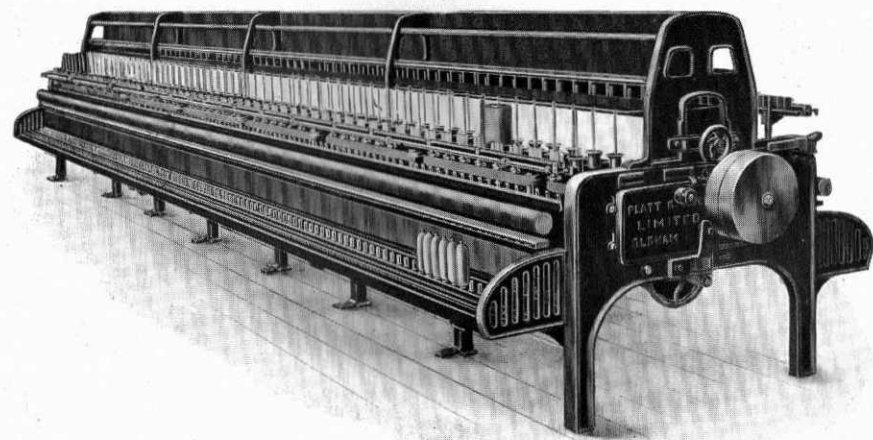


knocking-off motion comes into action and the press stops. The attendant then ties the various strings, and releases a catch from the ratchet wheel on the flywheel shaft, when the presser sinks by its own weight, and during its descent the top bars are automatically unlocked and turned back, and the bundle then removed by the attendant.

Warp Winding Frame.—This machine winds the grey yarn from the mule cop, or ring frame bobbin, on to larger bobbins called warpers' bobbins, and at the same time clears the yarn of impurities.



WARP WINDING FRAME

The machine has on each side two rows of spindles driven by bands from a tin drum or roller, running through the centre of the machine.

The cops or bobbins to be wound are fixed in front of the machine, and the threads pass over a drag roller covered with cloth, and thence over a guide rod, through a card wire brush, and over a guide, on to a warpers' bobbin.

On each spindle is fixed a cast-iron disc, covered with a flannel washer, on which the bobbin rests and revolves by frictional contact.