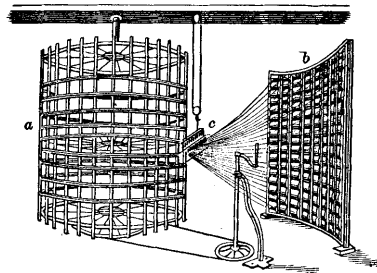


**Warp'ing-mill.** (*Weaving.*) An apparatus for laying out the threads of a warp and dividing them into two sets.

It comprises a large wooden reel *a* of 12 or more sides mounted on a vertical axis and rotated by an endless band passing around a horizontal wheel at its base, and a second wheel turned by a winch. One sixth of the whole number of threads, on their bobbins, are mounted on a frame *b*, called the *travers*, the bobbins being set loosely upon spindles, so as to

Fig. 7039.



Warping-Mill.

movable bars in the *heck-box*, so that by pushing up one set of pins, after the yarns are passed through, the warp is divided into two *leas*, one for each of the heddles of the loom. The ends of these are knotted together, and they are passed over two pins on the mill, which is then turned by means of the winch. The heck-box rises, and the yarns are wound spirally on the reel; the movement is then reversed, and the box descending by its own weight, a spiral layer is laid on in the opposite direction, and so on until the yarns are all wound of the bobbins. See also previous article.