N. JONES.

TUCK MARKER FOR SEWING MACHINES.

No. 105,402. Patented July 12, 1870.

Fig: 1

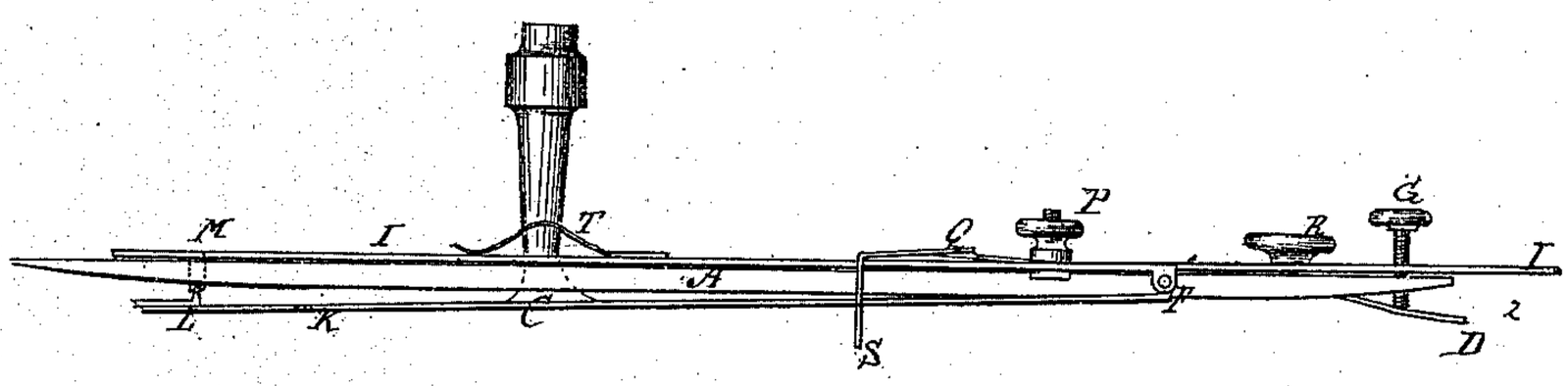


Fig: 2

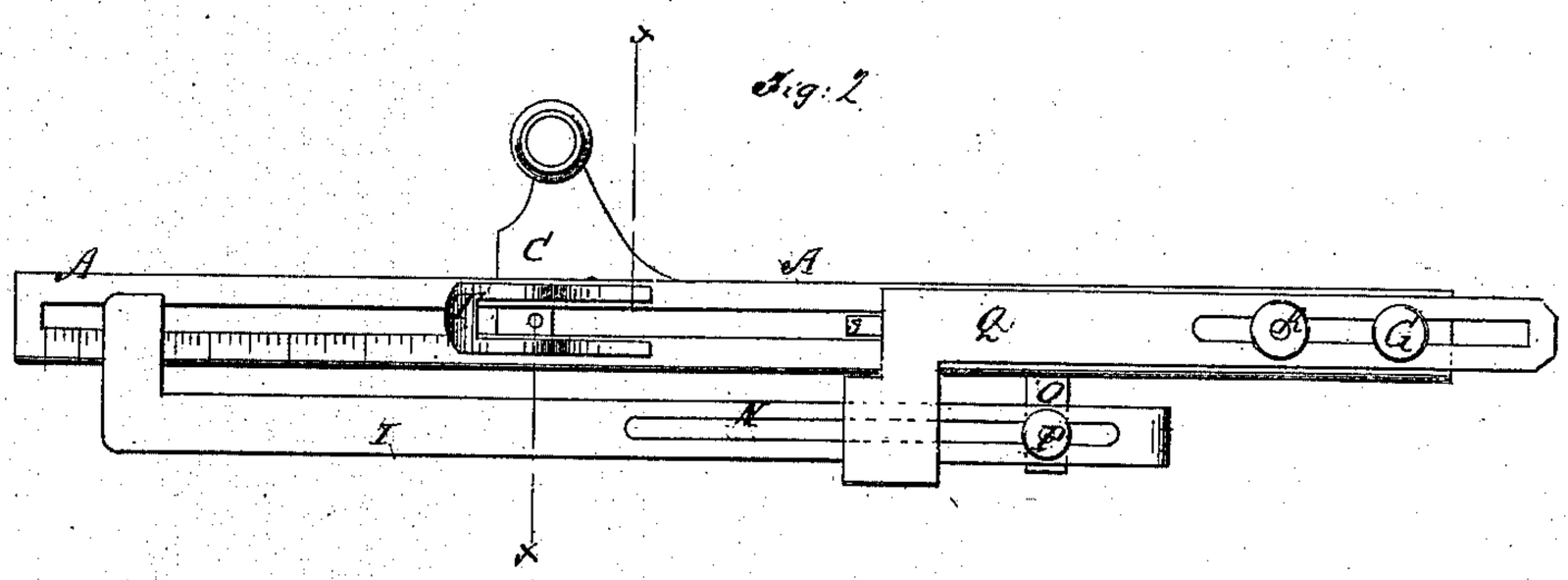


Fig: 3

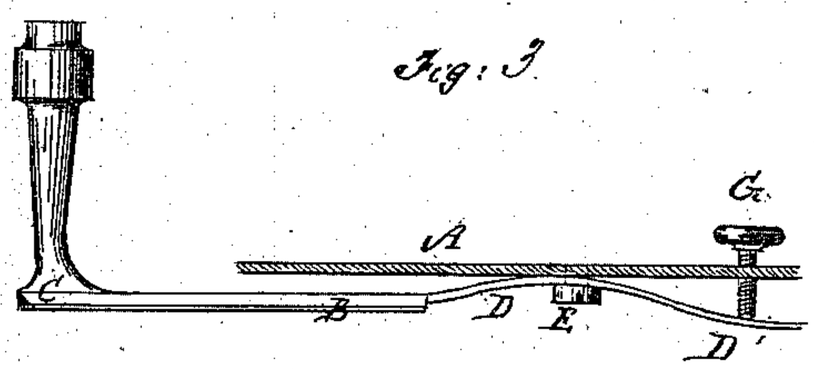


Fig: 5.

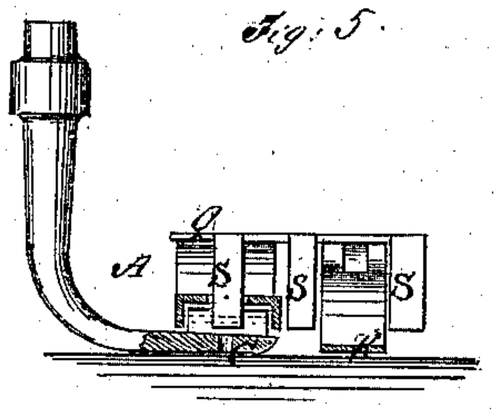
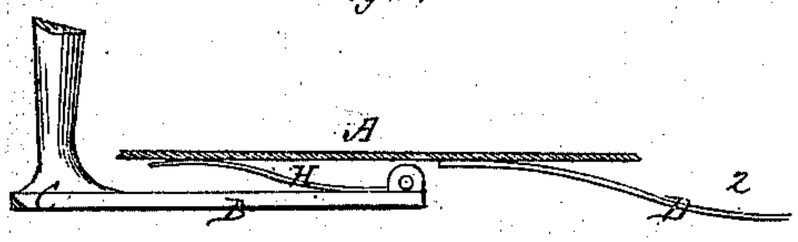


Fig: 4



Witnesses:

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UNITED STATES PATENT OFFICE.

NATHANIEL JONES, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TUCK-MARKER FOR SEWING-MACHINE.

Specification forming part of Letters Patent No. **105,402**, dated July 12, 1870.

To all whom it may concern:

Be it known that I, NATHANIEL JONES, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Tuck-Marker; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to improvements in tuck-markers; and consists in an improved construction and arrangement of a tuck-marker for attachment to the presser-foot, to be raised by the feed-plate and pressed down by the presser-foot.

Figure 1 is a front elevation of my improved tuck-marker. Fig. 2 is a plan of the same. Fig. 3 is a section of a part of the same. Fig. 4 is a section similar to Fig. 3, showing a modified arrangement of the same; and Fig. 5 is a transverse section taken on the line *x x* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A is a long supporting-plate, attached to a plate, B, rigidly attached to the presser-foot C, and projecting a considerable distance therefrom rearward or perpendicularly to the line in which the cloth moves. The said plate A may be connected to the end of this plate B either by a spring, D, and screw E, or it may be hinged or pivoted to it, as partly shown in the sectional Fig. 4 at F. In one case the spring D is prolonged at D^1 beyond the screw E, to bear upon the plate of the machine, and in the other case a separate spring, D^2, is attached to the plate A for the purpose. In both cases a temper-screw, G, is provided to vary the tension of the spring, and in the latter case a spring, H, is introduced between the plates A and B in front of the hinged point F, to have an upward pressure on the said plate A. This plate A is intended for the support of the spring-plates I and K, which carry the marking-points. The said plates are connected together at the rear end, either permanently or by a hinge or pivot, and the front ends carry the marking-points L M, one above and the other below the cloth. The upper plate, I, is slotted at N for a considerable distance near the rear end, and is clamped upon a bar, O, projecting from the plate A, for the purpose of supporting it, by a clamping-screw, P, or other suitable device. The plates I K are thus held adjustably, so that they may be moved forward or back for wide or narrow tucks. The supporting-plate A is slotted from the front end toward the other about two-thirds, or thereabout, of its length, and the marking-point M on the plate I works through this slot, so that the said plate I is supported by the plate A, which is stronger, against the tendency of the cloth to draw it laterally. Both plates I and K have angular projections at the front ends, whereby the marking-points are supported so as to work through the slot of the plate A, although the said plates I K are at one side of the plate A, which is so arranged that the needle also works through the slot.

Q is a plate, clamped down on the top of A by a screw, R, so as to be adjusted along the said plate toward or from the needle. At the end fronting the needle it has short bars or fingers S, which are bent downward to form the cloth-guide, the said fingers or bars reaching down to and resting on the plate of the machine, one passing through the slot of the plate A, also through a slot in the plate B, and the others at each side of plates I K. The fingers S of this plate Q serve also to support the plate I against the action of the cloth. These fingers always bear on the plate of the machine, the plate Q being made to spring when the plate A goes down.

T is a spring, placed on the top of the plate A where the needle works through it, to be struck by the end of the needle-post to press the marker M down upon the cloth, or to assist in doing so, to insure the marking distinctly; but it may be used or not, as preferred.

It will be seen that the plate K rests on the plate of the machine, but is not connected to it, but is supported, together with the plate I, by the plate A, connected to the presser-foot. The front end of this plate A is lifted up by the action of springs D or H; but the action of these springs is counteracted by the springs D^1 or D^2, which have a tendency to throw the rear end of plate A up and the front end down. This tendency is increased as the presser-foot goes down and lessened as it is raised. Therefore, when the foot goes down the outer end of I will be forced down upon the cloth, which, being between the marking-points, will be

marked thereby; and when the foot is raised, and the pressure thereof on the springs D^1 or D^2 is released, the front end of plates A and I will be thrown up higher than would be due to the release of the said springs D^1 or D^2 by the springs D or H, thereby freeing the cloth to allow it to feed, and allowing a sufficient movement to plate I to strike a blow when coming down. The force of this blow may be varied, as required for different kinds of cloth, by the temper-screw G. The plate has a scale marked on it, by which to be guided in setting the tuck-markers, and the cloth gaged the required distance from the needle.

The prolongation B of the presser-foot is intended not only as a means for connecting the bar A to the foot, but also to press down and smooth the tuck as it is moved along under it, which it does very effectually, as I have practically demonstrated.

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

1. The combination, with the presser-foot of a sewing-machine, of the supporting-plate A, tuck-marking plates I K, spring D^1 or D^2, and temper-screw G, when constructed substantially as specified.

2. The combination, with the plate A, presser-foot, and the springs D^2, of the springs H, substantially as specified.

The above specification of my invention signed by me this 5th day of May, 1870.

NATHANIEL JONES.

Witnesses:
GEO. W. MABEE,
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