

8 SHAFT KIT FOR NILUS II WITH BACK HINGE TREADLES

36"	1029-2836
45"	1030-2845
60"	1031-2860



On receiving the loom, unpack and lay out the loom components. Do NOT discard any packing material until all parts are inventoried.

Check the parts received against the parts list on pages #2 to #4 of the assembly instructions. Report any discrepancies to Leclerc immediately.

With two people (minimum) this conversion kit may take up to 4 to 5 hours to install.

Leclerc Looms

Since 1876



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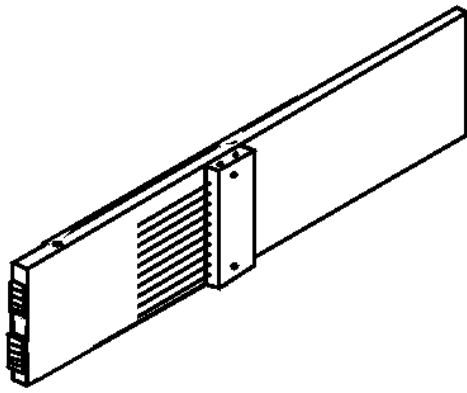
info@leclerclooms.com
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Kit Prepared by: _____

Inspected by: _____

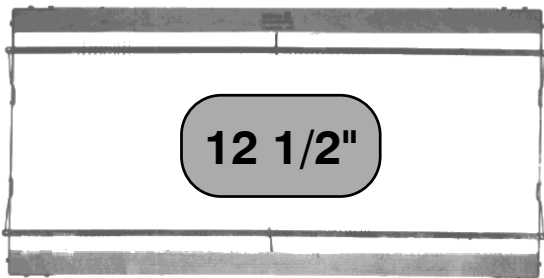
Date: _____



1 Right hand side upright 48" x 7 1/8" x 1 3/4"
1 Left hand side upright 48" x 7 1/8" x 1 3/4"



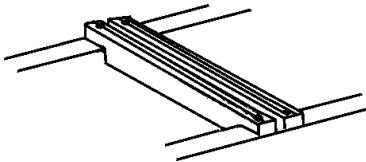
4 Sets of jacks 8 7/16" (12 3/8")



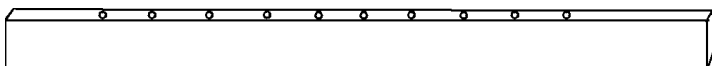
4 Shaft frames 47 3/4" x 16 5/8" (63" x 16 5/8")



2 Metal rods for jack box 7 1/2" x 3/8"

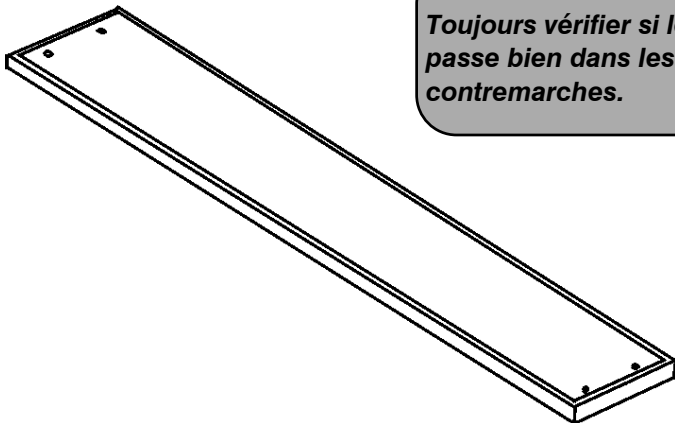


2 Rubber strips for jacks 8 1/4"

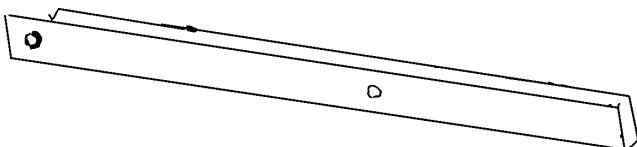


8 Floating lams 49" (64") (cc= 2 3/4")

Note for Leclerc in French :
*Toujours vérifier si le crochet à ros
passe bien dans les trous des
contremarches.*

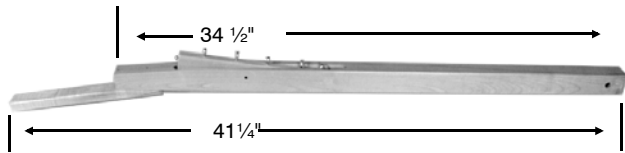


1 Castle top (shelf) 53 1/2" (68 1/2")



1 Brake treadle 29 3/4" x 1 1/2" x 3/4"

PARTS LIST



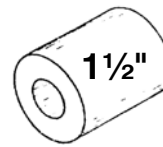
10 treadles with rocker piece

1 Treadle Separator 30³/₄"

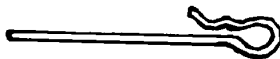


1 Treadle set rod 28¹/₄" x 7/16" with push nut

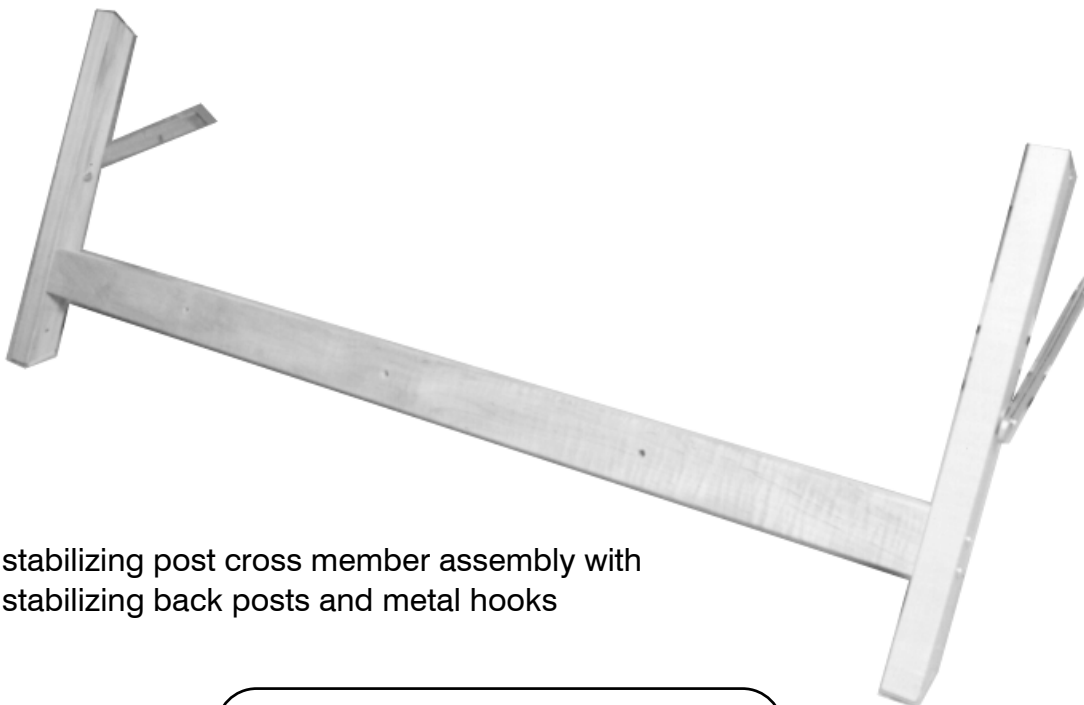
1 more Treadle set
Pushnut



4 Wood spacers for
treadle set



10 Treadle hooks 10" long

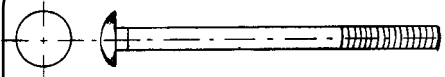


1 new stabilizing post cross member assembly with
2 new stabilizing back posts and metal hooks

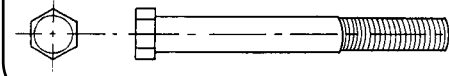
YOU WILL ALSO NEED:

- 1 electric drill
- 1 drill bit 11/64"
- 1 drill bit 1/8"

PARTS LIST



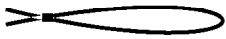
Carriage bolt 3X - 5/16" x 4" (Treadle set)



Machine bolts 4X - 9" x 3/8" (side loom castle)

Square nuts
3X - 5/16"

Washers
3X - 5/16"
12X - 3/8 (jacks)



60 treadle cords 7" long



2X - Brown plastic



3 Screwdrivers
Black, Red and Green)



Round head screw

- 2X - #8 1 1/2" (treadle separator)
- 10X - #12 x 3/4" (Jack box (loop))
- 2X - #12 x 1 1/2" (Back post hook)
- 4X - #14 x 2" (Stabilizing post)
- 8X - #12 x 1 1/2" (jack box)
- 4X - #7 x 3/4" (Rubber jack box)



1 aluminum
wrench



7X Screw eyes



4X - #12 x 1 1/2"
(castle top)



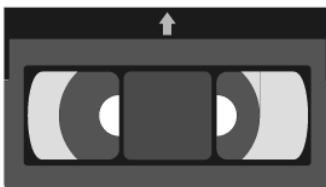
10 Loop cord 18 1/2" long for treadle rocker



10 Treadle springs
with Loop cords 6.5"



1 metal spring rod



Video showing all steps of the installation

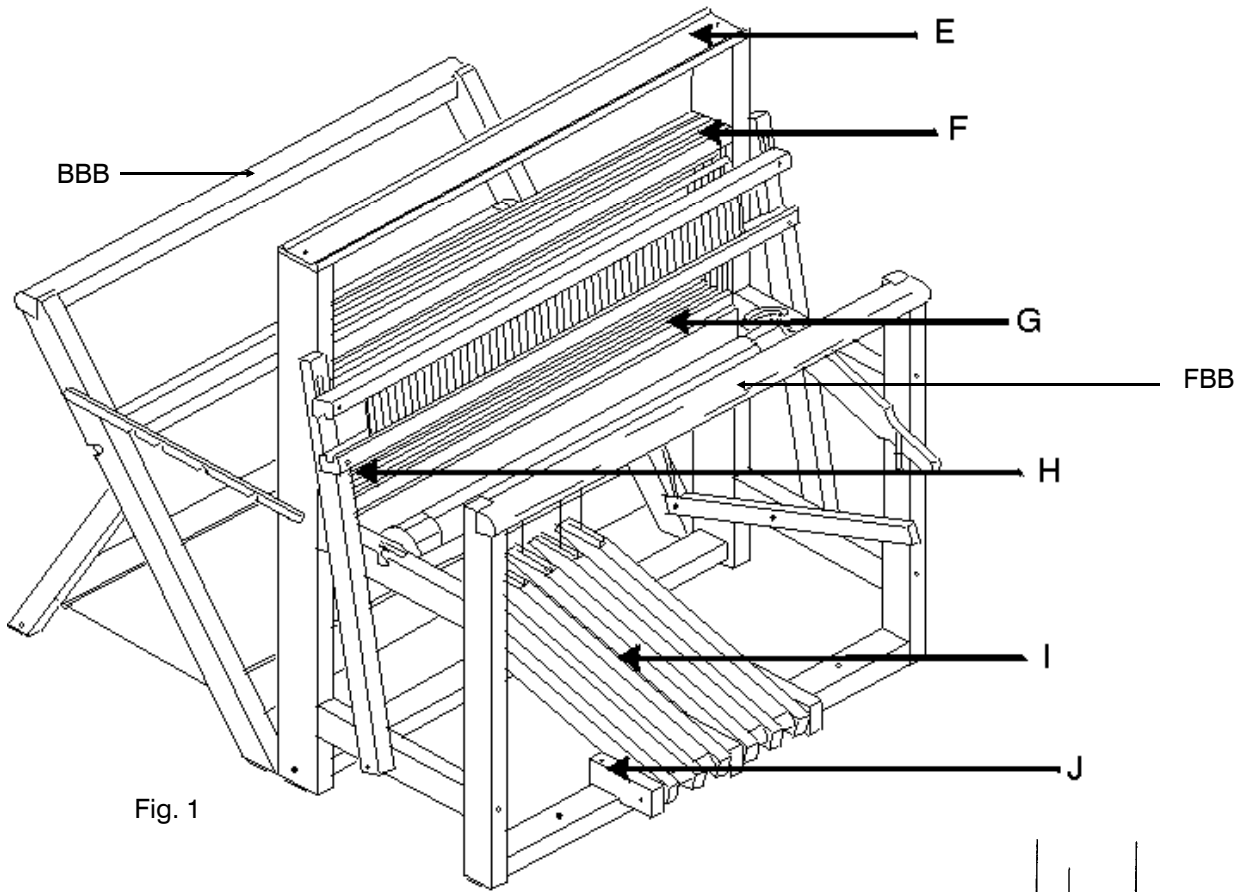


Fig. 1

- 1- Remove the whole Treadle Set I *
- 2- Remove Front and Back Breastbeam FBB*, BBB*
- 3- Remove Castle Top E
- 4- Remove Warp and Cloth Beam *
- 5- Remove the four Shaft Frames F*
- 6- Remove the four Lams (you may use a screwdriver to open the "S" hooks holding the lams to the jack)
- 7- Tape the jack box with strong tape "T"
- 8-- Remove the jack box*

* set aside for use lather with all screws, bolts, washers and nuts

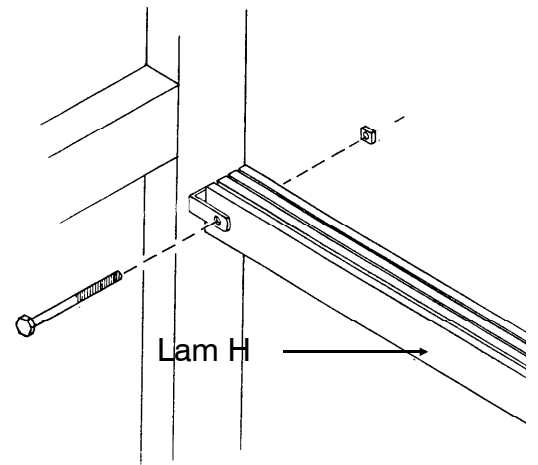


Fig. 2

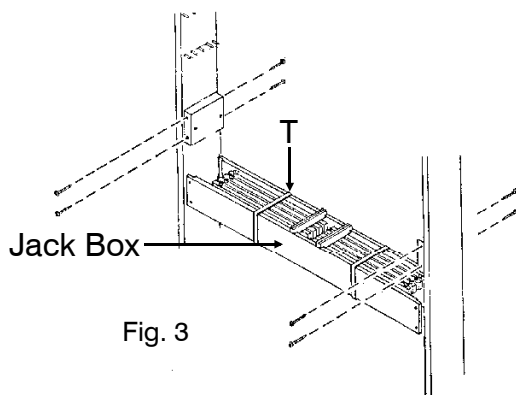


Fig. 3

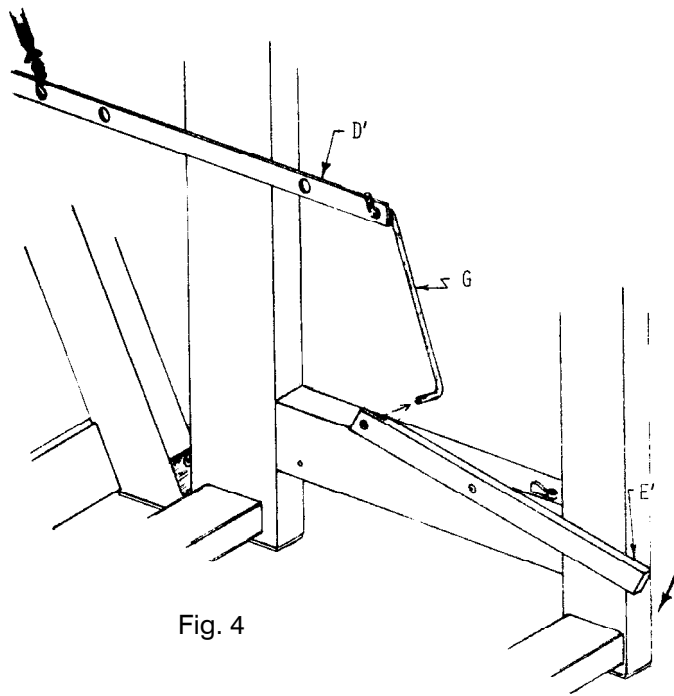


Fig. 4

Lay the loom on its front with the back stabilizing assembly folded.
 Disconnect the brake treadle from the L-shaped rod G

Unfold the back section of the loom and set it down on a chair.

Remove the Flat-Headed Screws* holding the hinges* to the middle posts, and remove the back stabilizing assembly. (not to be re-used)

* set aside for re-use

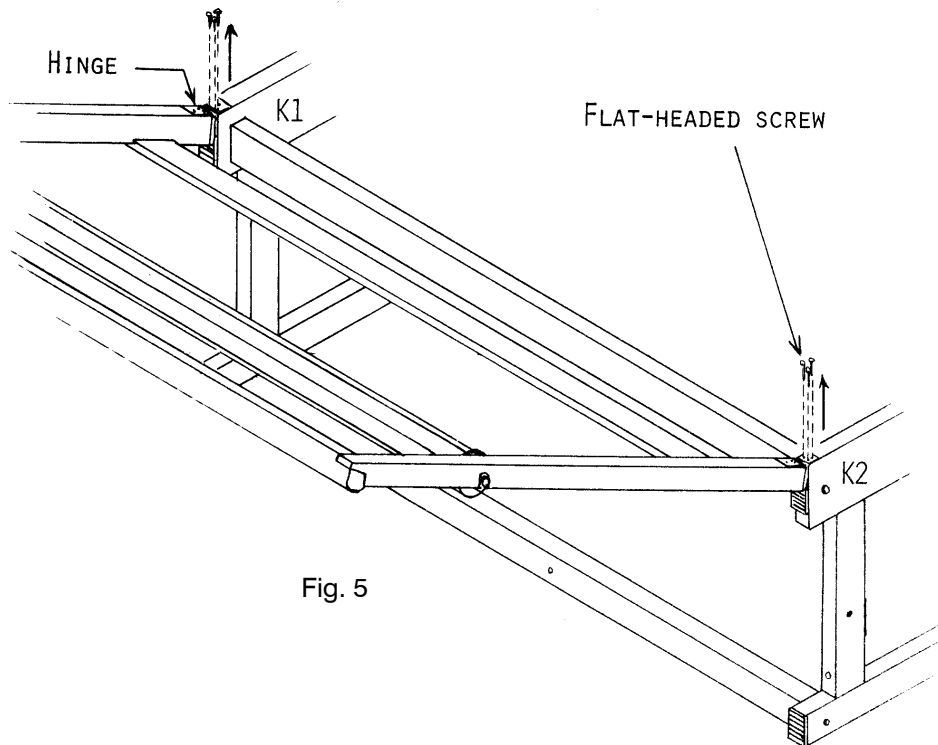
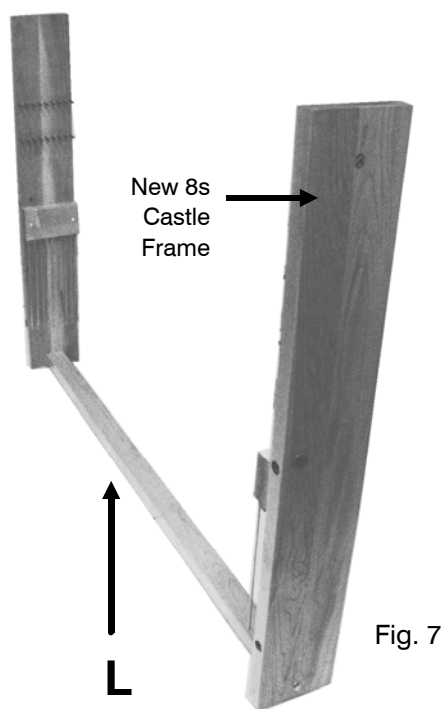
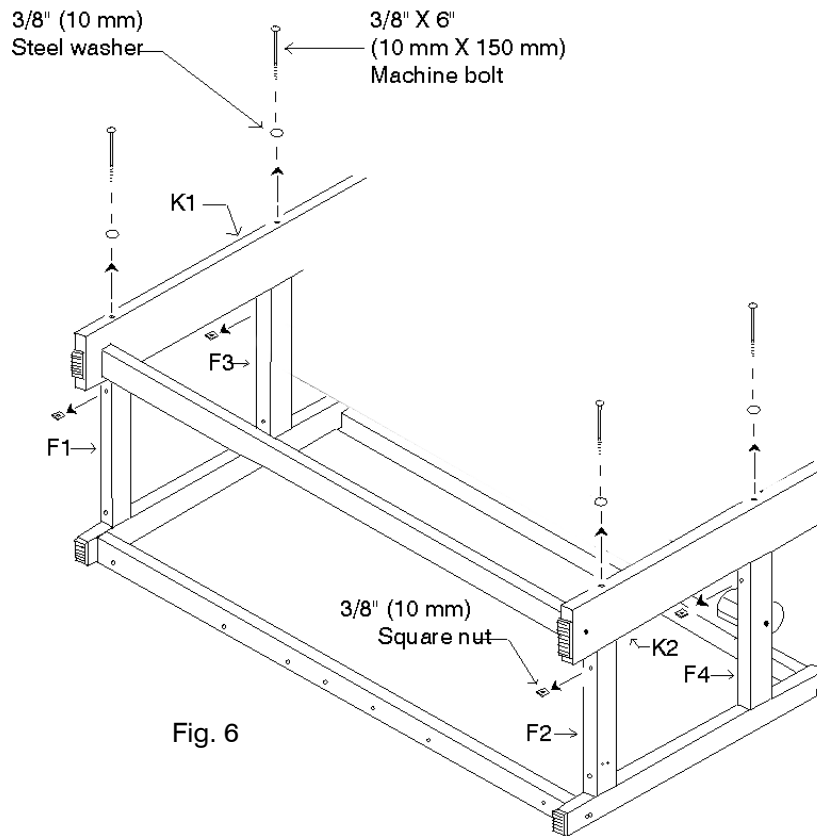


Fig. 5

While the loom is still on its front, remove the four 3/8" x 6" machine bolts, the 3/8" steel washers and the square nuts holding the main castle post K1 and K2 to lateral cross-members F1, F2, F3 and F4

Note: steel washers & square nuts will be re-used for assembling the new castle posts



Remove the middle cross member L* from the old castle frame and assemble it with the new 8s castle frame using the same machine bolts, washers and square nuts.

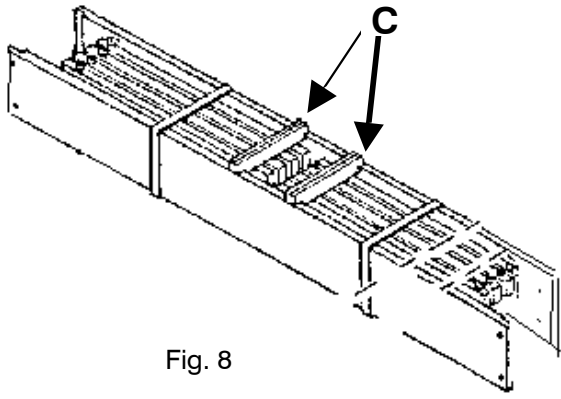


Fig. 8

Un-tape the jack box .
Remove the 2 rubbers strips C on the top of the jack box. Remove staples.
The jack box board and jacks will be re-used.

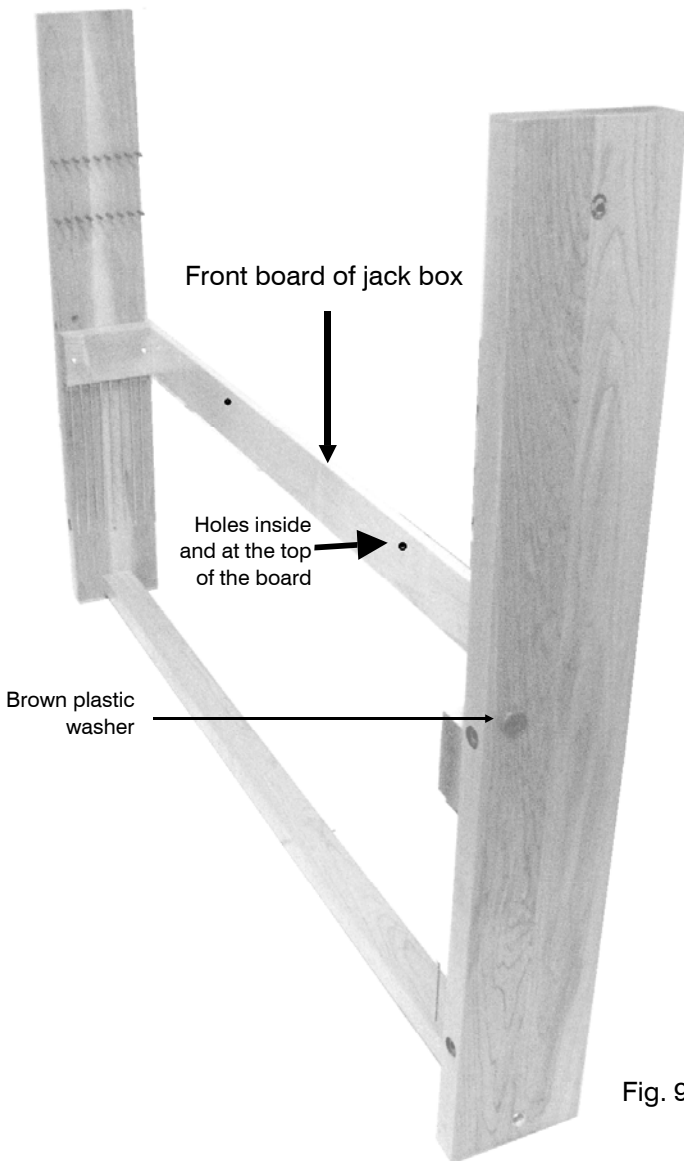


Fig. 9

Install the front board of the jack box in the front of the new castle assembly using the screws of the old loom (No. 12, 1½")
(The plastic brown washer is at the back of the castle frame).

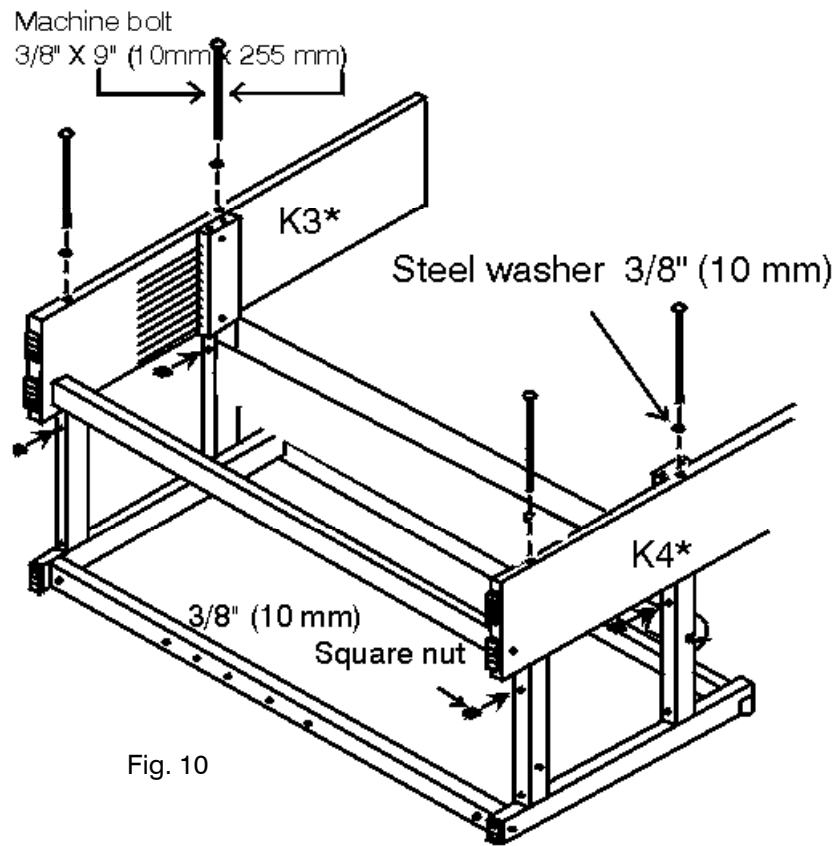


Fig. 10

Install the new castle assembly with the new machine bolt 3/8" X 9", the steel washer 3/8" and the square nuts 3/8" (Fig. 10 & 10A)

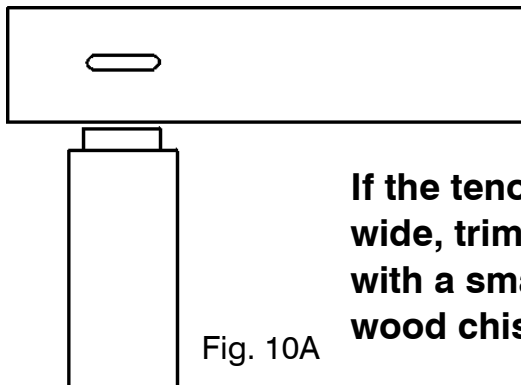


Fig. 10A

If the tenons are too wide, trim the excess with a small saw or a wood chisel.

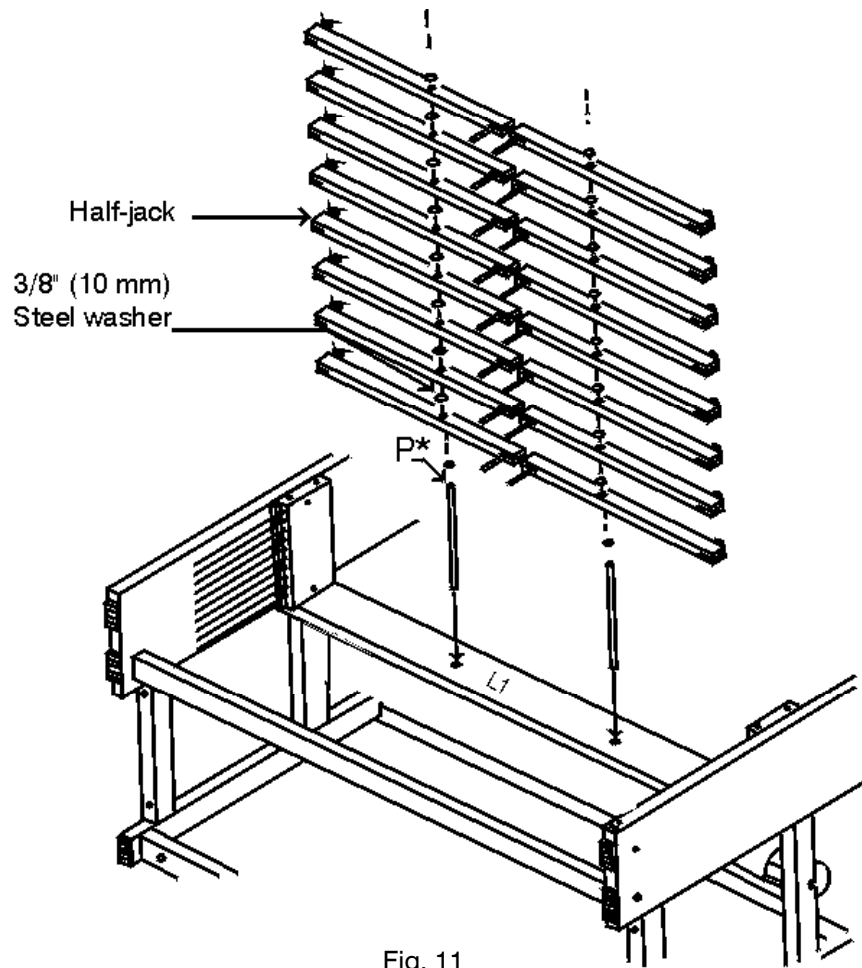


Fig. 11

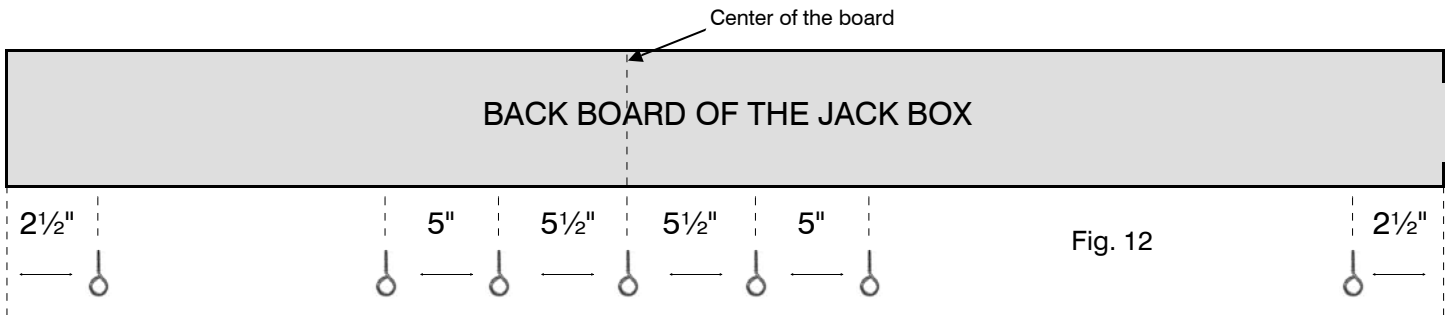
Insert jack axle rods P (7½"), supplied with the kit, into the holes in the jack-box front board L1.

On each axle rod, place one 3/8" (10 mm) steel washer, then eight half-jacks (loom and kit half jacks) with a 3/8" (10 mm) steel washer between each and finish with another 3/8" (10 mm) steel washer (Fig.11)

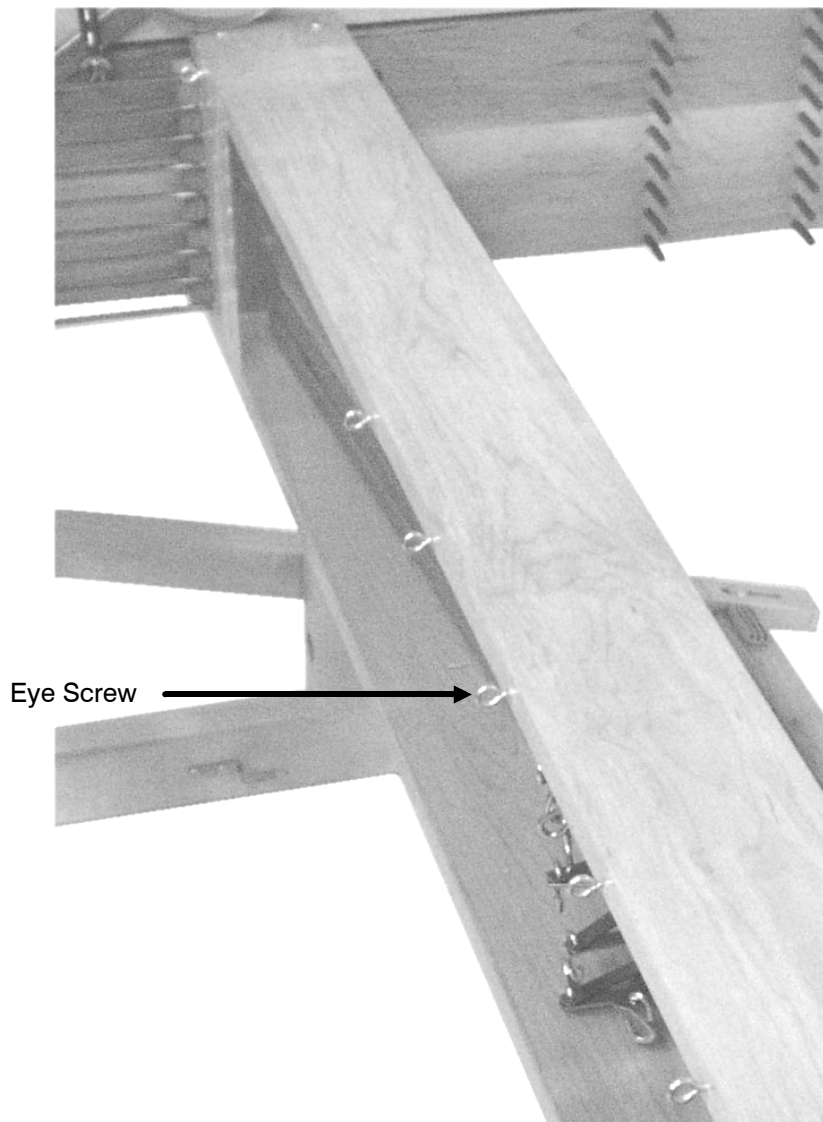
Close the jack box with the back board and again use the screws of the old loom (No. 12, 1½") to fix it in place.

Make sure that the jack box rods are in the holes of the jack box board.

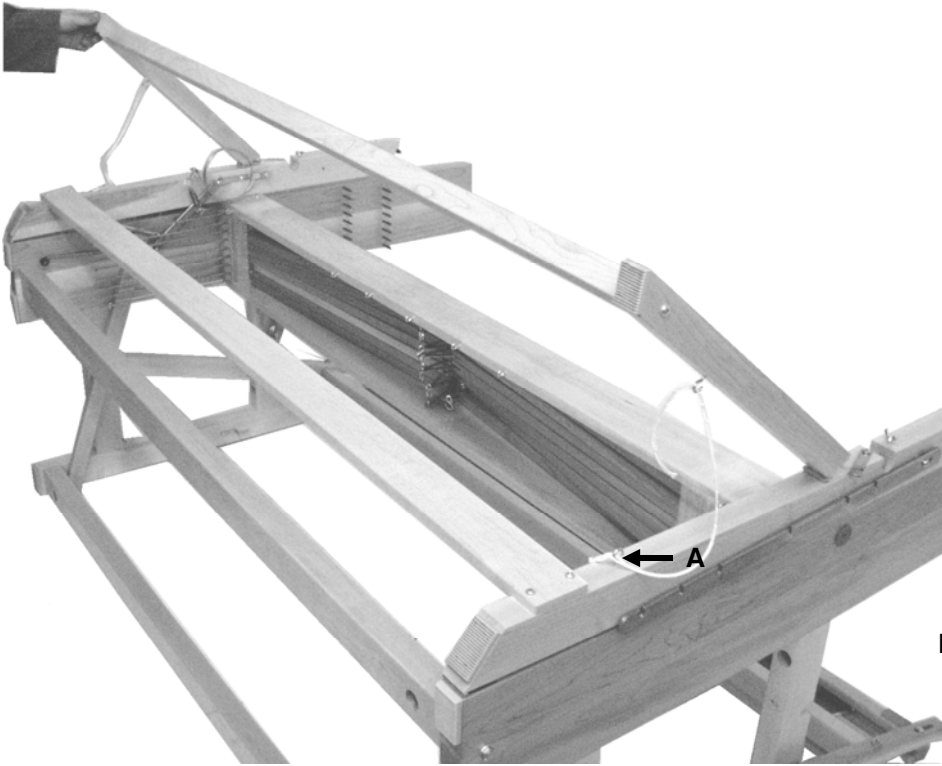
Prior to positioning the loom upright, install the 7 eye screws into the bottom of the back board as shown here.



Then secure the back board to the castle uprights completing the jack box.



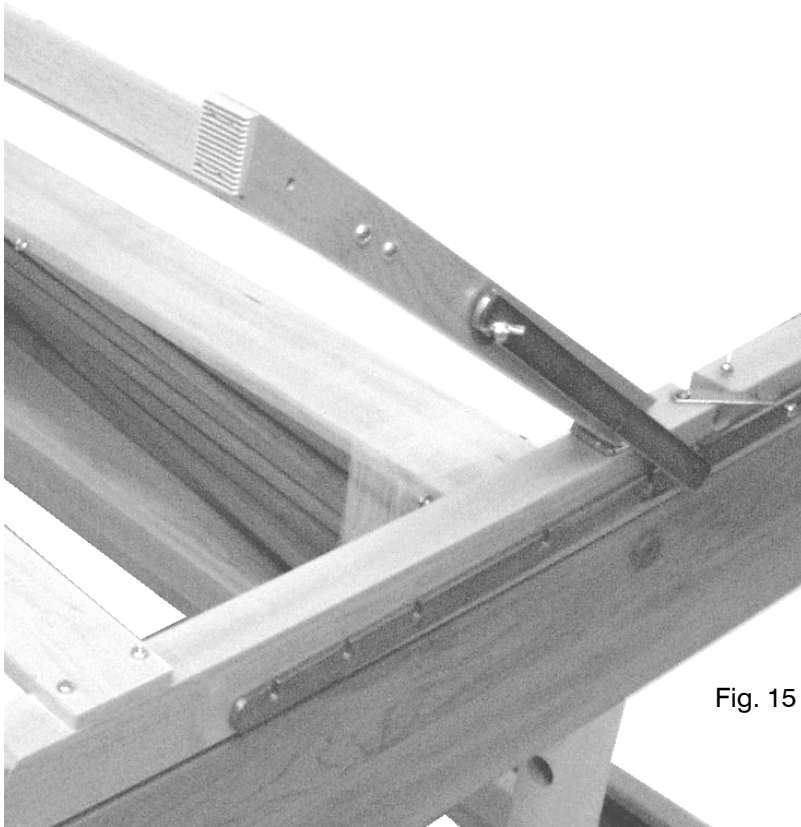
Tape both sides of the jack box.



Install the old back post with the old stabilizing post using the same screws removed previously.

Remove eye screws "A" from the back post

Fig. 14



Remove the old stabilizing post and install the new one using the same screws.

Fig. 15

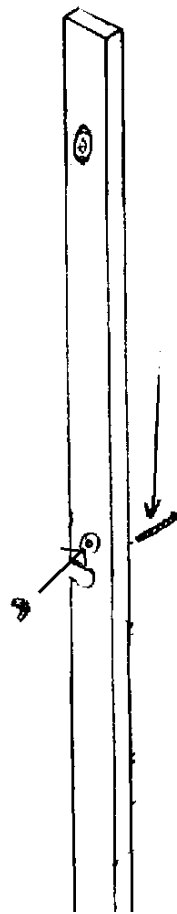
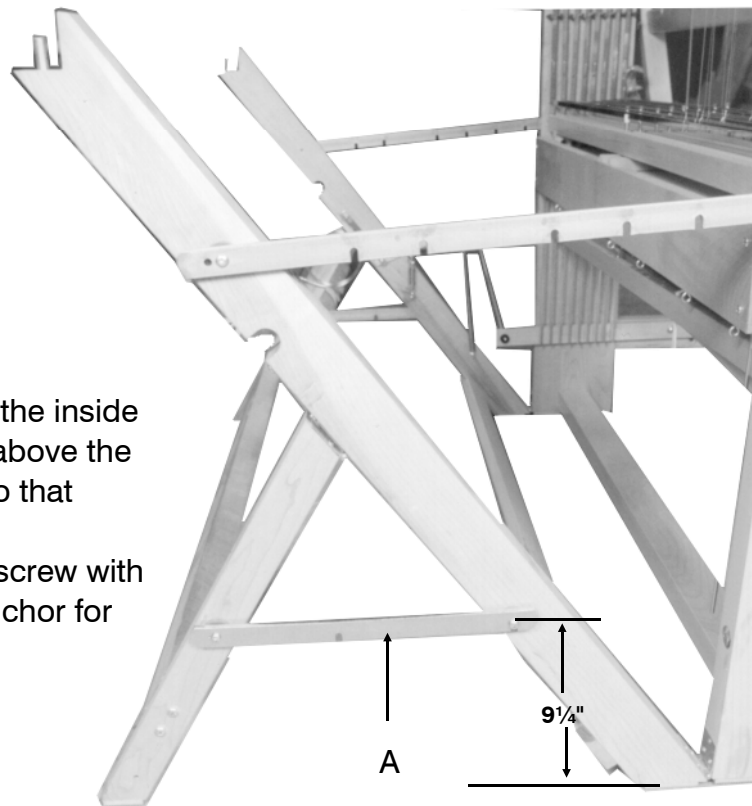


Fig. 16

Re-position the loom upright.

From the old castle frame get the 2 carriage bolts 1/4" x 2 1/2" and the wing nuts 1/4" and affix them to the new castle from the inside.

Unfold the back post and lock in place at the last notch using the carriage bolt just installed. Lock wing nuts.



Using a 11/64" Bit, drill a hole on the inside of each Warp Beam Post, 9 1/4" above the floor as indicated (or drill holes so that metal hook (A) is level)
 Insert a #12 1 1/2" round headed screw with a brown plastic Washer as an anchor for the hook.

Fig. 17

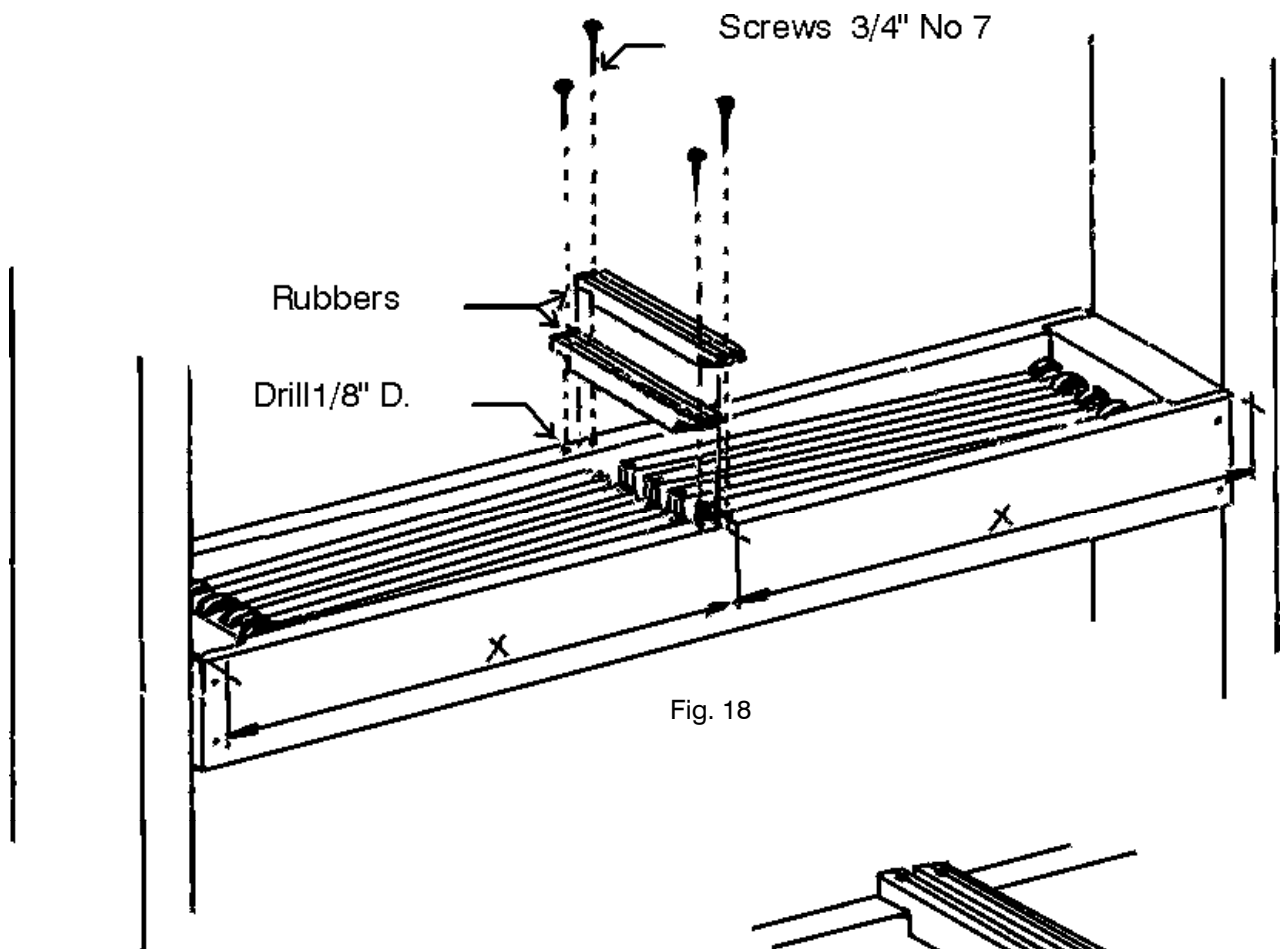


Fig. 18

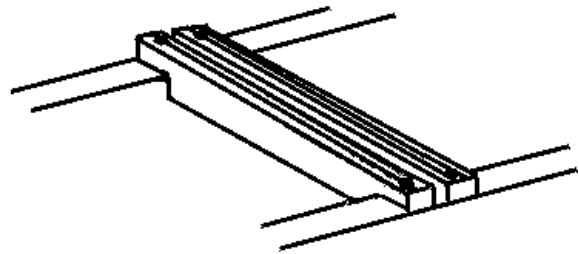


Fig. 19

Reposition the loom to its upright position
 Put two jack rubber strips (one on each side of the center of boards even with the end of the jacks).

Pre drilled holes are normally not needed because the screws are very small but if you prefer, drill holes at these locations on the two boards with an 1/8" (3.17 mm) bit. (Fig. 18)

Then fix rubber strips with 4 3/4" round headed screws No 7 (Fig. 18 and 19)

Un-tape the jack box.

Install the heddles in the shaft frames. (see "WARP AND WEAVE" on page 10)

Slide shaft frames T between dividers. The shaft frames must rest on the plastic supports of the jacks (shaft guides).

The Leclerc Logo must be on top, facing the front of the loom.

NOTE: Some shafts may be tight between the castle frame until the castle top is attached.

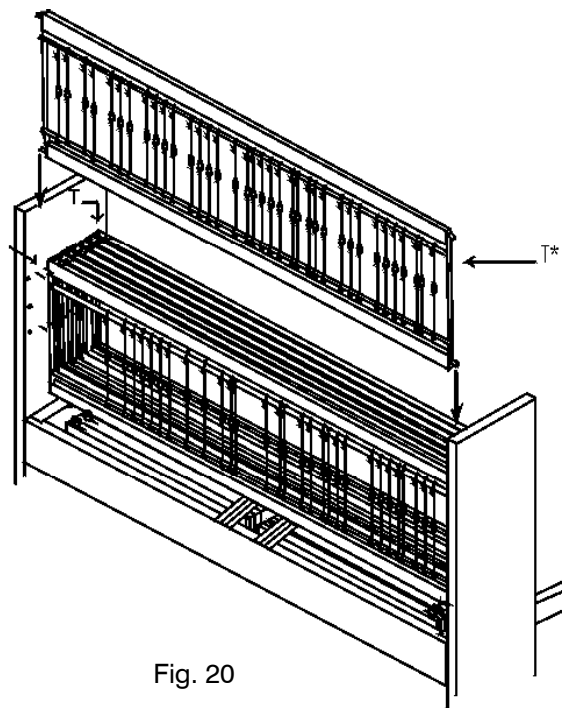


Fig. 20

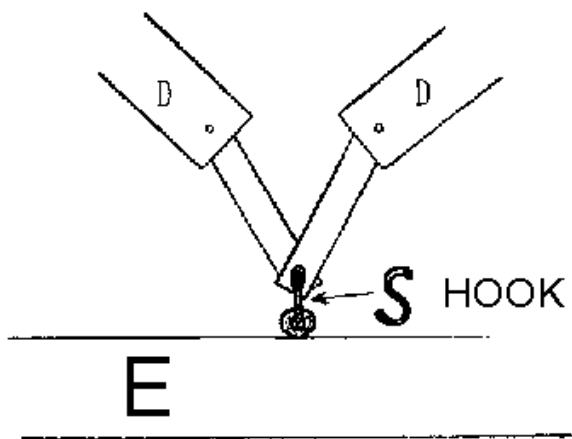


Fig. 21

Hook jacks to new floating lam.

Put the "S" hook of the jacks D inside the eyelet of the lam E.

Using four 1½" flat-headed screws no. 12, affix the castle top on top of the middle wide post (castle). Make sure to screw into the pre-drilled holes.

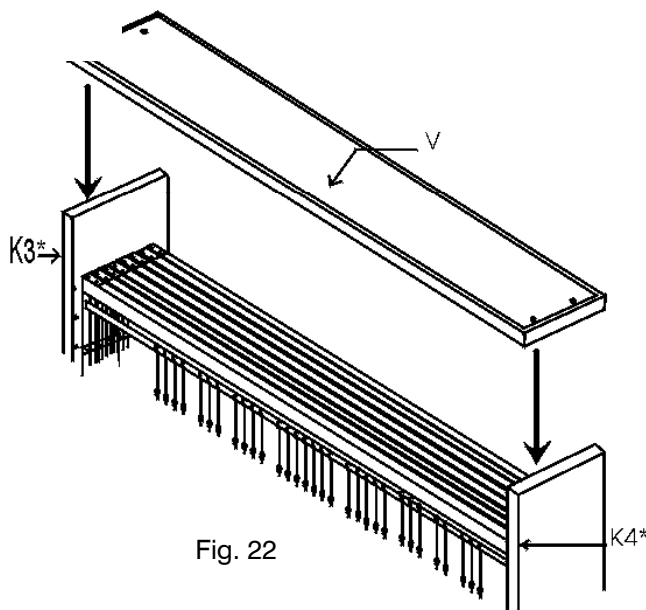


Fig. 22

**MAKE SURE THE SWORDS
"A" AND "B" ARE ATTACHED
AS SHOWN BELOW**

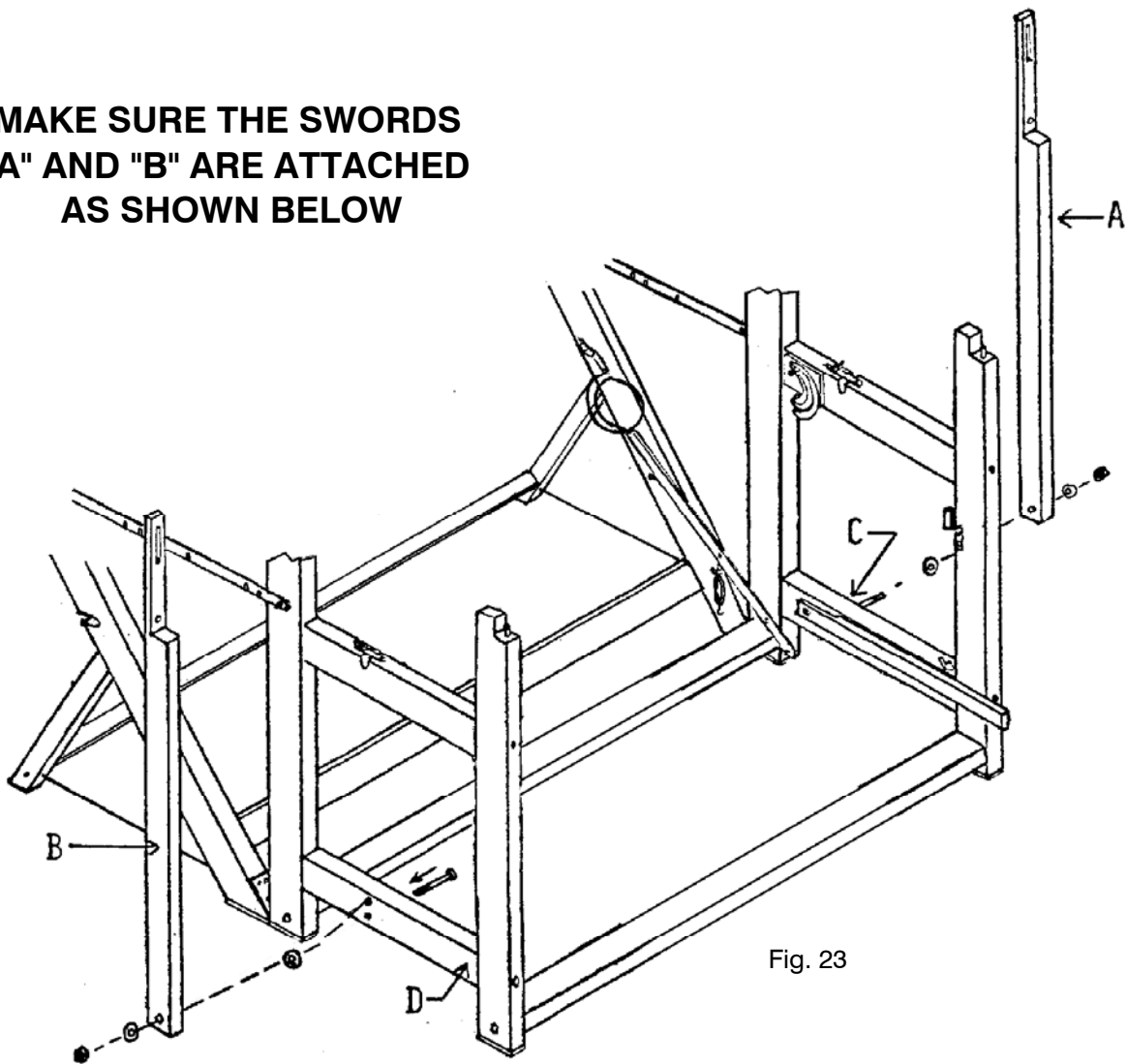


Fig. 23

Note: Hammer the carriage bolts inside the holes so they will lock while you will screw in the auto lock nuts.

Using 5/16" x 3 1/2" (8 mm x 89 mm) carriage bolts, affix swords A and B to lower front cross-members C and D. Insert the bolt from the inside into the **upper hole** (jack type loom) Place a 5/16" (8 mm) steel washer between the cross-member and the sword and another on the outside, a 5/16" (8 mm) nylon auto lock nut.

The grooves on top of the swords must be in front.

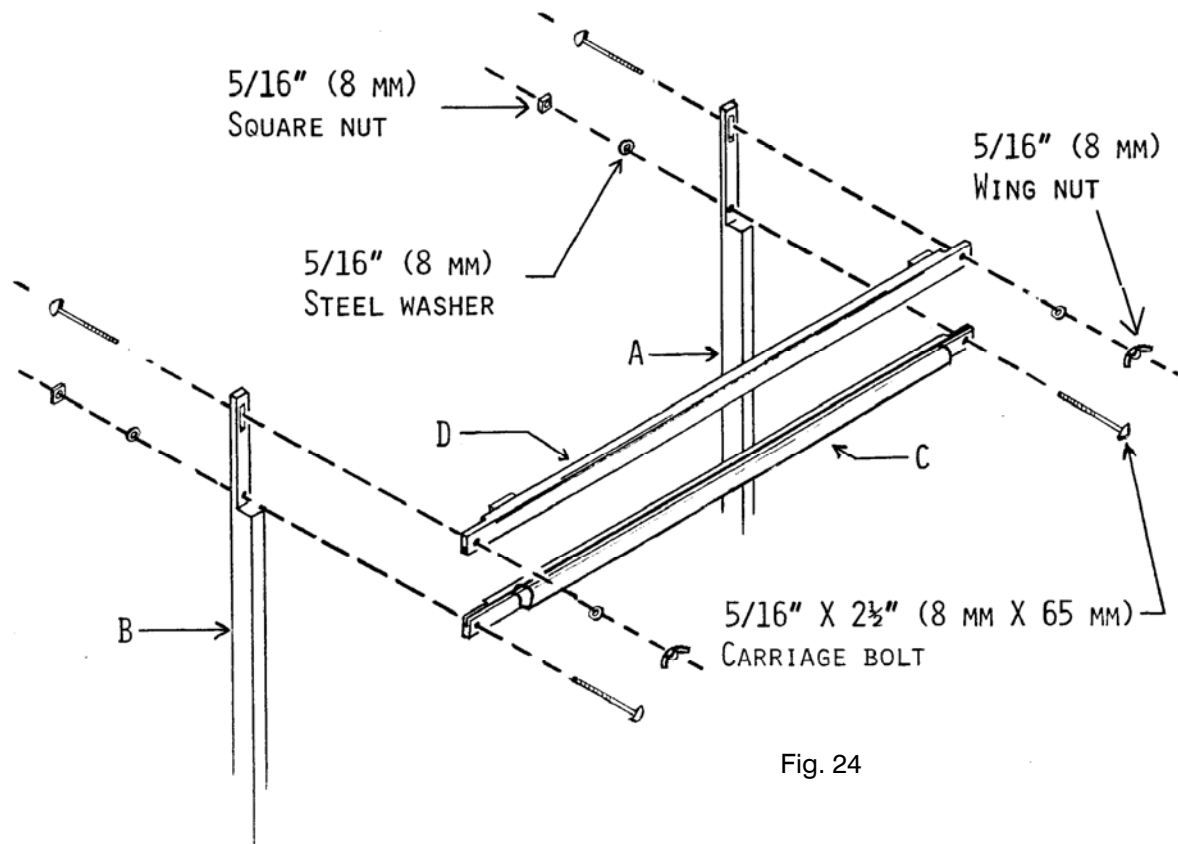


Fig. 24

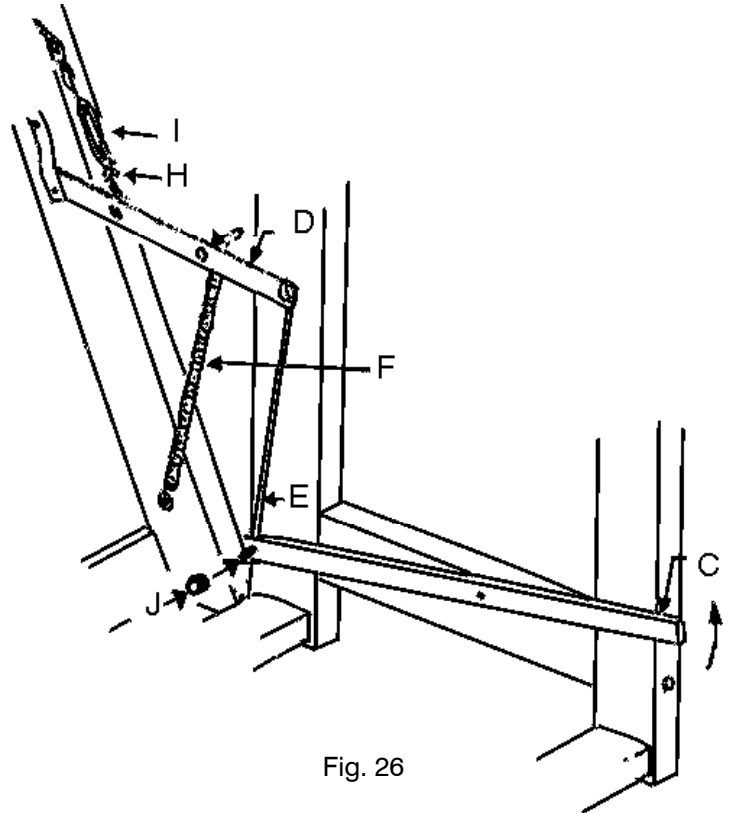
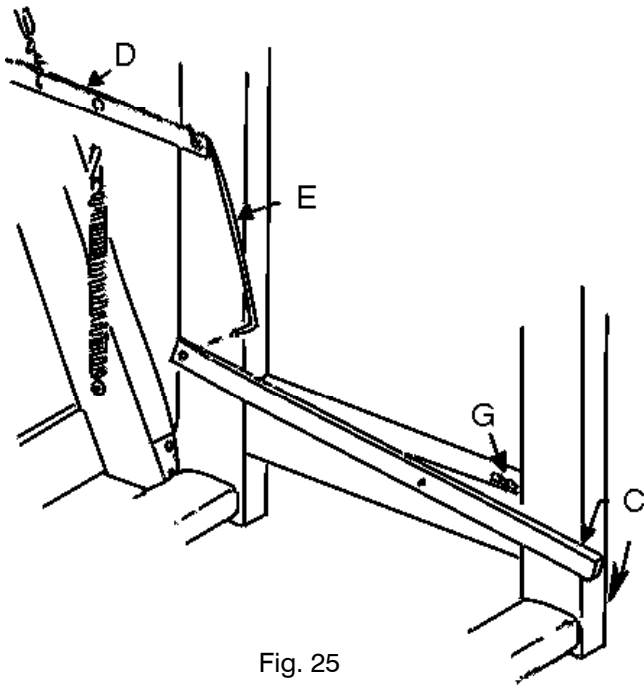
Using 5/16" x 2 1/2" (8 mm x 65 mm) carriage bolts, 5/16" (8 mm) steel washers, and square nuts, affix batten sley C to the lower holes of swords A and B. (Fig. 24)

NOTE: The batten sley does not have polyvinyl bumpers but it has a shuttle race.

Using 5/16" X 2 1/2" (8 mm X 65 mm) carriage bolts, 5/16" (8 mm) steel washers, and wing nuts, affix batten handtree D to swords A and B. (Fig. 24)

NOTE: The batten handtree has polyvinyl bumpers.

The slots of the batten sley and handtree must face each other.



Install new longer brake treadle:

Using metal rod E, join the brake treadle C to the brake lever D. First insert the double-cornered end of the metal rod into lever D; then insert the other end of the metal rod into treadle C while the treadle is depressed. (Fig. 25)

Raise treadle C as high as possible then hook spring F to lever D. (Fig. 26)

Brake adjustment : Release the brake by depressing treadle C and locking it down with the catch G. (Fig. 25) The warp beam should turn freely but the brake circular wire should not be too slack. If the tension is too great, unscrew the wing nut H slightly and then loosen the turnbuckle I. If the tension is too slack, tighten the turnbuckle I slightly and then the wing nut H. (Fig. 26)

Add a black rubber ring J to the lower end of the rod E, to prevent the rod from slipping out. (Fig. 26)

TREADLE SET ASSEMBLY

From the old loom you will need:

- 3 treadle blocks
- 4 wood spacers 1½"
- 4 washers 5/16"

Assemble the treadle set (in or out of the loom) as shown in picture using:

- 1 treadle rod 28¼"
- 10 treadles
- 8 wood spacers 1½"
- 3 treadle blocks
- 4 x 5/16" washers
- 1 push nut to be installed after the set is on the loom.

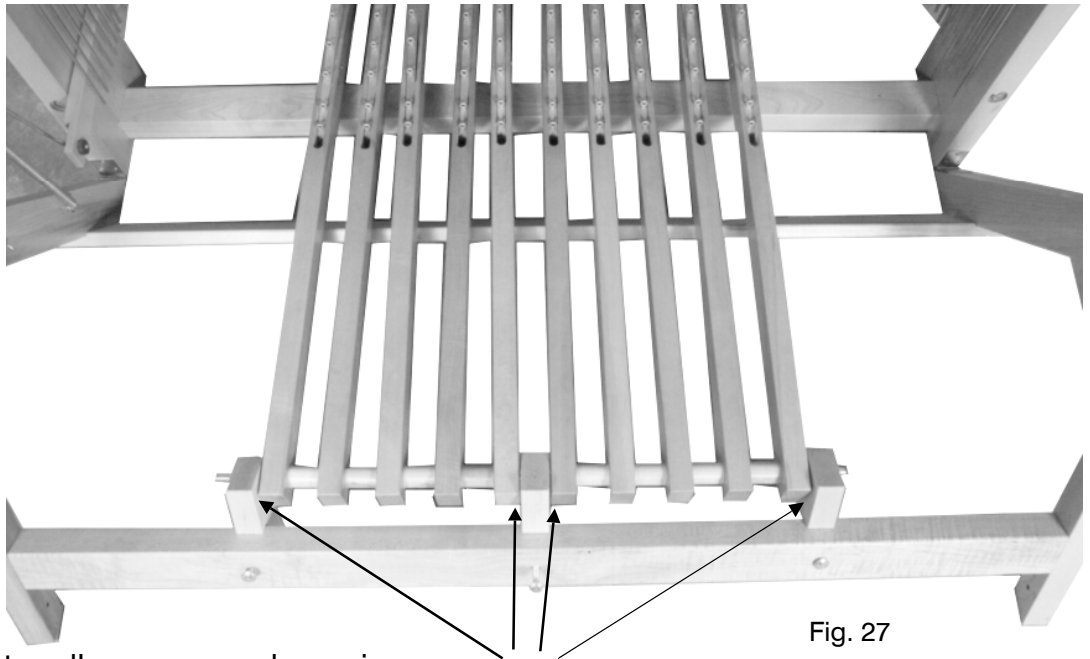


Fig. 27

Use 4 washers between treadle and treadle blocks.

Affix treadle set to the treadle cross-member using:

- 3 carriage bolts 5/16" x 4"
(from outside to inside of the loom)
- 3 washers 5/16" (inside of the loom)
- 3 Square nuts 5/16"

TREADLE SEPARATOR



Center the Treadle Separator Board on top of the Middle Loom Crossmember, and place treadles into the separator. Slide the separator left and right to optimize its position, making sure it is centered and all the treadles are straight. Then mark the separator position in order to make the two required pre-drilled holes in the middle cross-member using an 1/8" drill bit. Affix the separator to the cross-member using 2 1½" round-headed screws #8.

Fig. 28

TREADLE SPRINGS

Insert the Spring Rod and Springs in the Screw Eyes below the Jack Back Board aligning one spring above each treadle.

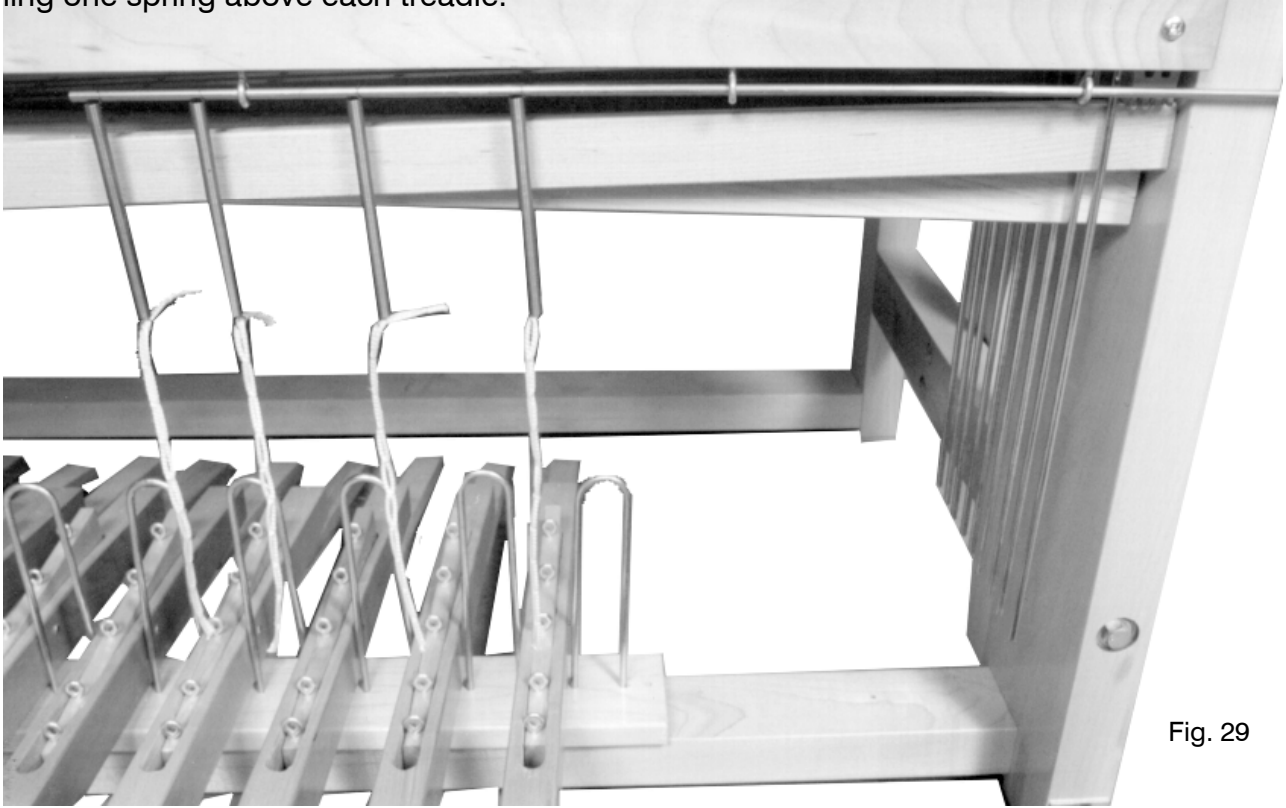


Fig. 29

ANCHORS FOR TREADLE ROCKER CORD

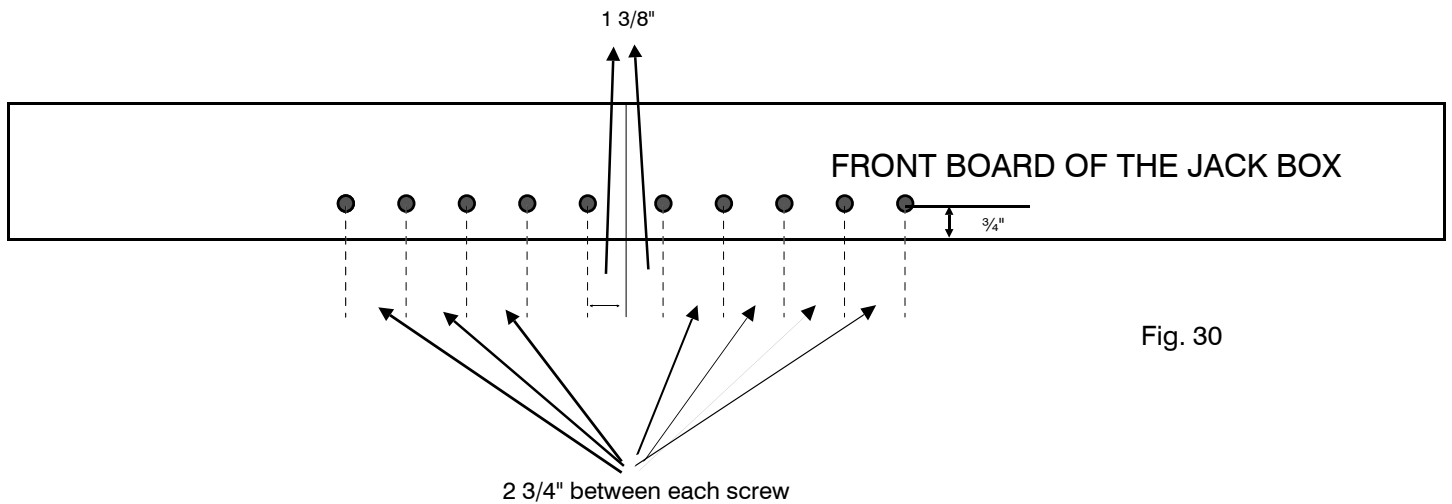


Fig. 30

The Treadle Rockers operate with a Loop Cord anchored from the Front Board of the Jack Box. Using an $11/64$ " Bit, drill 10 holes centered on the Front Board as indicated in the diagram. Screw in 10 #12 $3/4$ " Screws leaving the Head exposed to secure the Loop cord.

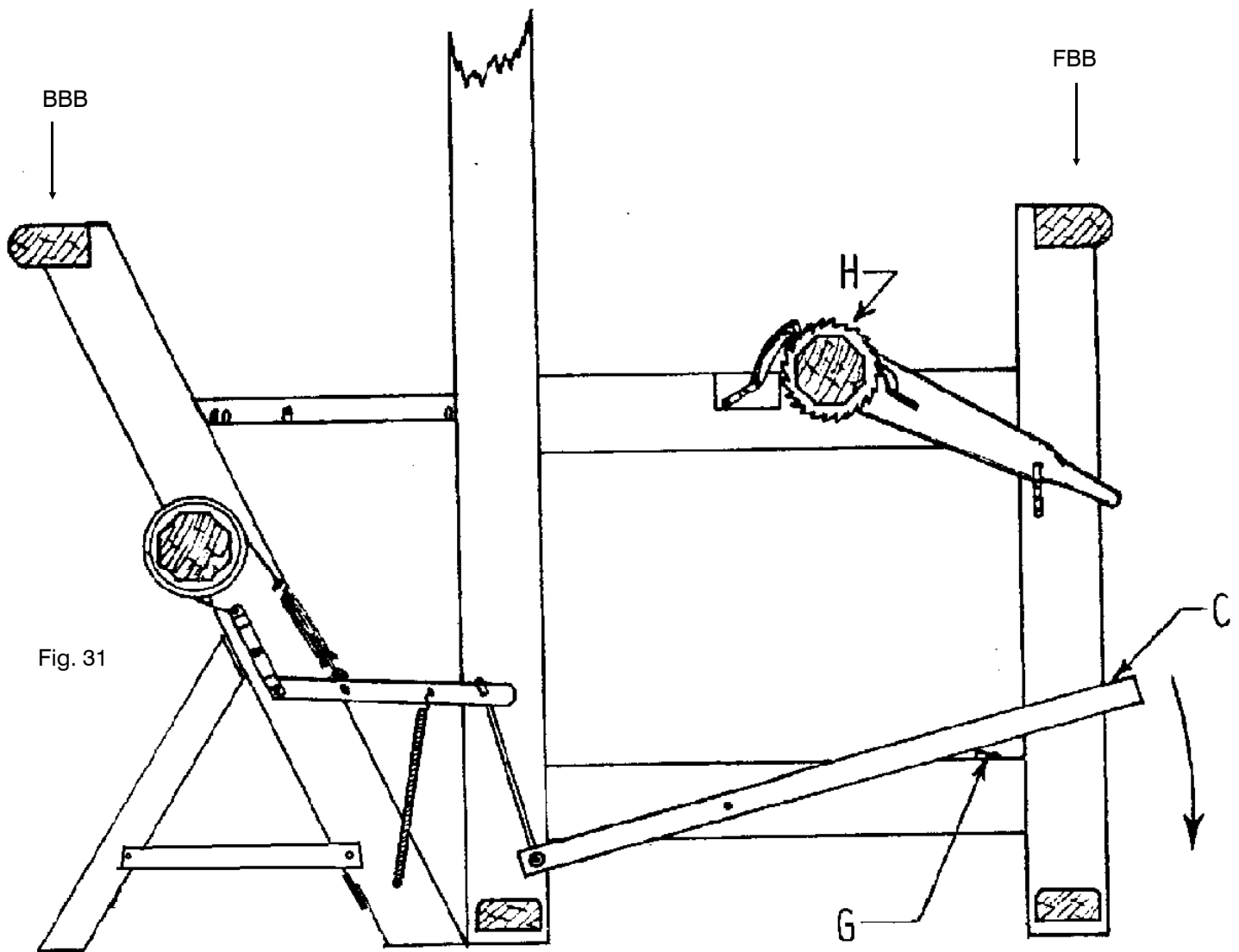


Fig. 31

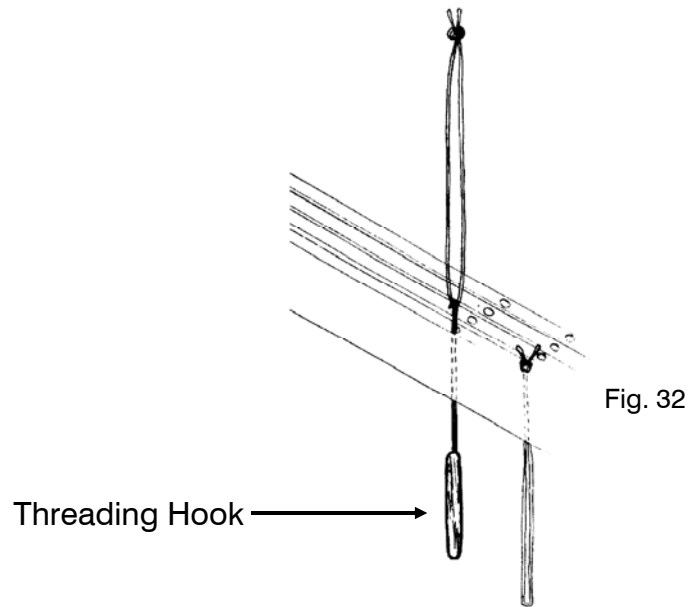
Instal: Front Cloth beam and Breastbeam
 Back Warp beam and Breastbeam

WEAVING:

To advance the warp, depress brake treadle C and turn cloth beam H at the same time. Then release brake treadle C and advance the cloth beam until the next notch in the ratchet gear is reached. If the tension is too great, gently depress the brake treadle until the desired tension is obtained. (Fig. 31)

FIRST TREADLE TIE-UP

Select any treadle and tie the Lams to the Treadles using the 7" cords supplied with the loom. Take the threading hook to help pass the cord through each hole of the lam.

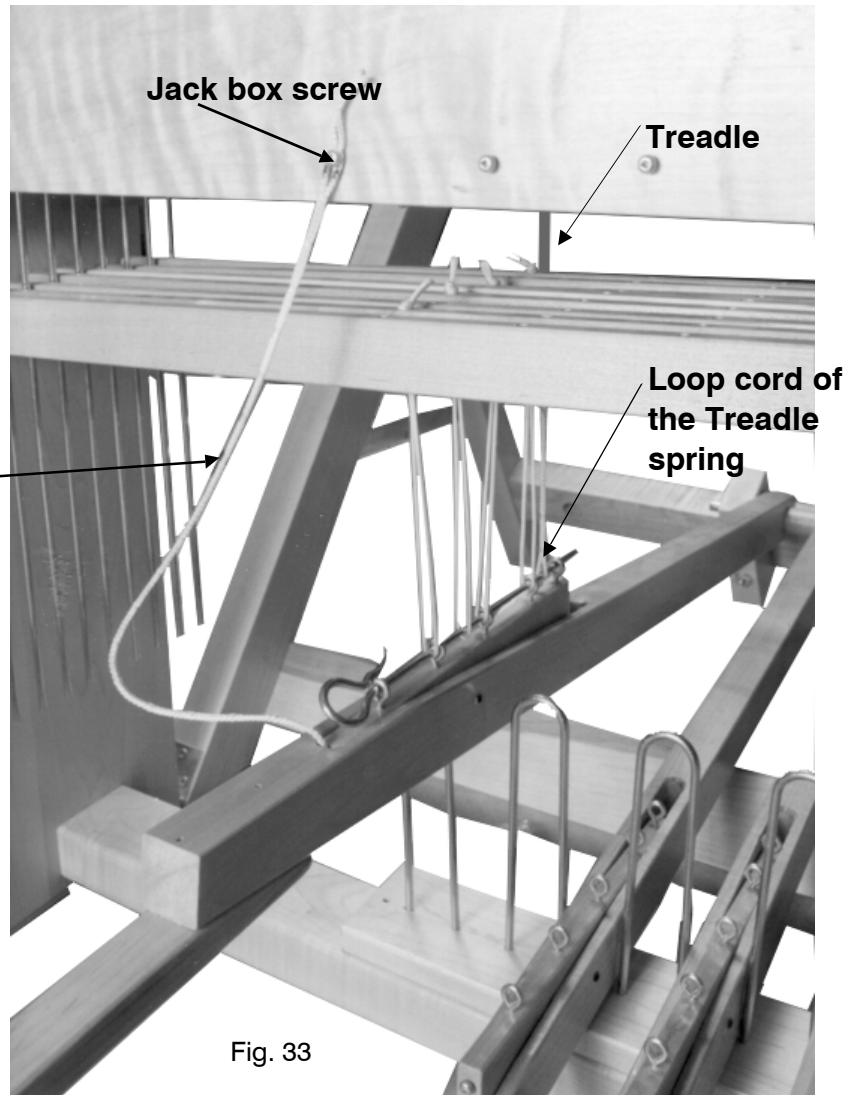
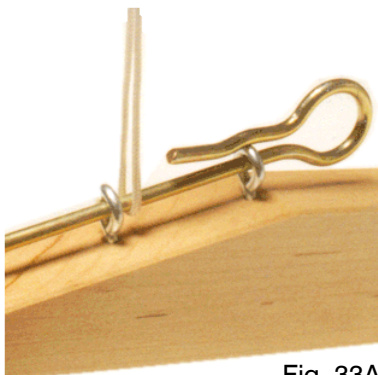


TREADLE HOOK AND ROCKER LOOP CORD

Slide the Treadle Hook through the Screw Eyes and Cord Loops. Before the last Screw Eye, insert the Hook through the Treadle Spring and secure. In the Treadle rest position(up) there should be no or very little tension on the Spring. However slack on those cords is not desirable. When all treadles are tied up, they should be at the same height.

Rocker loop cord

Install the Treadle Rocker Loop Cord on the Anchors(Screw Heads) using the marked points at the Anchor.(Fig. 33)



FIRST SHED

When you depress the Treadle, the Rocker Loop Cord raises the front of Rocker setting the Shafts at the corre Level.

Rocker loop
cord

Fig. 34

Rocker screw



VIEW FROM THE BACK OF THE LOOM SHOWING THE TREADLE AT REST POSITION AND DEPRESSED.

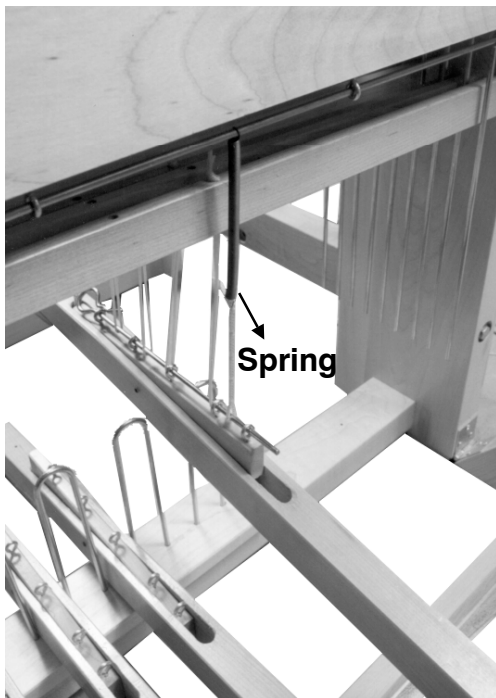


Fig. 35



Fig. 36

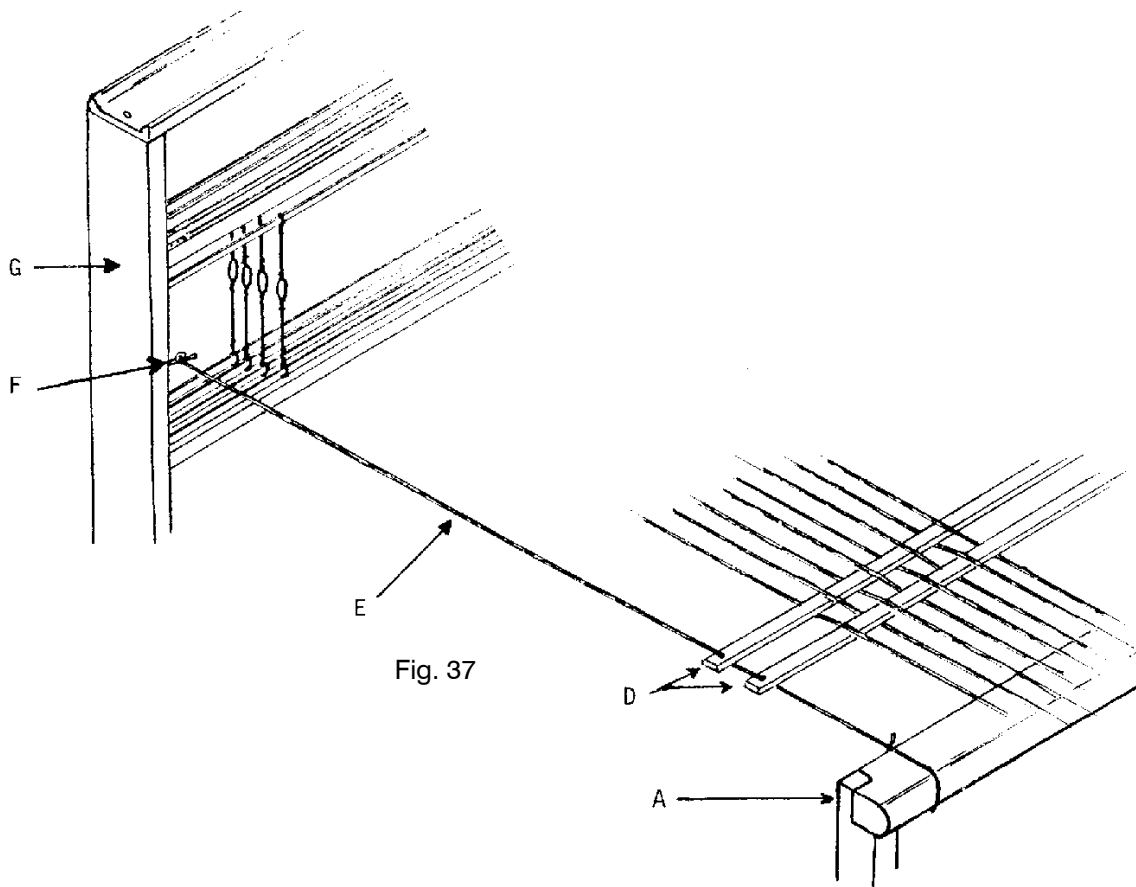
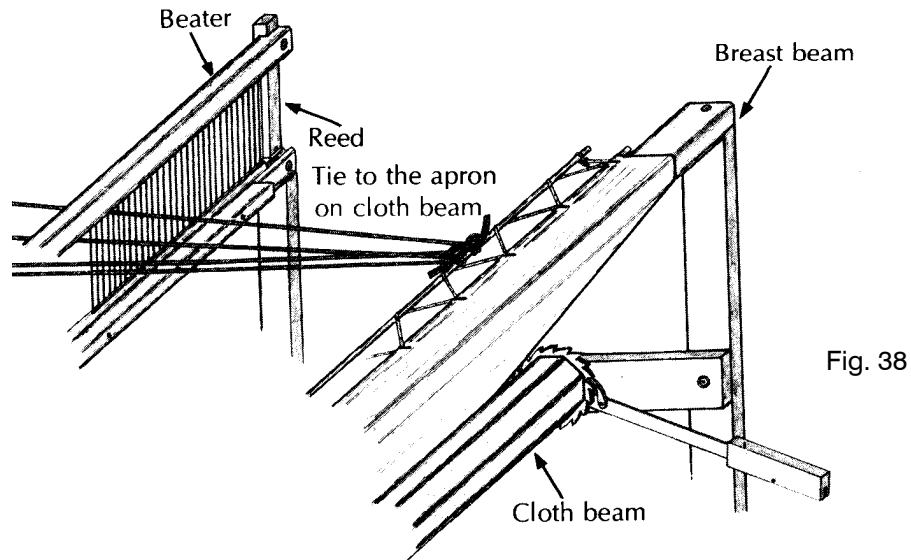


Fig. 37

Affix screw eyes F to the holes inside middle posts G.
Pass a string C through the holes at each side of the lease sticks D and tie them to the screw eyes and to the thread beam A. The lease sticks will be held at the right height and distance for easy threading. (Fig. 37)

If the loom is equipped with a sectional warp beam, affix the rake-like pieces (following the instructions supplied with the sectional warp beam) and do the following instructions on the cloth beam only.

If the loom is not equipped with a sectional warp beam, affix the apron to the warp beam with tacks and do the following procedures on the warp and cloth beams.



Insert a warp rod into the apron border.

For 27", 36" and 45" looms
(70cm, 90cm and 115cm)

Cut the 5 yard (4.5m) cord in half.
Use one half of the cord to lace the
apron warp rod to a second warp rod.
This second warp rod will be used to
attach warp threads.

For 60" looms
(150cm)

Use a 5 yard (4.5m) cord to lace the
apron warp rod to a second warp rod.
This second warp rod will be used to
attach warp threads.

For more information see the book "Warp & Weave" supplied with the loom.

**We at Leclerc encourage Weaver feedback on this and all
our products. Please
send your comments to Leclerc Loom Co.**

ADJUSTING THE SHED

The key to a wide clean shed is the proper adjustment of the Rocker Loop Cord. Once you have completed the hookup of the Cords and Springs, start at one end of the Treadle Set and depress each Treadle one at a time noting the position of the bottom Shed. Adjust each Shed by shortening or lengthening the Loop Cord. When properly adjusted, the bottom Shed of each Treadle should just kiss the Race Plate and the top Shed should be uniform across the width of the Loom. (see diagrams for examples)

Picture #39 shows an uneven Shed caused by Rocker Loop Cords being out of adjustment.

Picture #40 shows properly adjusted Rocker Loop Cords with the bottom Shed just kissing the Race Plate and the Top Shed uniformly even across the width.

It is very important to maintain a reasonable amount of tension on the Warp when making adjustments and while weaving in order to keep a wide, clean Shed.

The design of the system provides a greater lifting force on the Shafts with considerably less leg pressure required to depress the Treadles. With a few Picks on each new project, the Weaver will find the correct Warp tension required to produce the desired PPI (Picks per Inch) in the Cloth, while maintaining a wide, clean Shed.

HAPPY WEAVING



Fig. 39



Fig. 40