TEXTILE MACHINERY.

11,472. J. W. Hill and E. Bardaley, Stockport, near Manchester. Looms. [Fig. 1, June 2, 1900.]

This invention relates to looms for weaving terry fabrics, particularly to that part of the loom known as the terry motion, in which the reed pocket is allowed to open for, say, two picks and to close for the third pick. Upon a shaft extending from end to end of the reed is arranged a set of crush fingers extending towards the reed pocket, and upon the same shaft is a lever arm adapted to rest, through the intervention of further levers, upon the link of an endless chain driven from the camshaft of the loom. The shaft is made up of links of different sizes, and as it travels the links are alternately raised and lowered, thereby changing the height of the crush fingers and the reed pocket firmly closed against the reed, and, when in position to take place at, say, each third pick the reed is effectively locked or held closed at the right moment. It is stated in the specification that in terry fabrics with alternate plain parts the invention dispenses with the arrangement completely used for alternately engaging and disengaging the terry motion, and thus takes a considerable load off the loom. (Accepted June 27, 1900.)

11,631. J. Footell and F. E. Dawson, Bolton, Lancs., Self-Acting Mules and Twiners. [Fig. 2, June 15, 1900.]

The mule-box of this apparatus, with acting male and twiner mechanism, is operated by means of a bell-crank lever, one arm of which is actuated by the ordinary roller box rod, the movements of which are effected by the movements of the multi-}

11,720. G. B. Hodgson, M. E. Hodgson, and G. Hodgson, Limited, Bradford, Yorks. Looms. [Fig. 1, September 2, 1900.]

This invention has for object to effect a reduction in the number of parts and consequently to simplify the mechanism of conveying motions from the primary drive. The shedding mechanism of a loom consists of the letting-off and taking-up motions, the motion from the reed box, the loom cylinder, or pattern surface, and the set off and take up motions can be turned back by hand by disconnecting one clutch. The fact that the several motions can all be reversed or turned back at one and the same time, it is stated, compensates for any faulty pick, which it is necessary to take out of the piece. The mechanism comprises a vertical shaft on the top of which is a bent wheel that gear with the bell wheel that communicates motion to the shedding mechanism. Near the bottom of the shaft is an eccentric wheel being mounted between the fork, upon the pin that couples the fork end of the link to the tongue piece of the next link. Two studs carrying anti-friction rollers are fixed in the underparts of the fork. The periphery of these rollers bear against the sides of a rib on the guide rail, and the periphery of the rollers carried by the forked end of the clip chassis links bear against the sides of a further rib on the guide rail. (Accepted June 27, 1900.)

15,672. A. Thomson, Bradford, Stentering Machines. [Fig. 1, August 9, 1900.]

The object of this invention is to preserve the clip chains, as well as the metal guides within which each chain travels in stentering machines used for stretching and finishing textile fabrics. The links of the clip chain are of ordinary form, excepting that the fork end of each link is made sufficiently wide to allow of an antifriction wheel being mounted between the fork, upon the pin that couples the fork end of the link to the tongue piece of the next link. Two studs carrying anti-friction rollers are fixed in the underparts of the clip. The periphery of these rollers bear against the sides of a rib on the guide rail, and the periphery of the rollers carried by the forked end of the clip chassis links bear against the sides of a further rib on the guide rail. (Accepted June 27, 1900.)

15,733. J. Fraser, Dundee, Automatic Stop Motion for Spinning Machines. [Fig. 1, March 9, 1900.]

On a bracket near one of the retaining or feed rolls of the machine a rod is fastened, and on each end of this rod radial arms project, one above and one below the retaining rolls, these arms being formed with eye or slots through which the edge or thread passes on its way to the drawing rolls and flyer of the machine, one of these rods being fitted in connection with each rove bobbin. The edge or thread passes through slots in a horizontal rove guide rod above the retaining rolls before passing through the eyes to the swivelling rod. The lower radial arm of the rod may be connected by a spring to the bracket which carries the rod, or instead the top radial arm may have a small weight attached to it. When the rod or thread is in normal working order the swivelling rod is vertical with its arm horizontal by reason of the tension of the thread; when, however, a thread breaks, the arm is inclined at the "nip" of the drawing rolls and becomes slack, whereupon the spring connected to the lower arm of the weight of the upper arm, as the case may be, will cause the arm to swing through an arc and assume a position in which delivery of the thread is stopped. (Accepted July 4, 1900.)