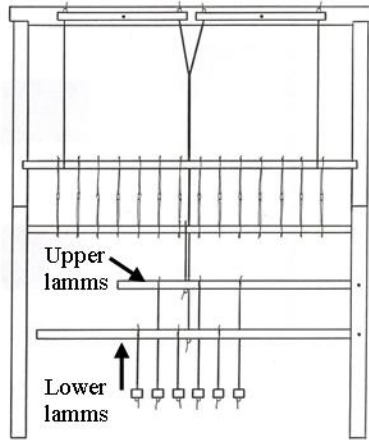
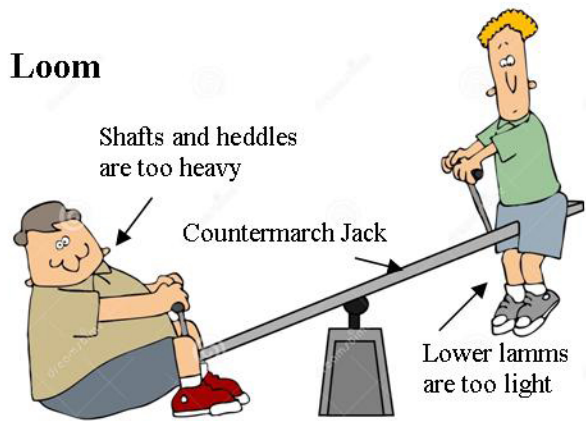


## 25 Balance of the Countermarch Loom

If you have the same weight on each side of a teeter totter, the board is horizontal and it is easy to move the ends up and down.



If the weight is not the same, the heavy side falls and it is hard to lift that side.

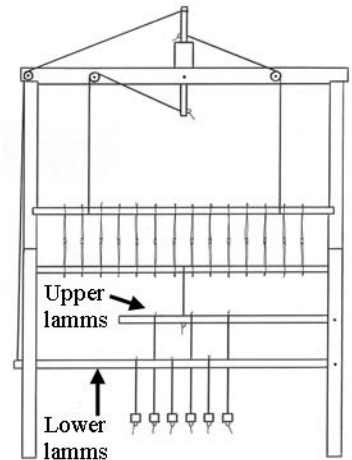


On the Glimakra looms in these diagrams, one pair of shaft bars, 100 heddles and one upper lamm have a combined weight of approx 1 lb.

The lower lamm weighs approx the same, 1 lb.

When you pull out the locking pins, the shafts do not move.

If your shafts fall, they are not balanced (held up) by the lower lamms.



If your shaft, heddles and upper lamm weigh more than 2 lbs, you should consider making them lighter weight. Only jack looms need heavy shafts.

When a loom is balanced, the jacks stay in place when the locking pin is removed. Horizontal jacks will remain horizontal and vertical jacks will remain vertical. Treadles remain resting about 4 or 5 inches from the floor.

### Are your upper and lower lamms the same length?

Often the case with very old looms, the lower lamms would need to be thicker or taller to be heavy enough.

### If your shafts fall

Your lower lamms are simply not heavy enough. The warp threads are pulled down and your treadles rise. It is like the teeter totter with one very heavy guy at one end, pulling your shafts down.

### You lose the advantage of the counter-march shed

When you have to lift the shafts with the treadle before you can open a shed, it is acting more like a jack loom.

## 26 Consequences of your loom being out of balance

### When your shafts fall, they raise your treadles

To make a shed, you need to lift your shafts up to the normal position so that the counter-march shed can be made. The treadle is sitting higher, so you will lift your foot up to the treadle and push it down as far as the shafts have fallen, just to get the warp threads back to the resting position.

### Having your treadles this high is not comfortable

If your shafts fall 2 inches, you need to press the treadle down and lift the shafts two inches, just to correct the position of the shafts. Lifting the weight of the shafts makes it a jack loom in its action and feel. Then to open the shed, press further on the treadle. You need to move the treadle twice the distance of a balanced loom. Having your treadles this high is not comfortable.

