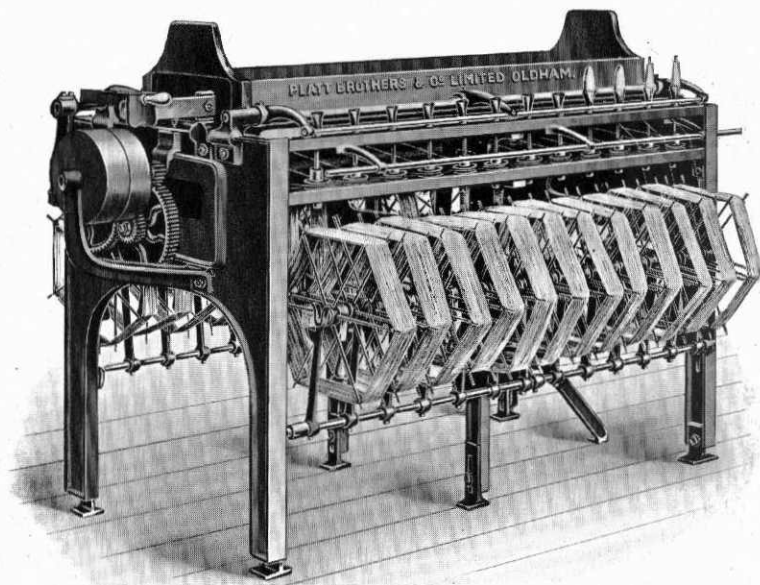


The drum winder may be constructed with a line of drums on each side of the machine, with one bobbin per drum, or with a single line of drums in the centre, as illustrated, but with two bobbins per drum. The former type is most convenient where the workpeople are of very short stature.

Pirn Winder for Weft.—After dyeing the hanks of yarn used for weft in weaving coloured goods, such as checks, it is necessary to re-wind the yarn on the Pirn Winder to prepare “cops” (cannettes) or pirns for the loom shuttle. On each side of



WEFT PIRN WINDER

this machine are swifts to receive the dyed hanks, the yarn passing from the hanks over guide rods, one of which has a radial movement to traverse the yarn on to paper tubes or pirns. The form of the cop is obtained by means of a slit conical cup through which the spindle and the pirn pass. The yarn is guided through the slit in the cup on to the revolving pirn, and, as the winding progresses, it accumulates and fills the cup, and causes the cop or pirn to be pushed upwards, at the same time imparting to the cop its conical shape. It may be added that the machine may be arranged for hanks above or below.