

nection, controlled, as to its engagement or disengagement, by a knuckle-jointed lever. Attached to this jointed lever was a notched rod, that was extended along the whole length of the bed on its upper side, over the front needles and under the carriage. When the yarn broke or ran out, projecting feet on the pivoted yarn-guides dropped into notches of the notched rod, and then the further movement of the carriage moved the notched rod, disconnected the friction-driving-pulley, and stopped the machine. A register on the machine could be set to disconnect the friction-pulley and stop the machine at the completion of any desired number of courses.

One or two threads could be used with each of the two sets of cams. The front plate or needle-bed was connected with a lever, by which it might be moved or shifted horizontally the distance of one needle to the right or left to "rack" or cross the threads, in order to produce an edge-finish on the end of the ribbed web, which in this machine was flat.

To form "one and one" rib, both sets of cams were retained in position to operate each needle the full length of its knitting-stroke up and down.

In the formation of the "polka" stitch by this machine, instead of holding the second or "tucked" stitch or loop on the latch as usual, it was held *inside* the hook and under the latch, which strained the yarn less than the old method, and the web could be made slacker and softer, for the double loop could be drawn more than the single loop without breaking the yarn.

The capacity of the machine was stated to be from four to eight dozen jackets per day, according to the grade of goods and style of finish desired.

The following patents are some of those owned by this company: Nos. 39,934, 50,369, and 9621.

CAMPBELL & CLUTE, *Cohoes, N. Y.*

A knitting-machine for shirt-work, employing bearded needles, sinkers, pressers, and inside leading, and cast-off burrs, as usual. The needle-cylinder, and overhanging, automatically operated take-up frame, were connected together so as to be moved exactly in unison. The take-up rollers moved with equal surface speed, to draw equally on the sides of the flattened tubular web, and the extent of their movement was regulated by the slack of the web as the latter was produced.

Each machine had four feeders, and was provided with novel devices for moving the pressing-wheels out of operative position with