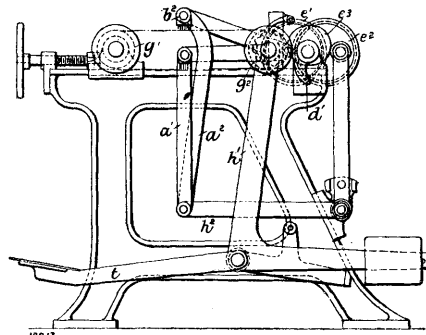


## TEXTILE MACHINERY.

19,217. A. Monforts, Munchen-Gladbach, Germany. **Machines for Finishing Yarn in the Form of Hanks or Skeins.** [2 Figs.] August 31, 1896.—This machine relates to a machine for brushing and stretching yarn in the hank, in which the hank of yarn is arranged over two rollers, and when in a stretched condition and at rest is brushed simultaneously from the outside and the inside, after which the brushes are withdrawn; the hank is unstretched by a parallel movement of one of its supporting rollers, and is moved forward by rotary movement imparted to the said roller, so that fresh portions of it will be brought into position to be brushed, and is then again stretched by another parallel movement of one roller. The mode of working of the machine is as follows: The driving is effected by means of the shaft  $w$  provided with the cams  $d^1$  and  $e^3$  and the eccentrics  $e^1$ ,  $e^2$ . The lever  $h^1$  with the roller  $g^2$  is moved nearer to the roller  $g^1$  by



means of the treadle  $t$ , and the brushes  $b^1$ ,  $b^2$  are at the same time raised to their highest positions by means of the roller  $r^2$ , whereupon a hank is placed around the yarn rollers  $g^1$ ,  $g^2$ . The treadle  $t$  is now liberated, and as a result the hank is tightened and stretched, and the brushes  $b^1$ ,  $b^2$  being no longer held up by the roller  $r^2$  enter the threads of the hank in which they are caused to travel by the action of the eccentrics  $e^1$ ,  $e^2$  and cam  $e^3$ , and so brush the hank. When through the rotation of the cam-shaft  $w$  the cam  $d^1$  again reaches the roller  $r^1$ , the brushes  $b^1$ ,  $b^2$  are moved away from the hank, and the pawl  $k^2$  rotates the yarn-roller  $g^2$ , and thereby moves the hank forwards to a corresponding extent, whereupon the hank is again tightened and stretched. The series of operations is then repeated until the hank of yarn has been sufficiently brushed and stretched. (Accepted August 4, 1897.)