THUMBELINA SPINNING WHEEL

Mark 2 (1978)

ASSEMBLY INSTRUCTIONS:

It is suggested you read these instructions right through once, identifying the different parts of the wheel as you go. You can then start again at the beginning and progress one step at a time following the detailed instructions and assembly hints closely. Keep a piece of soap or candle handy and rub all the screws on it before inserting them. You will find they are easier to drive and they will hold more securely.

If you intend to stain or oil, we suggest you assemble all the parts first to make sure the wheel operates well, then disassemble as necessary to stain and/or oil the parts. When you do so be very careful not to get stain or polish on the shafts or bearings of the wheel, flyer or bobbins, otherwise the operation may be sticky and may not spin freely.

STEPS IN ASSEMBLY:

1. Assemble treadle bar to treadle plate with 2 small countersunk screws (see Fig 1)

Fig 1

2. Assemble Lazy Kate Place the large base upside down on the edge of the table and screw the two turned uprights of the Lazy Kate to the front corners with long screws. Twist the uprights to line up the holes before finally tightening the screws. The uprights may be put either way round depending on whether you are right or left handed. Insert the two rods with knobs in the Lazy Kate. (See Fig 2)

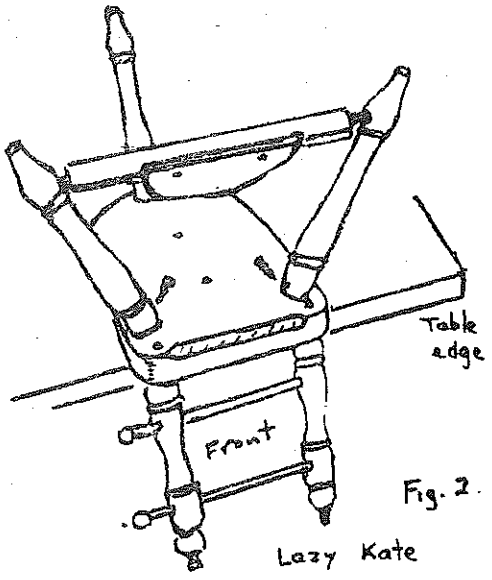


Fig. 2

3. Fit legs. Slide the nylon bearings near the foot of each front leg onto the steel ends of the treadle bar, so the legs hang sloping inwards. Fit the legs into the sockets in the base. Keep moving the legs slightly while you slide the two socket ends simultaneously into their holes in the base. To line up the treadle bearings, twist each leg as far as it will go one way, then the reverse, then return to the centre point. The treadle should swing completely freely in its two supporting bearings. Insert the two fully threaded screws and fix the front legs firmly. Screw in the back leg in the hole provided (See Fig 2)

4. Assemble the wheel uprights Stand the base on its legs and take the pre-assembled wheel uprights and top bar. Remove the nuts and washers from the base and discard the spacer cross-bar. Insert the bolts into the base holes, making sure the long top bar faces over the Lazy Kate as shown in Fig 3. Fit the washers and tighten the nuts under the base firmly.

5. Assemble wheel and crank. The two ball bearings are pre-aligned. Push the crank shaft into the rear bearing, then through the centre hub of the wheel. The fixing screw hole in the hub must face towards the rear (see Fig 3) Note the position of the drilled hole in the crank shaft. This must be lined up under the hole in the hub before the screw is put in. When the crank is fully in, adjust the position of the crank until it measures 2" (50 mm) from the upright (See Fig 4). Insert a nail or wooden match into the hole in the wheel hub and move the crank until you can feel the drilled hole in the crank shaft. Line it up with the hole in the hub by twisting fully each way against the nail in the hole and then centre by returning to the middle. Remove the nail and insert the fully threaded $1\frac{1}{4}$" (31 mm) screw When the screw is in, move the crank a little back and forth and gently retighten the screw until all movement ceases and the screw is bedded into the drilled hole in the shaft.

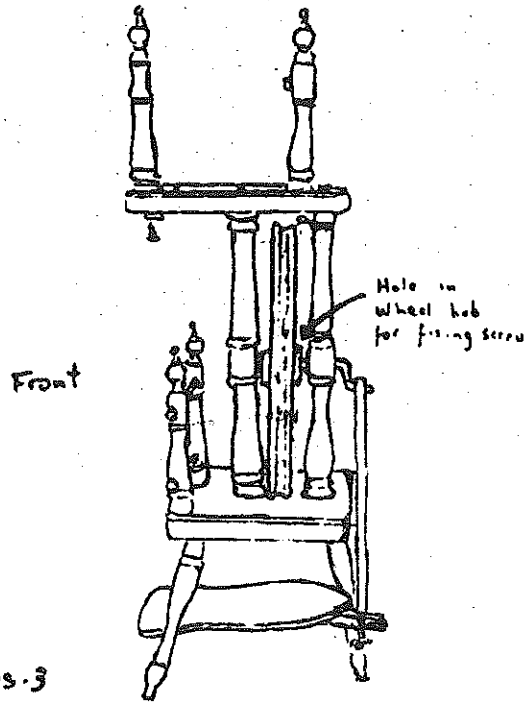


Fig. 3

The wheel should now turn freely, and if you push it by hand it should continue turning for more than 50 turns.

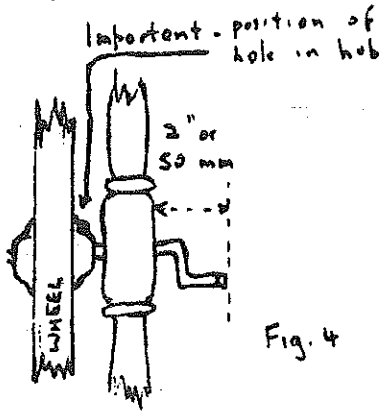


Fig. 4

6. Connect footman bar(connecting rod) Slip the top end over the crank, add a steel washer and fix by pushing the spring clip over the groove in the crank end.

Remove the rubber band from the screw in the treadle extension. Screw up into the end of the footman connecting bar until the spring is firm but free to move. The wheel can now be worked by the treadle.

7 Assemble the Mother of All (Bobbin uprights) Remove the wing nut and washer then insert the front bobbin upright into the front slot with the bearing towards the rear. Lock into position by placing the washer over stud and tighten wing nut. Insert rear bobbin upright in the other slot, depress wire tension clip and fit behind head of round head screw located in upright. This clip retains the upright in the slot allowing it to snap forward when pushed away to free the flyer from the mother-of-all. To free the upright, depress the tension clip and move to one side.

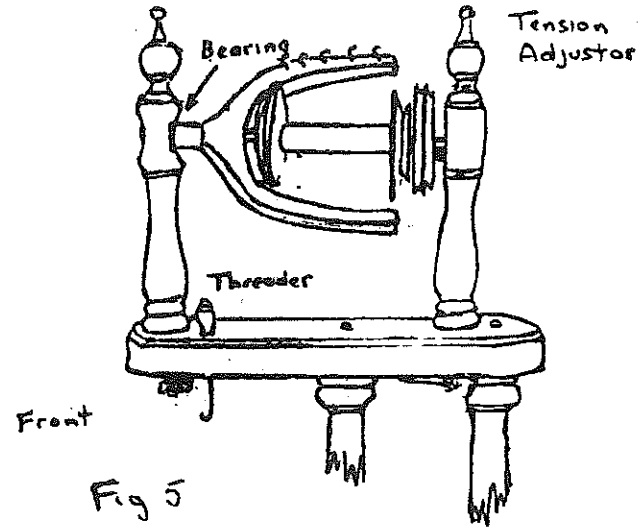


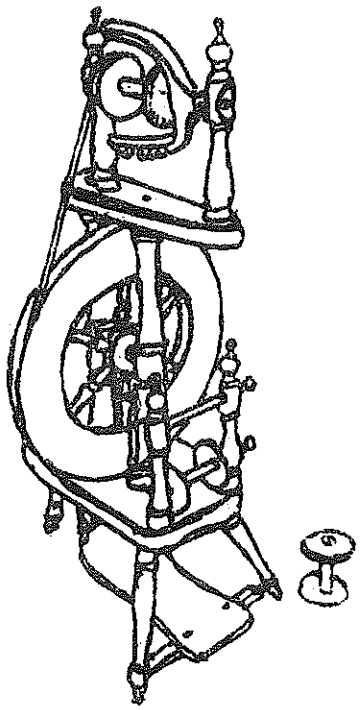
Fig 5

(See Fig 5)

8. Final adjustments. Screw the 10 hooks into the flyer, assemble a bobbin on the flyer and add on the pulley. The flyer assembly may now be fitted between the bobbin uprights by pushing the back end into the rear adjustable bearing. This allows the front end to slip into the front bearing. Adjust the rear knob until the bearing block is near the bottom of the slot (See Fig 5)

Pass the drive string twice round the wheel with one loop over the smaller pulley groove and the other loop over the bobbin groove. Tie a firm knot, and adjust the rear bobbin upright knob to adjust the string tension. Put the little wire threader in the hole in the top bar, and the wheel is ready to spin. Apply a little vaseline or petroleum jelly on the bobbin leather bearings, both ends of the flyer, and both ends of the treadle bar and conrod.

NOTE:
The bobbin uprights are designed to be completely removed if you wish to attach a Jumbo unit to the top bar.



Finished!