

J. LAMB.
Sewing-Machines.

No. 128,640.

Patented July 2, 1872.

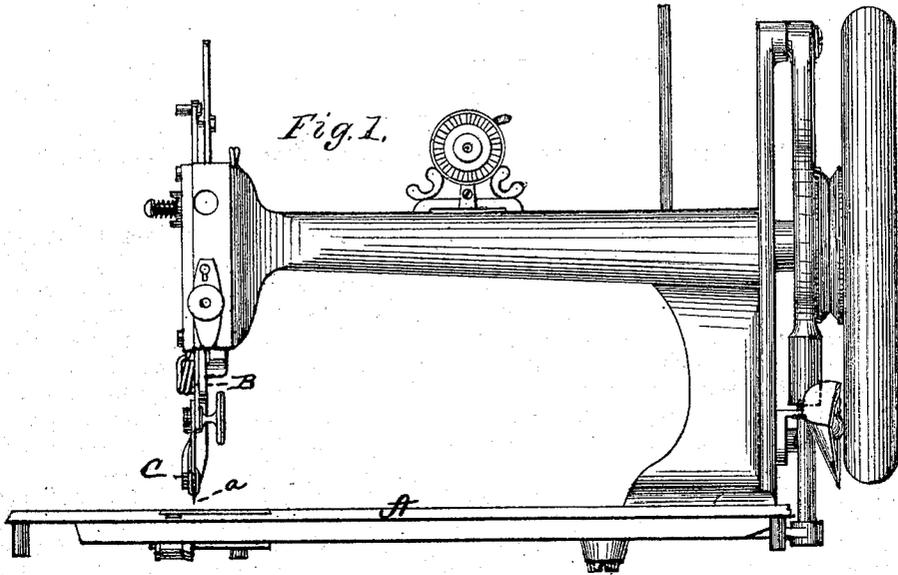


Fig. 2.

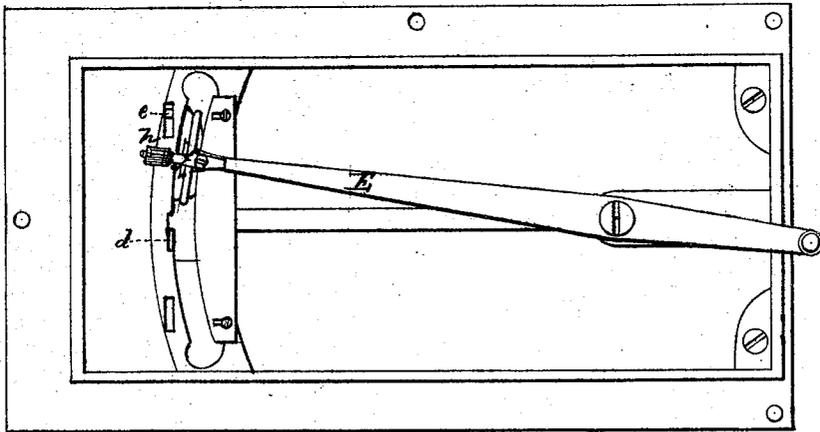


Fig. 3.

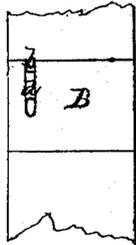
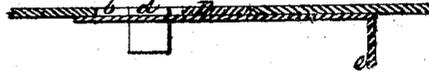


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN LAMB, OF JEFFERSONVILLE, NEW YORK.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 128,640, dated July 2, 1872.

To all whom it may concern:

Be it known that I, JOHN LAMB, of Jeffersonville, in the county of Sullivan and State of New York, have invented certain new and useful Improvements in Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

My invention relates to that class of sewing-machines in which the cloth is fed by the needle and helper; and consists in a reciprocating bar placed in the needle-slot, filling up the same, and thus making an adjustable needle-hole in the throat-plate and needle-race for the purpose of keeping soft fine goods from being punched down with the needle, and for keeping the loop from turning over in the race and missing the shuttle.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 is a bottom view of a "vertical-feed" machine with my improvement attached. Fig. 3 is a plan view of the throat-plate with needle-slot. Fig. 4 is a section of the reciprocating-bar with the way in which the same moves.

As I do not lay claim to any other part of a sewing-machine than the reciprocating bar in the needle-slot, and the mechanism for operating the same, I do not deem it necessary to describe any other part of the machine.

H represents the bed-plate; B, the needle-arm with needle *a*; C, the presser-foot; D, the throat-plate with needle-slot *b*; and E, the shuttle-carrying lever, all of which are constructed and arranged to operate in any of the known and usual ways for a vertical-feed ma-

chine. In the needle-slot *b* is placed the end of a bar, *d*, the main part of which runs in a groove or way under the throat-plate D, and from its other end extends an arm, *e*, downward for a suitable distance. From that end of the shuttle-lever E, which carries the shuttle, extends an arm, *f*, upon the extreme end of which is a rubber cushion, *h*, said arm being of such length that the cushion will strike the projection *e* on the bar *d*.

During the operation of the machine, while the needle is on its upward stroke, and the shuttle moves back after having passed through the loop, the cushion *h* on the arm *f* strikes the projection *e* and moves the bar *d* so that the end thereof in the slot *b* will close that part of said slot in which the needle works, leaving only a hole large enough for the needle to pass through at the downward stroke. This prevents the goods, especially when soft or fine, from being punched down with the needle, and also prevents the loop from turning over in the race and missing the shuttle. The bar *d* is moved in the opposite direction by the needle while it feeds the goods, assisted by the helper-bar connected with the presser-foot C.

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

The reciprocating bar *d*, having one end within the needle-slot *b*, and the other end provided with a downwardly-projecting arm, *e*, when combined with and operated in one direction by the needle, and in the other by the shuttle lever-arm *f*, substantially as set forth, and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

Witnesses:

JOSIAH SMITH,
GEO. WIND.

JOHN LAMB.