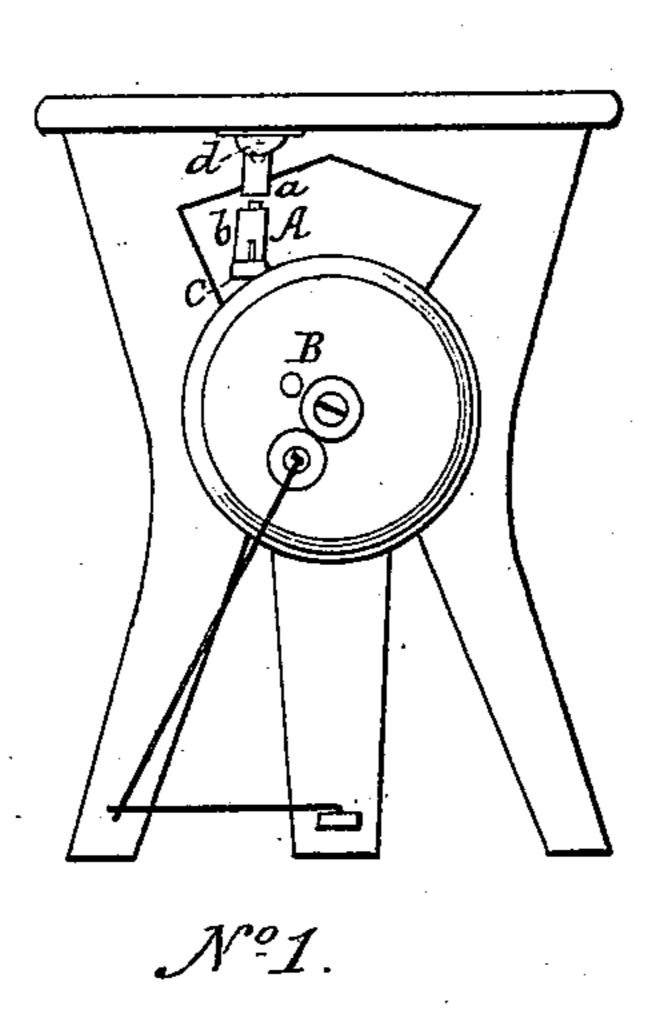
## SHERMAN & BISHOP.

Stop for Preventing Retrograde Motion in Sewing Machines.

No. 93,014.

Patented July 27, 1869.



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Witnesses.

S. a. Robinson

Samuel L. Marner

Inventors.

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## Anited States Patent Office.

## WESLEY SHERMAN AND GILES BISHOP, OF MIDDLETOWN, CON-NECTICUT.

Letters Patent No. 93,014, dated July 27, 1869.

## IMPROVEMENT IN STOP FOR PREVENTING RETROGRADE 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 we, Wesley Sherman and Giles Bishop, both of Middletown, in the county of Middlesex, and State of Connecticut, have invented a new and improved Device, Method, or Mode for Preventing Retrograde Motion in Sewing-Machines; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The nature of our invention consists in providing a self-acting pawl or stop-lever, in two parts, and tipped with a bit of leather, cork, rubber, or their equivalent, to hang by a hinge from the under side of the table or frame of the sewing-machine, just over the balance-wheel, and to reach down to and rest upon and fit to the rim of the balance-wheel in such manner that any tendency to retrograde motion is prevented, and at the same time forms no obstruction to the forward motion of the machine.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

The pawl or stop-lever is constructed of wood, metal, cork, or gutta-percha, and is made in two parts; one part is provided with a screw-end, and the other part with a threaded aperture.

These parts are fastened together by means of the screw-end and threaded aperture.

We construct it in two parts in this manner, so that by means of the screw, the pawl or lever may be shortened or lengthened at pleasure, to adapt it to all sizes and styles of sewing-machines, letter A, of drawing No. 1, representing the pawl or stop-lever, and a of the same drawing representing the screw just referred to.

And we further provide the lower end of the pawl or stop-lever with the slot b of drawing No. 1, which is also shown in drawing No. 2, (No. 2 being a view of the pawl or stop-lever detached from the machine,) into which we insert a bit of cork, leather, rubber, or their equivalent, as shown by letter c of drawing No. 1, cut upon that side of it that comes in contact with the wheel, in such shape (as shown by e of drawing

No. 2) as shall correspond with and fit the rim of the wheel B of drawing No. 1.

This cork, leather, or rubber we use to avoid any noise when the machine is in motion, and to increase the friction, and we cut it in a shape to fit the rim of the wheel, so that all parts of the rim may come in contact with that side of the cork, leather, or rubber tip of the pawl or lever, and thus more effectually prevent any tendency to retrograde motion.

This pawl or lever A we then hang in the hinge dof drawings No. 1 and No. 2, which is fastened to the under side of the table or frame of the sewing-machine, (as shown in No. 1 of the drawings,) just above and a little to one side of the centre of the balancewheel, so that the tipped end of the pawl or lever will meet and rest down upon the rim of the balancewheel in such manner, and at that point upon the wheel where, if there is the slightest attempt at retrograde motion, it will be met by immediate and strong resistance, and at the same time will offer no obstruction to the forward motion of the machine; this tipped end of the pawl or lever being made to hug, by means of the weight of the pawl and the shape of the contact side of the tip, the rim of the balance-wheel, and by these means, and partly by the hinge, the said pawl is kept securely in its place upon the rim of the wheel, and furnishes an effectual stop to retrograde motion of the machine.

We hang the pawl or lever upon the hinge d of the drawings No. 1 and No. 2, so that it may have unrestricted play and furnish no obstruction to the forward motion of the machine.

What we claim as our invention, and desire to secure by Letters Patent, is—

The self-acting hanging pawl or stop-lever A in two parts, constructed and operating substantially as hereinbefore described, when applied to sewing-machines, as and for the purpose described.

WESLEY SHERMAN. GILES BISHOP.

Witnesses:

S. A. Robinson, Samuel L. Warner.