Fasten the three round headed bolts, 3-\(\frac{3}{4}\)" long, (for the treadle set) to cross piece 150-N-12. The head of the bolts should be under the loom. Use a hammer. Fig. 1.

Fix the cross piece 150-N-12 between the front posts 101-102-N-12, the unvarnished side face down. Fig. 2

Fasten cross piece 150-N-12 to front posts 101-102-N-12 using square headed bolts 3/8" x 5" long, with washers and nuts. Tighten with wrench. Nuts should be placed on holes underneath cross piece 150-N-12. Fig. 3.
Join front part of the loom to the center part. The cross pieces 111-112-113-114-N-12 have small projections on their ends called tenons that fit into the mortises of upright pieces 141-142-N-12 of center part of loom. Fig. 4.

Open out the rear posts 103 and 104-N-12 and fix the 12" bolts (with washers and nuts) in the holes of cross beams 111-112-113-114-N-12. Tighten firmly with 3/4" x 3/4" tube and metal pin. Fig. 5.
Attach the batten swords 121-N to the side cross beams 113-114-N-12 with square headed wooden screws 1-\(\frac{1}{2}\)" long. Be careful to put a washer between the metal attachment and wood to prevent rubbing. Do not tighten the bolts too much so the batten moves freely. Fig. 6.

The treadles are connected to the bottom cross piece 150-N-12 by placing the wooden attachment over the bolts that are already in place. Put washers and fasten the nuts to the bolts. Fig. 7.

Insert the take-up motion handle 125-N-12 into the ratchet wheel of front beam 164-N. Then lift the ratchet dogs and place the front beam in the grooves of cross beams 111-112-N-12. Fig. 8.
To assemble the beater, first take batten sley 157-N (without rubber bumpers) and attach it to the swords 121-N with 5/16" x 2-1/2" bolts, washers and nuts. Fig. 9.

Attach batten handtree 156-N (with rubber bumpers) near the grooves of batten swords 121-N. Use 5/16" x 2-1/2" bolts, with washers and wing nuts. Fig. 10.

Fix breast beams 155-N in the steel studs of front 101-102-N-12 and rear posts 103-104-N-12, round edges outside. Fig. 11.
To attach the back beam 165-N, first fix the large metal drum inside the steel wire spiral, then place the beam in the grooves of rear posts 103-104-N-12.

The cord of the automatic brake is already attached to the lever 126-N, and to hook the spring to the wire circle without difficulty, just press the lever down to the cross piece 150-N-12 passing the cord under the nylon pulley. Fig. 12.

Refer to "Warp and Weave", the instruction booklet that came with the loom, for further information on:

- How to remove harnesses.......................... 23
- How to put heddles in frames........................ 9
- Tie-up system...................................... 12
- Friction brake........................................ 65
TREADLE ARRANGEMENT

This loom is equipped with springs to hold the weight of treadles and prevent harnesses to raise by the weight of treadles.

1) Fix the metal rod with a notch in eyes at bottom of rear board of jacks box. Insert springs in line with each treadle. Push the rod up to the time it locks in the first eye.

2) Hook a spring in last eye of each treadle.

3) Tie cord according to your pattern.

WEIGHT FOR MULTIPLE HARNESS LOOM

When necessary, to keep the harnesses down for a better shed, add weights (1 or 2) on top of the harnesses.

Use gummed paper (skotch tape) to keep weights in place.
STRAIGHTENING THE BEATER

Check to see if the rubber bumpers touch to the loom upright pieces 141-142-N-12 equally. If not, loosen the bolts of batten handtree and batten sley 156-N and 157-N and force them into the proper position. Tighten the bolts and check again. If still not correct, start again, but this time keep forcing them until you hear a small cracking noise, then tighten again. It is very important that the beater touches the upright pieces uniformly. Fig. 15
MECHANISM OF HARNESSSES AND JACKS