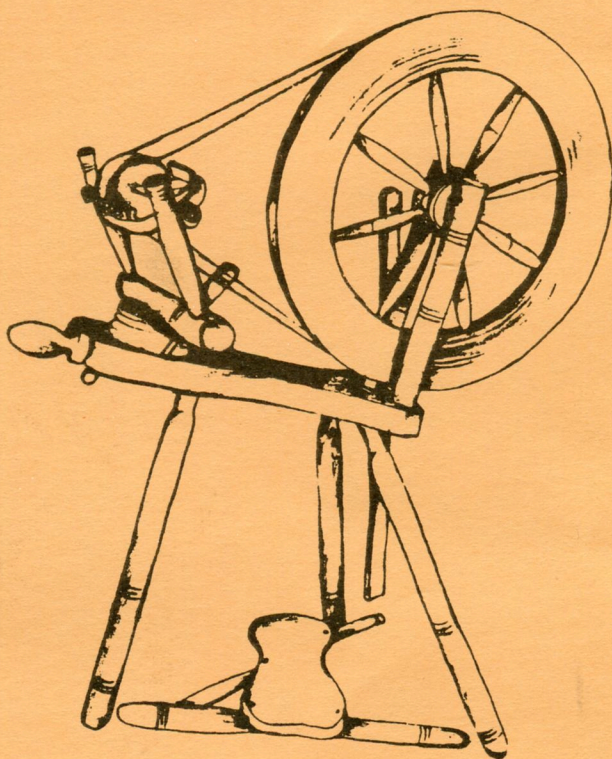


# LEWIS SPINNING WHEEL

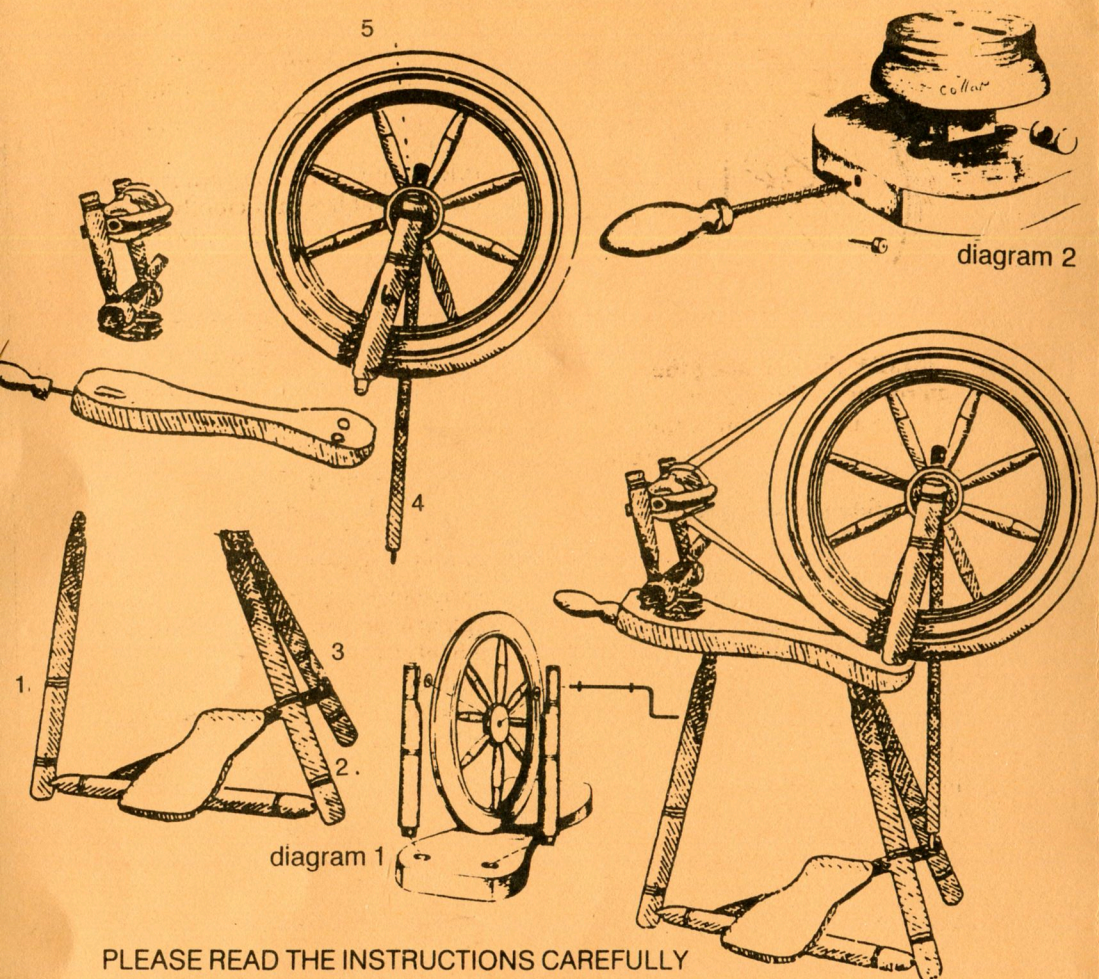
## ASSEMBLY INSTRUCTIONS



**HALDANE**  
THE SPINNING WHEEL MAKERS

GATESIDE, CUPAR, FIFE KY14 7ST





PLEASE READ THE INSTRUCTIONS CAREFULLY

Identify the Parts

- 1 base
- 3 legs (numbered 1, 2 and 3)
- 1 pedal assembly
- 1 footman (numbered 4)
- 1 wheel
- 2 wheel supports (they have bearings at one end) 5, 6
- 1 crossbar (has a flat along the entire length)
- 1 collar (spacer to fit between crossbar and base)
- 1 tension handle (metal thread at one end)
- 2 maidens (leather bearings fitted on these)
- 1 carton containing : Flyer, driving pulley, crank, threading hook and bobbin holder and a package containing: 6 screws 6 washers, spring pin, locating nail, split pin, driving band, 2 pedal pins, a flexible connector and a tapered pin.



PLEASE REFER TO THE DIAGRAM and fit the parts in the following order:

1. Fit the crank to the wheel by first pushing the straight part gently through the bearing on the wheel support from the side marked 5. see diagram 1 Place a plastic washer on the crank, then push the crank through the centre of the wheel.

Lock the wheel to the crank using the nail to line up the hole in the crank with that on the wheel centre. Replace the nail with the spring pin. Should you ever wish to remove the spring pin then cut the point off the nail and use the flat end to push the pin out.

Fit another washer before fitting the crank into the second support.

The assembly can now be located on the base. Take care to push the supports down evenly. Secure from underneath with 1½ in. screws with ¼ in. steel washers.

2. The crossbar can now be loosely screwed into the collar with 1 in. screws and 3/16 washers. Place collar in position, adjust crossbar, so that the inner groove of the driving pulley is in line with the wheel, and tighten screws. The tension handle should now be screwed in (see diagram 2). Lock it in position with the tapered pin from underneath the base. Push this in gently.

Fit the maidens and flyer assembly. The small bearing is twisted when removing the flyer, so do not push it in as tightly as the other one!

3. Legs to base, with the pedal (pins from package) between legs 1 and 2. Tapered joints allow the legs to fit firmly with a gentle tap.
4. The flexible connector (green) should be secured to the bottom of the footman (4) with a ¾ in. screw. Connect it to the crank, bush flange to the outside, secure with split pin. The flexible connector is now secured to the pedal with a ¾ in. screw.



## DOUBLE DRIVE-BAND

To fasten the double drive band: Turn the tension handle until the crossbar is  $\frac{2}{3}$  of the way down the slot, towards the wheel. Pass the band around the wheel, over the bobbin whorl, again around the wheel, then over the larger diameter on the driving pulley.

Pull the band tight, determine where the join should be and then cut the driving band with sharp scissors. (a knife leaves a ragged edge). The two ends are butt jointed by using the flame from a lighter or match. Push the ends against each other while they are being heated and as the polyester melts it will fuse into one. Take care not to burn your fingers but try to roll the joint while it is still hot so as to reduce any bumps on the surface.

Treadling causes the drive-band to turn both bobbin and flyer simultaneously. The flyer inserts twist into the yarn, and the spun yarn is wound onto the bobbin (clockwise) because the smaller diameter of the bobbin whorl causes the bobbin to revolve at a faster rate than the flyer, but as long as the tension on the drive-band is not over-tight the bobbin will slip and only wind on the amount which you feed through the orifice. As the bobbin fills it becomes heavier and tension on the drive-band will need to be increased by turning the tension handle clockwise.

## SINGLE DRIVE-BAND

The wheel can be used as a single band (Scotch tension) machine. A kit of parts is included.

## DRIVING PULLEYS

Haldane make a range of driving pulleys to give the different twist ratios.

No 0	6 and 5:1	No 2	9 and 7:1	No 4	11 and 10:1
No 1	7.7 and 6.5:1 (standard)	No 3	10.2 and 7.7:1		

## BEFORE SPINNING

For the best results all moving parts must move easily.

With the drive band disconnected the wheel itself should revolve freely. Oil the pedal pins.

Oil inside the shanks of the bobbins so that they revolve freely on the spindle. Screw the whorl (driving pulley) on and check that the bobbin still runs freely.

Place the complete flyer assembly into the leather bearings of the maidens. Oil the leather bearings and ensure that the flyer assembly runs freely before re-connecting the drive-band.

## BOBBINS

Use the bobbins with a U shaped whorl for spinning. Ply onto the bobbin with the V shaped whorl.

## FINISHING A NATURAL WHEEL

The wheel can be finished with oil or lacquer. In both cases a stain can be used if required.

Note The working part of the wheel rim must not be sandpapered.

The driving pulley grooves must not be sandpapered.

The bobbin grooves should be smooth.