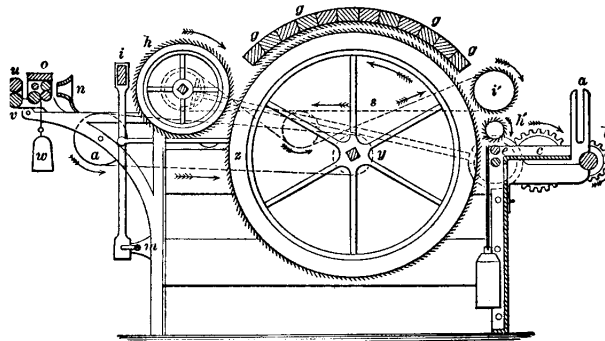


Sliver. (Fiber.) A continuous strand of cotton or other fiber in a loose, untwisted condition, ready for *slubbing* and *roving*, preparatory to being spun. The process is effected by the *finishing-card*.

The carding-machine (Fig. 5203) receives the roller from the lapping-machine in the grooves *a*, resting at the same time upon the roller *b*, which turns it by friction, so as to unwind the fleece or *lap*. This is conducted over the table *c*, between the two nipping or feed rollers *e*, where it is caught by the card-drum *z*, covered with the card-cloth in strips, parallel with its axis; *h'* is the *small runner*; *i'*, the *large runner*; *g g g g*, the *flat top-cards*; *h*, the *doffer-card*, which takes the fleece off the main drum, and which in turn is cleared by the *doffer-knife i*. This knife receives a very fast up-and-down motion from the crank *m*, by which it peels a gossamer-like fleece from the doffer-card. It is actually a comb, with very fine teeth, which penetrate slightly between the wire of the card as it moves downward. The fleece thus separated from the card is then drawn together through the tin funnel *n*, so as to form a narrow band or *sliver*, and is thus presented to the *drawing-rollers* at *o*. The front pair of these, being driven with a slightly greater velocity than those behind, draw the sliver through faster than it is delivered by the latter, and by this means attenuate the same. This action brings about a still greater parallelism of the fibers, which is repeated in every subsequent machine. The top rollers are pressed down upon the lower ones by the weight *w*. The rollers *u v* deliver the drawn sliver into cans, ready for the drawing and doubling process.

Fig. 5203.



Finishing-Card.