(No Model.)

A. L. COOMBS.

TWO NEEDLE SEWING MACHINE AND GUIDE THEREFOR.

No. 419,584. Patented Jan. 14, 1890.

Fig: 1.

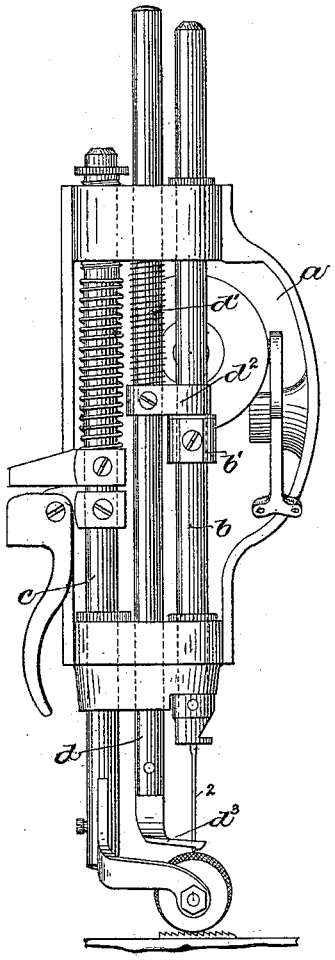


Fig: 2.

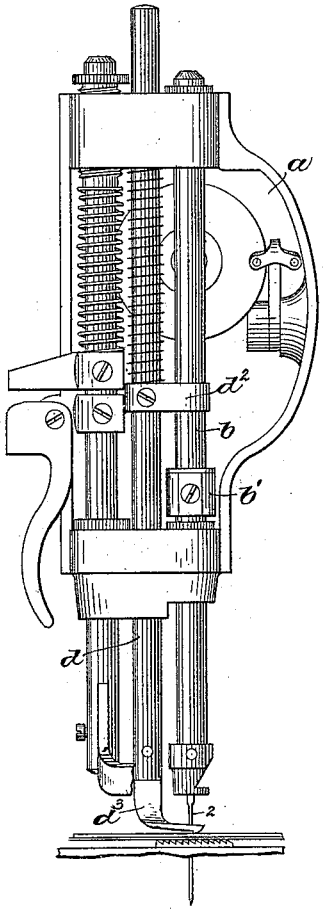


Fig: 3.

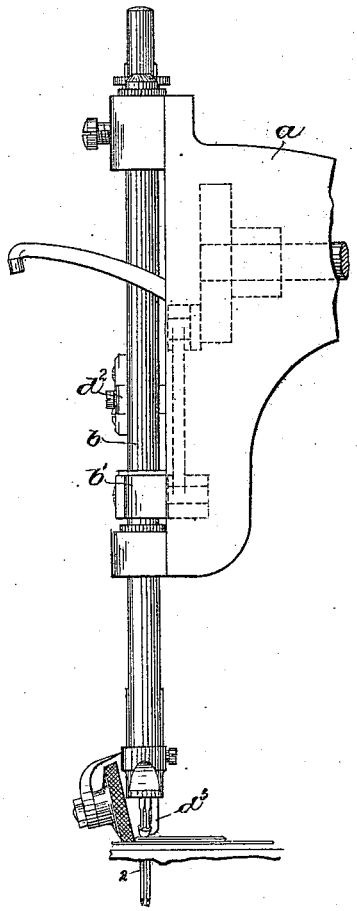
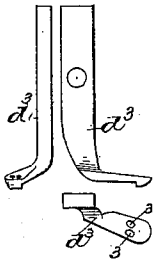


Fig: 4.



Witnesses.
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by Lemby & Gregory Attys.

UNITED STATES PATENT OFFICE.

ABRAHAM L. COOMBS, OF LYNN, MASSACHUSETTS, ASSIGNOR TO THE WHEELER & WILSON MANUFACTURING COMPANY, OF BRIDGEPORT, CONNECTICUT.

TWO-NEEDLE SEWING-MACHINE AND GUIDE THEREFOR.

SPECIFICATION forming part of Letters Patent No. 419,584, dated January 14, 1890.

Application filed April 2, 1889. Serial No. 305,651. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM L. COOMBS, of Lynn, county of Essex, State of Massachusetts, have invented an Improvement in Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention relates to improvements in sewing-machines, and has for its object to provide a two-needle machine having an ordinary presser-foot—as, for instance, a roller presser-foot—with an additional presser-foot adapted to serve as a guide for the needles to prevent them coming in contact with each other.

My invention consists in the combination, with a presser-foot of a sewing-machine having two closely-adjacent needles, of an independent vertically-movable needle-guide foot having two guide-eyes for said needles, as hereinafter more fully described, and as indicated by the claims hereunto appended.

Figure 1 shows in elevation the needle-bar, presser-bar, and independent foot or needle-guide and operating parts embodying this invention, the needle-bar and guide for the needles being in their uppermost position; Fig. 2, a similar view to Fig. 1, the needle-bar and guide for the needles being in the lowermost position; Fig. 3, a side view of the parts shown in Fig. 2, and Fig. 4 details of the independent foot or guide for the needles to be referred to.

The frame or arm a of the machine, the needle-bar b, having two closely-adjacent needles 2, the presser-bar c, (herein shown as having a roller presser-foot,) and means for lifting the said presser-bar are all of usual construction. An independent needle-guide bar d has its bearings in the arm or head a to move parallel with the needle-bar b, and its foot d^3 is normally held down upon or near to the work by means of a spring d', which is interposed between the bearing projection of the arm and the collar, shoulder, or projection d^2, secured to or formed upon the bar. The guide-bar d has at its lower end a foot d^3, which is bent or formed to lie substantially parallel with relation to the work, and has at or near its end two guide eyes or holes 3, which receive the needles 2. A collar or shoulder b' is secured to or formed upon the needle-bar b, which, as the latter rises and falls, strikes the under side of the collar or projection d^2 and raises the bar d, and as the said needle-bar b falls the spring d' causes the bar d to fall. The two opposite positions of the needle-bar and the relative positions of the guide-bar d may be seen in Figs. 1 and 2. By this foot it will be seen that the two needles remain continually in the guide-eyes thereof, so that there is no chance of fouling.

I do not desire to limit my invention to the means herein shown for moving the needle-guide bar or foot, as it is obvious that it may be moved in various ways.

I claim—

1. In a sewing-machine, the combination, with a presser-bar and a foot or presser, of a needle-bar having two closely-adjacent eye-pointed needles, and an independent vertically-movable needle-guide bar provided with a needle-guide foot arranged adjacent to said foot or presser and having two eyes for said needles, substantially as set forth.

2. In a sewing-machine, the combination, with a presser-bar and foot or presser, of a needle-bar having two closely-adjacent eye-pointed needles, an independent vertically-movable needle-guide bar provided with a needle-guide foot arranged to bear on the work adjacent to said foot or presser and having two guide-eyes for said needles, and means for raising and lowering said needle-guide foot, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ABRAHAM L. COOMBS.

Witnesses:
IRA B. KEITH,
CHARLES LEIGHTON.