(Model.)

G. S. ROMINGER.

Sewing Machine.

No. 242,372. **Patented May 31, 1881.**

FIG. 2.

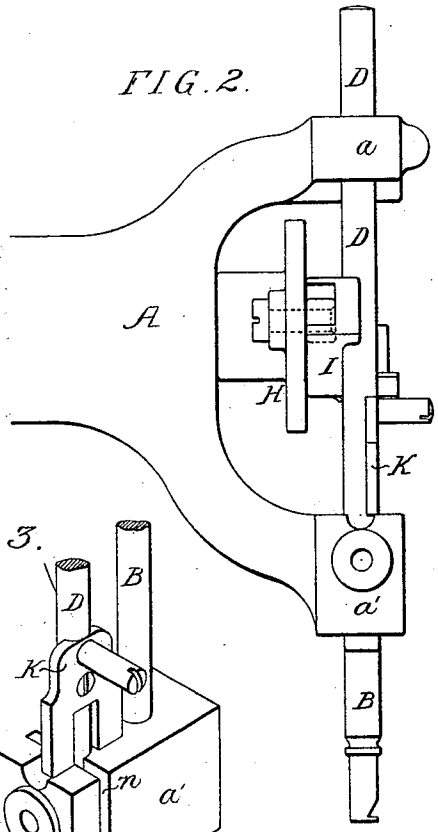


FIG. 1.

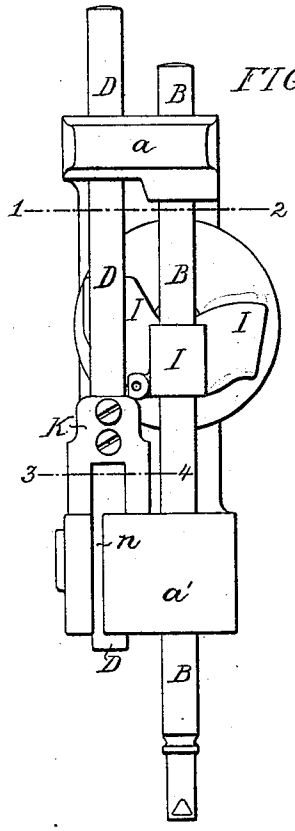


FIG. 3.

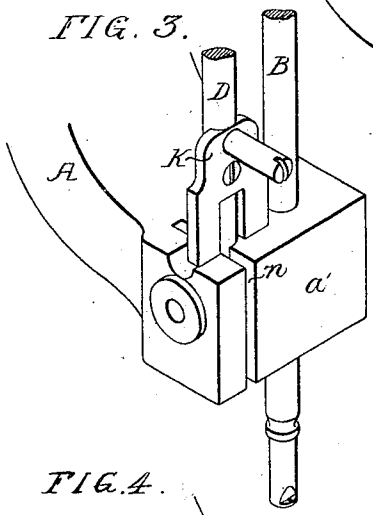


FIG. 6.

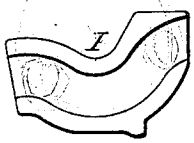


FIG. 5.

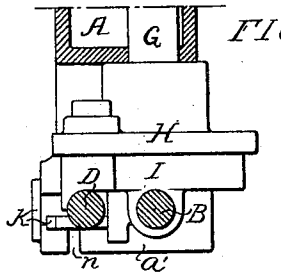


FIG. 4.

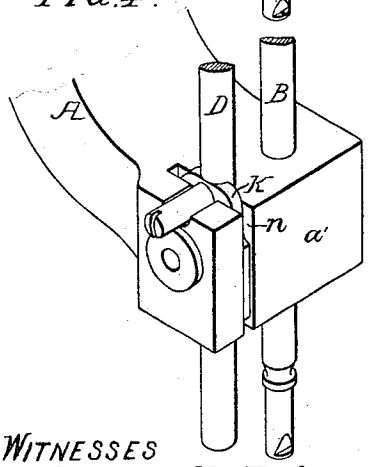
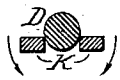


FIG. 7.



WITNESSES

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INVENTOR

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by his Attorneys.

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UNITED STATES PATENT OFFICE.

GEORGE S. ROMINGER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE AMERICAN BUTTON HOLE, OVERSEAMING AND SEWING MACHINE COMPANY, OF SAME PLACE.

SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 242,372, dated May 31, 1881.

Application filed August 16, 1880. (Model.)

To all whom it may concern:

Be it known that I, GEORGE S. ROMINGER, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Sewing-Machines, of which the following is a specification.

The main object of my invention is to insure the steadiness of the needle-bar of a sewing-machine, and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a front view of the end portion of the stationary arm, needle-bar, and presser-bar of a sewing-machine with my improvements; Fig. 2, a side view of Fig. 1; Figs. 3 and 4, perspective views; Fig. 5, a sectional plan on the line 1 2; Fig. 6, a rear view of the cross-head; Fig. 7, a section of the presser-bar on the line 3 4.

The stationary arm A of a sewing-machine has two projections, *a a'*, in which the reciprocating needle-bar B and the presser-bar D are arranged to slide.

G is the driving-shaft, carrying a face-plate, H, a crank-pin on which is provided with an anti-friction roller adapted to a curved recess (shown in Fig. 6) in the back of a cross-head, I, which is secured to the needle-bar. The cross-head is made perfectly true at the back, and bears lightly against the face-plate, so as to prevent the turning of the needle-bar and obviate all inward vibration toward the face-plate during the operation of the machine. One wing, *e*, of the cross-head I is constructed to partially embrace and bear against the presser-bar D, which thus adds to the lateral steadiness of the needle-bar and obviates vibrations which, in the absence of this arrangement, might be imparted to the said needle-bar by the action of the anti-friction roller of the crank-pin on the edge of the curved recess in the back of the cross-head. When the presser-bar is lowered, as shown in Fig. 4, the forked plate is mainly contained within the slot *n*, and thus the presser-bar is prevented from turning in its bearings; but when the presser-bar has been raised, as shown in Fig. 3, it can be so turned by the handle *w* that the lower ends of the prongs will bear on the top of the projection *a'* of the stationary arm, and the presser-bar will be thus retained in its elevated position. There is another object in adopting this forked plate, the relation of which to the presser-bar will be best observed in the sectional plan, Fig. 7. The bar itself has a bearing in the lower projection, *a'*, of the stationary arm, so that when the bar becomes loose all that is necessary to take up the slack is to slightly bend the prongs of the fork outward in the direction of the arrows, Fig. 7, when a sufficiently tight fit of the lower end of the bar in its bearings will be assured, and it is important that there should always be a proper steadiness of the presser-bar, as reliance is placed upon it for imparting steadiness to the needle-bar.

I claim as my invention—

1. The combination of the presser-bar, the shaft G, and its face-plate H with the needle-bar B, its cross-head I, adapted to bear against the face-plate, and having wing *e*, constructed to partially embrace the said presser-bar, all substantially as specified.

2. The combination of the presser-bar and its forked plate K with the projection *a'* of the stationary arm, the said projection having a slot, *n*, adapted to receive the said bar and forked plate, as described.

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

GEO. S. ROMINGER.

Witnesses:

J. J. BUCHEY,

HENRY HOWSON, Jr.