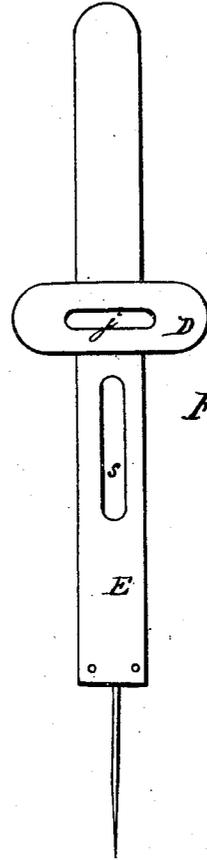
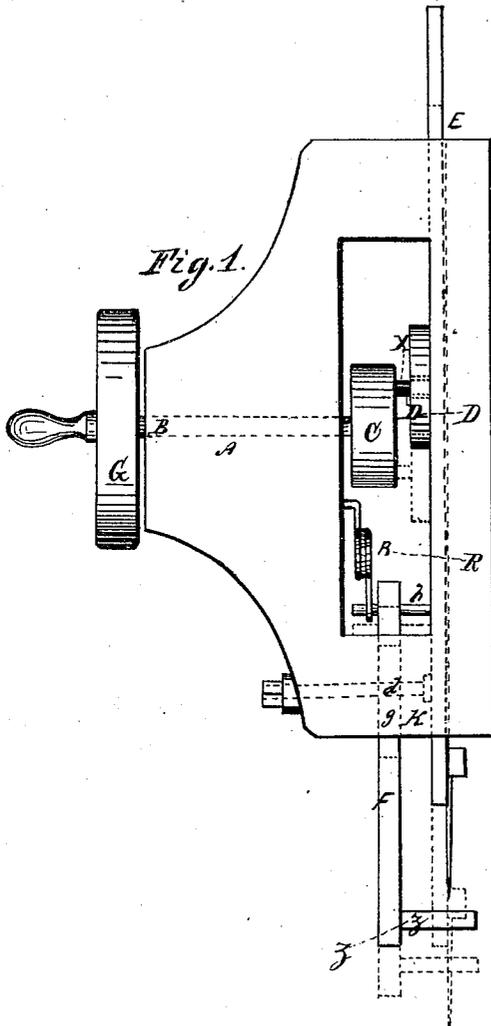


No. 76,986.

PATENTED APR. 21, 1868.

C. E. BROWN.
SEWING MACHINE.



Witnesses
V. D. Stockbridge
A. A. Chapman

Inventor :
C. E. Brown
per
Alexander Deussen
Atty

UNITED STATES PATENT OFFICE.

CHARLES E. BROWN, OF EAST RANDOLPH, MASSACHUSETTS.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. 76,986, dated April 21, 1868.

To all whom it may concern:

Be it known that I, CHARLES E. BROWN, of East Randolph, in the county of Norfolk and in the State of Massachusetts, have invented certain new and useful Improvements in Sewing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

In the annexed drawings, making a part of this specification, A represents the head of a sewing-machine, and is more particularly in the form applied to Singer's machine. B represents a horizontal shaft adjusted in the head A, upon one end of which is rigidly secured the pinion or crank-wheel G, and at the other a drive-wheel, C. The drive-wheel C has in one side of it a pin, *x*, which operates as a crank-pin, and works in the slot *j* of the horizontal plate or strip D. The plate or strip D is secured to the needle-bar E, and raises and lowers or depresses it by means of the crank-pin *x* working in the slot *j* thereof. The needle-bar E is provided with a slot, *s*, in which works a pin, *h*, and is adjusted and works up and down in a suitable groove in the head A.

F represents the guide-bar provided with a slot, *g*, in which works a bolt, *d*, or rather so that it may work up and down over said bolt *d*.

The guide-bar F is made flat on one side, and beveled on its two edges, over which or against which fits a collar, K, which is provided with a groove corresponding with the beveled edges of the bar F. K represents a collar provided with a groove which exactly fits against the beveled edges of the bar F, and has the bolt *d* secured to it. Said bolt

then passes through the slot *g* and head A and thereby holds said collar K firmly against the guide-bar F, and as the bar wears or the head A, against which it works, the said bar may be always kept perfectly tight by means of a nut on the outer end of the bolt *d*.

A pin, *h*, passes through the top of the guide-bar F, and projects both ways therefrom. Upon or against one end of said pin *h* rests a suitable spring, R, to press down the bar F after it has been elevated by means of the other end of the pin *h* catching against or in the bottom of the slot *s* of the needle-bar E.

The needle-bar E is operated by means of the pin *x* working in the groove *j* of the plate D attached thereto, and said bar in turn, when raised nearly as high as desired, elevates the guide-bar F by means of its pin *h* catching in the slots *s*. The bar F is depressed by means of the spring R. It will be readily seen that the bars E and F are elevated and depressed together, or at the same time, within certain limits.

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

The guide-bar F provided with a slot, *g*, and pin *h*, in combination with the collar K, bolt *d*, and the spring R, when constructed and used substantially as and for the purpose herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of December, 1867.

CHARLES E. BROWN.

Witnesses:

ORAMEL WHITE,
MARY E. WHITE.