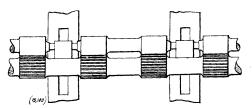
## TEXTILE MACHINERY.

15,100. G. Mitchell and A. Craven. Bradford, Yorks. Throstle Spinning Frame. [3 Figs.] July 22, 1899.—For the purpose of spinning unoiled and untwisted wool fibre a throstle spinning frame is provided with front and back drawing rollers; but for the usual intermediate rollers and carriers there are substituted fluted rollers driven at a speed proportionate to that of the front rollers, and upon these fluted



rollers are placed metallic carriers driven by frictional contact therewith, and supported by journals secured to saddles of the ordinary construction. In a modification of the invention, the intermediate rollers are plain, and the carriers are fluted, the rollers and carriers in either case serving to sustain the unoiled and untwisted fibre in its travel between the front and back rollers of the spinning frame. (Accepted December 13, 1899.)