

J. T. JONES.
Sewing-Machine Guide.

No. 93,540.

Patented Aug. 10, 1869.

Fig. 1.

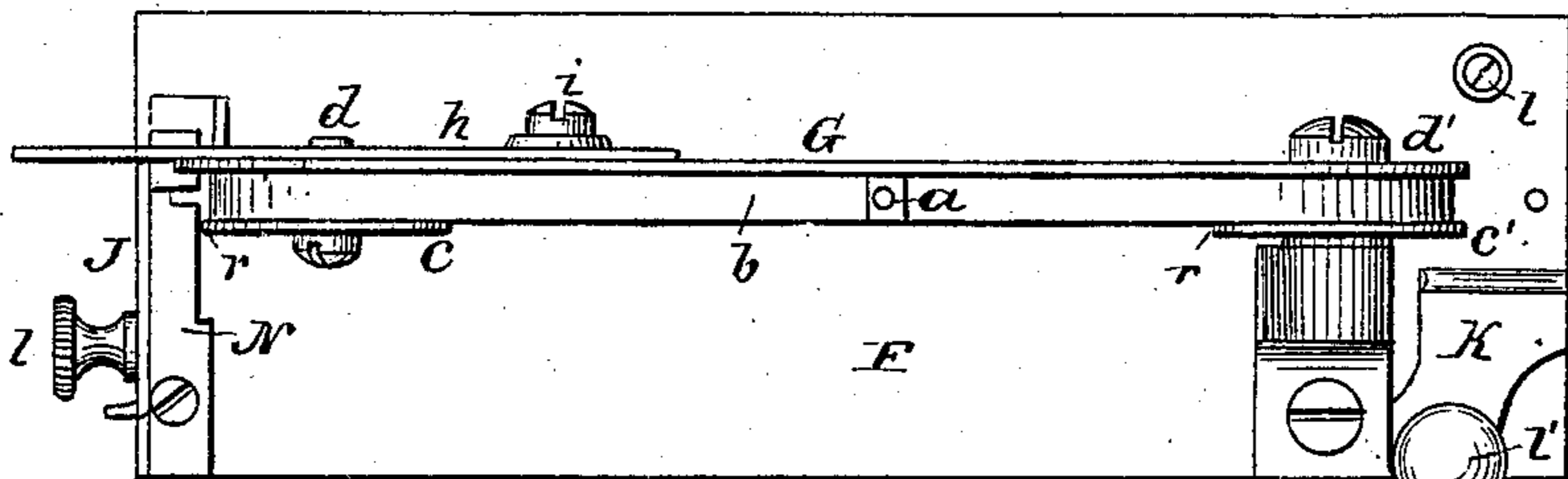


Fig. 2.

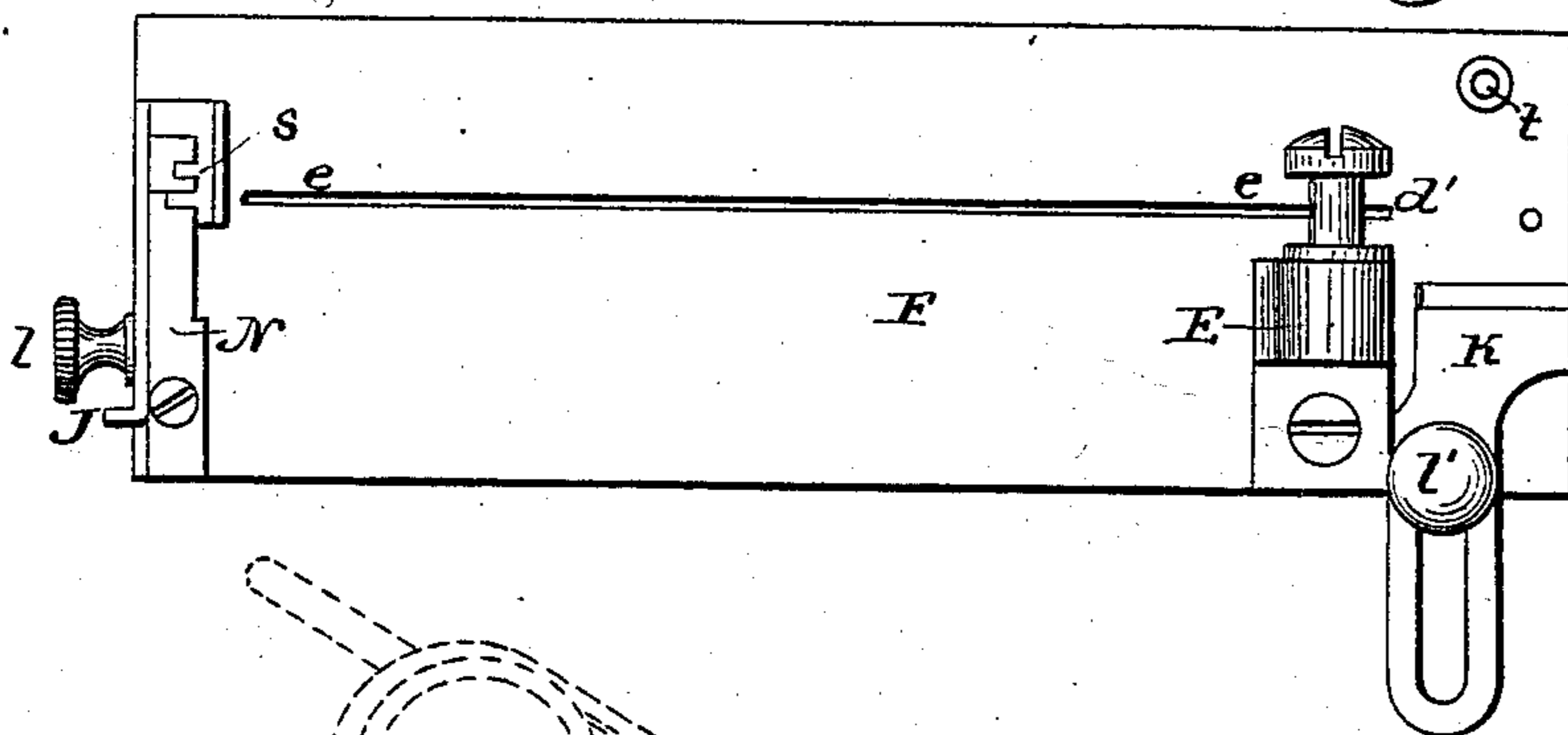


Fig. 3.

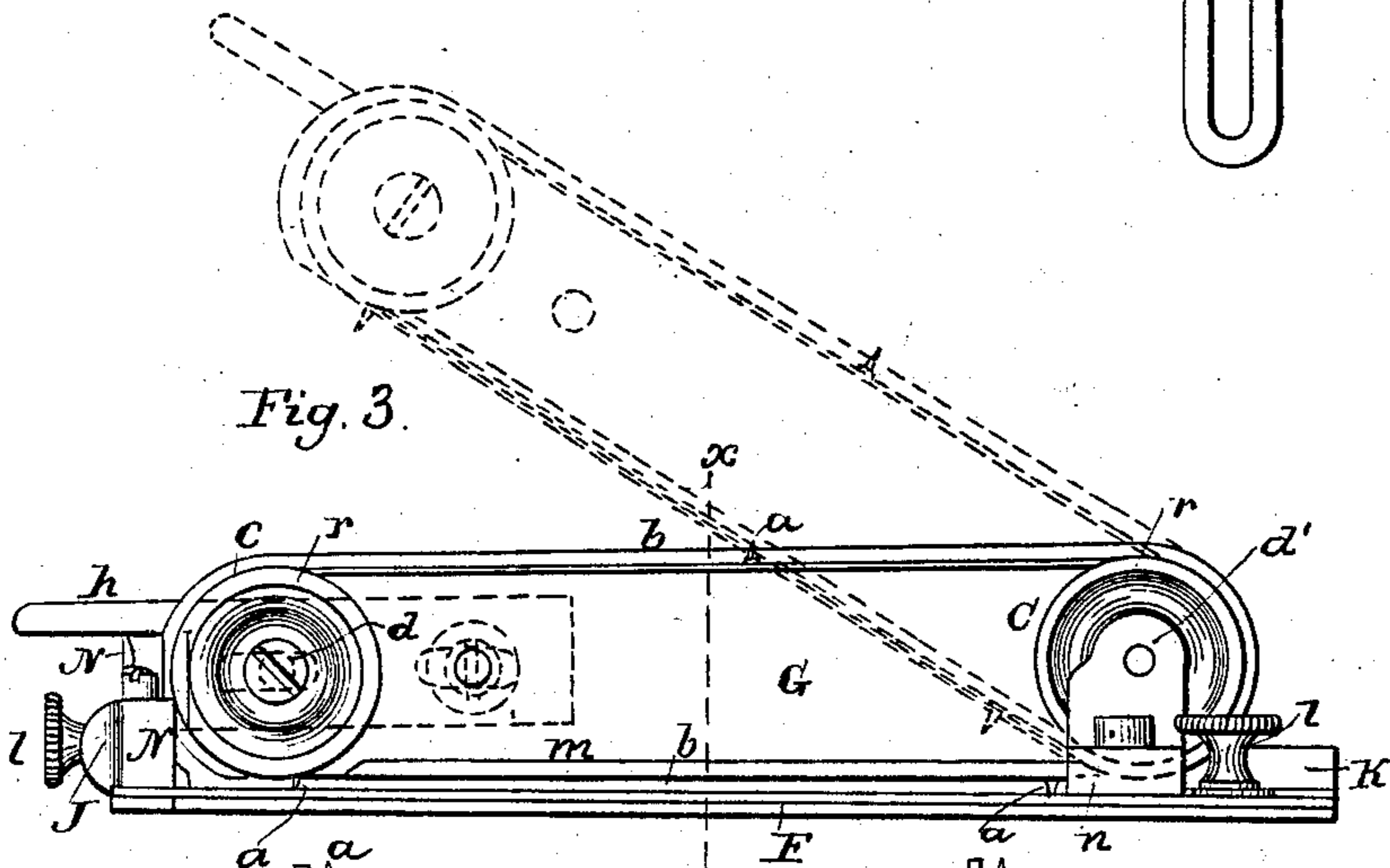


Fig. 5.

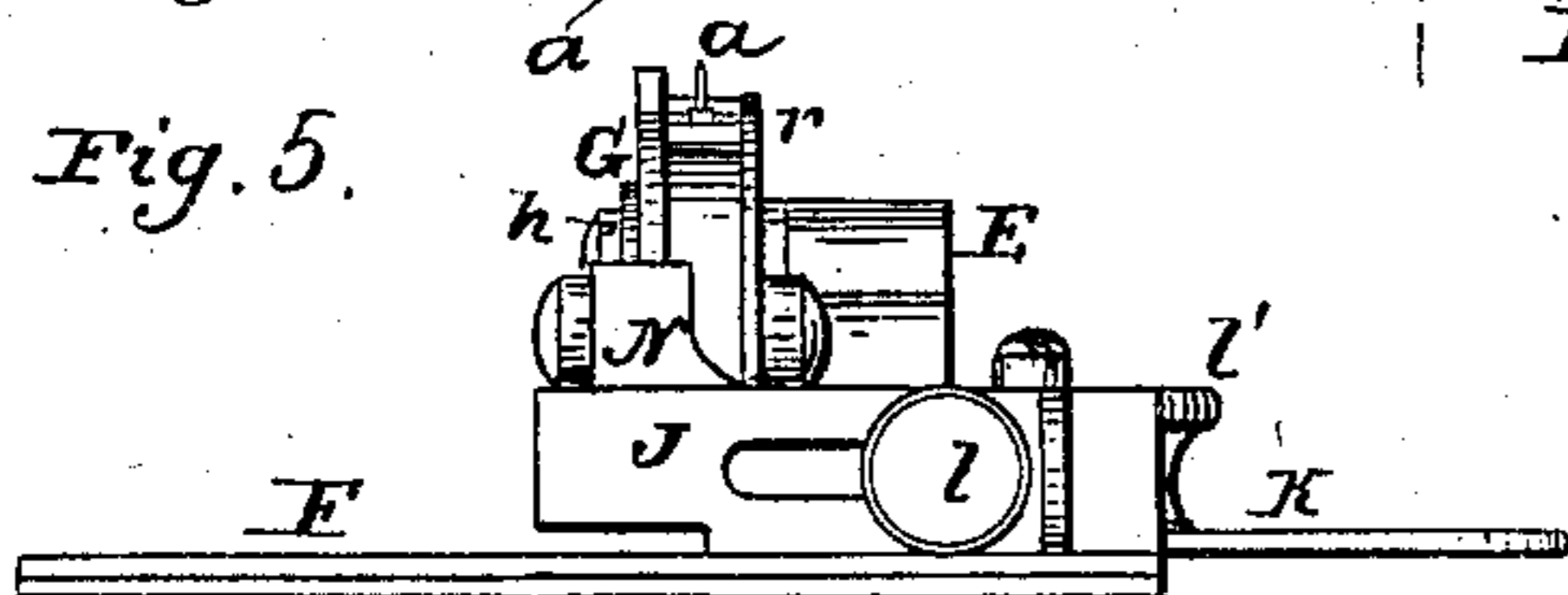
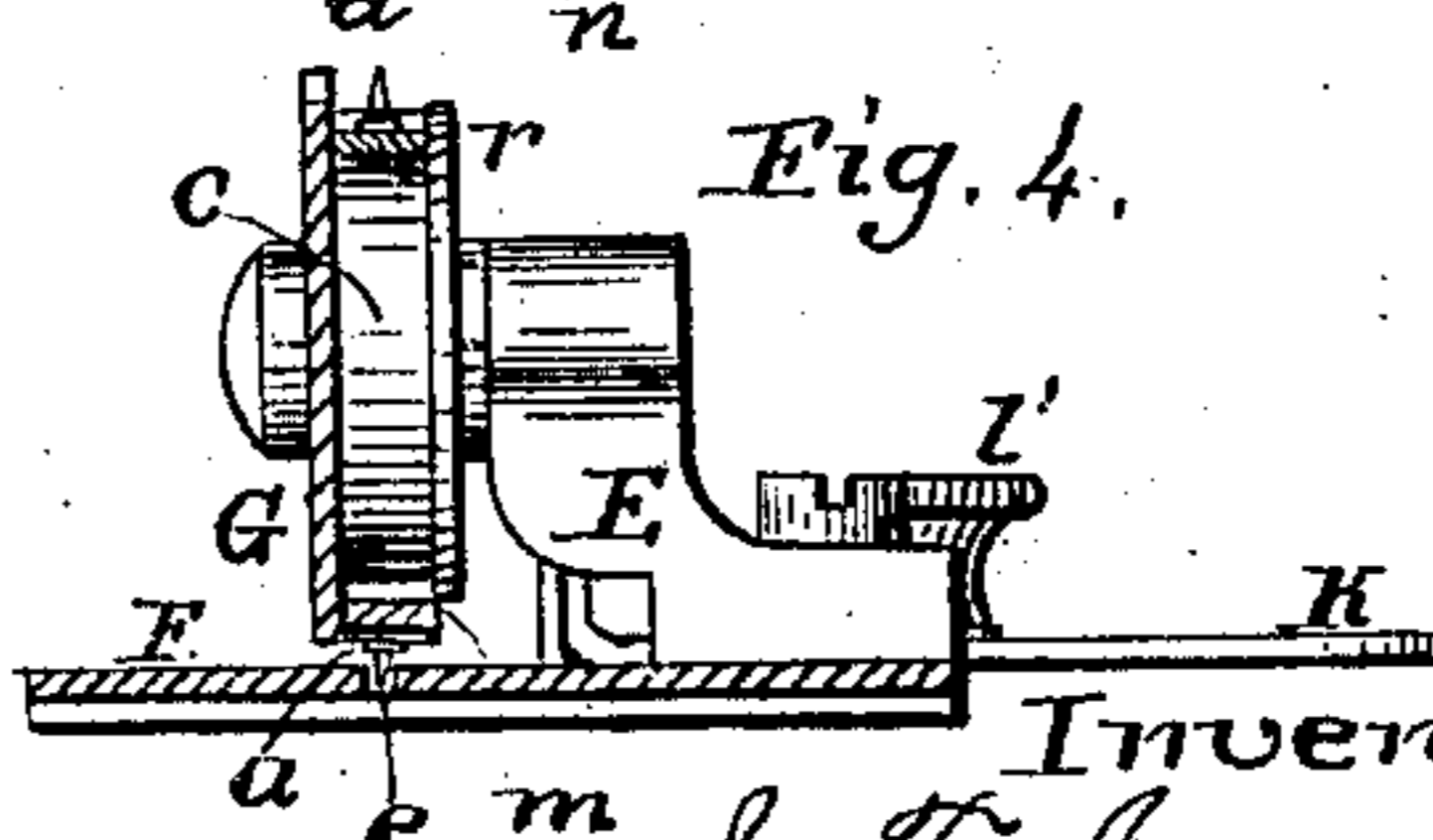


Fig. 4.



Witnesses:

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Letters Patent No. 93,540, dated August 10, 1869.

IMPROVEMENT IN BASTER-GUIDE FOR SEWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN THOMAS JONES, of the city, county, and State of New York, have made an invention of a new and useful Baster-Guide for Sewing-Machines; and that the following is a full, clear, and exact description and specification of my said invention.

The feeding-apparatus of sewing-machines now in general use acts upon a short portion of the cloth at a time; hence it is customary for the operator to use his hand continually, to arrange the cloth in the proper position to be acted upon by the feeding-apparatus, and the constant attention of both the eye and the hand is required for this purpose.

The object of my invention is to relieve the eye and hand of the operator of this incessant attention and application, and to thereby facilitate working with the machine. To this end,

My invention consists of what I term a baster-guide for sewing-machines, which consists substantially of a set of travelling points, for perforating the cloth at intervals, and guiding it to the place where it is delivered to the feeding-apparatus of a sewing-machine, and of a holding-plate, or its equivalent, for holding the cloth in engagement with the points while they are in position to act upon the cloth.

My invention consists, further, of the combination of the said travelling set of points and holding-plate, with a gauge to determine the position of the cloth relatively to the points at the end of the implement at which the cloth enters it, or thereabout.

My invention consists, further, of the combination of the said travelling set of points and holding-plate with a gauge at the delivery-end of the implement, or thereabout, to guide the cloth as it leaves the implement.

My invention consists, further, of the combination of the travelling set of points and the holding-plate through the intervention of a pivot or hinge, in such manner that the set of travelling points and holding-plate may be separated, to permit the cloth to be introduced readily between the two.

In order that my invention may be fully understood, I have represented, in the accompanying drawings, a baster-guide embodying it—

Figure 1 representing a plan of the implement;

Figure 2 representing a plan of it with certain parts removed;

Figure 3 representing a side view of the implement;

Figure 4 representing a transverse section of the same at the line *xx* of fig. 3; and

Figure 5 representing an end view of the implement.

In constructing my implement, I prefer to secure the points *a a a* to an endless band, *b*, so that they

may travel in engagement with the cloth at one side of the band, and return on the opposite side of the band to the place where the cloth enters the implement.

This band *b* is constructed to travel upon two pulleys, *O O'*, which are fitted to turn upon arbors, *d d'*, and are provided with flanges, *r*, to hold the band in its position.

One of these arbors, *d'*, is secured to a bracket, *E*, projecting from the holding-plate *F*, which forms the stock of the implement, while the other arbor, *d*, is connected with a frame, *G*, which is constructed to swing upon the arbor, *d'*, which operates as a hinge-pivot, so that the travelling set of points *a a a* may be separated from the holding-plate by turning the swinging frame *G* upward upon the arbor *d'*.

The arbor *d* is connected with the swinging frame *G* by a slotted slide, *h*, so that said arbor may be moved, to tighten the band *b*, and may then be secured by the clamp-screw *i*, which fastens the slide to the swing-frame.

The points *a a a*, while travelling in the direction in which the cloth moves, are caused to move in a track that is parallel with the surface of the holding-plate *F*, by means of a track-plate, *m*, which is secured to the swinging frame *G*; and in practice, I find it expedient to raise one end of this track, as indicated by the dotted lines *n* in fig. 3, so as to facilitate the withdrawal of the points from the cloth, as the latter passes to the needle.

The holding-plate *F* is slotted, as at *e e*, to permit the travelling points to pass through the cloth lying upon the holding-plate; and the distance from the face of the holding-plate to the adjacent face of the band *b* is less than the length of the points, so that each point is compelled to perforate the cloth and project slightly into the said slot.

This holding-plate is fitted at one end with a sliding gauge, *J*, which determines the position of the edge of the cloth at its entrance in the implement, and it is fitted at the delivery-end of the implement with a second gauge, *K*, to determine the position of the edge of the cloth as it leaves the implement.

The stocks or shanks of both gauges are slotted, to permit them to be secured to the implement by clamp-screws, *l l'*, in such manner that they may be adjusted.

The clamp-screw *l* of one of the gauges *J*, is screwed into a bracket, *N*, which projects upward from the holding-plate *F*; and this bracket is notched, as at *s*, to admit the adjacent end of the swinging frame *G*, and thus holds that frame in place when it is in its normal position.

The outer end of the slide *h* overlaps the bracket *N*, and forms a handle, by which the swinging frame can be conveniently turned up and down, and the

lower edge of this handle, bearing upon the top of the bracket N, when the swinging frame is in its normal position, holds the frame and the travelling points in their proper positions relatively to the face of the holding-plate G.

The holding-plate F is perforated with a hole, *t*, to permit the insertion of a screw by which the implement is secured to the bed-plate of a sewing-machine.

The implement is screwed fast to the bed-frame of a sewing-machine, just in advance of the feeding-apparatus, so that the material can pass from it directly to the feeding-apparatus; the centre of the slot *e e* being in line with the needle, or thereabout, so that the travelling points *a a a* travel in the line of the intended seam.

The gauges are set as far from the points as the seam is to be from the edge of the cloth, the swinging frame is turned upward, the cloth is entered with its end in the feeding-apparatus and its edge in contact with the gauges, and the swinging frame is turned down, so as to enter the point or points which are at the under side of the band, into the cloth.

When, then, the sewing-machine is put in operation, the feeding-apparatus will draw the cloth forward and cause it to pass through the baster-guide; and as the points are engaged in the cloth, the movement of the latter will cause the points to travel, the band *b* to traverse the pulleys, and each point in succession, as it travels round the pulley C, to perforate and engage itself with the cloth, while, as each point travels round the pulley C, it will withdraw from and liberate the cloth.

When a point is once engaged with the cloth, the latter cannot escape, because the holding-plate holds the cloth nearer to the face of the band than the length of the point. Hence, the cloth is guided by the point to the delivery-end of the implement in the same position in which it is engaged with the point; and when the cloth is so engaged, no further attention is required for the portion of cloth extending between the point engaged and the feed-apparatus of the machine. Therefore, the operator need only be careful to place his cloth properly at the time a point is about engaging with it; and as the points are, in this example, about four inches apart, the careful attention of the eye and hand of the operator is required only at intervals corresponding with the time required to sew a seam of four inches in length, instead of incessantly, as in ordinary machines.

My invention need not be embodied in the form of implement represented in the drawing, as it may be embodied in other forms.

Thus, for example, the holding-plate may be arranged above the points instead of beneath them, in which case the band, pulley, and their appurtenances may be received in a recess formed in the bed-plate of the sewing-machine.

The points also may be connected with some other instrumentality than a band, to cause them to move to and fro.

I am aware that an endless series of travelling points has been used to feed the cloth in sewing-machines, but in such cases the points were set at short intervals in a band, and no means were provided of holding the cloth engaged with the points from the period of their engagement to the place where the cloth was disengaged from them, the cloth merely lying upon the band carrying the points by reason of its weight.

I do not, therefore, claim to have been the first inventor of a series of points for feeding or holding cloth in a sewing-machine; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The baster-guide hereinbefore described, consisting substantially of the combination of a set of travelling points with a holding-plate to maintain the engagement of the cloth with the points, substantially as before set forth.

Also, the combination of the said set of travelling points and holding-plate with a gauge, to determine the position of the cloth as it enters the implement, substantially as before set forth.

Also, the combination of the said set of travelling points and holding-plate with a gauge, to determine the position of the cloth as it leaves the implement, substantially as before set forth.

Also, the combination of the said set of travelling points to holding-plate, and the swinging frame, substantially as before set forth.

In testimony whereof, I have hereunto set my hand, this 8th day of June, A. D. 1869.

J. T. JONES.

Witnesses:

W. L. BENNEM,
JOHN RATHBONE, Jr.