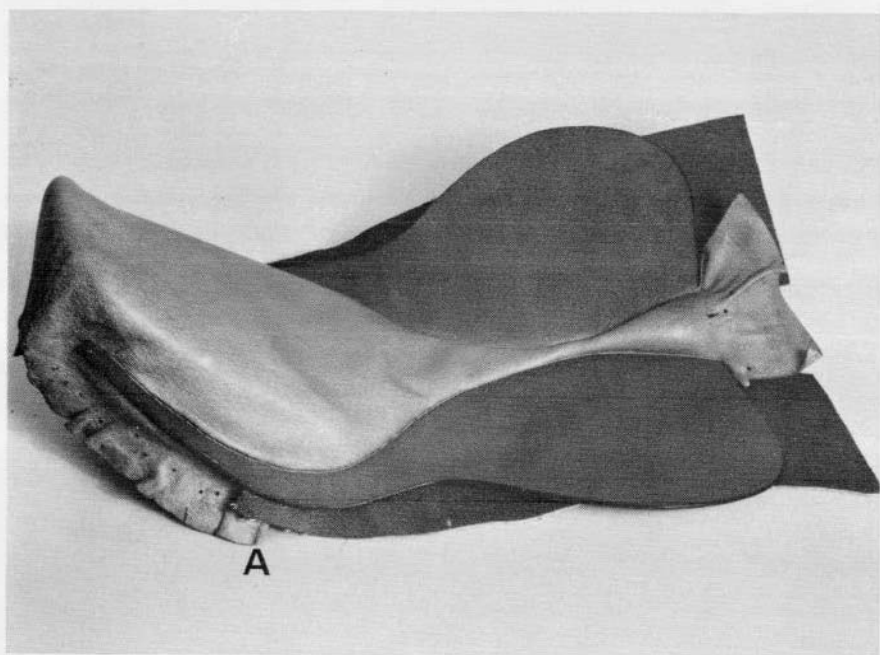


Fig 23

skilled saddlemakers are able to wrap the pigskin around the cantle and completely bone out the crease, making cutting and stitching unnecessary). If any adjustment is needed to the serged seat, it can be made at this point.

Drawing on the seat (Fig 24)

Place the seat with attached skirts and pullers on the saddle and check that it is central by realigning with the skirt nail holes, and hold with a large tack. Lightly dampen the seat again and tack into position, where possible picking up the holes made earlier by the holding tacks. Strain the seat gently over the sides of the tree, working alternately from side to side. At this stage the use of the hands is preferable to the straining pliers. Strain the pullers over the tree and tack-hold.

Continue until they are secured along their length. Cut the puller to form a recess for the web (Fig 25c), to which the girth straps are attached, making sure that the puller ends and the web are properly aligned (Fig 24a). That part of the seat UNDER the tail end of the skirt should overlap the puller by about 1½ in – 2 in (Fig 23a).

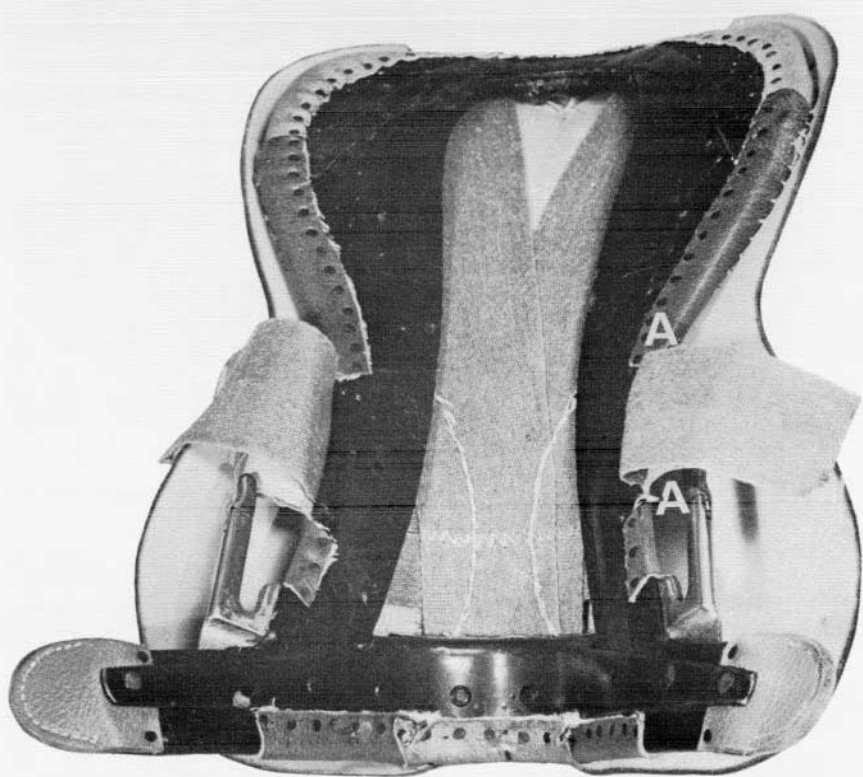


Fig 24



Fig 25

Fixing the seat

The tacks holding the seat under the head are put in close to the metal arch, leaving space for more tacks at a later stage.

Those holding the seat on the underside of the tree are positioned close together, on a line parallel with the edge of the tree about $\frac{5}{16}$ in apart. Having determined that the seat is central and properly fitted, the tacks are driven home, and the surplus material is trimmed off (Fig 24).

Fixing the saddle nails

The saddle nails are now fitted through the skirt, replacing the large holding tacks. Care should be taken to avoid damage to the polished heads by covering it with a piece of leather before hammering. The nail point should protrude through the tree close to the gullet plate, the end turned with round nosed pliers and hammered into the tree. To avoid staining when removing marks from the seat and skirts the whole area should be dampened.

The girth straps are now stitched into position (Fig 28). Fold the girth web back so that the end is hidden and stitch the

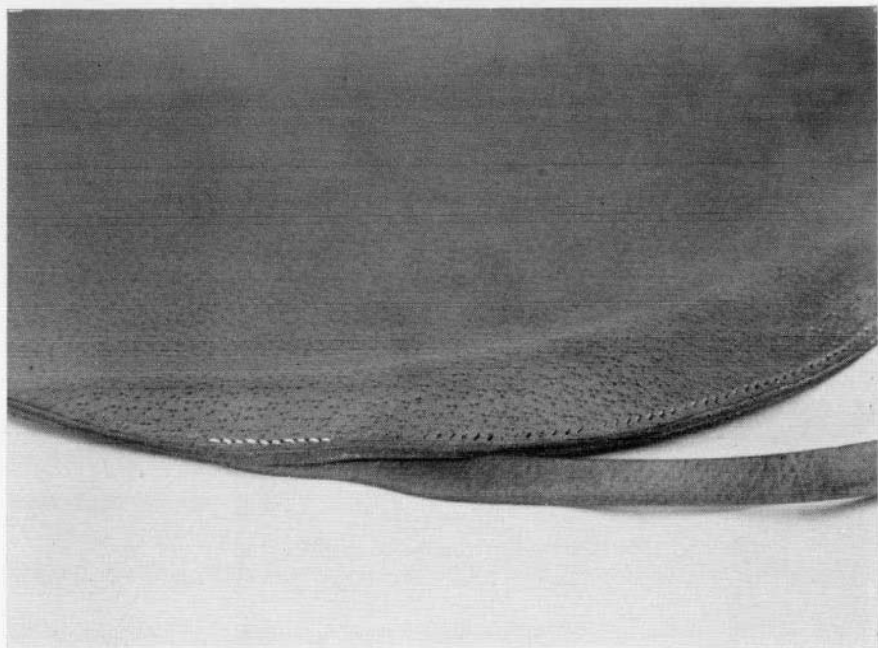


Fig 26

straps to the double thickness. The top stitches should catch the edge of the puller which was cut and left for this purpose (Fig 25).

Fitting the flaps (Fig 25)

Position the flaps on the saddle, tacking them at the head above the stirrup bar and underneath at the waist. The front top edge of the flap should be about $\frac{1}{2}$ in above the top edge of the stirrup bar and protrude by the same distance in front of the tree. Hold with two tacks. The part of the flap which fits underneath the tree at the back is folded, forming a curve that will fit the edge of the tree. Hold with two tacks. Two more holding tacks are placed in the flaps (Fig 25c). Make any adjustments that are necessary, such as trimming the top where it fits under the stirrup bars.

When the flaps are satisfactorily fitted, the flap saddle nails are placed in position and fixed in the same way as the skirt nails. More tacks are placed near the top edge of the flap through the fold into the edge of the tree. All of these can now be hammered home (Fig 28).

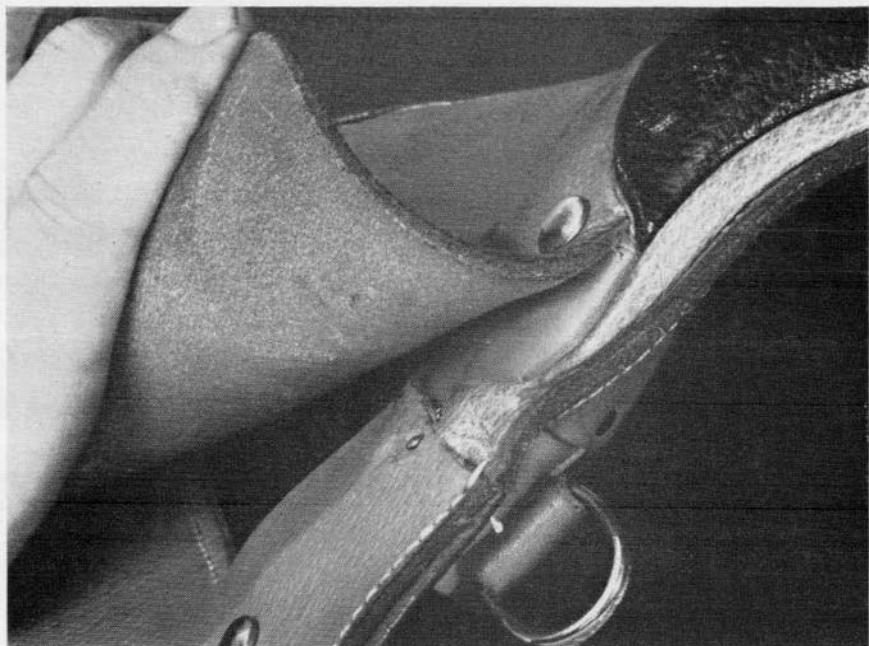


Fig 27

Making the forepiece or bridge (Fig 29)

Measure the distance between the top edges of the flaps around the radius of the gullet and cut a piece of pigskin 2in wide to this length, also cut a piece of hide to match. Stitch the two pieces together. Enough thread should be left at both ends for joining the forepiece to the flaps. The number of stitches per inch should match the stitching of the flaps. Edge, stain and polish. A piece of 3mm leather, $\frac{1}{4}$ in wide is placed between the hide and pigskin to impart shape (Fig 30*d*). Dampen the pigskin and lay it flat on the bench, run a single crease along the edge to make it 'stand up' and spot stitch along the crease line. About $\frac{3}{4}$ in from the ends (Fig 29) cut darts $1\frac{1}{2}$ in deep. The darts facilitate fixing the forepiece to the gullet (Fig 27). Additional darts may be cut for easier fixing. The saddle at this stage, complete with seat, skirts and flaps, is ready for the panel to be fitted.

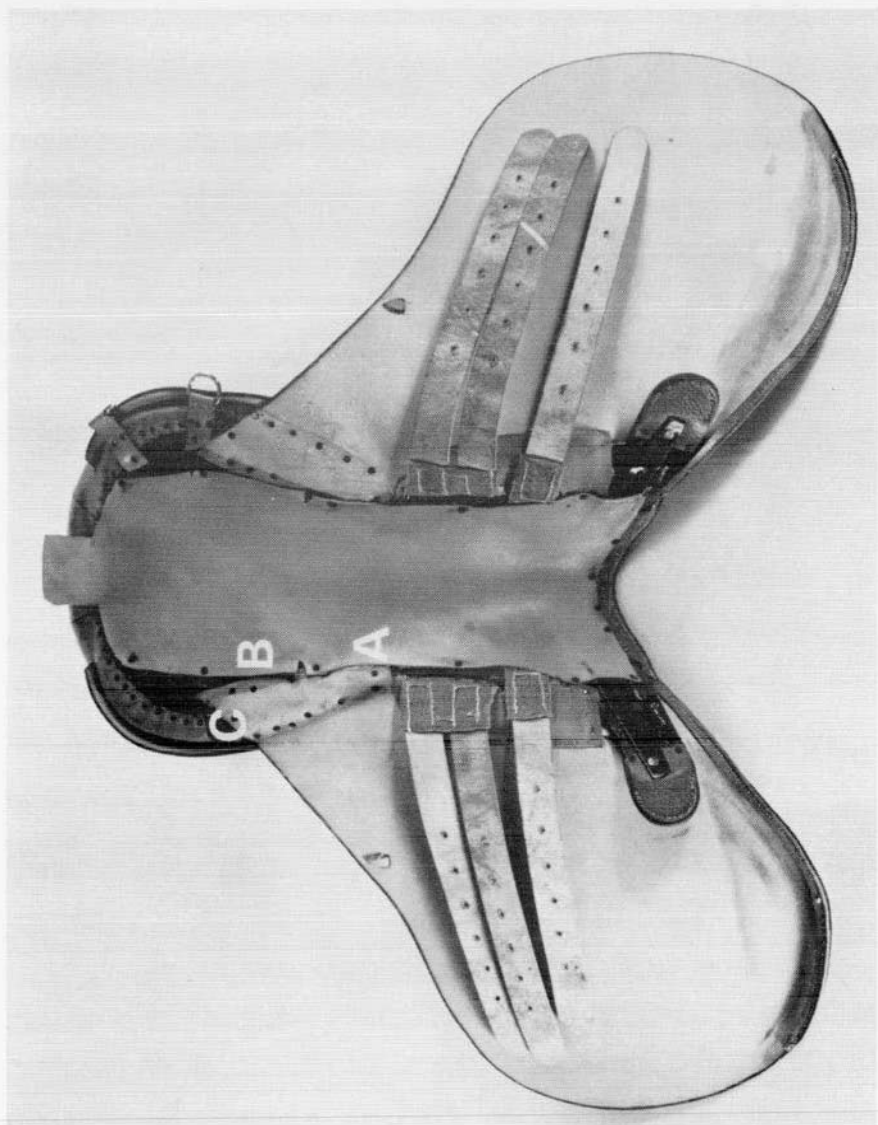


Fig 28

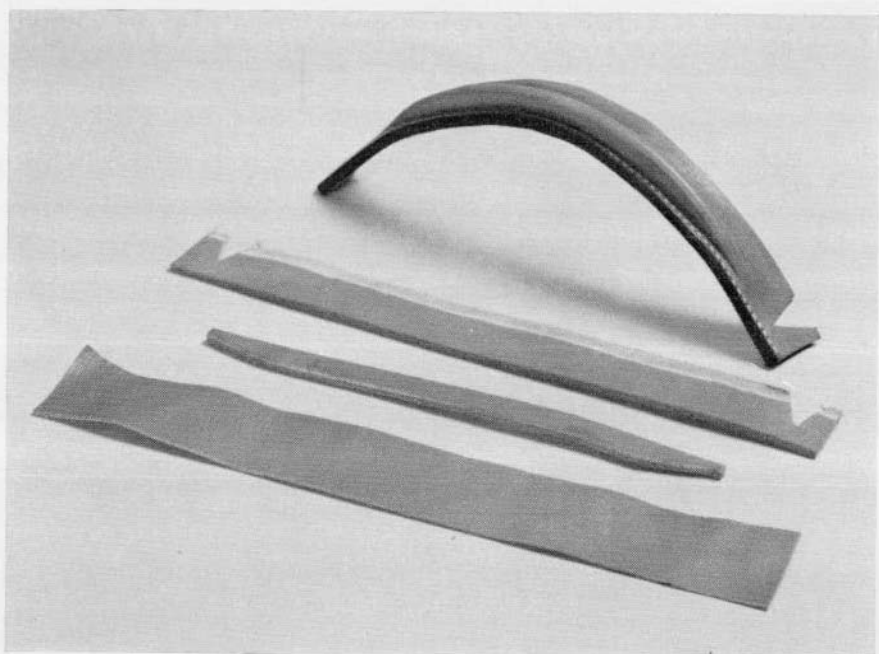


Fig 29

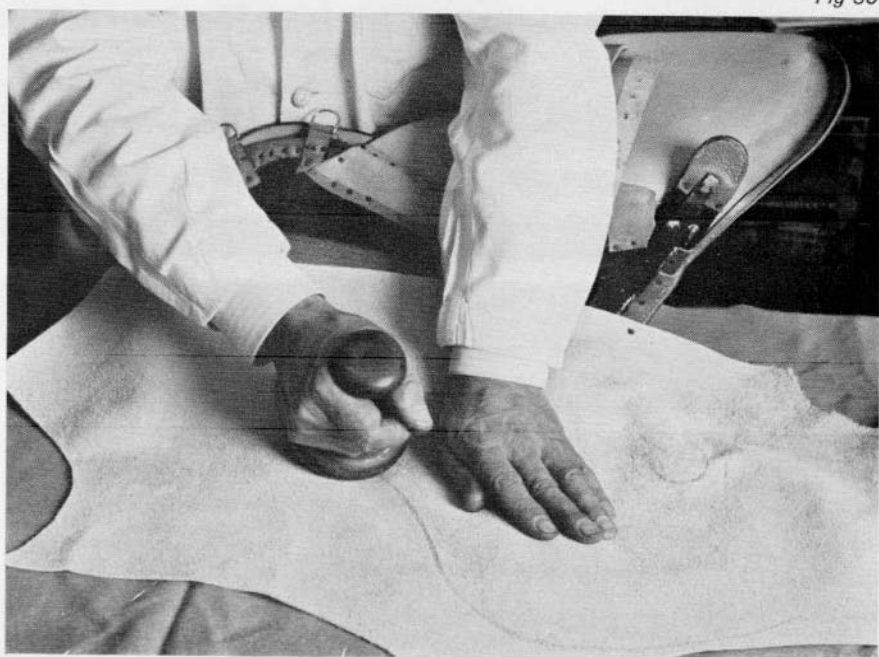


Fig 30



Fig 31

MAKING THE PANEL

Obtaining the shape (Fig 30)

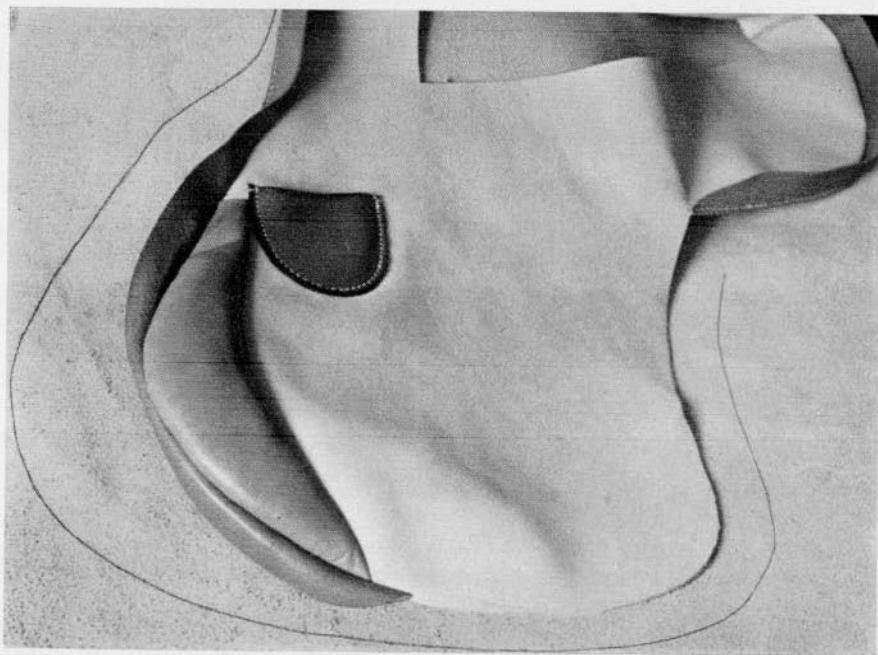
To obtain the shape of the panel, place the saddle on the bench with the underside uppermost. Position a large basil with the straight edge 1in over the centre line and roughly

parallel with the gullet. Using a masher rub hard over the basil along the outline of the flap and tree point. This produces an impression of the shape of the panel. Retaining the basil in position turn the saddle over and roughly mark the shape of the seat on the basil. Remove the basil, place it finished surface uppermost on the bench and deepen the outline impression with a single crease, then cut to shape. Use this as a template, place on another piece of basil, undersides together and cut the second half to the same shape. Hold the two pieces together and mark the tree pocket positions by piercing with an awl (Fig 31). The pocket area is reinforced (Fig 33). Cut a piece of stout hide for the pockets. In the absence of a pattern use the tree points to produce the shape. Make an allowance for both the stitching and the thickness of the tree point. Stitch the pocket into position with a No. 18 four-cord thread. Ease the pockets with a piece of thick leather to facilitate fitting.

Making the lining (Fig 32)

Fit the two panel pieces to the saddle by slipping the points into the pockets, to the fullest extent. Align the edges of the

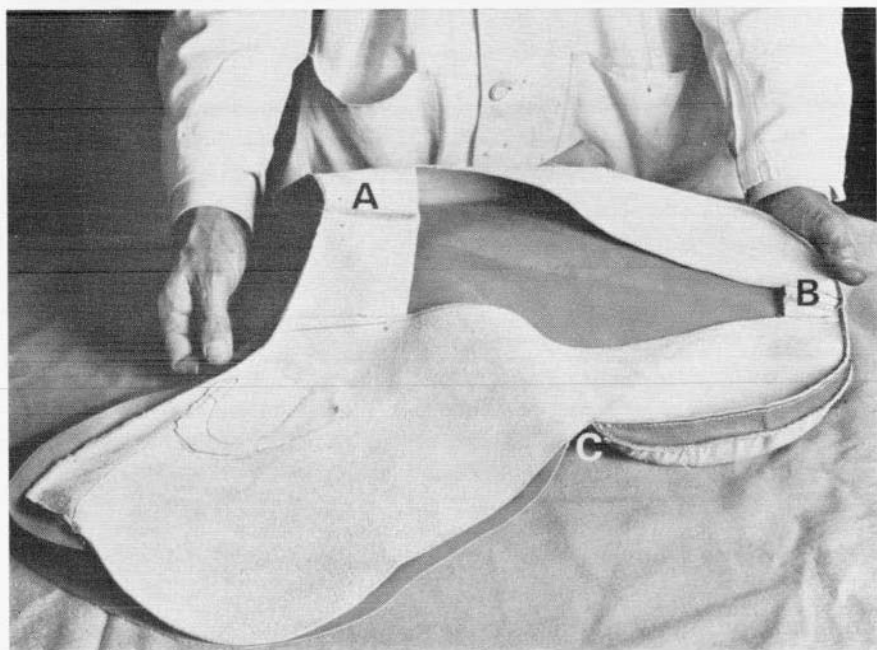
Fig 32



flap and panel and place a tack through the two thicknesses into the tree at the head and cantle. Having cut the panel oversize, there will be an overlap of the two halves along the length of the gullet. Press the lining into the gullet with the hand and rub with the masher to obtain an imprint of the shape of the gullet, gullet plate and inside curve at the cantle on the lining. A centre line should now be marked at the head and cantle along which the row of stitches will be sewn to hold the two parts together. Remove the panel and cut out that part enclosed by the imprint. Stitch the two halves together (Fig 33 *a* and *b*) and then line the panel with scrim for reinforcement.

The facings are now cut from pigskin; two pieces 1in wide and about 20in long are required to face the front edge of the panel and the cantle. If the knee roll covering is to be built in, then at this stage cut some lining leather to shape and backstitch with the front facing to the panel (Fig 32). The seat facing can now be backstitched into position with the two ends which taper away inside the seam (Fig 33*c*). Place the panel on the bench over the lining leather and, using it as a

Fig 33



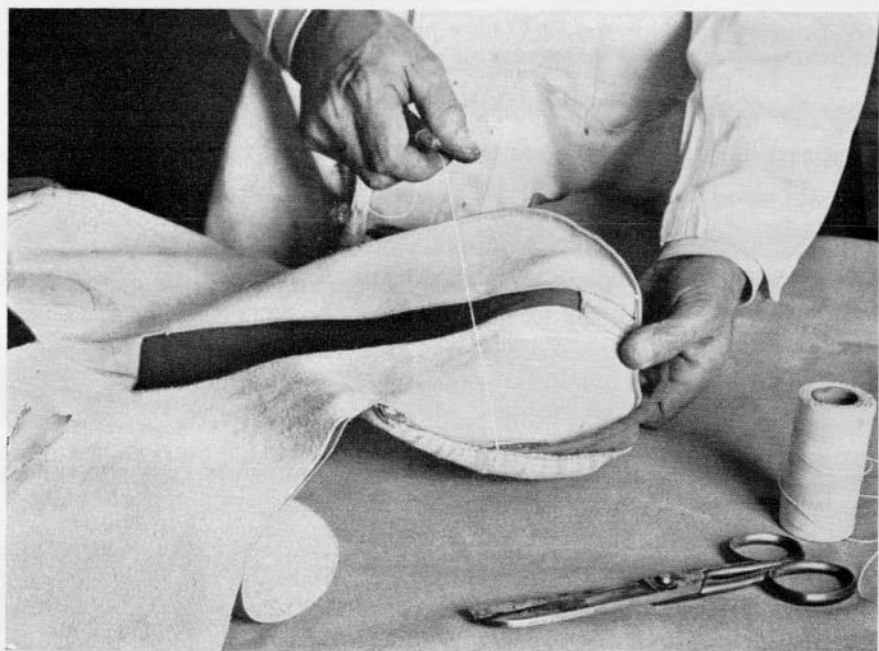


Fig 34

pattern, mark the lining to shape, allowing enough material for the knee roll pad, the seat and turnings (Fig 32). The depth of the panel at the seat and the thickness of the knee roll pad is determined by the amount of material allowed in cutting and is usually between $1\frac{1}{4}$ in – 2in at its widest part. Cut the lining, allowing sufficient material to fold over the panel at the gullet (Fig 35a).

The outside edge of the lining, which is larger than the panel, is gathered to ensure a good fit. Make a running stitch with a fine strong thread about $\frac{3}{16}$ in from the outside edge of the lining and pull one end of the thread so that the material is gathered to its correct length, knot the thread until panel and lining are stitched together. Stitch the lining to the pigskin facings at the front of the panel and round the seat. Then stitch the remainder of the panel and lining together (Fig 33).

Finishing and stuffing

Take a piece of $\frac{3}{8}$ in piping cord and wrap the seat facing around it. These two edges, and the edges of the panel and the lining should now be over-stitched together all the way

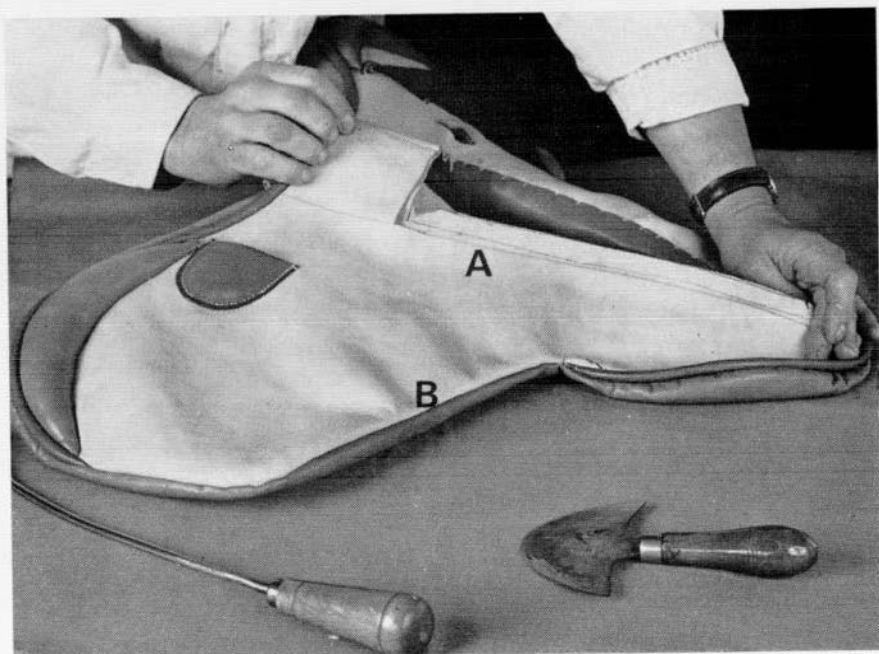


Fig 35

round (Fig 34). The facing at the front edge of the panel is stitched in the same way. The panel, having been made inside out is now reversed (Fig 35).

Cut the sweat flaps from flap butt to shape, and mark their position on the panel. Glue the inside surfaces of the panel and lining together where they will be covered by the sweat flap. Edge, stain and prick the sweat flaps and running stitch them into position (Fig 36).

The front of the panel is now stuffed with saddle-wool, the 'knee-roll' area first. The lining and panel can now be closed by over stitching along the length of the gullet. That part of the panel under the seat is not stuffed until it has been fitted to the saddle. Slits can be cut each side of the panel, front and rear, in the centre of the wither and seat bearers, to enable more stuffing to be inserted after the saddle has been completed (Fig 36). Now stuff the knee-rolls and over stitch the open ends.

Fitting panel to saddle

Before fitting commences a piece of lining leather matching

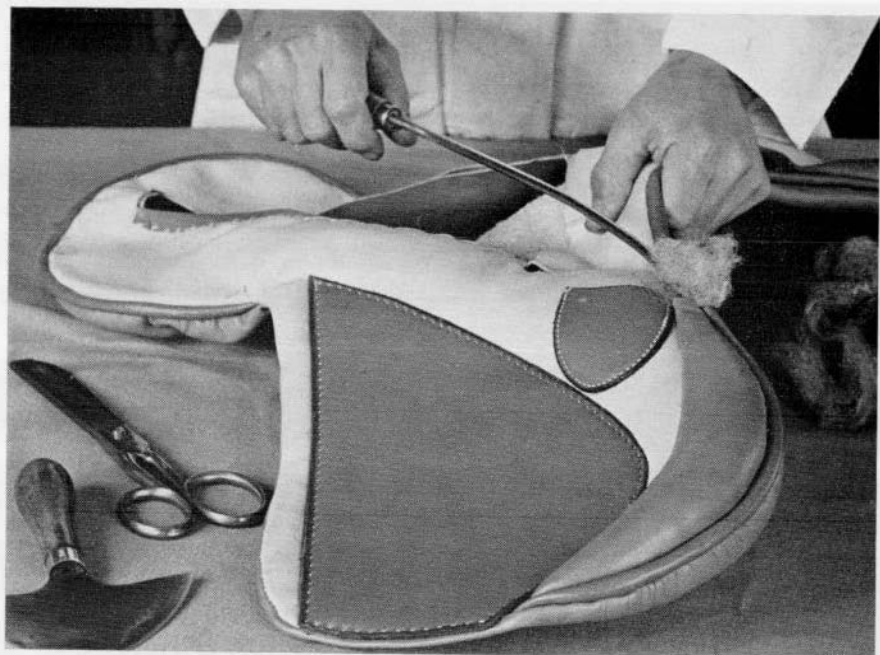
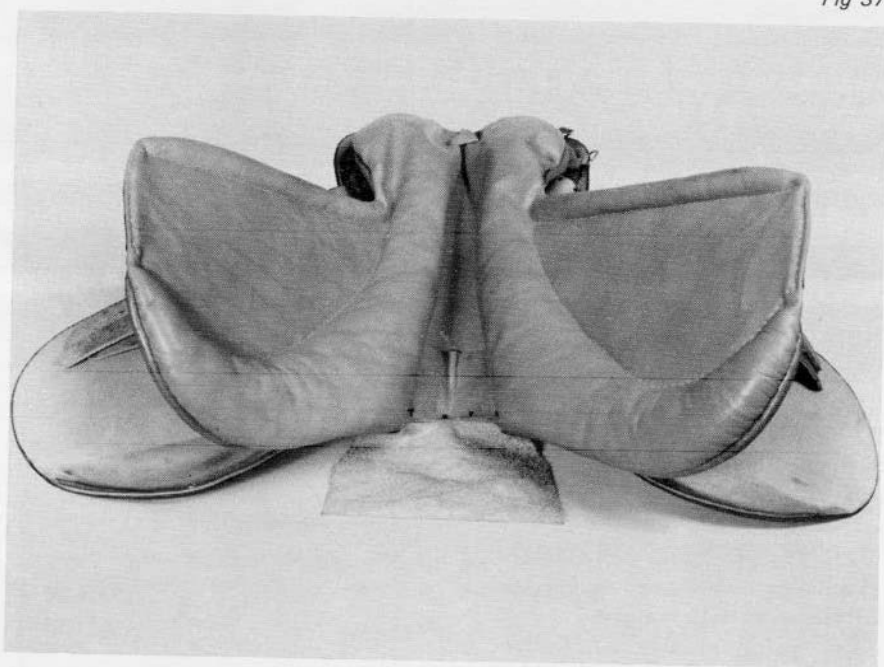


Fig 36

Fig 37



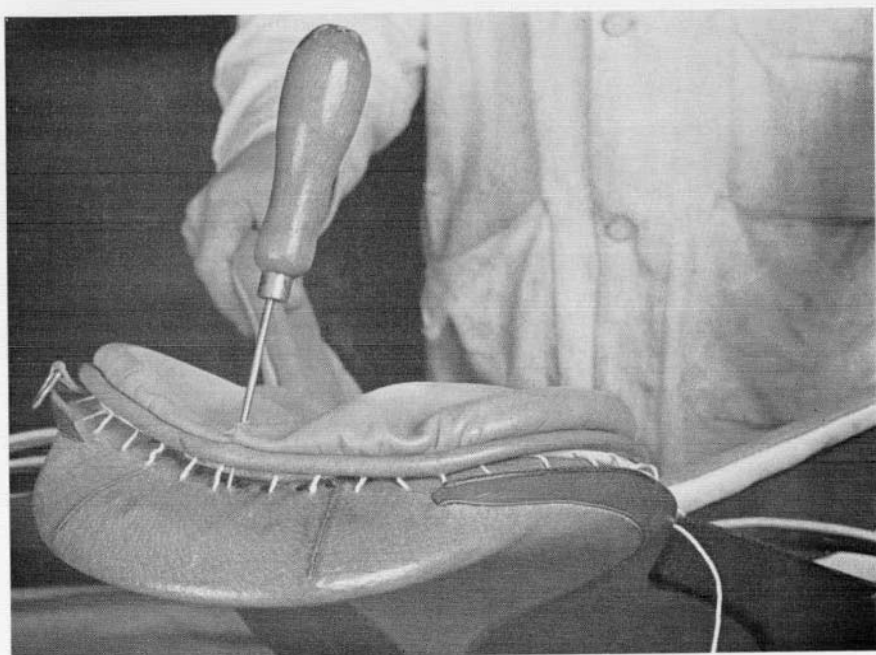


Fig 38

the panel to cover the gullet should be cut to shape. Leave enough material at the cantle end to allow for finishing. Dampen the leather and fit it into the curve of the gullet and tack in position (see Fig 28).

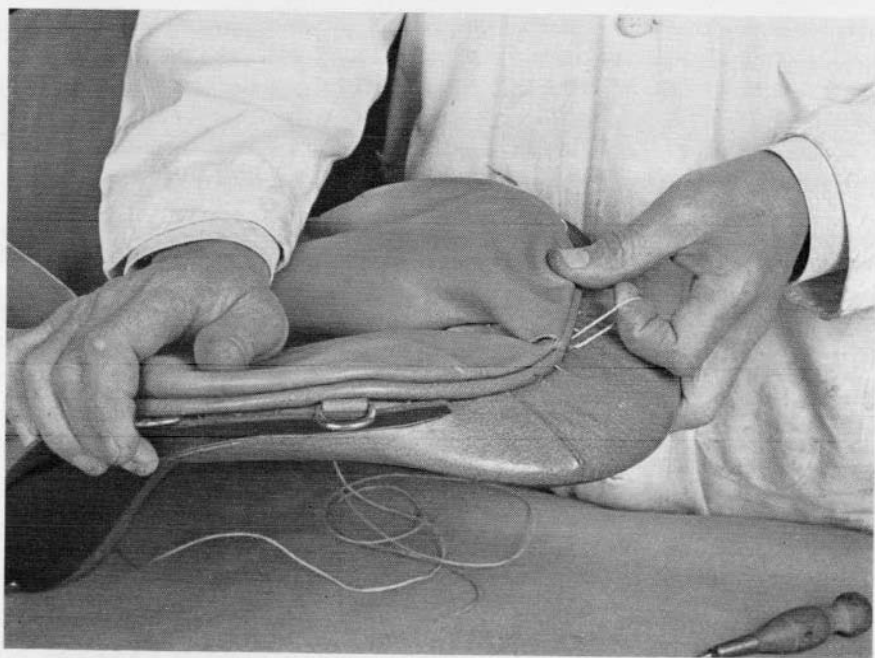
The panel is now fitted to the saddle by first inserting the points into the pockets, checking to ensure that it fits well, particularly where the panel has to be lace-stitched in. Make sure that the radius of the head of the saddle and the panel are level, and place about 4 or 5 large tacks on the underside of the gullet flap and tack into position (Fig 37). Then stitch through the forepiece and panel from pocket to pocket using the existing stitch holes. It may be necessary to use the masher to adjust the stuffing at the front part of the panel to ensure a good fit.

Place an awl through the centre of the panel at the cantle into the saddle tree (Fig 38). This is a temporary measure to hold the panel whilst the position of the stitches is marked on the panel and the seat on the underside of the cantle. These stitches need to be about 1in apart, and positioned in

such a way that when the lacing is completed the threads do not show between them.

Thread a curved needle with a long stout thread, 7 or 8 'common'. Stitching may commence either side of the saddle, starting at the top end of the flap, so that the knot in the thread will anchor there. A bent awl is used to make some of the holes until the curved needle can be used effectively. The stitches on the panel are made about $\frac{1}{8}$ in from the edge of the facing along the area that is ultimately hidden by the skirt; beyond this point and until a corresponding point is reached on the other side, the panel stitches should be made into the facing itself, ensuring the absence of any gap around the cantle. Pick up the marks already made for the stitches and leave them fairly loose, about $2\frac{1}{2}$ in between the saddle and the panel (Fig 38). When the stitches have been laced around the whole area they can be pulled up in the following manner: return to the first stitch and carefully tighten up the loose threads; when three or four stitches have been tightened, bringing the panel almost close to the saddle, pull in a straight line with the left hand holding the panel secure

Fig 39



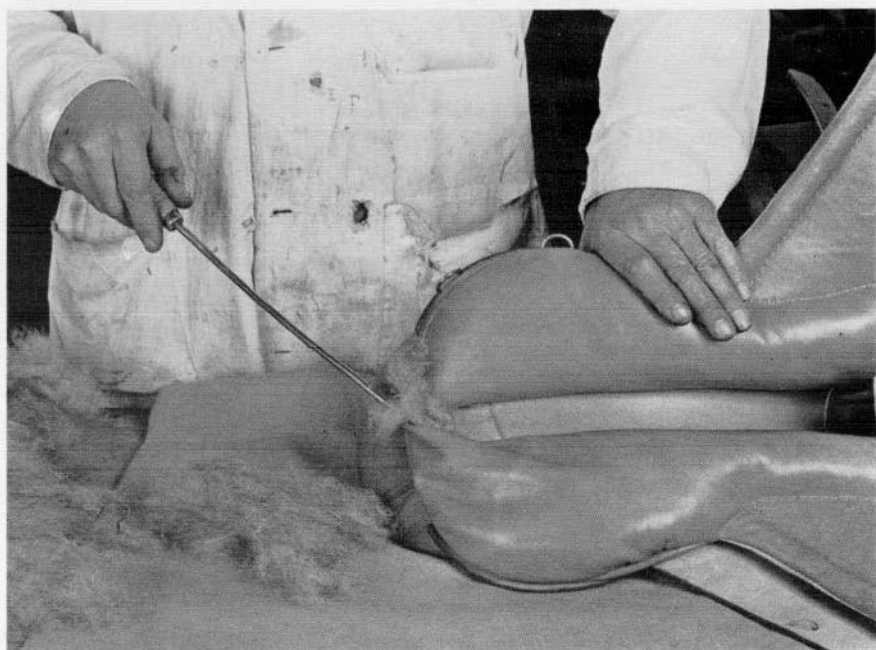
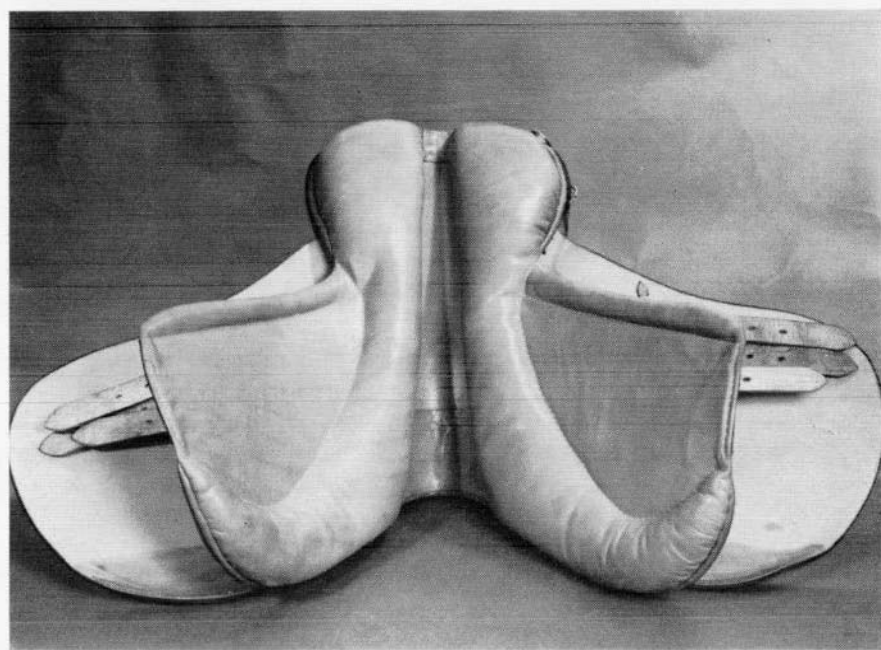


Fig 40

Fig 41



with the right. This will avoid the stitches tearing the leather (Fig 39).

When the panel has been completely laced in, the seat area is stuffed through the centre opening at the cantle (Fig 40), the front of the panel having already been stuffed. A solid metal stuffing stick is used for this purpose. A masher is used to attain the required shape. When stuffing is completed, the opening is stitched up and the small flap attached to the gullet piece folded back to cover the join, and held in position with tacks or small brass nails.

All that remains now is for the front gullet flap, attached at the head of the panel, to be folded in neatly under the head and glued.

The saddle is now complete (Figs 41 and 42).

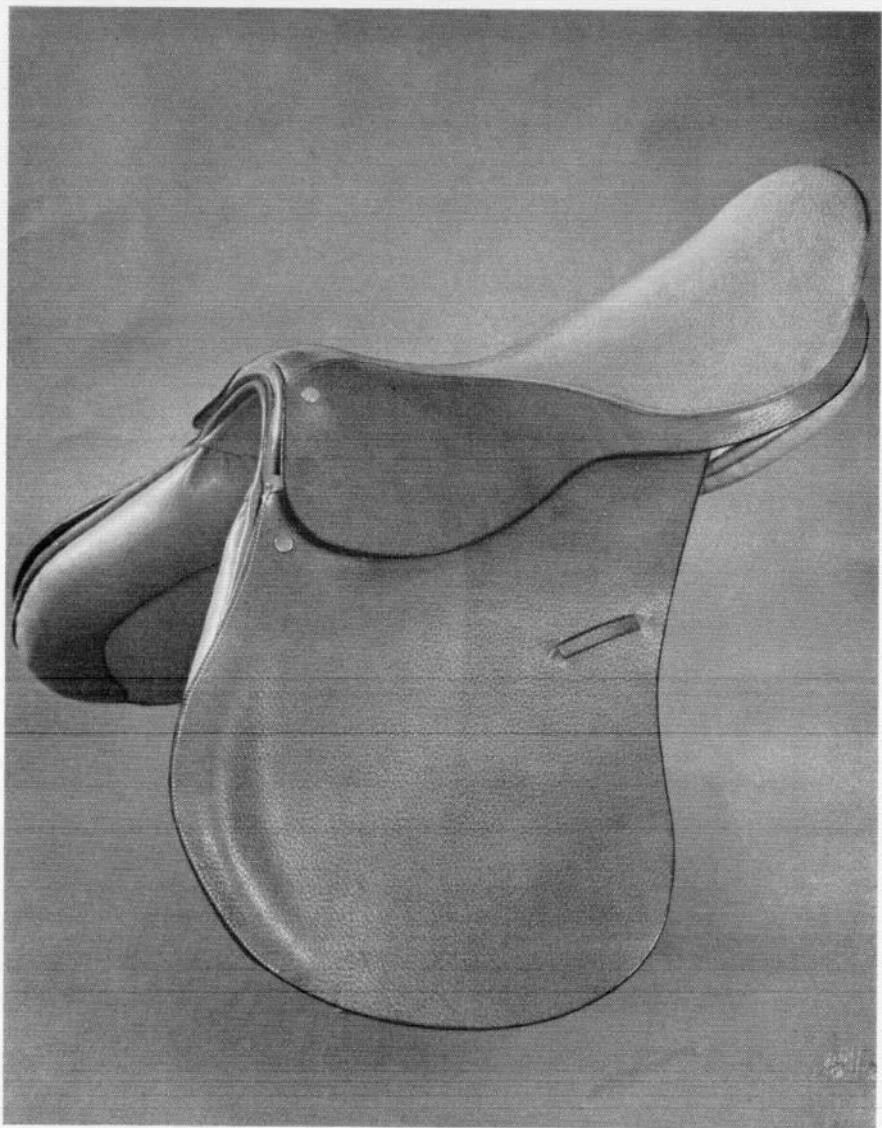
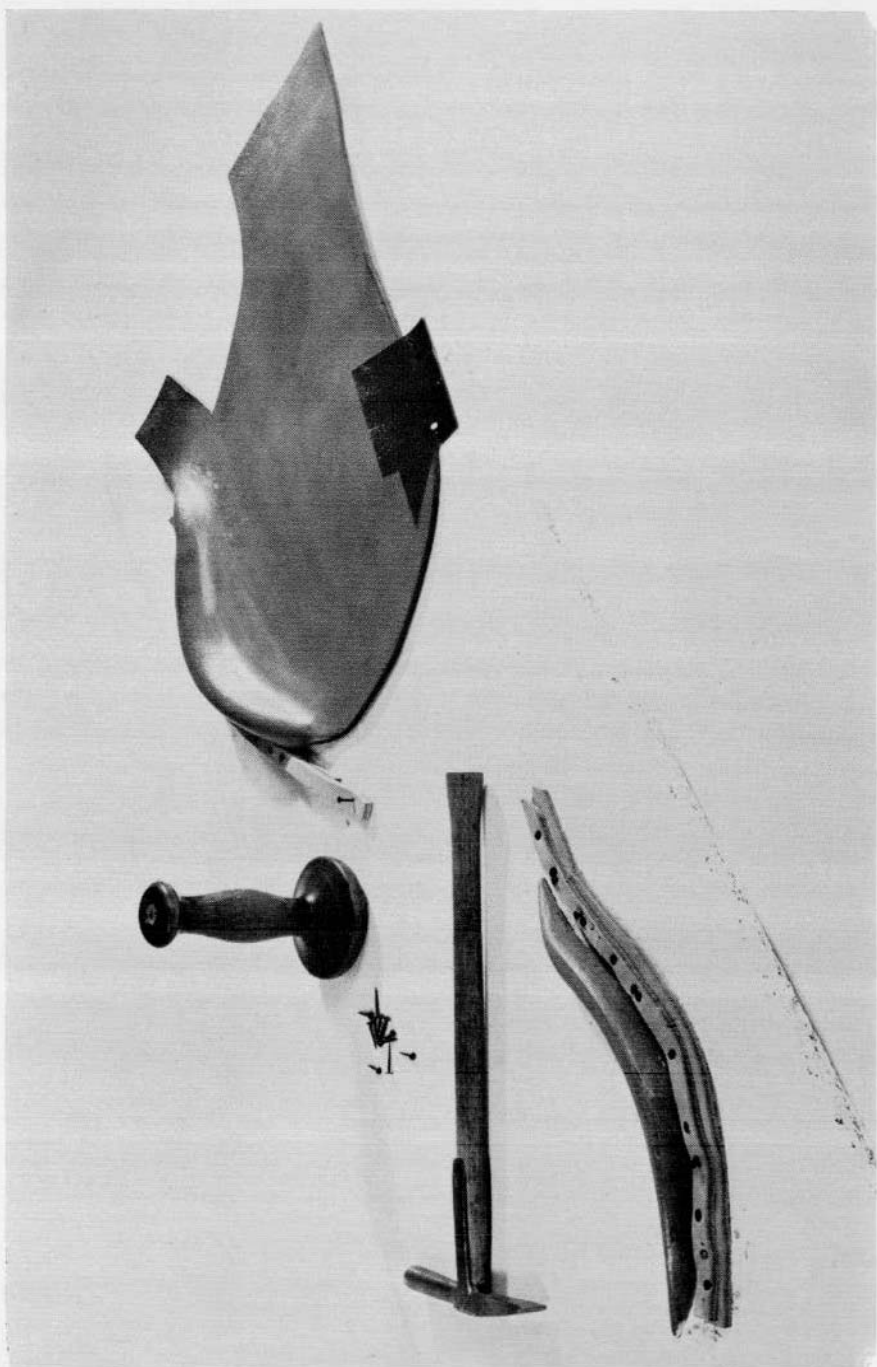


Fig 42



8 'Making Up' and Finishing

Straining the web

This is sometimes called 'firing the web'. In the absence of a web stretcher, run some strands of web along the centre of a bench and stretch tightly over the ends before tacking down. Dampen all the uppermost sides and gently ease a block of wood between the material and the bench. As the web dries out it will also loosen off, so ease another block on top of the existing one, dampen and repeat the operation until the web is fully stretched. Instead of the wooden blocks, a 'scissors' type car jack may be used to gradually increase the tension to obtain the required amount of stretch.

IT IS ESSENTIAL to pre-stretch webbing to prevent sagging which would otherwise occur after a few months of use.

Blocking the flaps

The flaps on the saddle in Fig 41 were blocked in the device illustrated in Fig 43. The hard resin block is a similar shape to the knee roll rubber insert, and the top mould is made of glass fibre.

Sandpaper the inside of the flaps and carefully dampen to soften them, taking care to avoid staining the outside. Wrap the front edge over the block and tack a piece of leather temporarily along the outside edge. Using a masher, rub the inside edge of the curve without bruising the grained surface. Place the cover over the top and clamp in position until dry.

Preparing a spring tree

Wrap a piece of thin basil around the two outside curves of the tree at its widest part so that it covers the spring and the tree, and glue together. Run a single creasing iron around the inside area to define the shape to be stitched, and 'running stitch' both springs; these stitches will describe a 'D' shape when completed. Stick a piece of $\frac{3}{4}$ in felt into this shape, so that it is flush with the tree.

The tree can now be 'webbed up' in the usual way.

Observations

1. To avoid the wear which is caused by friction, surcingle loops are sewn so that the ends are inside, or wrapped around the edge of the flaps.
2. The flap must be long enough to clear the top edge of the rider's boot.
3. Machining a skirt to a puller, though cheaper initially could later result in an expensive repair.
4. Many continental and some English saddle-makers have dispensed with the use of pigskin for seats and pullers, in favour of a type of panel hide (pig grained) which is less expensive. The blocking and fitting is similar to the method described on Page 32.

9 Glossary of Terms

Webbing up the tree

Attaching strained web to tree before covering with hessian or linen.

Belying

Fitting the bellies to the side of the tree.

Snowing

Placing the saddle wool in position before covering it with serge.

Setting

An alternative method of padding the seat whereby the serge is put in position first and completely stuffed afterwards.

Regulating

Moving the flock in the seat (or panel) with a seat awl through the serge to obtain a good shape.

Blocking

Stretching the dampened seat (often pigskin) over the tree to obtain the correct shape. Term also used in shaping the flap for knee roll.

Drawing on the seat

The actual fitting of the skirts, pullers, welt and seat to the saddle.

Stuffing

Stuffing the saddle seat before blocking, and also the panel, with flexible and rigid stuffing sticks.

Lacing in

Attaching the finished panel to the saddle by means of lacing stiches.

10 Bibliography

- | | | |
|---|--------------------|-------------------|
| <i>Accoutrements of the Riding Horse</i> | Cecil G. Trew | Seeley Services |
| <i>Handbook for Military Artificers</i> | | H.M.S.O. (1915) |
| <i>The heavy Horse, its harness, and harness decoration</i> | Terry Keegan | Pelham Books |
| <i>Horses and Saddlery</i> | G. Tylden | J. A. Allen & Co. |
| <i>Horse and Man</i> | Gianoli | Allen & Unwin |
| <i>Saddlery and Harness-making</i> | Paul Hasluck | J. A. Allen & Co. |
| <i>Saddlery</i> | E. Hartley Edwards | J. A. Allen & Co. |
| <i>The Saddle of Queens</i> | Lida Fleitman | J. A. Allen & Co. |
| <i>Stitch by stitch</i> | Diana Tuke | J. A. Allen & Co. |
| <i>To Hand Make a Saddle</i> | J. H. Shields | J. A. Allen & Co. |