No. 607,005. Patented July 5, 1898.

J. S. FINKENBINER.

LAP SEAM FELLER.

(No Model.)

(Application filed Nov. 13, 1894. Renewed Oct. 29, 1895.)

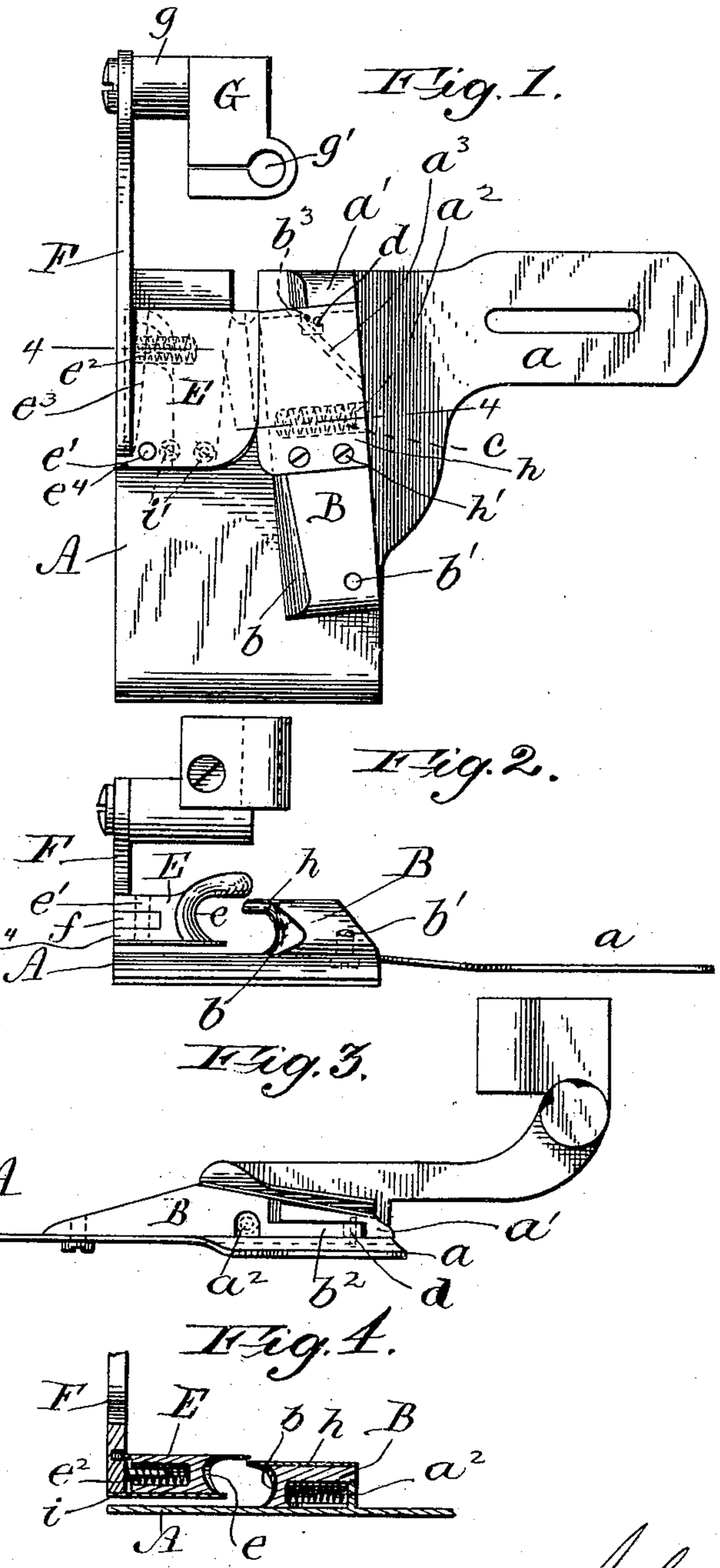

Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

Witnesses:
A. D. Lyckman
C. M. Sweeney.

Inventor:
John S. Finkenbiner,
by Munn & Calvert,
Attorney.

UNITED STATES PATENT OFFICE.

JOHN S. FINKENBINER, OF ST. LOUIS, MISSOURI.

LAP-SEAM FELLER.

SPECIFICATION forming part of Letters Patent No. 607,005, dated July 5, 1898.

Application filed November 13, 1894. Renewed October 29, 1895. Serial No. 567,324. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. FINKENBINER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Lap-Seam Fellers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of sewing-machine lap-seam fellers more particularly adapted for use in sewing heavy goods, as men's woolen clothing, and in which it is desirable that the guiding-scrolls should be strong and rigid, so as to be reliably adapted for the heavy work for which they are intended. In the use of lap-seam fellers of this class more or less difficulty has heretofore been experienced by reason of the fact that in crossing a seam previously made the thickened portion of the work at the seam was liable to choke the feller, so that the work could not be properly guided and the edges thereof turned in as it was fed to the stitch-forming mechanism of the sewing-machine. This objection is obviated in my improved lap-seam feller by constructing the same in two independent parts, one of which is to be attached to the work-plate of the machine and the other of which is supported from above the work-plate, and by constructing the rigid guiding-blocks or scroll portions thereof in such a manner that they will yield laterally when a thickened portion of the seam is passing through the feller, and also, preferably, by providing said scroll portions or blocks with spring-lips, which extend inward beyond the inclined guiding edges of the two-part feller, these spring-lips being adapted to yield or spring vertically, thus facilitating the passage of the thick portions of the work.

In the accompanying drawings, Figure 1 is a plan view of my improved two-part feller; and Figs. 2 and 3 are front and side views, respectively, of the same. Fig. 4 is a cross-section on the line 4 4 of Fig. 1.

A denotes a base-plate provided with a slotted arm a, by which it may be adjustably secured to the work-plate of a sewing-machine.

B is a rigid guiding-block provided with an inclined concave guiding edge b, said block being pivoted by a pin or screw b' to the base-plate A. The said base-plate A is provided with a fixed undercut block a', beneath which extends a lip or portion b^2 of the block B, and said block B is recessed for the reception of a coil-spring c, which is confined between the inner wall of the recess and a fixed lug a^2, extending upward from the base-plate A, the said spring thus serving to normally hold the block B in the position shown in Fig. 1, but yielding when a thickened portion of the fabric is passing through the hemmer, so that the block B will move laterally somewhat in opposition to the stress of said spring to permit the work to pass. The inward movement of the block B under the stress of the spring c is limited by a stop-pin d, fixed in the base-plate A and the fixed block a' and received in a notch b^3 in the plate B, while the outward swinging movement of the block B in opposition to the stress of the spring c is limited by the inclined forward edge a^3 of the block a', against which the inclined end portion of the block B impinges when the said block B is forced outward.

E denotes a rigid guiding-block having a concave guiding edge e, said block being pivotally attached by a pin e' to a lug f at the forward end of an arm F, pivotally mounted in a boss g, projecting from a block G, having an opening g' for the reception of the presser-bar of the machine, to which said block G may be attached. The arm F is thus adapted to be turned up when desired on its pivotal connection with the block G when the work is to be inserted or removed. The block E is recessed for the reception of a spring e^2, the outer end of which impinges against the side of the arm F, and thus has a tendency to hold the free or forward end of the block inward in the position denoted in Fig. 1, the said spring yielding when a thickened portion of the work is passing through the feller to permit the said free end of the guiding-block to move to the left, and thus facilitate the passage of the work. This movement of the block E to the left is limited by the arm F, against which the inclined outer edge e^3 of the said block E impinges when the latter is fully swung to the left on its pivot e', while the inward movement of the said block, under the stress of the spring e^2, is limited by ears e^4, formed on the outer end of the said block, said ears impinging against the front end of the arm F.

The block B is preferably provided at its upper side with a thin spring-plate *h*, which overhangs the guiding edge *b* of the said block and which, when a thickened portion of the work passes beneath it, is adapted to yield or rise at its forward end, said plate being attached to said block at its rear end by screws *h'*. The guide-block E is also preferably provided on its lower side with a thin spring-plate *i*, extending inward beyond the inclined concave guiding edge *e* of the said block E, said spring-plate being attached near its rear end to the said block E by screws *i'*, so that the forward or free end of the said plate may yield or spring downward when a thickened portion of the work is passing through the feller. This feature of the spring-plates *h* and *i* are, however, not broadly claimed herein, being embraced by my application, Serial No. 517,810, filed July 17, 1894.

From the foregoing it will be apparent that my improved feller, in which the guide-blocks B and E are pivotally attached to the parts by which they are supported and which are yieldingly held in working position, is particularly adapted for use in heavy work, as in crossing seams or thickened portions said guiding-blocks are free to yield laterally when there is a stress owing to the passage of a thickened portion of the work, and thus any clogging of the feller is avoided, while the spring-plates *h* and *i* are also adapted to yield vertically when required, thus providing a feller which is elastic both vertically and laterally, while the guiding parts thereof consist in themselves of rigid blocks which are strong and durable.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A sewing-machine lap-seam feller consisting of two separate and independent guiding blocks or parts, one of which is provided with means whereby it may be attached to the work-plate of the sewing-machine, and the other of which is constructed to be supported from above the said work-plate, said blocks being pivotally connected with the parts by which they are supported, and having concave, guiding edges facing each other, combined with springs to yieldingly hold the forward portions of the said blocks in working positions.

2. A sewing-machine lap-seam feller consisting of two separate and independent guiding blocks or parts, one of which is provided with means whereby it may be attached to the work-plate of the machine, and the other of which is constructed to be supported from above the said work-plate, said blocks being pivotally connected with the parts by which they are supported, and having concave, guiding edges facing each other, combined with springs to yieldingly hold the forward portions of the said block in working positions, the said guiding block or part which is to be supported by the work-plate of the machine being provided at its upper side with a spring-plate overhanging its concave guiding edge, and the said block or part which is to be supported from above the work-plate being provided at its lower side with a spring-plate which extends inward beyond its concave guiding edges.

3. The combination with the base-plate A, of the guiding-block B pivotally attached at or near one of its ends to said base-plate, and having the concave guiding edge *b*, the spring *c* for yieldingly holding the free end of said block in working position, the block G, the arm F pivotally supported thereby, the guide-block E pivotally connected with the said arm F and provided with a concave guiding edge, and the spring e^2 for yieldingly holding the free end of the said guiding-block E in working position.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN S. FINKENBINER.

Witnesses:

JULIUS F. BALTZELL,

FRANK KOENEKE.