

UNITED STATES PATENT OFFICE.

JOSEPH BULLOCK, OF COHOES, NEW YORK.

KNITTING-MACHINE.

Specification of Letters Patent No. 26,085, dated November 15, 1859.

To all whom it may concern:

Be it known that I, JOSEPH BULLOCK, of Cohoes, in the county of Albany and State of New York, have invented a new and useful Improvement in Circular-Knitting Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a vertical section of the framing of a circular knitting machine and those parts to which my improvement relates. Fig. 2, is a plan of the same.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists in the employment in a circular knitting machine, in combination with a stationary series of needles pointing toward the center of the machine of a series of jacks applied substantially as hereinafter described and having only a movement between the needles in a direction radial to the center of the machine, for the purpose of "landing" the stitches over the beards of the needles.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

A, B, C, is the framing of the machine consisting of a bed plate A, and upright pillars B, supporting a stationary annular plate C.

a, a, are the needles secured firmly to the plate C, by means of a covering plate D, and a clamping plate E, the latter bearing on the covering plate and being bolted down to the plate C, by screws *h, h*.

F, F, are the jacks whose form is represented in Fig. 1, working as levers upon a fulcrum *c*, composed of a ring of wire resting in a groove provided in the upper side of a horizontal annular plate E', which is supported below the plate C, by hangers *d*. This plate has a number of radial slots corresponding with the number of jacks, in which the jacks are received.

The jacks are formed with hooks or slotted off-sets as shown at *e, e*, in Fig. 1, to fit the fulcrum *c*, which construction enables any one of them to be taken out without interfering with the others, by simply draw-

ing it upward out of its slot C. The jacks so applied are operated by two cams H, and L, carried by a revolving ring or plate G, which is fitted loosely to the plate E, concentrically to the circle of the needles, the cam H, being screwed to the top of the said plate G and operating against the outer edges of the jack above the needles, for the purpose of landing the stitches over the beards of the needles, and the cam L, being attached to the cam H, and operating upon the inner edges of the jacks also above the needles for the purpose of moving them back again after their operation to land the stitches. At the sides of Fig. 1, the jacks are exhibited in their extreme positions, one at the right having just completed its operation to land the stitch, and one at the left being thrown back.

I, is a cam held by a stud *f*, carried by an arm J, which is bolted to the top of the revolving plate G, and operating below the needles for the purpose of pressing back the cloth upon the needles.

Instead of the cam L, there may be used for throwing back the jacks, a spring *g*, (see Fig. 1,) of india rubber or coiled wire applied to encircle the lower parts of the jacks.

The means of closing the beards of the needles, the threads conductor and the other operating parts necessary to be used in combination with the stationary needles and the jacks which I have described, to complete the machine, may be the same as the machines now in use with stationary needles.

I do not claim the circular series of stationary needles arranged as described. But

What I claim as my invention and desire to secure by Letters Patent, is,

The employment in combination with such a circular series of stationary needles, of a series of lever like jacks F, applied substantially as herein described and having a movement between the needles in a direction radial to the center of the machine as described but no rotary motion.

JOSEPH BULLOCK.

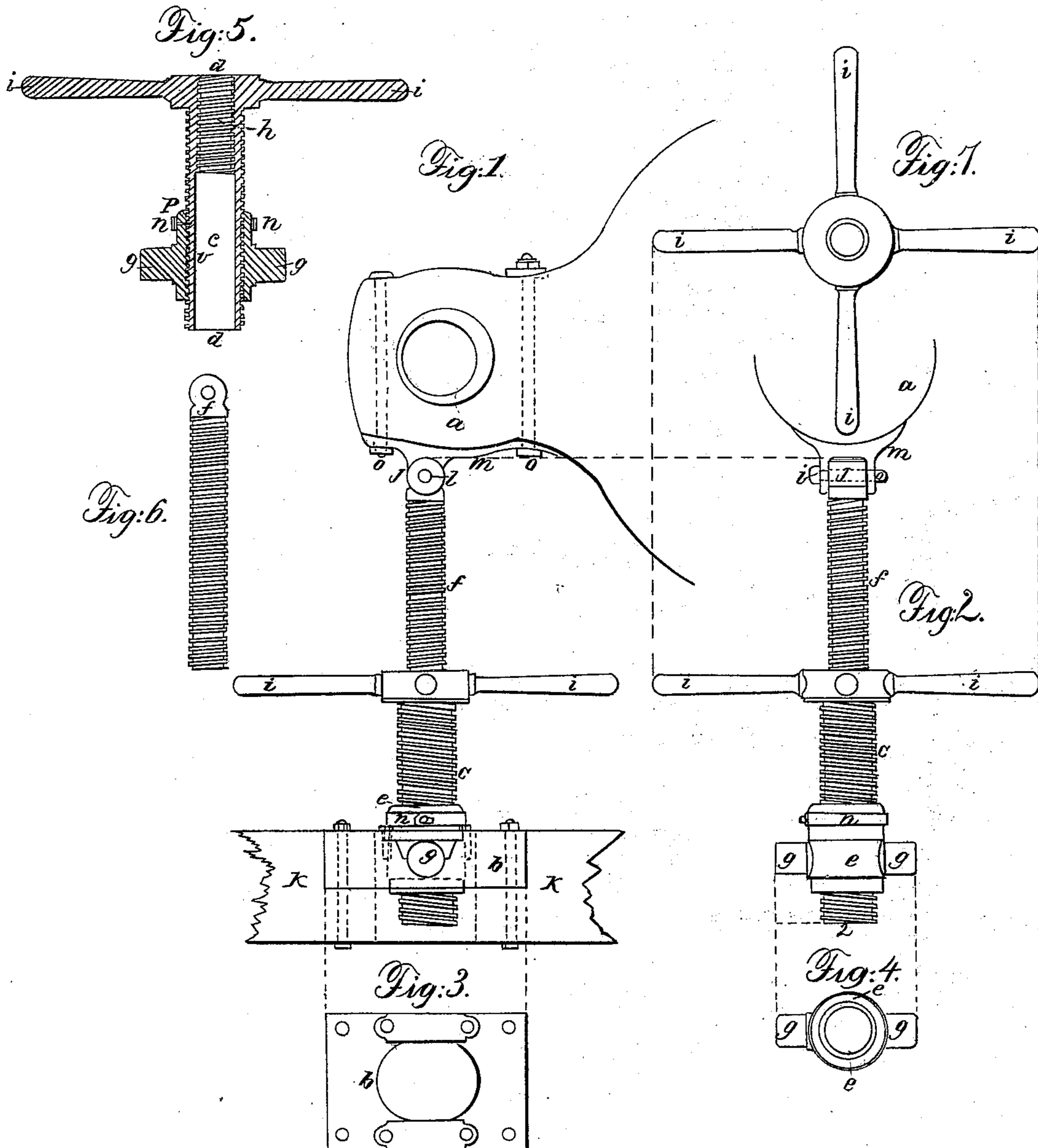
Witnesses:

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No 26,124.

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Witnesses
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