

# NILUS II COUNTERMARCHE

8 SHAFT LOOM

## Leclerc Looms

Since 1876



1573 Savoie  
C. P. 4  
Plessisville, Qc.  
G6L 2Y6

TEL: 819-362-2408  
FAX: 819-362-2045

### Receiving the Loom from Leclerc

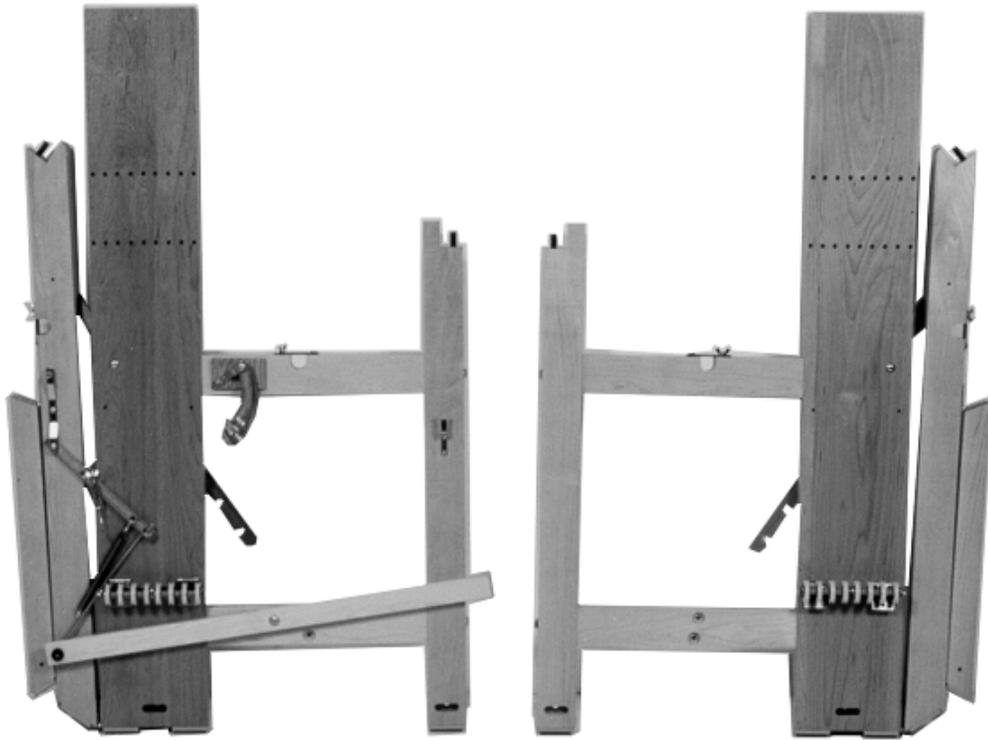
On receiving the loom, unpack and lay out the loom components.  
Do NOT discard any packing material until all parts are inventoried.

Check the parts received against the parts list on pages #2 to #7  
of the assembly instructions. Report any discrepancies to Leclerc  
immediately.

To assemble this loom, a  
minimum of 2 people are  
needed but it is  
recommended you use 3.



# PARTS LIST



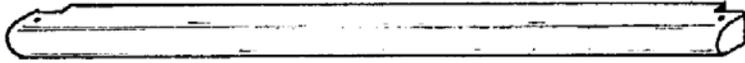
1 left-hand side

1 right-hand side

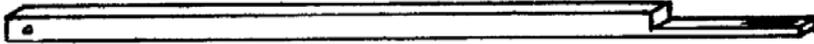


2 LAM SEPARATORS

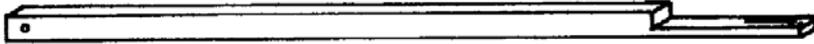
*Note for Leclerc in French : Faire les petit trous dans les montants pour les baguettes d'encroix.*



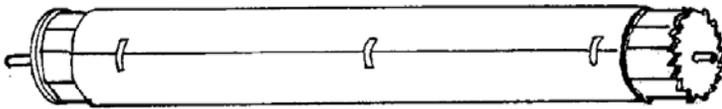
East beams



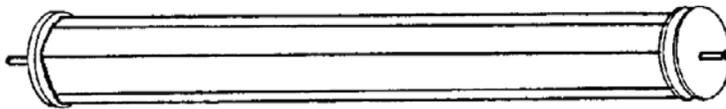
Low sword



High sword



Front (front) beam



Back (back) beam



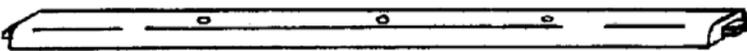
Handtree



Sley with shuttle race

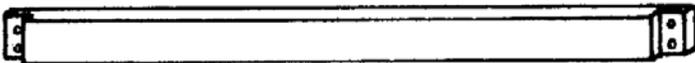


Over-middle cross-member



Under set cross-member

26 1/2" CC



Over cross-member  
Supporting back posts



Cross-member connecting  
Stabilizing posts

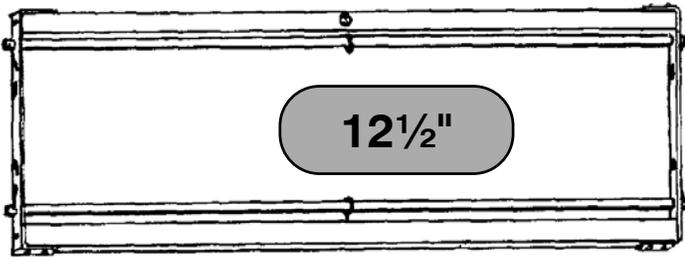
# PARTS LIST



1 apron



1 cloth take-up motion handle



8 shafts



10 treadles



3 treadle supports



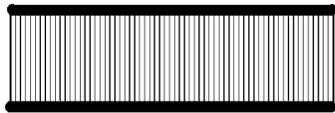
1 treadle set rod (8S=28<sup>3</sup>/<sub>4</sub>") WITH PUSHNUT



One more pushnut for treadle set



1 Crank



1 reed



2 lease sticks



4 warp rods

PARTS LIST ( ) = 8 shaft loom



3 screwdrivers (black, red, green)



1 aluminum wrench



1 wrench 3/8" for eye lam screws



60 treadle cords 11<sup>3</sup>/<sub>4</sub>" to join lams to treadles

60 treadle cords 22<sup>1</sup>/<sub>4</sub>" to joint bottom part of shaft frames to treadles



1 boat shuttle



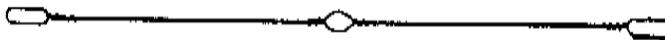
12 plastic bobbins



1 threading hook

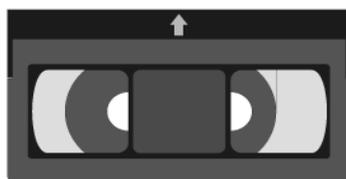


2 pkg of cords (5 yds each)



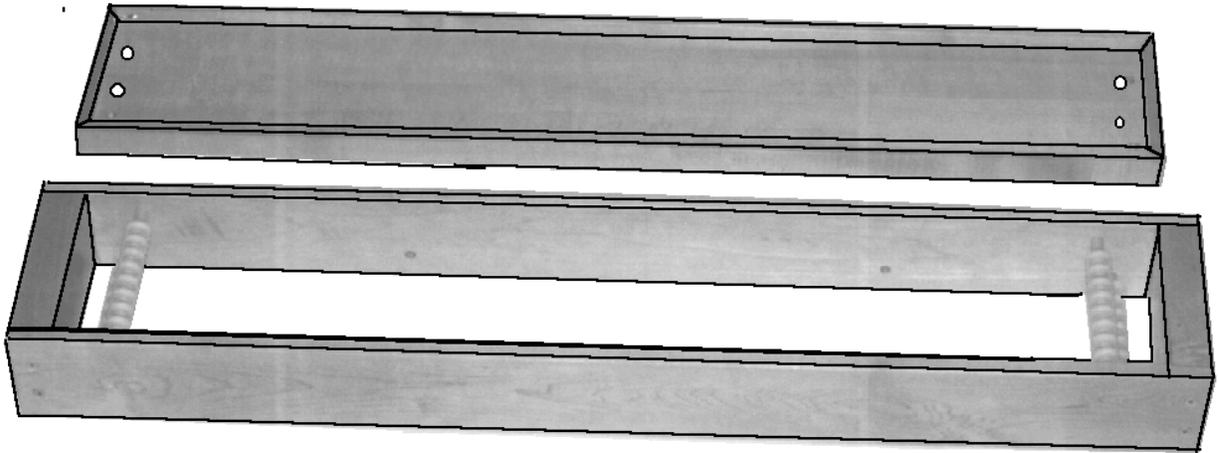
heddles (36" loom)  
heddles (45" loom)  
heddles (60" loom)

12<sup>1</sup>/<sub>2</sub>"

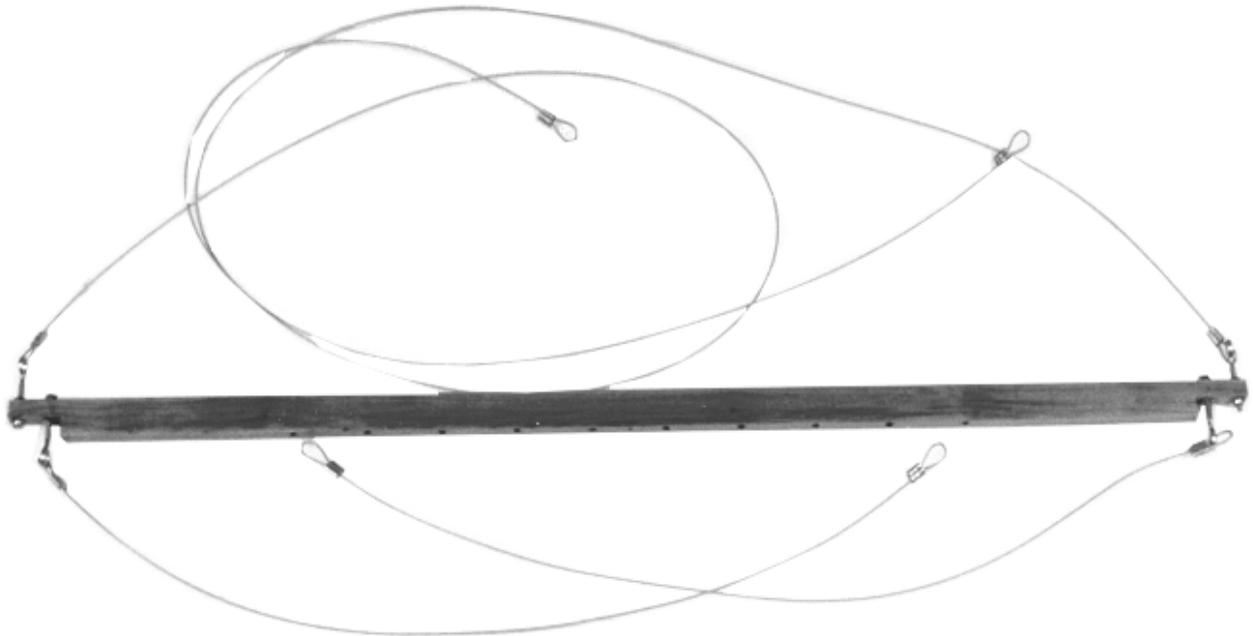


VHS VIDEO cassette with mounting instructions

## PARTS LIST

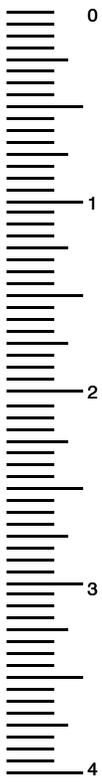


1 castle cover with pulleys and 1 castle top



8 metal lams with metal cables

*NOTE FOR LECLERC: Les trous des contremarches doivent être + gros pour que les cordes passent facilement. Utiliser une mèche 1/4"*



# PARTS LIST

Machine bolts

4X - 3/8" x 5"

Carriage Bolt<sup>ts</sup>

2X - 1/4" x 2 1/2"  
 4X - 5/16" x 2 1/2" (8 mm x 65 mm)  
 3X - 5/16" x 4"  
 2X - 5/16" x 3 1/2"

HEXAGON NUTS

2X- Nylon auto lock 5/16"

Washers

4X - 7/16"  
 11X - 5/16"  
 4X - 9/16"  
 4X - 3/8"

Square nuts

4X - 3/8"  
 5X - 5/16"

Wooden spacer

1 1/2"  
 8X for a 8 shaft loom

2 Loop cords Back Post 20"

Wing nuts

2 X - 1/4" (6 mm)  
 5X - 5/16" (8 mm)

4X eye screws

4X eye screws R-6

Flat head screw

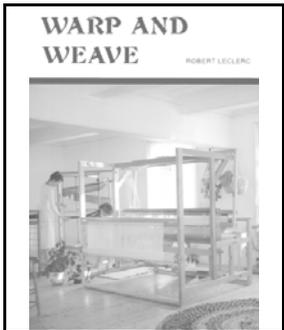
4X - #12 X 1 1/2" (cover)  
 4X - #12 X 1 1/2" (hinges)

4 spare shaft ends

Round head screw

2X - #14 x 2 1/2"  
 4X - #12 x 1 1/2" (back board)  
 4X - # 8 x 1 1/2" (lams sep)

Tacks for canvas



1 book Warp&Weave

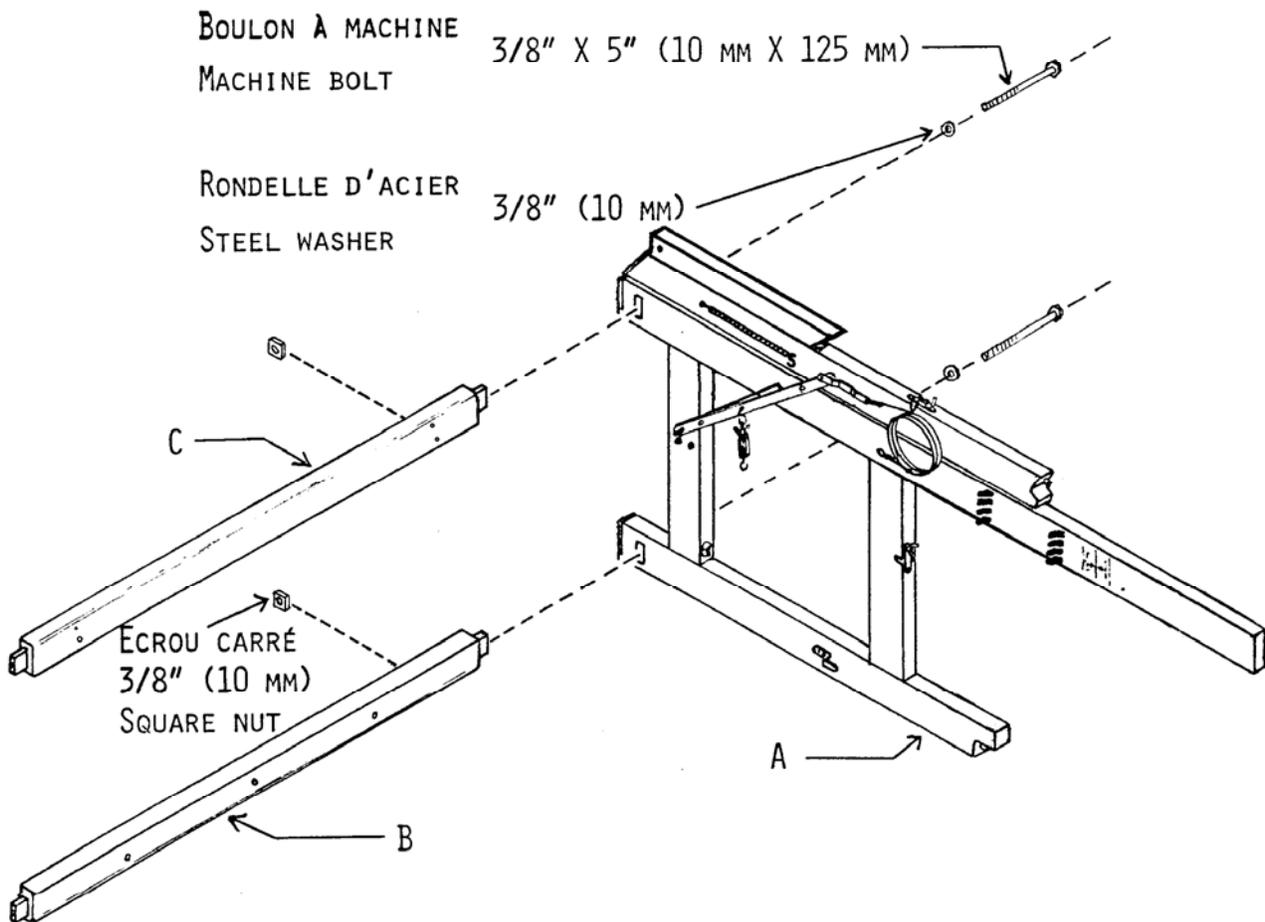


Fig. 1

Place right-hand side A of the loom on its front.

Insert a tenon of lower front cross-member B into the lower front mortise of right-hand side A. (Fig. 1)

NOTE: The lower front cross-member has 3 holes drilled through it which are used to affix the treadle set.

Using the wrench supplied with the loom, affix cross-member B with a 3/8" X 5" (10 mm X 125 mm) machine bolt, a 3/8" (10 mm) steel washer, and a square nut. (Fig. 1)

Insert a tenon of lower back cross-member C into the lower back mortise of right-hand side A. (Fig. 1)

NOTE: The lower back cross-member C does have 4 small holes drilled through it.

Affix cross-member C with a 3/8" X 5" (10 mm X 125 mm) machine bolt, a 3/8" (10 mm) steel washer, and a square nut (Fig. 1)

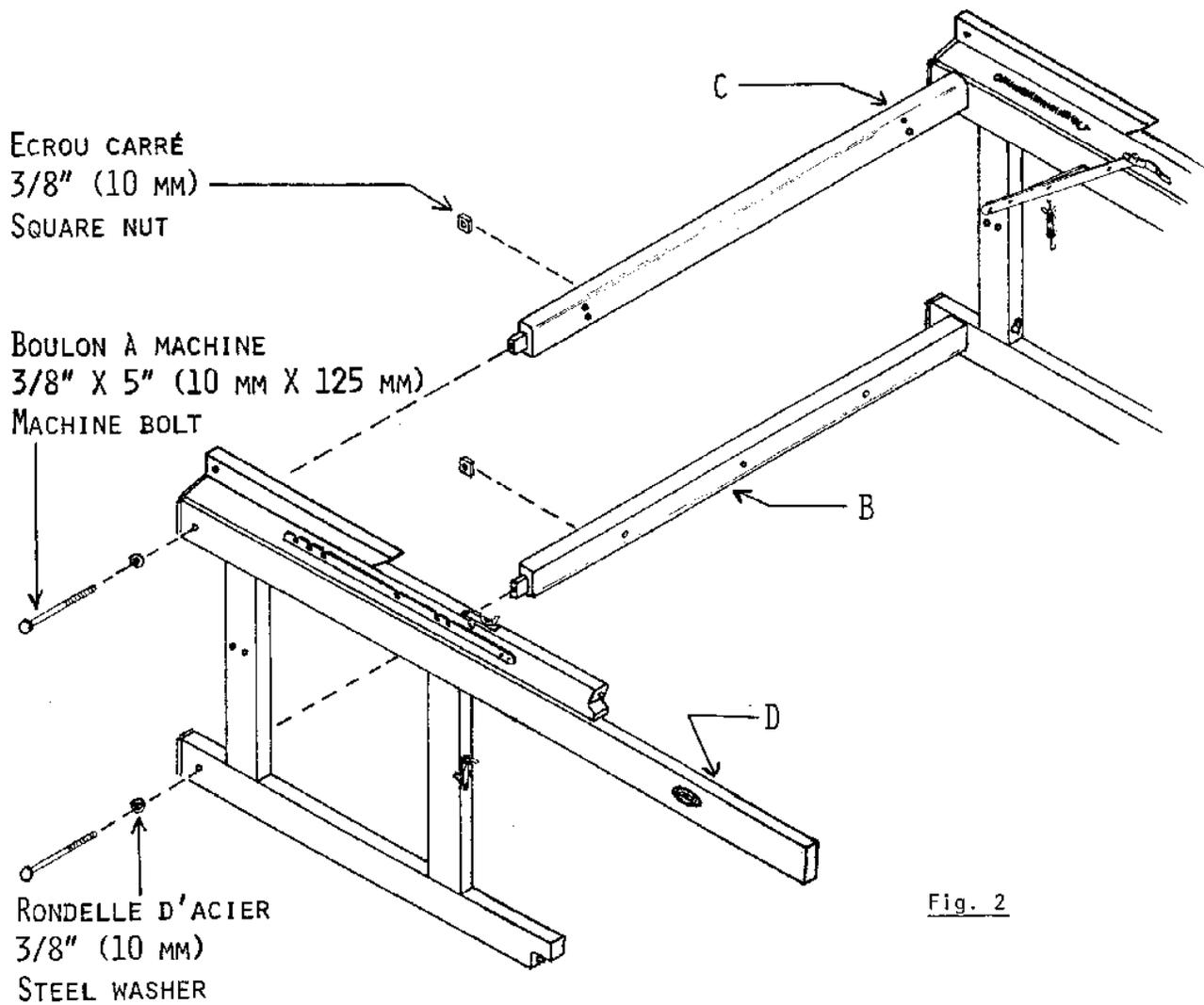


Fig. 2

After having placed left-hand side D of the loom on its front, insert the tenons of cross-members B and C into the lower mortises of left-hand side D. (Fig. 2)

Use 3/8" X 5" (10 mm X 125 mm) machine bolts, 3/8" (10 mm) steel washers, and square nuts. (Fig. 2)

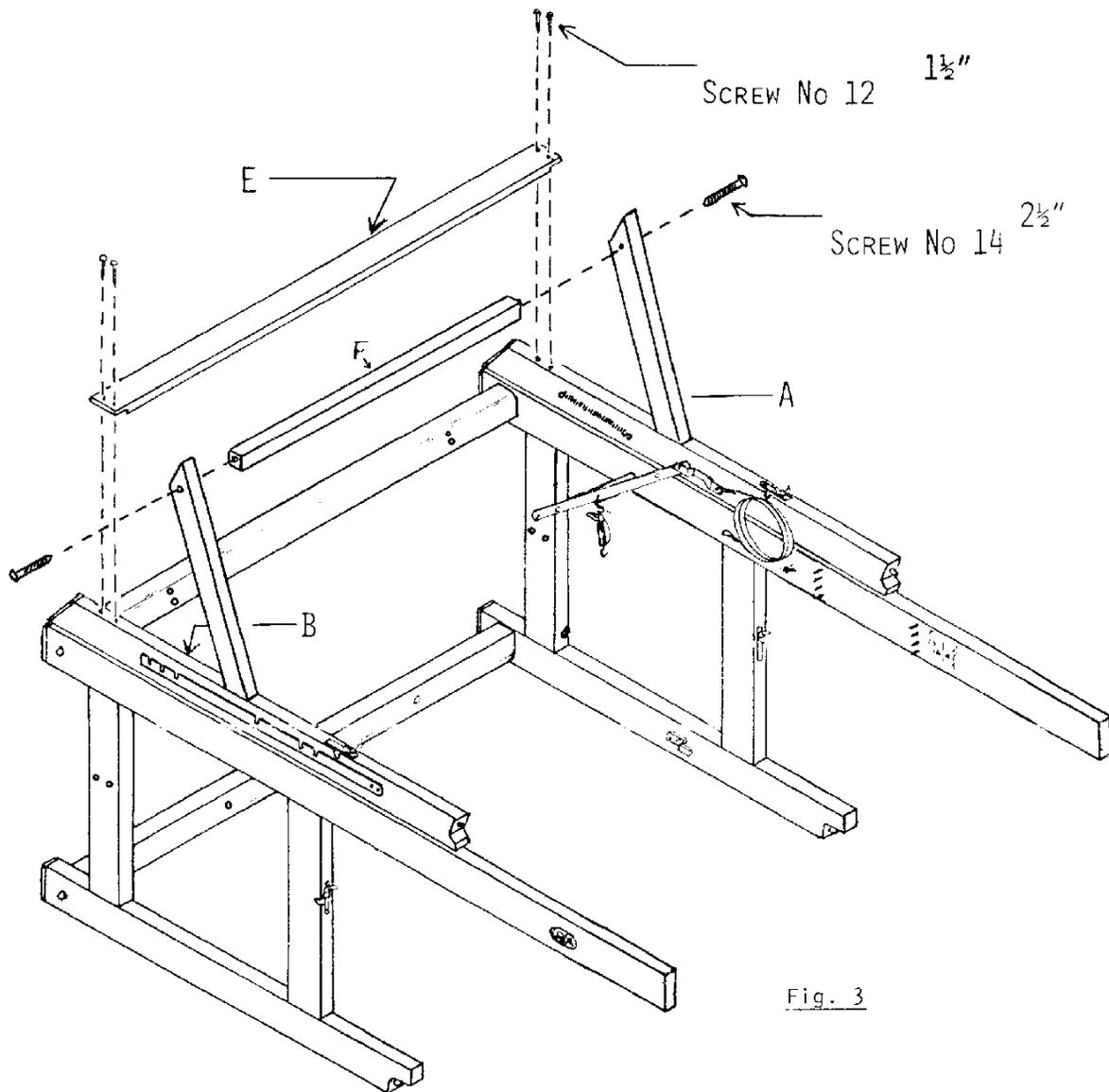


Fig. 3

Using four 1½" (40 mm) round-headed screws No 12, affix back cross-member E to back posts A and B. (Fig. 3)

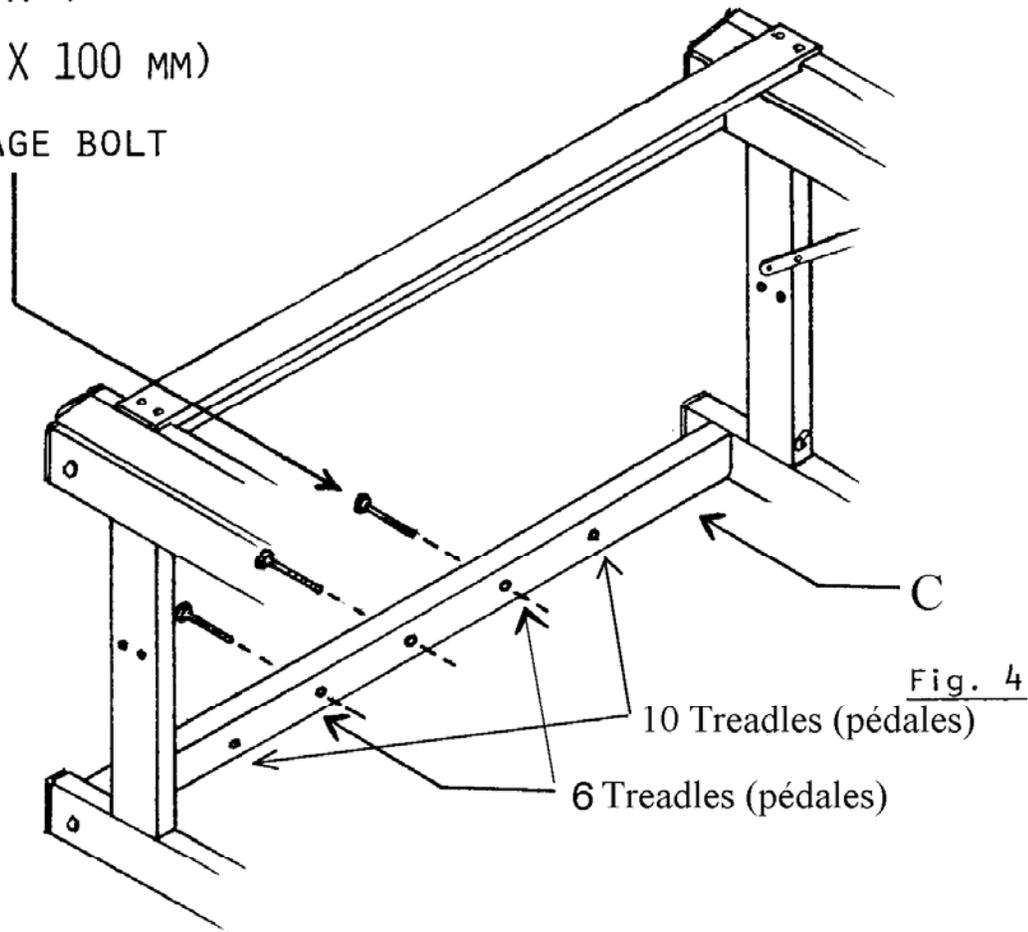
**NOTE:**

If cross-member E does not fit between posts A and B, insert it higher between the posts then slide it down. Application of soap to the screws will make their insertion easier.

Using two, 2½" (65 mm) round-headed screws No. 14, affix the cross-member for the stabilizing posts F. (Fig. 3)

BOULON A VOITURE  
5/16" X 4"  
(8 MM X 100 MM)

CARRIAGE BOLT

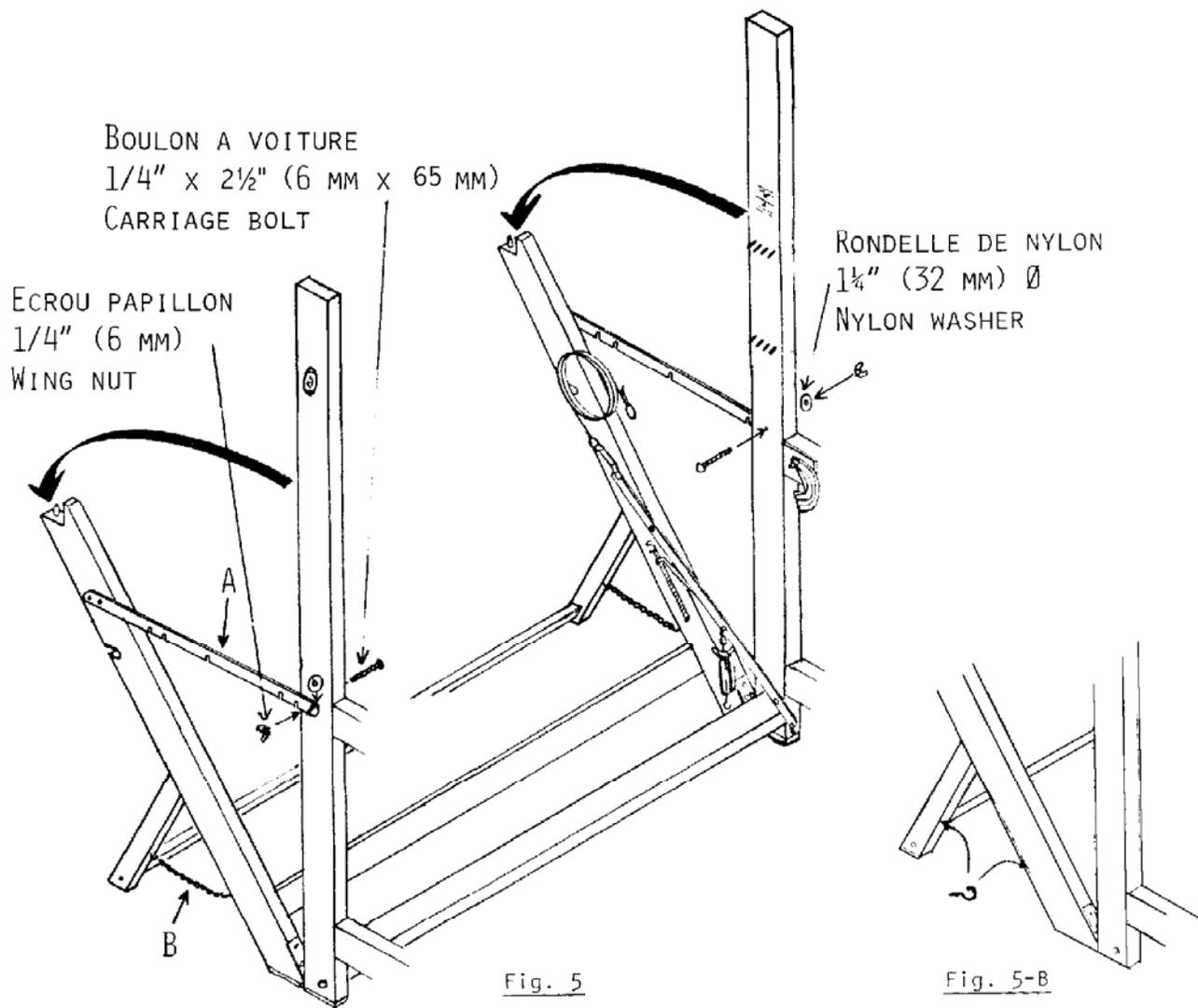


Insert the three 5/16" X 4" (8 mm X 100 mm) carriage bolts into the three lower holes of the front cross-member C. (Fig. 4)

The bolt heads should be on the underside when the loom is upright.  
The bolt heads must be hammered in snugly to the cross-member.

Place the loom right side up.

**NOTE: If you do not want to have the wing nuts on top of the treadle set, insert the bolts from the top of the treadle set and use the square nuts supplied with the kit under the cross member.**



Unfold the back section of the loom and lock it in place with metal hooks A. (Fig. 5)

Insert 1/4" x 2 1/2" carriage bolts into the holes of uprights. The nylon washers are already installed in the upright. Fasten the bolts with a 1/4" wing nut.

Be sure that the stabilizing posts are open and flat on the floor. Affix two opened eye hooks R-6 into the predrilled holes.

(Fig. 5-B)

Put loop cords B in place. These cords need to be tight, so they will secure the stabilizing posts. (Fig. 5)

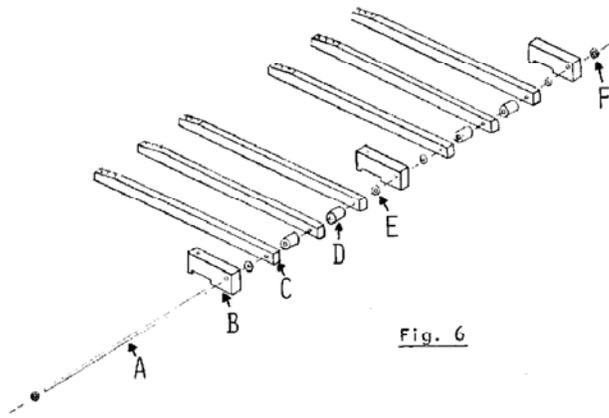


Fig. 6

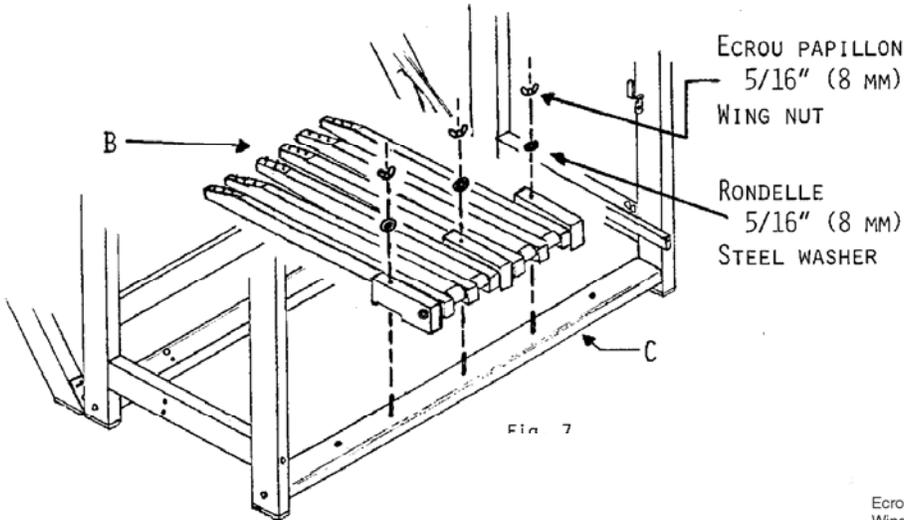


Fig. 7

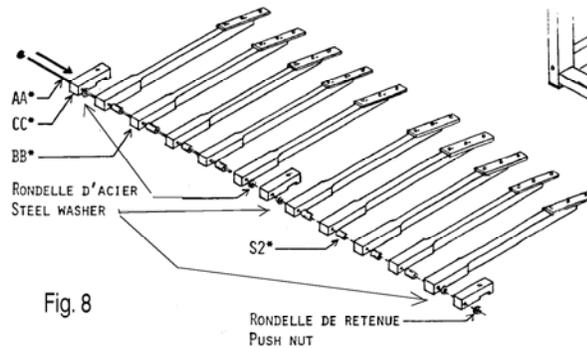


Fig. 8

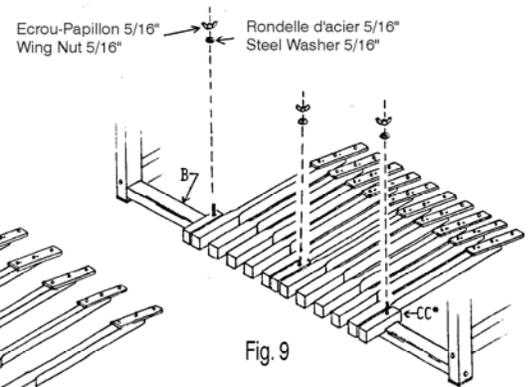


Fig. 9

Assemble the treadle set as illustrated. (Fig. 6)

Affix treadle set B to lower front cross-member C by inserting the cross-member bolts into the treadle set supports. Use 5/16" (8 mm) wing nuts with 5/16" (8 mm) steel washers. (Fig. 7)

Fig.8 shows the set up for an 8 shaft loom.

If you do not want to have the wing nuts on top of the treadle set, insert the carriage bolts from the top and put regular nuts 5/16" at the bottom.

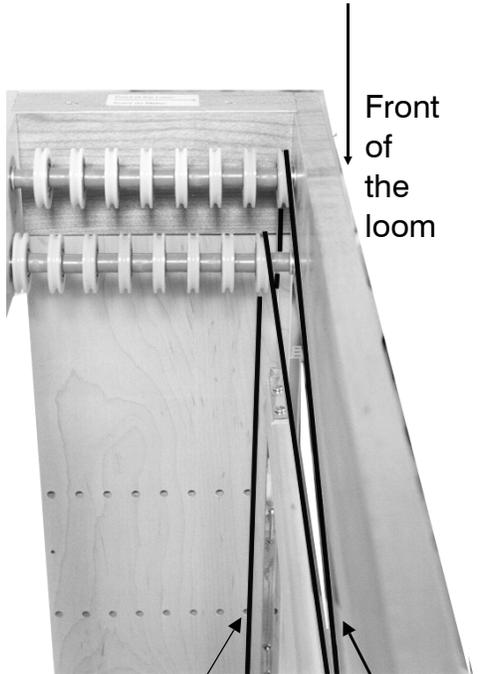


### Castle Top installation

Install the Castle Top on the Castle sides. (no hardware necessary). Simply slip the Routed ends over the Castle sides. VERY IMPORTANT: Place the Top, as indicated by the Arrow, to the Front.

### Shaft installation

(It is very important that you install your heddles before this operation. To add or remove heddles afterwards, remove the heddle support by bending it a little. You can start from the front or the back of the loom.)



Front of the loom

cable coming from the lam.

cable going to the shaft frame

Start installing the Lams and Shafts into the Castle Top, beginning with #1.

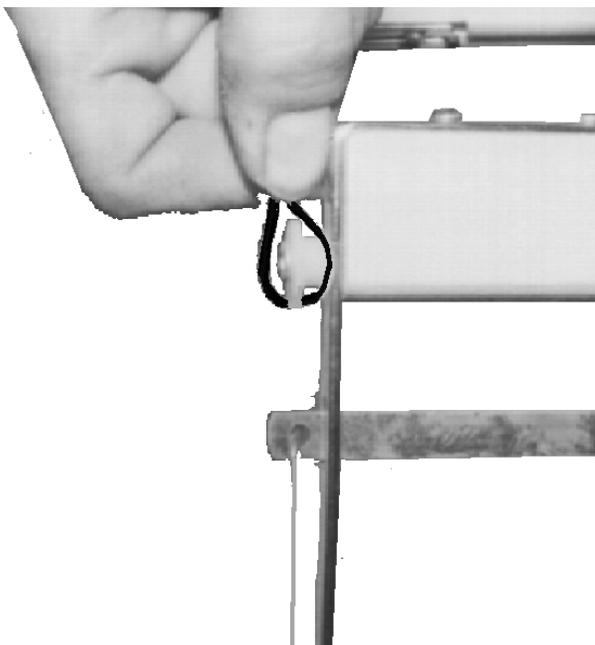
Place one Lam assembly(Lam and two top cables)on the floor under the most forward Shaft position(#1 from the front). Following the diagram on page #15, thread the top Cable on the left of the Lam up over the first lower bank Pulley from the front, across the Loom and over the first upper bank Pulley from the front on the right, down the Castle side and attach to the White Plastic Shaft end on Shaft #1.

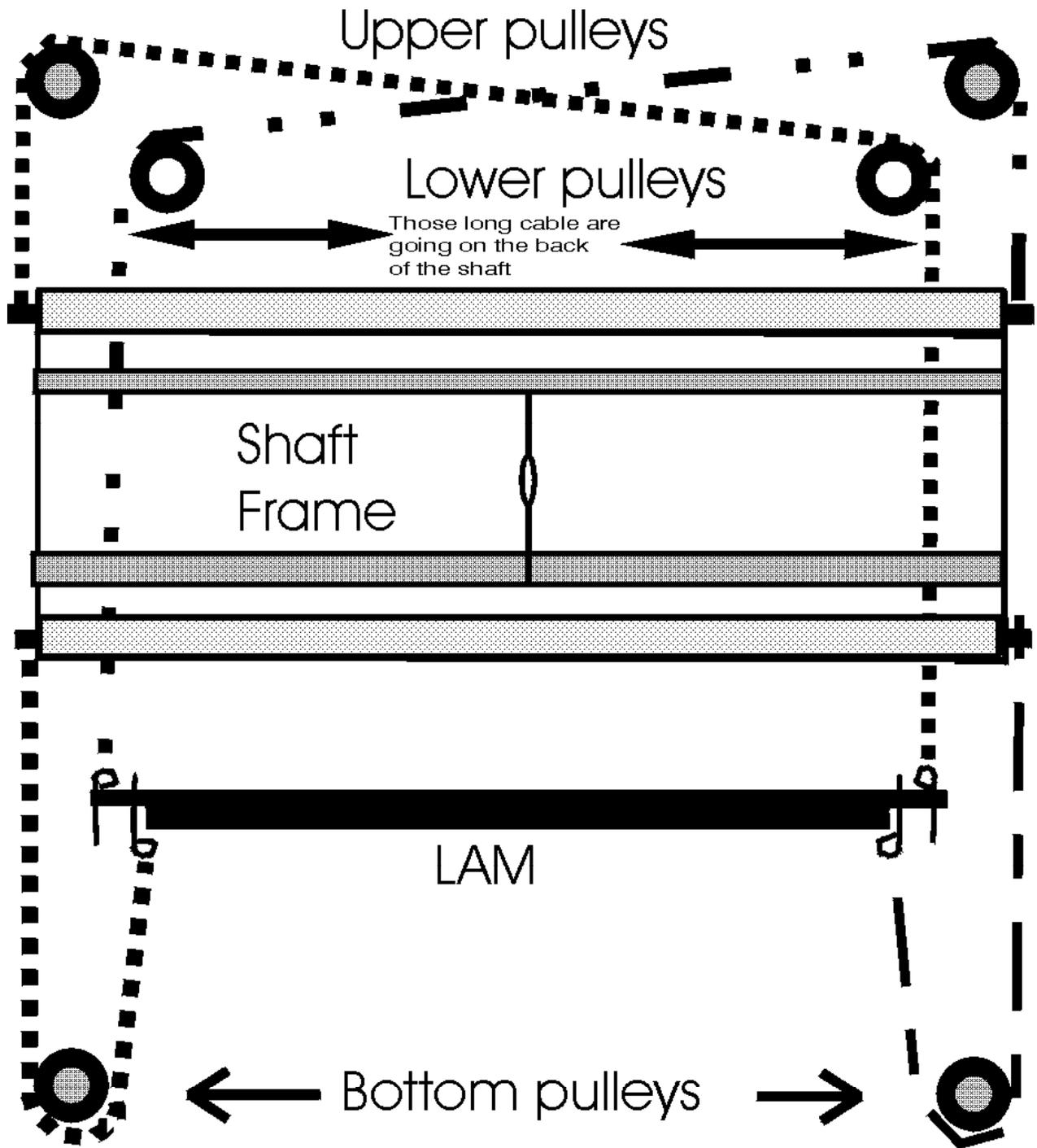
Now thread the top Cable on the right of the Lam up and over the first lower bank Pulley from the front on the right, across the Loom and over the first upper bank Pulley from the front on the left, down the Castle side and attach to the opposite White Plastic Shaft end on Shaft #1.

Run the Cable under and around the first Pulley from the front on the lower bank from the Shaft side, up the Castle side to the White Pastic Shaft end on the bottom left of the Shaft.

Run the Cable under and around the first Pulley from the front on the lower bank from the Shaft side, up the Castle side to the White Plastic Shaft end on the bottom right of the Shaft.

Repeat this sequence with each succeeding Lam/Shaft combination working in order from the front to the back, #s 2 thru 8.



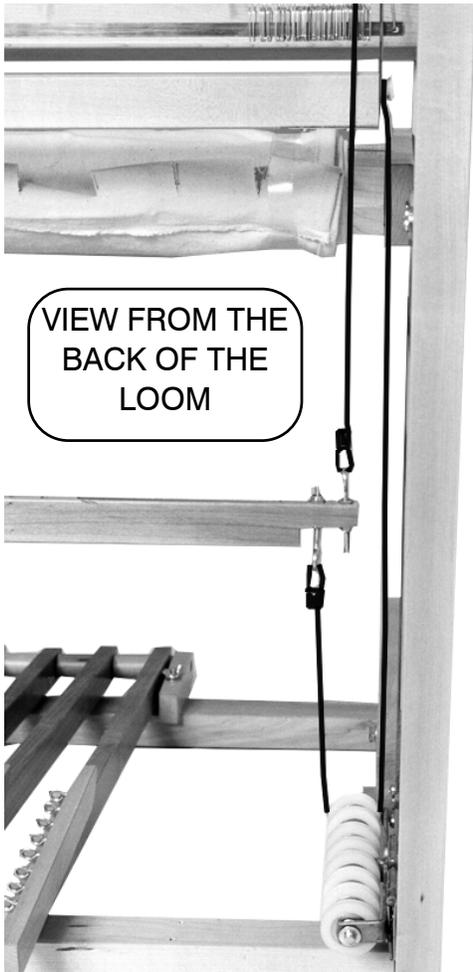


All cables length have been pre-adjust at the factory.

art\_cont8\graphic1

**VIEW FROM THE FRONT OF THE LOOM**

All cable lengths have been pre-adjusted at the factory.



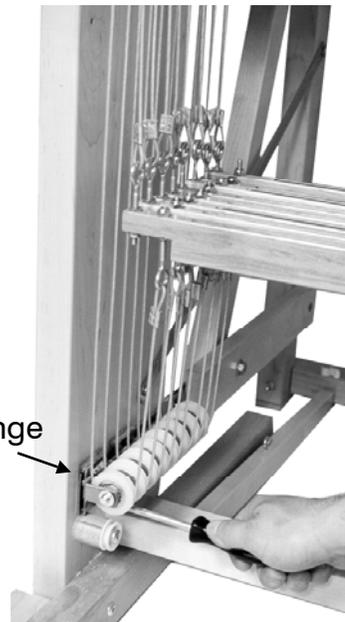
VIEW FROM THE  
BACK OF THE  
LOOM



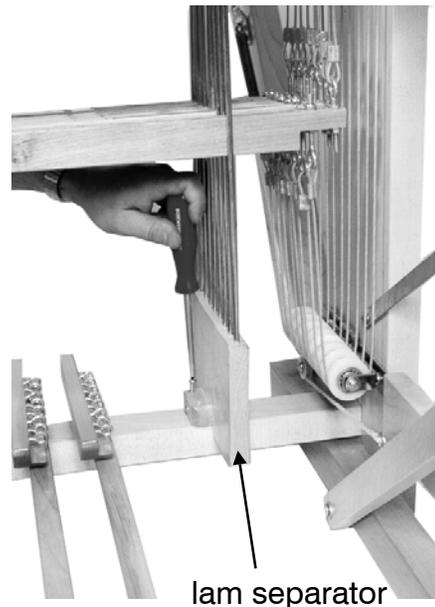
This is what it should look like. Eye bolts should be 90 degrees to the lams. Connectors should be parallel to the lams. Lams should be level.

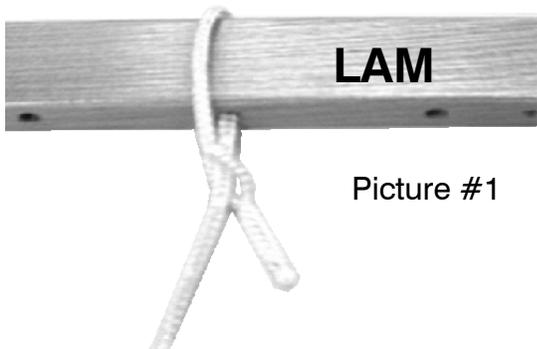
### Finishing the shaft frame installation

A small amount of tension is now needed on the cables. Make sure that all cables are in the right groove. Then, tighten the hinge of the bottom set of pulleys with 1½" flat headed screws # 12. If the shaft frames do not move freely, the cables are probably too tight. Unscrew each hinge slightly.

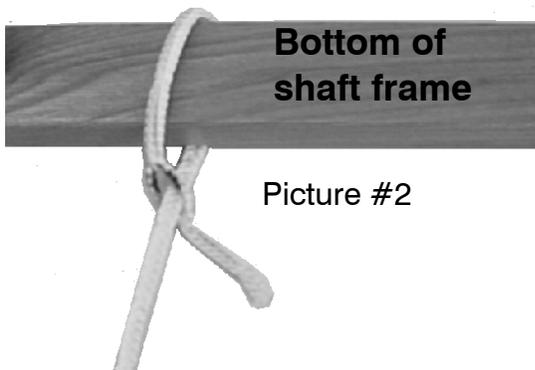


Install the 2 lam separators using the 1½" round-headed screws #8.

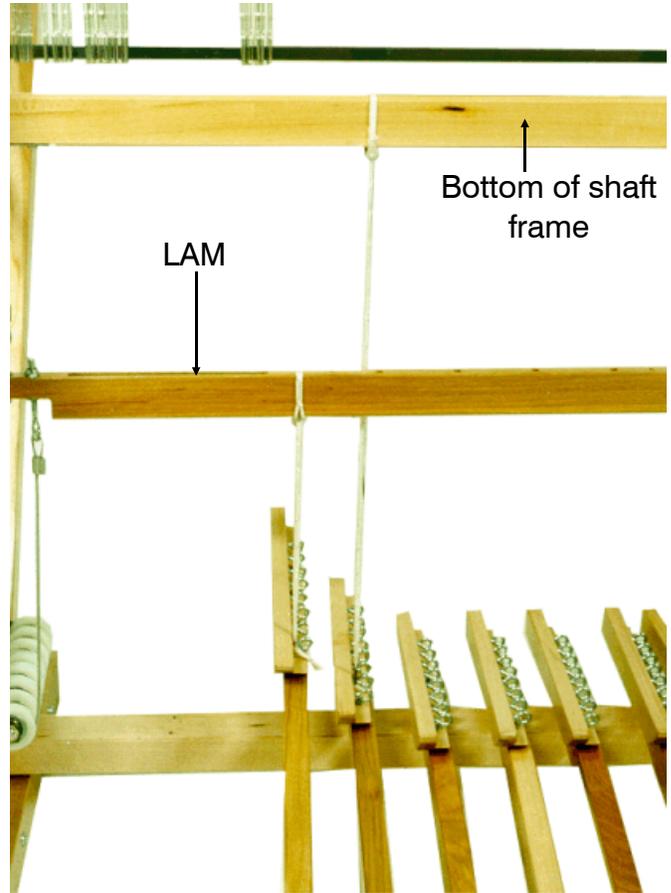




Picture #1



Picture #2



In this countermarche system, each shaft (Harness) should be tied to one treadle. You should have 8 treadle cords per treadle.

The short treadle cord should be tied to the lam (that will raise the shaft). Using your Reed hook, thread the cord through the lam and to the loop (black mark). Let it hang (picture #1)

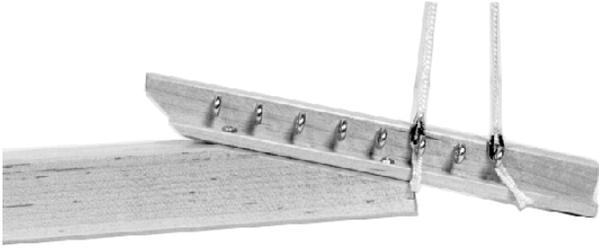
Pass the long cord over the bottom of the shaft. Pass it through the loop (red mark). Let it hang. (picture #2 )

Tie cords to the treadles at the black or red mark (picture #3); Just push each loop with a mark over each eye screw.

As an example, let's try plain weave (2 treadles)  
For treadle #1, tie short cord to lam #1, #3, #5, #7  
tie long cord to shaft #2, #4, #6, #8  
For treadle #2, tie short cord to lam #2, #4, #6, #8  
tie long cord to shaft #1, #3, #5, #7

When the tie-up is completed, depress both Treadles at the same time to equalize and set the Treadle Cords. Both Treadles should now raise and lower the Shafts freely.

Inspect the Castle Pulley assembly that all Cables are aligned freely in their own path across the Loom and down the Castle sides.



Picture #3

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



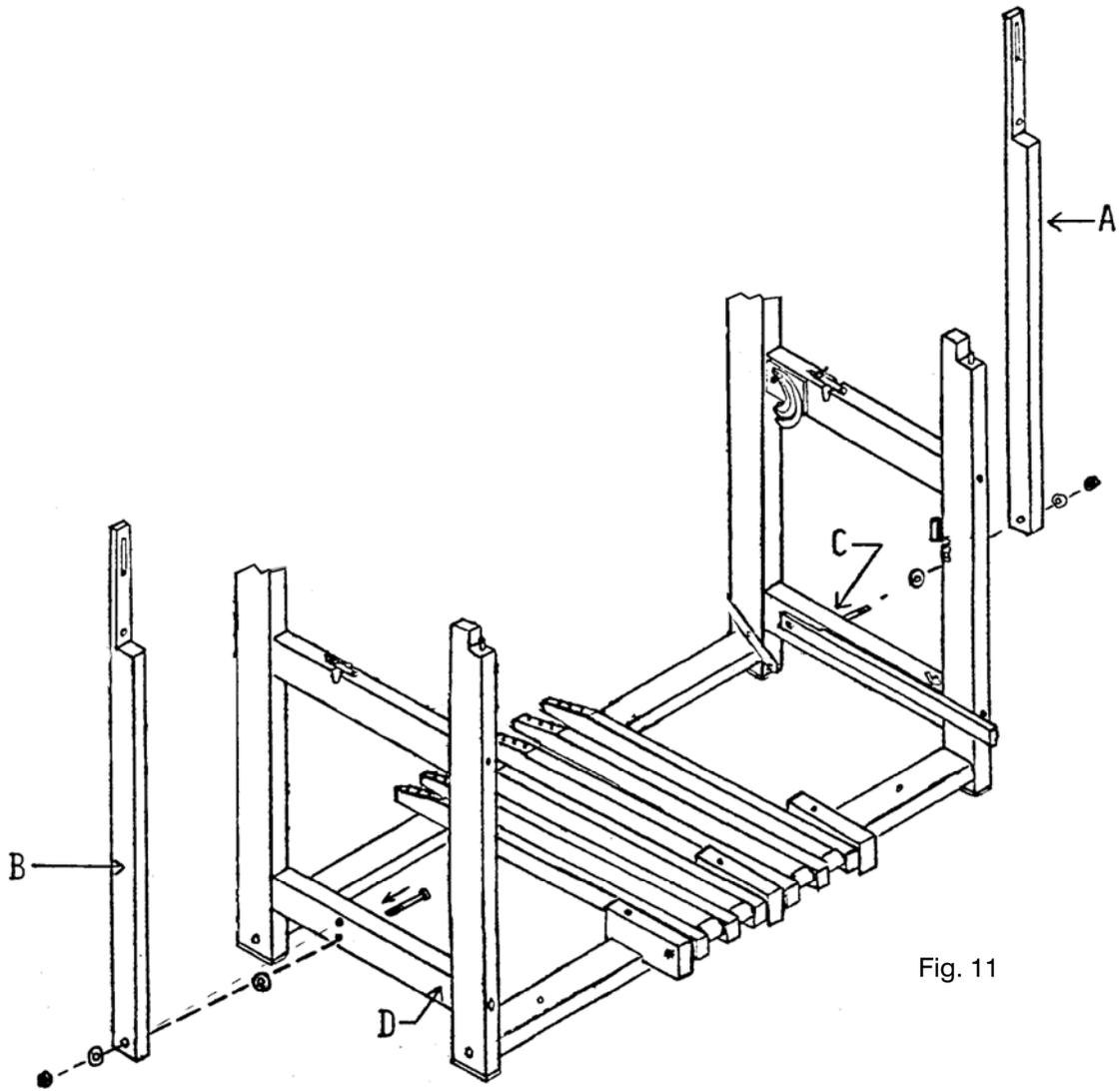


Fig. 11

**NOTE:** Hammer the carriage bolt inside the hole so it 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 the lower front cross-members C and D. Insert the bolt from the inside into the **LOWER hole** (countermarche loom).

Place a 5/16" (8 mm) steel washer between the cross-member and the sword and another on the outside. Then add a 5/16" (8 mm) lock nut.

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

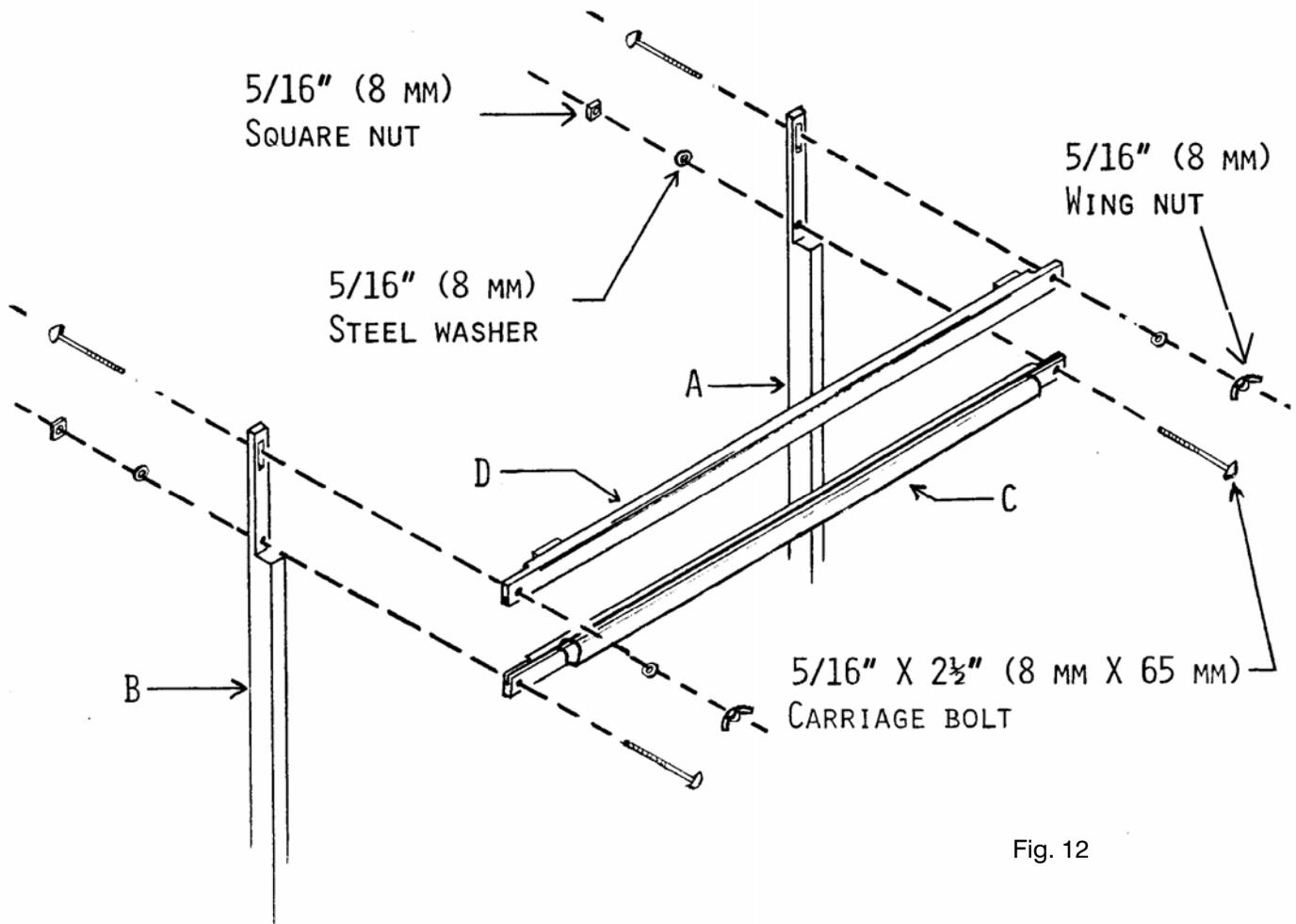


Fig. 12

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.

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.

NOTE: The batten handtree has polyvinyl bumpers.

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

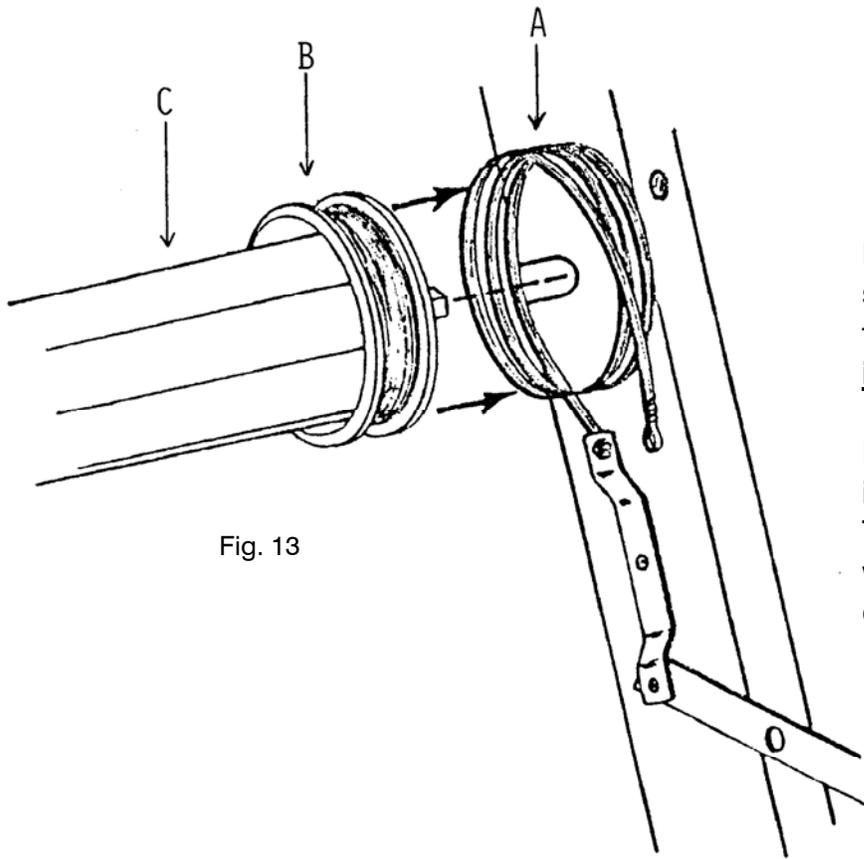


Fig. 13

Hold the circular wire brake shoe A slightly to the rear of the loom, **but do not unroll it.**

Insert the brake drum B into the wire brake shoe A. Then, install the ends of the warp beam C into the grooves of the back posts.

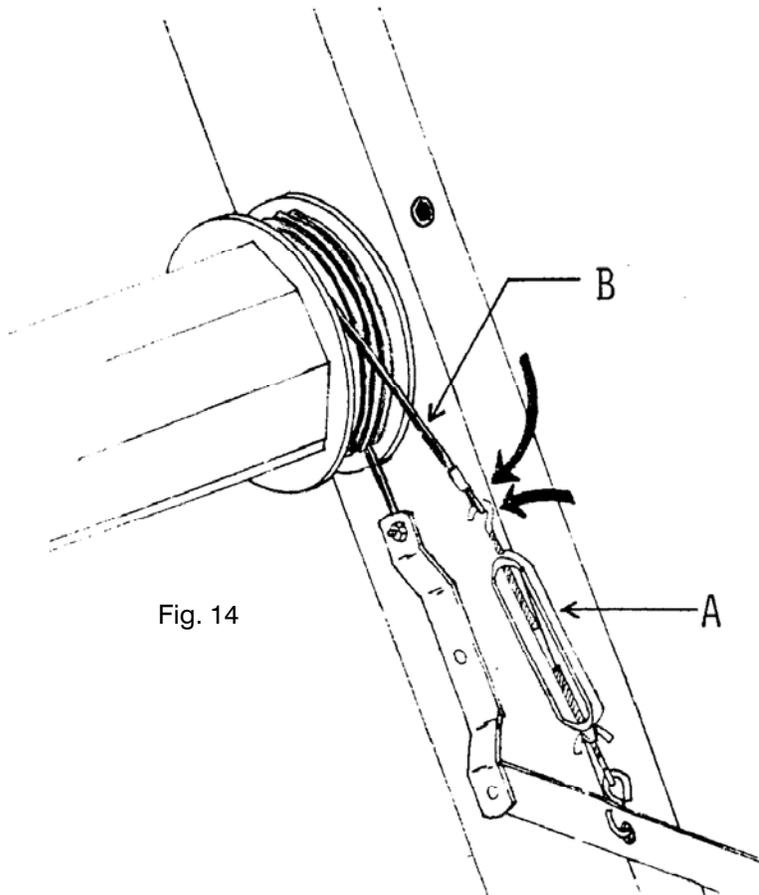


Fig. 14

Hook turnbuckle A to flat wire circle B. Adjustment instructions will be given later.

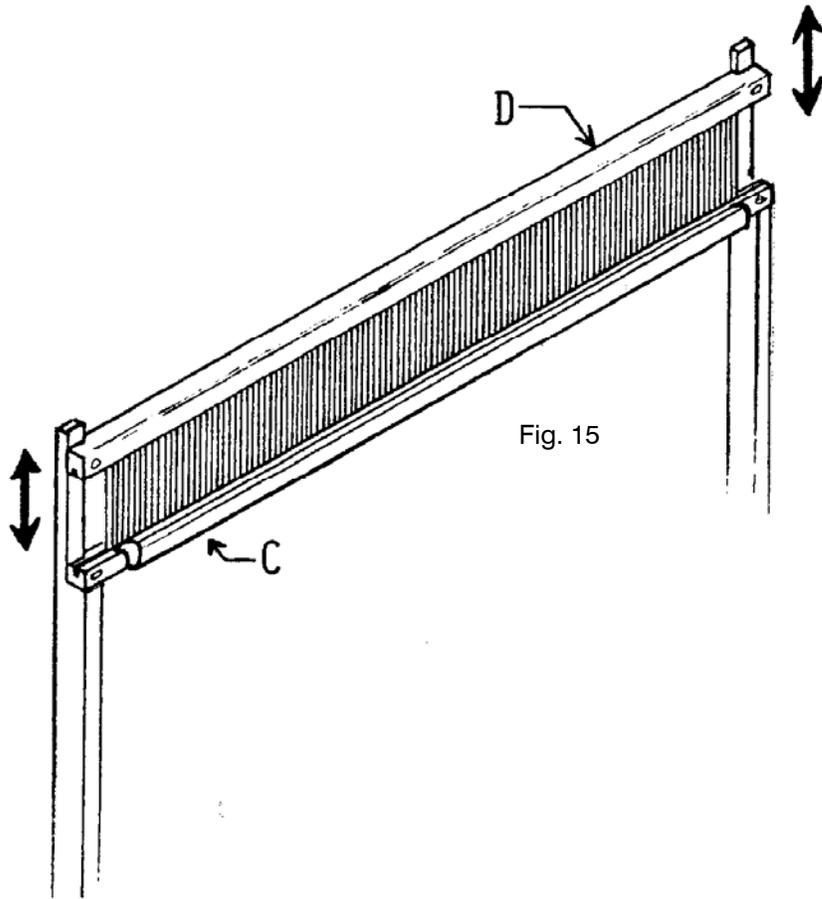


Fig. 15

Place the reed between batten sley C and handtree D. When the wing nuts are loose, the batten handtree can slide vertically in the sword slots. The reed must then be secured between the batten sley and handtree by tightening the wing nuts.

If the batten does not touch the two bumpers equally, loosen the bolts of the batten sley and handtree and exert pressure on the batten centering it in its proper place. Tighten the bolts again.

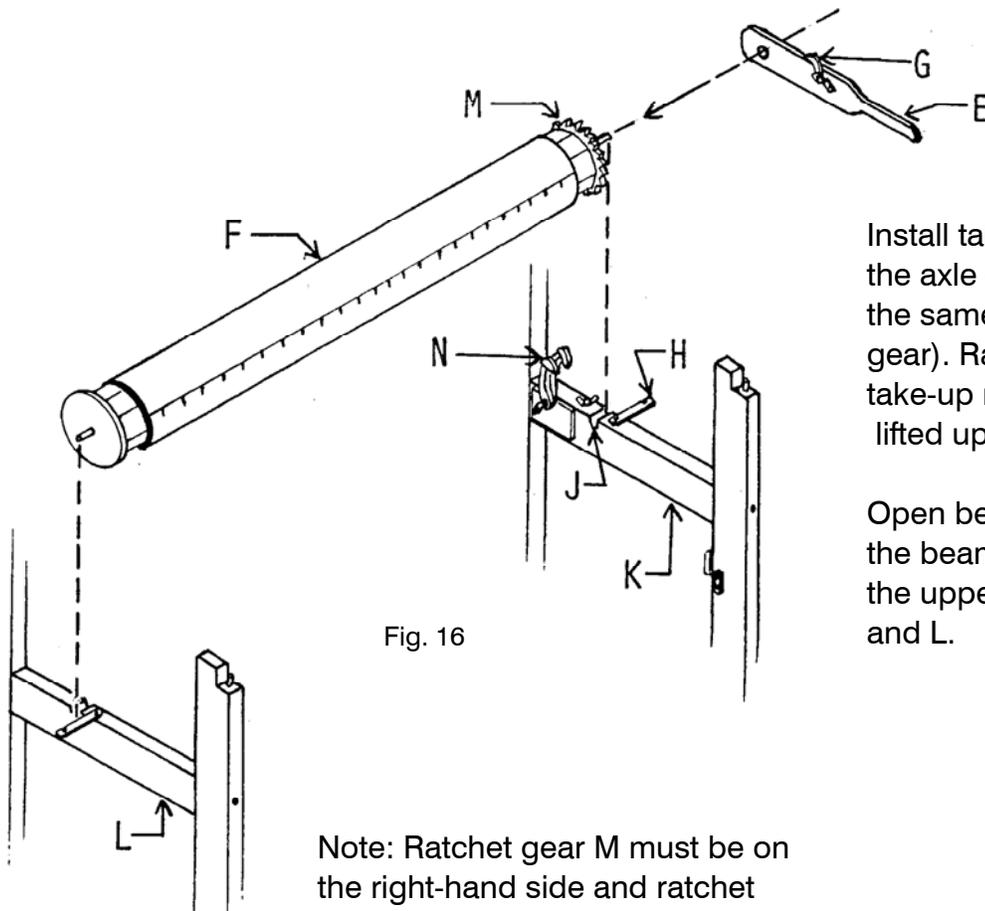


Fig. 16

Install take-up motion handle E on the axle end of cloth beam F (on the same side as the ratchet gear). Ratchet pawl G of the take-up motion handle must be lifted up.

Open beam latches H and place the beam ends in the slots J of the upper side cross-members K and L.

Note: Ratchet gear M must be on the right-hand side and ratchet pawls N must be lifted up.

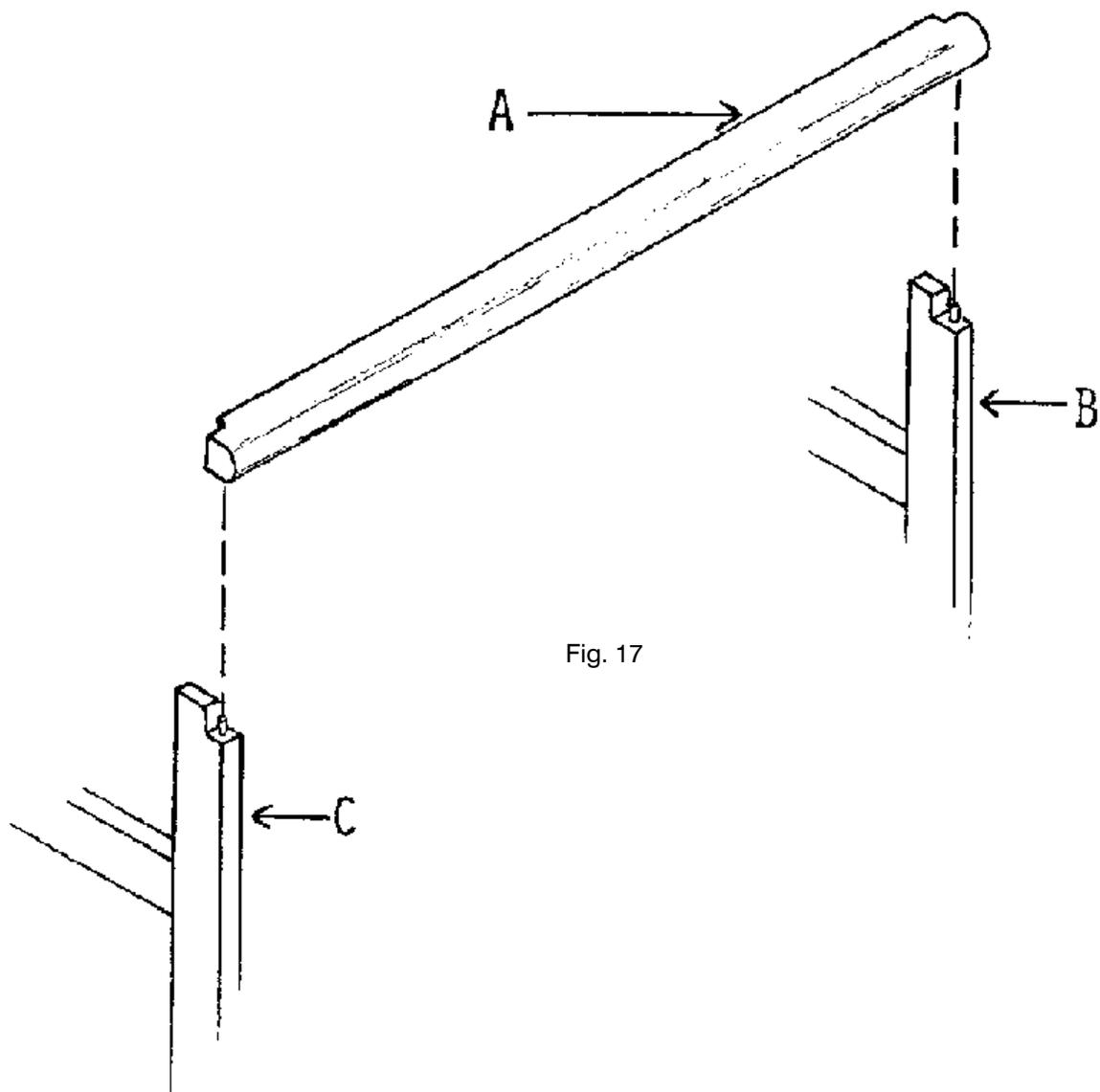


Fig. 17

Affix one of the breast beams A on the top of the front posts B and C.  
Affix the other breast beam on top of the back posts.

NOTE: To avoid splitting the front posts, slightly insert the breast beam onto the metal pin.  
Be sure that it is in the right position before inserting it completely.

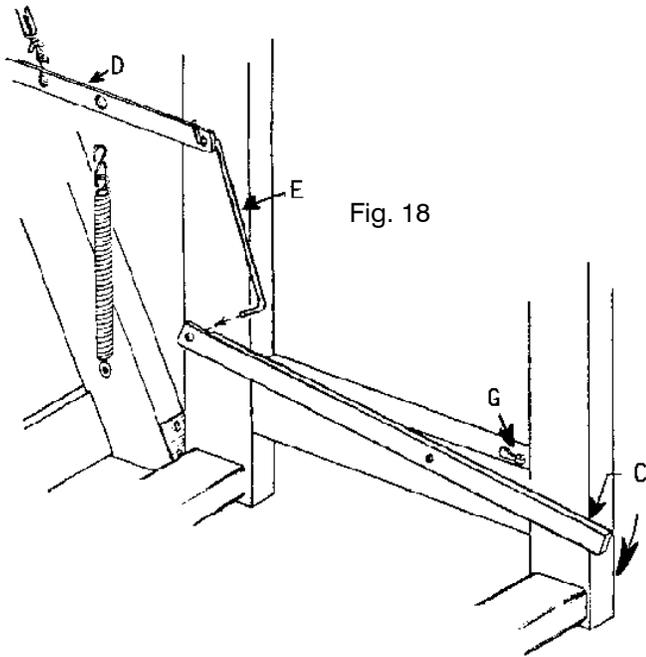


Fig. 18

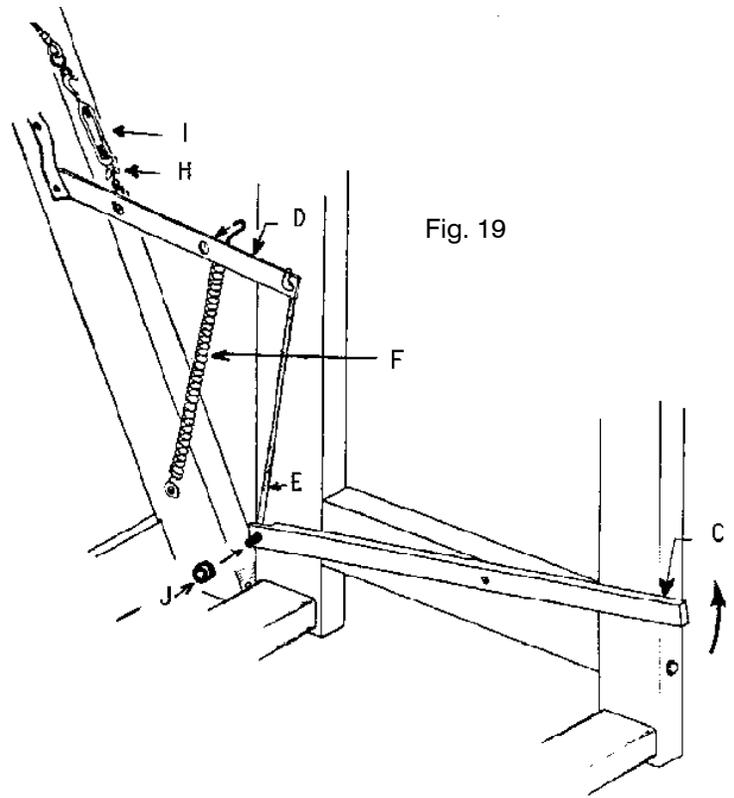


Fig. 19

Using metal rod E, join treadle C to 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.

Raise treadle C as high as possible then hook spring F to lever D.

#### BRAKE ADJUSTMENT:

Release the brake by depressing treadle C and locking it down with the catch G. 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.

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

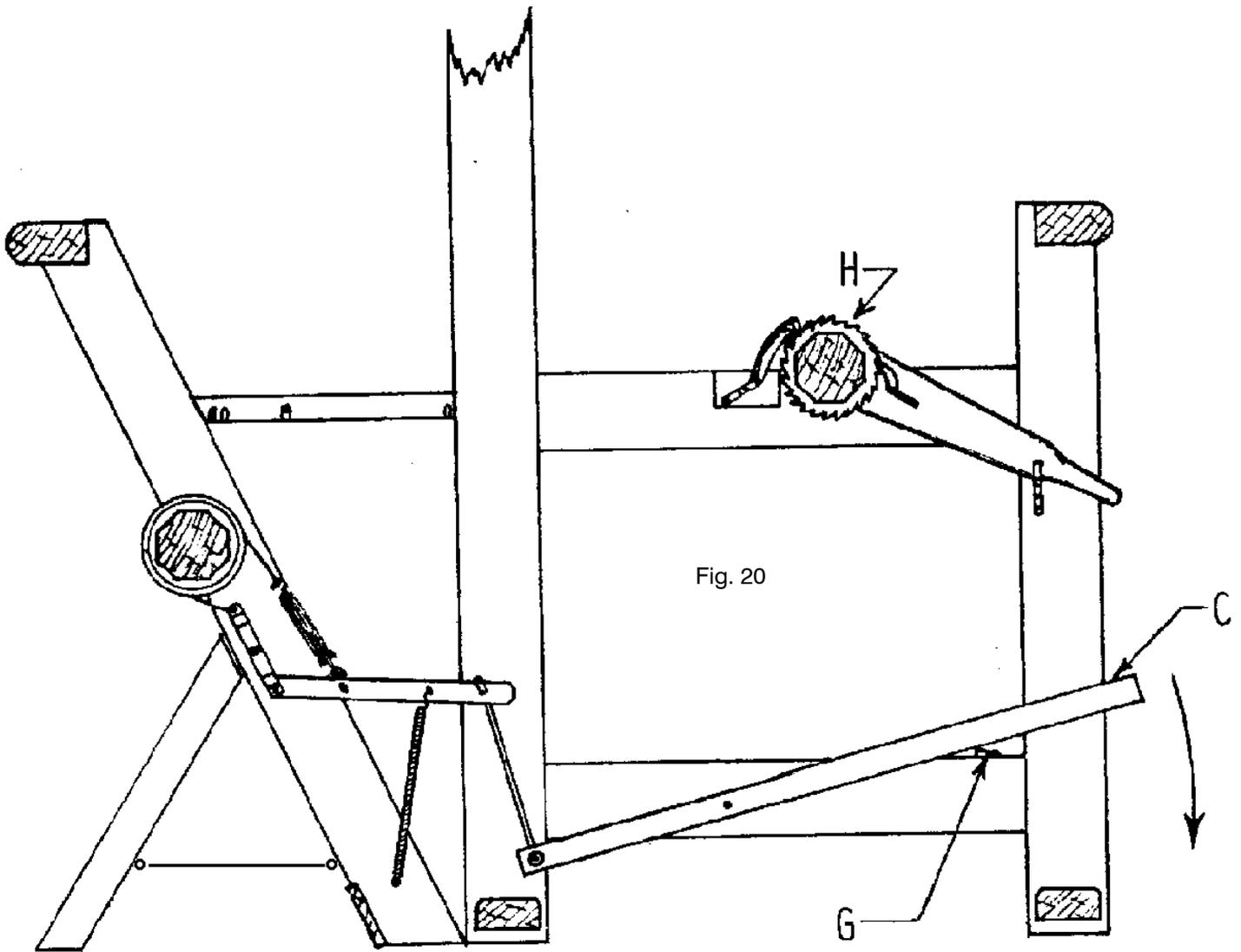


Fig. 20

**BEAMING:**

Release the brake by depressing treadle C and by locking it down with catch G.

**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 this is too much tension, gently depress the brake treadle until the desired tension is obtained.

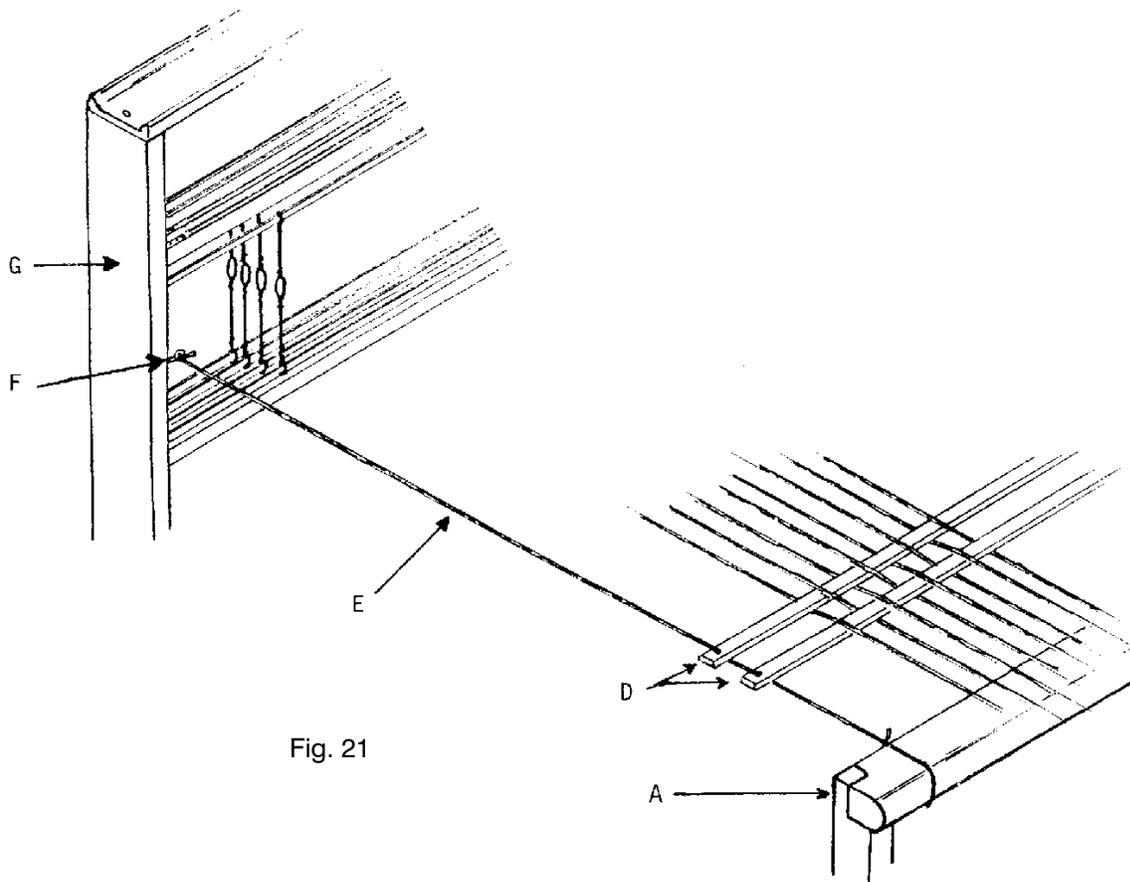


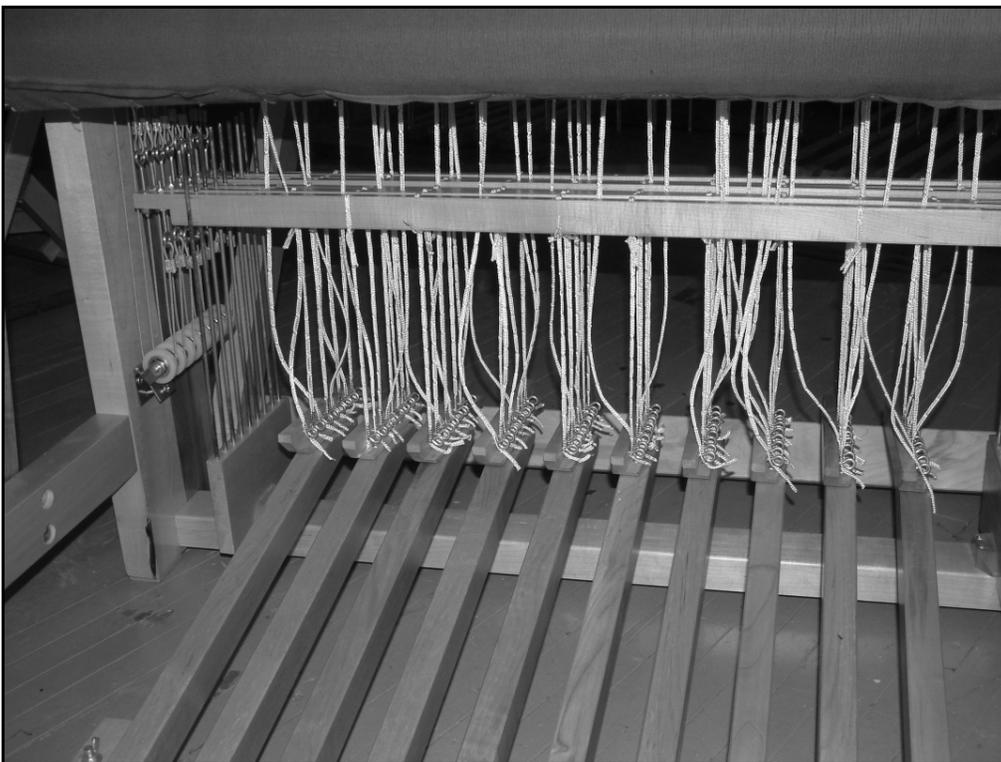
Fig. 21

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. 21)

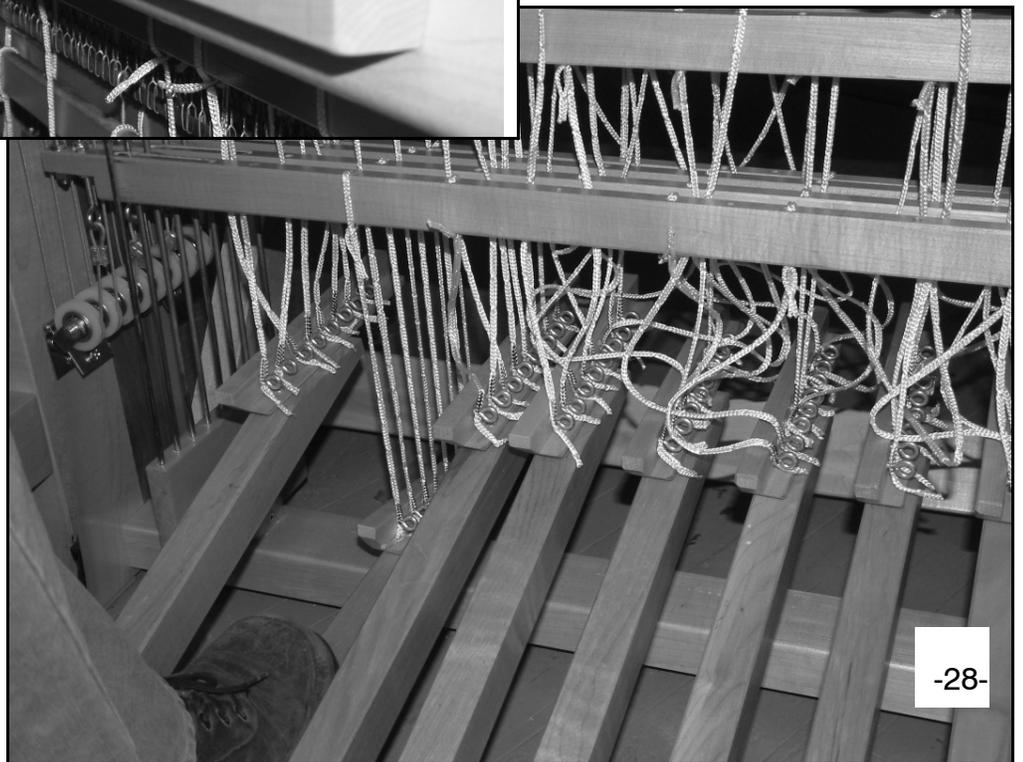
Here are some pictures showing the shed size and the treadles / lam s section. Your loom should look also like this.



## CLOSE SHED



# SHED OPEN PLAIN WEAVE





Those 2 pictures show the lams section with connectors when one treadle (plain weanve) is depress.



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.

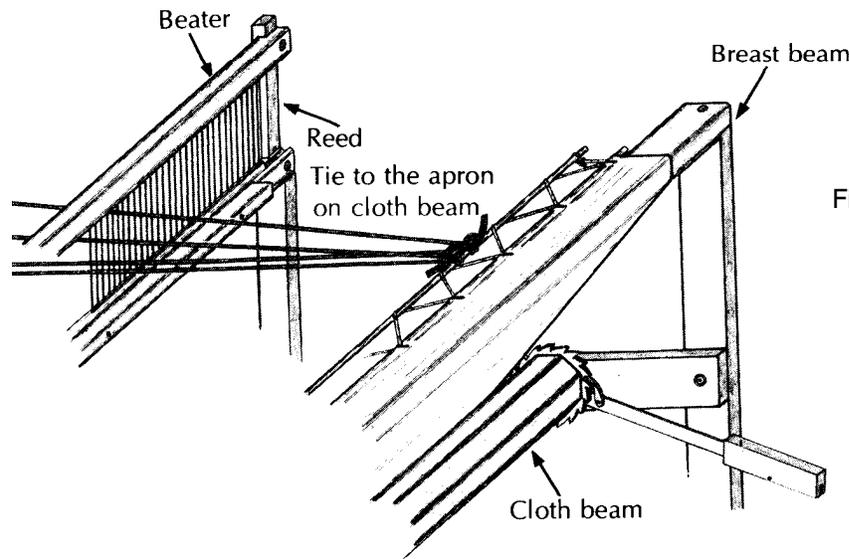


Fig. 22

Insert a warp rod into the apron border.

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

For 60" loom  
(150cm)

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.

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.**

**HAPPY WEAVING**