D. A. Dickinson,

Mechanical Brake.

No. 103584. Patented May 31. 1870.

Fig. 1.

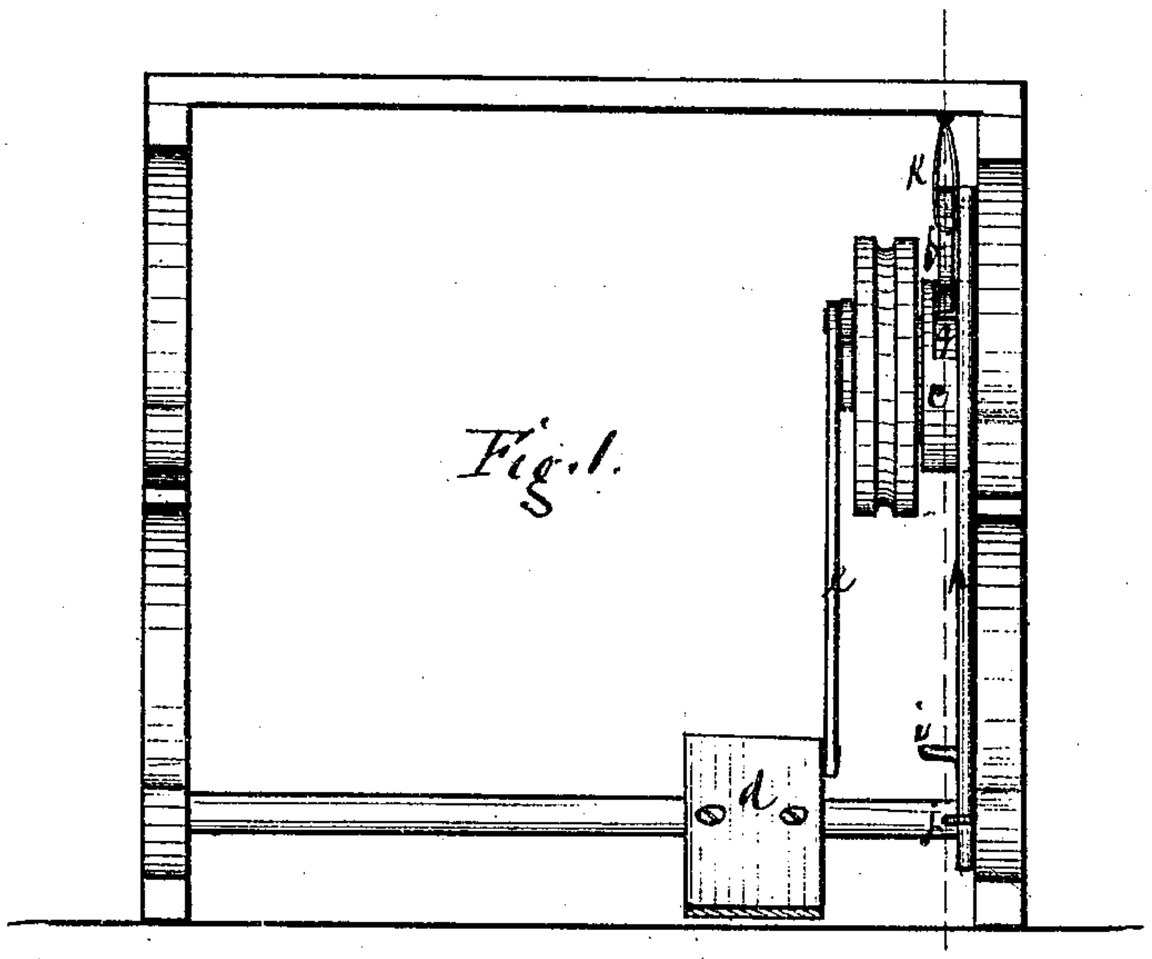
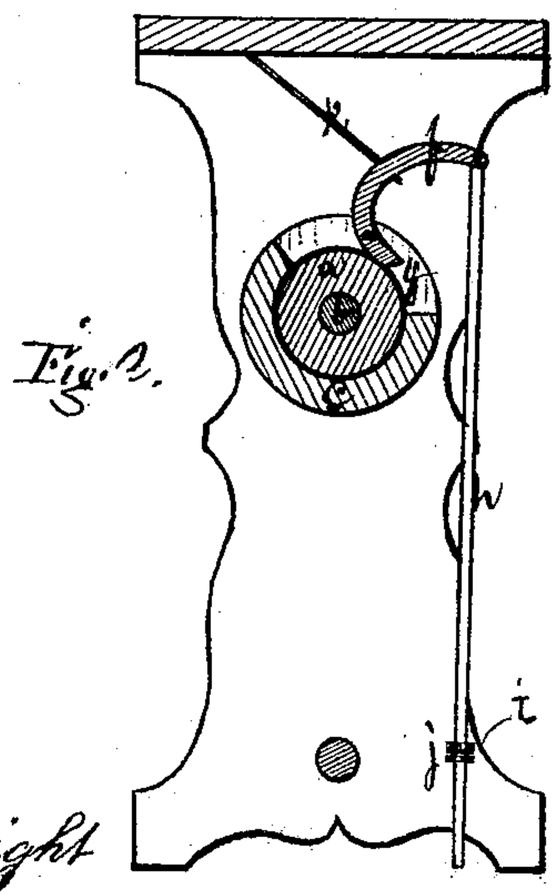


Fig. 2.



Witnesses
Geo. C. Lambright
Robert Everett.

Inventor
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by Atty Thos. P. Everett

United States Patent Office.

DAVID A. DICKINSON, OF BALTIMORE, MARYLAND.

Letters Patent No. 103,584, *dated May* 31, 1870.

IMPROVEMENT FOR PREVENTING REVERSE MOTION IN SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DAVID A. DICKINSON, of the city of Baltimore, in the State of Maryland, have invented a certain new and useful Improvement in Means for Preventing Reverse Motion and Starting Sewing-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 drawing and to the marks and letters thereon, which said drawing forms part of this specification, and shows my invention attached to the table and actuating parts of a sewing-machine—

Figure 1 thereof being a front view of the parts, and

Figure 2, a view, by vertical section, on the dotted line of fig. 1.

In both of these figures, where like parts are shown, like letters and marks are used to indicate the parts.

The object of this invention is to give to the operator of a sewing-machine the facility of starting the machine without using either of his hands, and, also, by the same means, of preventing the reverse motion of the machine.

This object is attained by surrounding the hub *a* of the crank-shaft *b* by a ring, *c*, which ring plays upon the hub, so that, when the hub and shaft are operated by the treadle *d* and pitman or connecting-rod *e*, to drive the machine, the ring may be at rest.

A curved lever, *f*, is pivoted in a slot, *g*, in the ring, to the outer end of which lever there is connected a vertical rod, *h*, having a step, *i*, near its lower end.

This rod has guides, *j*, to aid in keeping it in a vertical position.

A spring, *k*, attached to the table, is connected to the curved lever *f*, the tendency of this spring being to keep the lower end of the lever from contact with the hub *a*.

Now, it will readily be seen that, when the foot of the operator is upon the treadle *d*, letting the heel rest upon the treadle as a turning point, the front part of the foot of the operator can easily be turned toward the rod *h*, so that, by a slight pressure of the foot upon the step *i*, the lower end of the curved lever may be brought in contact with the hub, and, under the forward movement of the lever and the ring *c*, the crank-shaft will be moved for starting the machine.

The same movement of the foot of the operator will, with the pressure continued for the length of time desired, prevent the reverse motion of the machine.

I am aware that means and devices have been used for starting sewing-machines, and that other means and devices have been used for preventing the reverse motion of such machines; and, therefore, I do not broadly claim any means or combination of means for either or both of these purposes; but

What I do claim as new, and desire to secure by Letters Patent, is—

The arrangement of the ring *c*, curved lever *f*, spring *k*, and rod *h*, in their relation to the hub *a* and crank-shaft *b*, substantially as and for the purposes herein recited.

This specification signed this 7th day of April, 1870.

DAVID A. DICKINSON.

Witnesses:

THOS. T. EVERETT,

ROBERT EVERETT.