

E. D. McIntosh,
Sewing Machine.

No. 101,639.

Patented April 5, 1870.

Fig. 1.

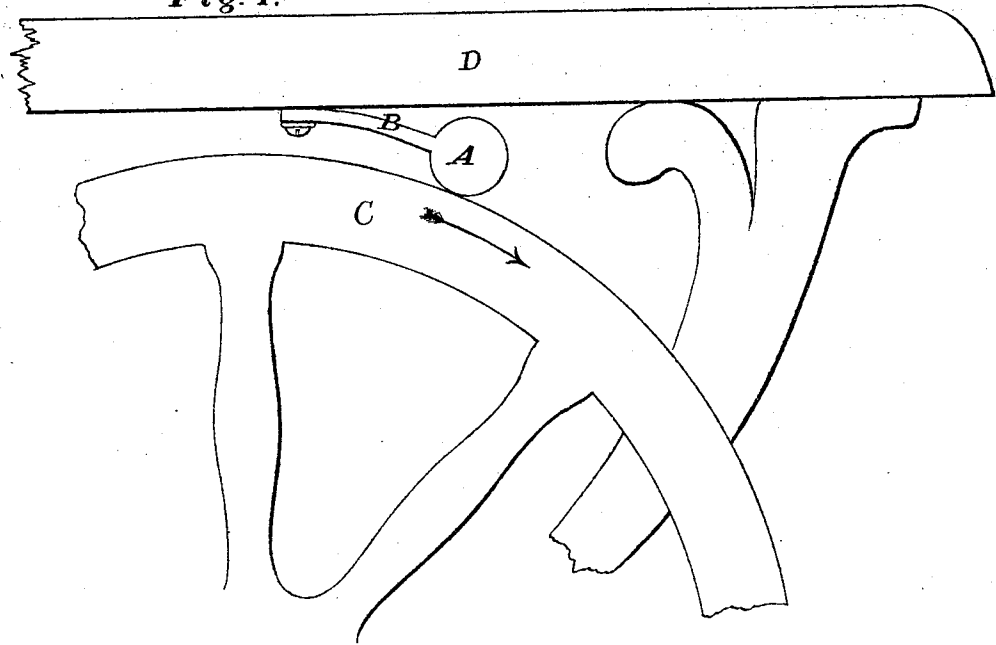


Fig. 2.

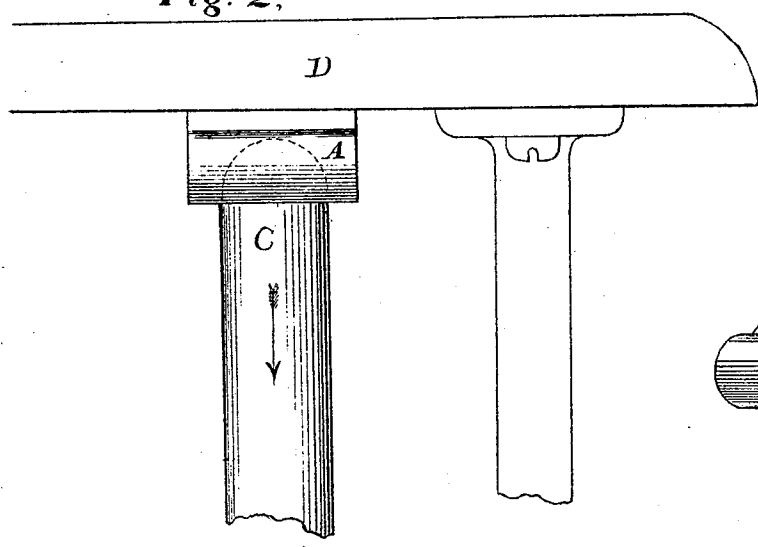
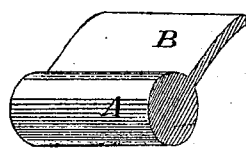


Fig 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELMER D. McINTOSH, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR
OF ONE-THIRD OF HIS RIGHT TO E. W. ANDERSON, OF SAME PLACE.

IMPROVEMENT IN BRAKE TO PREVENT REVERSE MOTION OF DRIVING-WHEEL IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 101,639, dated April 5, 1870.

To all whom it may concern:

Be it known that I, ELMER D. McINTOSH, of Washington, in the county of Washington and District of Columbia, have invented a new and valuable Improvement in Brake to Prevent Reverse Motion in Sewing-Machines and other machinery; and do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of my invention as applied to a sewing-machine. Fig. 2 is a front view of the same. Fig. 3 represents my invention in perspective.

My invention relates to means for preventing the reverse movement of the fly-wheel in sewing-machines and other mechanism; and consists in the construction and novel arrangement of a pendent block of rubber or other material, designed to rest upon the perimeter of the wheel in such a manner as to permit free revolution in the proper direction, and to prevent the reverse movement thereof in an easy but effectual manner.

In the drawing I have illustrated my invention by applying it to a sewing-machine, the letter C representing the fly-wheel, and D the table thereof. By blocking down or otherwise suiting the frame to the object in view, the wedge may be applied at any point on the periphery of the wheel; but, in the illustration, it has been attached immediately to the under side of the board of the table, as would be the case when applied to the Gold Medal or Wheeler & Wilson sewing-machines.

A designates the wedge, a cylinder or prism of rubber or other suitable material, provided with an elastic flap, B, whereby it is attached to the frame. This flap is usually made as wide as the cylinder is long, and is attached to the frame by its free end in such a manner that the cylinder will rest on the perimeter of the wheel just beyond the point where it approaches nearest the bottom of the table.

It is evident that the breadth of the flap B will prevent the cylinder from swerving to one side and falling off the perimeter. It will re-

main steadily in position, and its lightness and elasticity will cause it to experience but little wear; and, further, the elasticity of the flap will in a great measure remove even the little weight it has, there being no necessity for it to do more than touch the perimeter of the wheel; but when it is attempted to reverse the wheel, the action of the cylinder is complete and satisfactory. It is at once carried back by the wheel, and becomes wedged between its perimeter and the table, effectually stopping the movement; and, further, as in most instances when a stop is needed to prevent reverse motion, there will be scarcely any momentum to contend against. The elastic cylinder will not become so tightly wedged in but that it will have a tendency to spring out into shape again, and thereby give a slight impetus to the wheel in the right direction.

In the action of this wedge there is nothing harsh or sudden. Although it will stop the movement before the raised needle of a sewing-machine can enter the cloth, yet the stoppage will, even in this short space, be graduated and easy; but my improvement is not only adapted to sewing-machines, but to many other crank and treadle mechanisms in which it is of importance that the movement should proceed only in one direction.

Sometimes, for purposes of economy, or to give more solidity in large wedges of this kind, I introduce a core of rawhide, wood, or other material; but for general use the simple rubber cylinder and flap will be found to give complete satisfaction, both on account of economy of manufacture and efficiency of action.

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

The block A, of rubber or other suitable material, provided with an elastic flexible sustaining arm or flap, B, substantially as herein described, when constructed as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ELMER D. McINTOSH.

Witnesses:

D. D. KANE,
C. W. SCHREINER.