For any repair piece, always give number following illustration on cover. Price on request.

"MIRA" LOON

WOODEN PIECES

No.
101-102-M Front posts
103-104-M Rear posts
111-112-M Cross beams
113-114-M Cross beams
121-M Batten swords
123-M Board to center dog
125-M Take-up motion handle
126-M Release treadle
130-M Treadles
135-M Treadle spacers
140-M Lamms
141-142-M Upright pieces
150-152-M Cross bars
155-M Breast beams
156-M Batten handtree
157-M Batten sley
161-M Master roller
162-M Lower roller
163-M Roller socket for 1-1" roller (2-¼" outside)
164-165-M Cloth & Warp beams and wheels
168-169-M Wooden stick for harness frames

METAL PIECES

302-M Plain wheel for beam left hand side
303-M Wheel for friction brake
304-M Crank
306-M Dog for take-up motion handle #125
307-D Dog for front beam (short)
307-LD Dog for front beam (long)
338-M Bracket for treadles and rod
308-M Ratchet wheel cloth beam
404-M Hooks for treadle cords
406-M Strengthening piece for hand crank #125
409-M Wire circle for friction brake
410-M Warp rod
412-M Latch for beam
415-N Brake spring
417-N Support for hand crank
418-M Batten sword hardware
421-M Steel end frame
422-M Heddles rod
426-M Hooks for heddles rod
448-M Hooks for lamms
472-M Brake lever
407-M Bracket to hold master roller
476-M Nylon bearing with metal rod
Take the two sides of the loom already assembled, and place them on the floor upside down. (Fig. 1)

Set in place the two cross pieces No. 150-M and 152-M so that the unvarnished side be face underneath when the loom is turned right side up. The cross piece No. 150-M which is at front is bored with two holes to fix the treadles. The cross piece No. 152-M without holes should be placed at the back of the loom.

Pass through each side of the loom the square head bolts 3/8" x 5" long with washer and nut under the cross pieces No. 150-M and 152-M. Tighten with the wrench. (Fig. 2)

Fasten to the cross piece No. 150-M the two round head bolts 2-1/2" long. The head of the bolts should be under the loom. Use a hammer. (Fig. 3)
Attach the batten swords No. 121-M to the side cross beams #113-M and 114-M with square head wooden screws 1-\(\frac{1}{2}\)" long. Be careful to put one washer each side of the metal attachment to prevent rubbing. Do not tighten the bolts too much so that the batten moves easily back and forth. (Fig. 4)

Turn the loom right side up. (Fig. 5)
Fix the upright pieces No. 141-M and 142-M in the mortises of cross beams No. 111-M and 112-M. Fig. 6.

Fix upright pieces using washers and bolts ½" x 2-½", head outside of the loom. Tighten till the bolts exceed about ½" outside the nut.

It is important that upright pieces be straight so the harness frames operate well.

Fix the four lamms No. 140-M in the metal bracket of upright No. 142-M with 1" bolt and nut. Fig. 7.

Insert the take-up motion handle No. 125-M to the ratchet wheel of front beam No. 165-M. Then lift the ratchet dogs and place the front beam in the notches of cross beams No. 111-M and 112-M. Fig. 8.
The treadles are connected to the bottom cross piece #150-M by placing the metal attachments over the bolts already fixed. Fasten nuts on the bolts without using washers. Fig. 9.

To assemble the beater first take batten aley No. 157-M without rubber bumpers and fix it to the swords No. 121-M with bolts 5/16" x 2½", washers and nuts. (Fig. 10)

Fix batten handtree No. 156-M with rubber bumpers, towards the grooves of swords No. 121-M. Use bolts 5/16" x 2½", washers and wing nuts. (Fig. 11)
Fix breast beams No. 155-M to the front and back posts of the loom, the round edge outside. They are held in place by the steel studs and can be removed whenever necessary. When taking them off the loom, lift both ends at the same time to prevent breakage. Fig. 12.

To fix the back beam No. 165-M you should first fix the wheel for friction brake inside the steel wire spiral, then fix the beam in the grooves of rear posts No. 103-M and 104-M.

The cord of the automatic brake is already attached to the release treadle No. 126-M and to hook the spring to the wire circle without difficulty, all you do is press down the lever to the cross piece No. 150-M. Fig. 13.

Refer to "Warp and Weave" for further information on:
- Friction brake.........................................................87
- How to put healdles in frames..................................10
- How to install rollers.............................................14
- Tie-up.................................................................13
STRAIGHTENING THE BEATER

Check if the rubber bumpers touch equally to the loom uprights No. 141-M and 142-M. If not, loosen the bolts of batten sley and batten handtree No. 156-M and 157-M and force them into proper position. Tighten the bolts, and check again.

If not correct, start again, but force them up to the time it makes a small noise and tighten. (Fig. 14)
For instruction other than the mira frame see the Fanny Instruction.