J. H. APPLEGATE & C. B. WEBB.

Sewing-Machine.

No. 161,087 Patented March 23, 1875.

FIG. 1

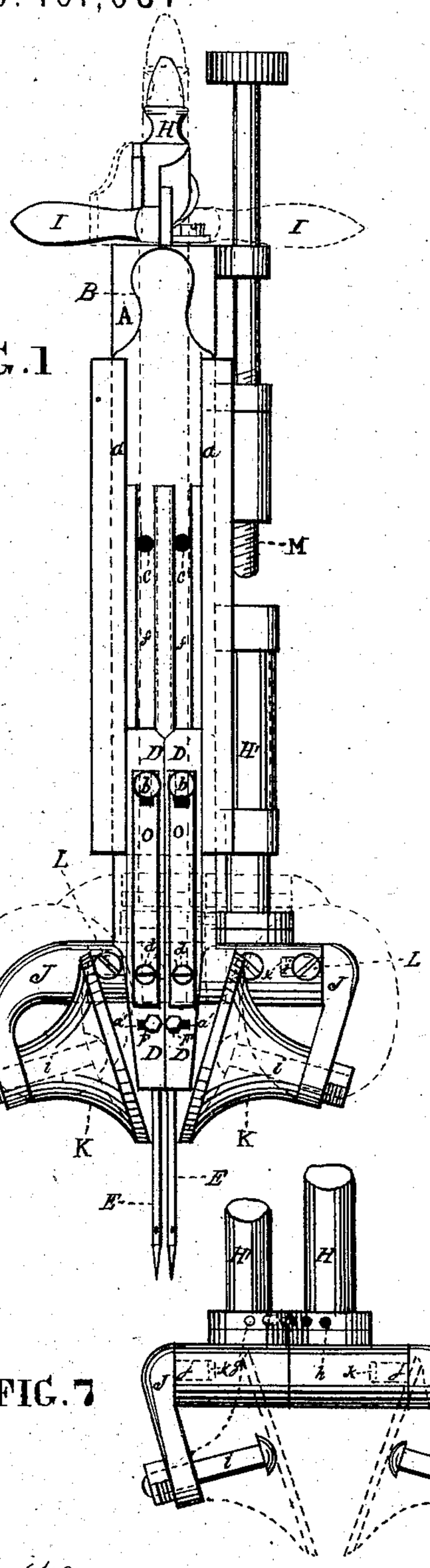

FIG. 2

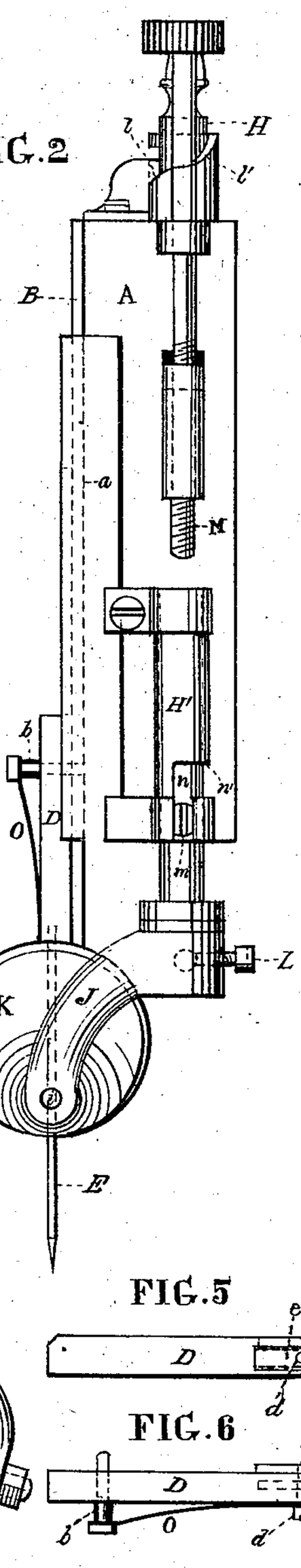

FIG. 3

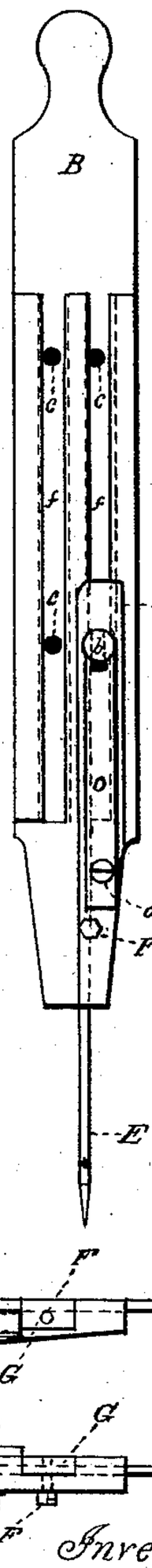

FIG. 4

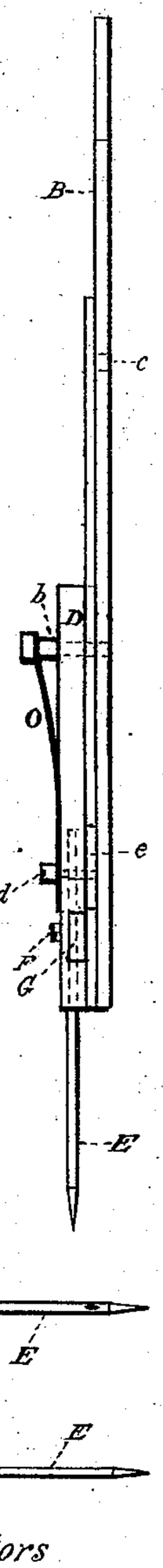

FIG. 5

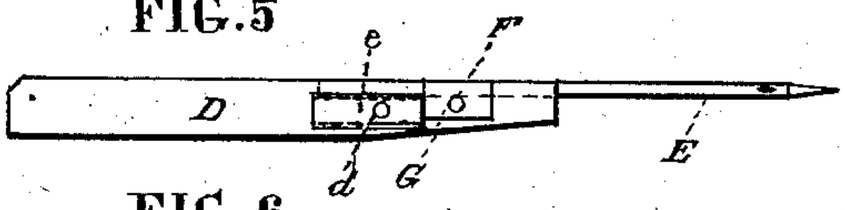

FIG. 6

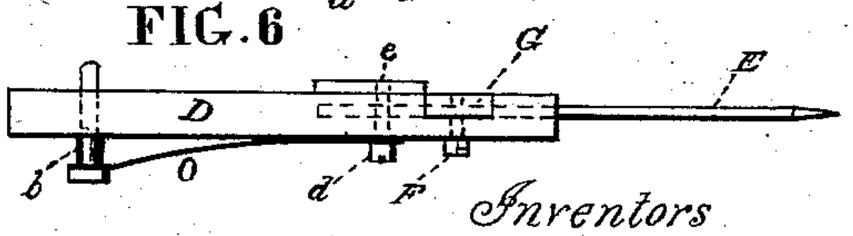

FIG. 7

Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. APPLEGATE AND CHARLES B. WEBB, OF PHILADELPHIA, PA.

IMPROVEMENT IN SEWING-MACHINES.

Specification forming part of Letters Patent No. **161,087**, dated March 23, 1875; application filed June 9, 1874.

To all whom it may concern:

Be it known that we, JOHN H. APPLEGATE and CHARLES B. WEBB, of the city and county of Philadelphia, and State of Pennsylvania, have invented an Improvement in Sewing-Machines, of which the following is a specification:

The invention relates to duplicate rolling pressers, one of which is on the ordinary presser-foot bar, and is operated by means of a cam-lever, for elevating and depressing it in the usual manner; the other is on the lower end of a short bar parallel with the said presser-foot bar, and the two bars are geared together by means of gear-wheels, or other convenient devices, so that by elevating or depressing the presser-foot bar both bars with their pressers are operated alike at the same time, and in turning the presser-foot bar both bars are turned so as to swing the pressers around simultaneously in opposite directions. By virtue of the geared connection of the bars both bars are set by a single screw-rod to regulate the pressure on the work. The said pressers revolve on pivots of arms connected with the bars, and said arms are made in two pieces, held together by means of dowel-pins, and fastened by screws, to provide for the adjustment of the pressers nearer together or farther apart in adaptation to the adjustment of the needles.

Figure 1 is a front elevation of the detachable head A of a sewing-machine having our improvement connected therewith. Fig. 2 is a side elevation of the same. Fig. 3 is a face view of the needle-bar B, having one of the needle-slides D connected with it. Fig. 4 is an edge view of the same. Fig. 5 is a rear-side view of one of the needle-slides D, provided with a needle, E. Fig. 6 is an edge view of the same. Fig. 7 is a rear view of the lower ends of the presser-bars H and H′, provided with arms J J.

Like letters of reference in all the figures indicate the same parts.

A is the detachable head of a sewing-machine having our improvements connected therewith. B is the needle-bar, movable in the vertical grooves *a a* at the front edge of the head A, and is operated in the usual manner. The bar is provided with slides D D, with which the needles E E are connected, for sewing two rows of stitches at the same time. The needles are securely held upon the slides D D by means of the screws F F and clamping-nuts G G, as seen in detail in Figs. 5 and 6, the clamps being capable of sliding in the cross-slots *a′*, to vary the distances of the needles apart, to regulate the distance between the rows of stitches. The slides are held in their places on the needle-bar by means of the spring-pins *b b*, which fit in holes *c* at different heights, so that by connecting them with the lower holes the needles are in position for sewing; and when only one needle is required to be used either slide may be elevated, and the pin *b* connected with the corresponding hole *c*. The slides are held against the front side of the needle-bar B by means of the screws *d d* and clasping-plates *e e*, which slide in the vertical dovetail grooves *f f* of the bar B when the slides are changed in their position upon the bar B. The springs O O are also held by the screws *d d*. H is an ordinary presser-foot bar, and I a cam-lever for operating the same. H′ is a short bar parallel with the bar H. The two bars are geared together by means of teeth *g* and holes *h*, as seen in Fig. 7. They may, however, be geared in any other convenient manner. On the lower ends of the bars H and H′ there are arms J J, provided with pivots *i i*, on which are situated the rolling pressers K K. The arms are made in two pieces, as represented in Fig. 1, one of which has a pin, *j*, and the other a hole, *k*, the two parts being held together by means of screws L L. This construction of the arms is for the purpose of the lateral adjustment of the pressers K K to suit the requisite distances of the needles E E from each other. As the bars H and H′ are geared together, as described, both bars are moved simultaneously, in regulating the pressers K K, by the ordinary screw-rod M, as seen in Figs. 1 and 2. They are also elevated and depressed by the incline *l* of the lever I. They are swung partly around, in opposite directions, by means of the incline *l′*, operating the bar H, so as to carry them away from the needles when required. They are held in this position by means of the pin *m*, which projects from the bar H′, being brought out of the vertical slot *n* of the tube N, in which the bar

works, into the horizontal slot *n'*. When the lever is turned in the opposite direction, to carry the feed-wheels back to their feeding position, and they are brought to their proper distance apart, the pin *m* comes in line with the vertical slot *n*, and descends therein as the bars H H' descend, as seen in Fig. 2, and the pressers are thus held securely in their operating position.

We claim as our invention—

The combination of the rolling pressers K K with the bars H and H', geared together, the pressers running face to face, and capable of being opened outward simultaneously from the needles, substantially in the manner and for the purpose above described.

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Witnesses:
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