

A. B. BATES.
Improvement in Sewing-Machines.

No. 115,151.

Patented May 23, 1871.

Fig. 1.

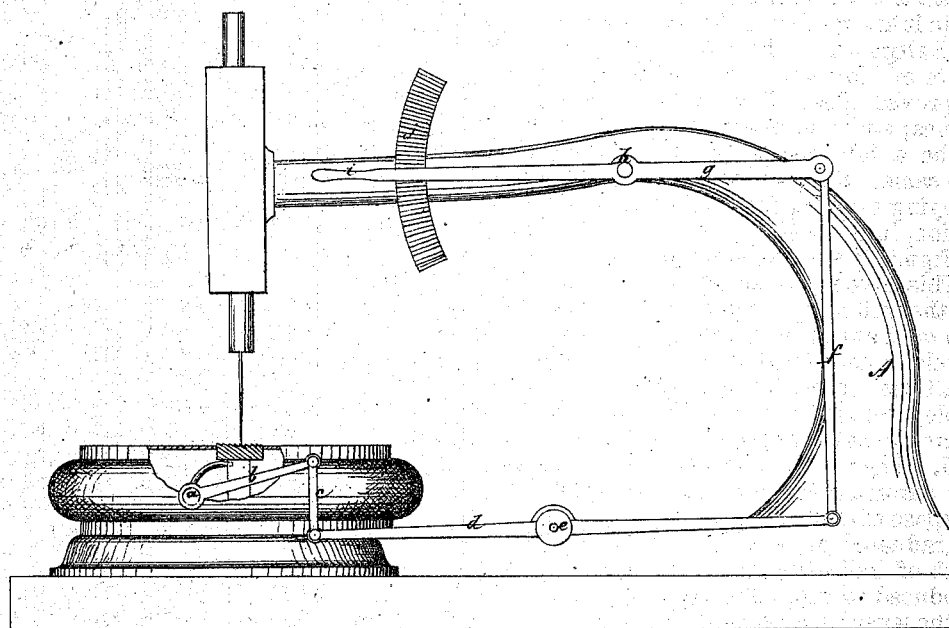
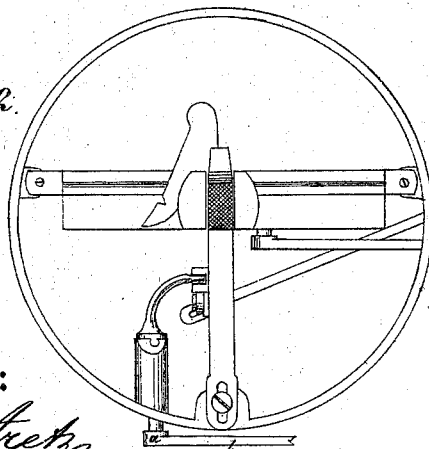


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALEXANDER B. BATES, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 115,151, dated May 23, 1871.

To all whom it may concern:

Be it known that I, ALEXANDER B. BATES, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and Improved Feed-Regulator for Sewing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation.

This invention relates to an improvement on the well-known Florence machine, wherein the mechanism for varying the length of the stitch is connected with the inner end of a shaft that passes through the side of the cloth-table, and is operated by turning by hand said shaft by means of a knob placed upon its outer end. The invention consists in an apparatus for automatically turning said shaft for the purpose of regulating the feed, combined with a graduated plate, which answers the purpose both of indicating how many stitches will be produced to the inch at each different position of the lever by which said apparatus is worked, and of holding said lever in any position desired.

Referring to the drawing, *a* is the shaft, by the turning of which the feed-regulating mechanism is operated, which latter being in no way my invention it is needless here to de-

scribe. *b* is an arm rigidly attached to the shaft *a*. *c* is a link connecting the arm *b* with a lever, *d*, which has its fulcrum at *e*, and is jointed at its other end with the lower extremity of a rod, *f*, that connects the lever *d* with a lever, *g*, which has its fulcrum at *h* and terminates in a handle, *i*. To the arm *A* that supports the lever *g* is secured a notched segment-plate, *j*, into either of the notches of which a tooth formed on the inner side of the lever *g* enters, thus securing the lever to the plate.

The notches should be inscribed with the figures that denote how many stitches to the inch will be produced at each different position.

The Florence machine has no device for indicating to the operator just what effect will follow any one movement of the shaft *a*. This disadvantage is obviated by my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the shaft *a*, arm *b*, link *c*, levers *d* and *g*, connecting-rod *f*, and notched plate *j*, as specified.

ALEXANDER B. BATES.

Witnesses:

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