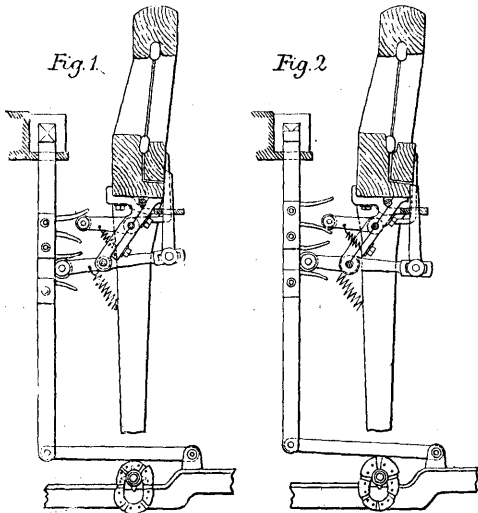


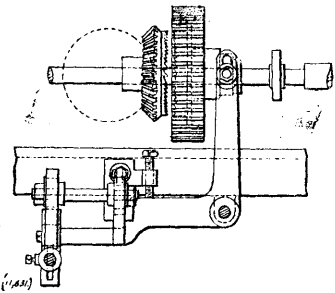
TEXTILE MACHINERY.

11,479. J. W. Hill and E. Bardsley, Stockport, near Manchester. Looms. [3 Figs.] June 2, 1899.—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 crank 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 links of an endless chain driven from the camshaft of the



loom. The chain is made up of links of different sizes, and as it travels the links alternately raise and lower the before-mentioned arm. With the raising of the arm the crank fingers engage with and hold the reed pocket firmly closed against the reed, and, with such movement timed to take place at, say, each third pick, the reed is effectually 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 commonly used for alternately engaging and disengaging the terry motion, and thus takes a considerable load off the loom. (Accepted June 27, 1900.)

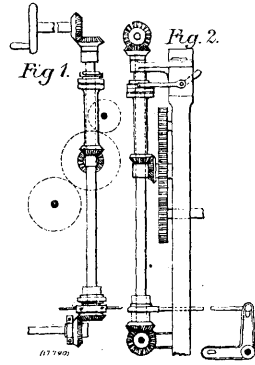
11,631. J. Footell and F. E. Dawson, Bolton, Lancaster. Self-Acting Mules and Twiners. [3 Figs.] June 5, 1899.—The roller-box of ordinary self-acting mule and twiner mechanism, is operated by means of a bellcrank lever, one arm of which is actuated by the ordinary roller box rod, the movements of which are effected by the movements of the mule



carriage, and the other arm of which is fitted with a fork located in a recess of the spurwheel which forms the roller box. The bellcrank lever is pivoted to the roller beam. It is stated that slipping of the roller box, breaking of wheels, cutting or damaging of the yarn through slipping out of gear, and wear and tear of the various parts are by this invention reduced to a minimum. (Accepted June 27, 1900.)

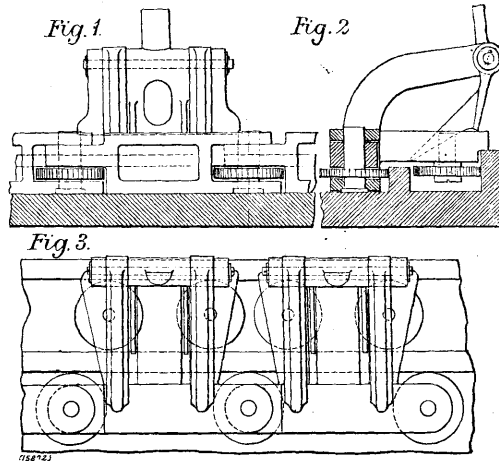
17,790. G. H. Hodgson, M. E. Hodgson, and G. Hodgson, Limited, Bradford, Yorks. Looms. [2 Figs.] September 4, 1899.—This invention has for object to effect a reduction in the number of parts and consequently to simplify the mechanism for conveying motion from the primary driver to the shedding mechanism of a loom, and to the letting off and taking up motions, in such manner that in the event of a fault occurring in the weaving, the shedding mechanism, cylinder, or pattern surface, and the let 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 picks which it may be necessary to take out of the piece. The mechanism comprises a vertical shaft on the top of which is a bevel wheel that gears with the bevel wheel that communicates motion to the shedding mechanism. Near the bottom of the shaft is an eccentric

connected by a link to the "letting-off" motion, and below the eccentric is a bevel wheel gearing with a bevel wheel that communicates motion to the "taking up" mechanism. Mounted on the vertical shaft is a long collar, on the bottom of which is a bevel wheel gearing with and driven by a bevel wheel which itself is driven by a gear wheel from the main shaft of the loom. The top of the long collar is a half clutch, the other half of which slides on a feather on the vertical shaft, and can be thrown in and out



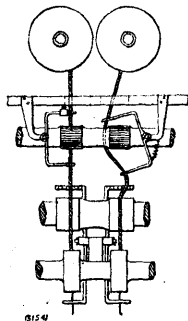
of gear by means of a hand lever. It will be seen that when the clutch is in gear, the shedding mechanism, "letting off" and "taking up" motions are all driven from the vertical shaft. When, however, the clutch is thrown out of gear, the long sleeve revolves loosely on the vertical shaft, and the latter can be turned back, the shedding mechanism, "letting off" and "taking up" mechanism, also being turned back at the same operation. (Accepted July 4, 1900.)

15,872. A. Thomson, Bradford. Stentering Machines. [3 Figs.] August 3, 1899.—The object of this invention is to preserve the clip chains, as well as the metal guides within which such chains travel, in stentering machines used for stretching and finishing textile fabrics. The links of the clip chain are of ordinary form, excepting that the forked end of each link is made sufficiently wide to allow of an antifriction



roller being mounted between the fork, upon the pin that couples the forked end of the link to the tongue piece of the next link. Two studs carrying antifriction rollers are fixed in the underside of the clip. The peripheries of these rollers bear against the side of a rib on the guide rail, and the peripheries of the rollers carried by the forked end of the clip chain links bear against the side of a further rib on the guide rail. (Accepted June 27, 1900.)

5151. J. Fraser, Dundee. Automatic Stop Motion for Spinning Machines. [1 Fig.] March 9, 1899.—On a bracket near one of the retaining or feed rolls of the machine a rod is fulcrumed, and on each end of this rod radial arms project, one above and one below the retaining rolls, these arms being formed with eyes or slots through which the rove 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 rove or thread passes through slots in a horizontal rove guide rod above the retaining rolls before passing through



the eyes in 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 rove 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 rove is arrested at the "nip" of the drawing rolls and becomes slack, whereupon the spring connected to the lower arm or the weight of the upper arm, as the case may be, will cause the swivelling rod to tilt and assume a position in which delivery of the thread is stopped. (Accepted July 4, 1900.)