

J. M. Lyon,
Brainer.

No. 98985.

Patented Jan. 18. 1870.

Fig. 1.

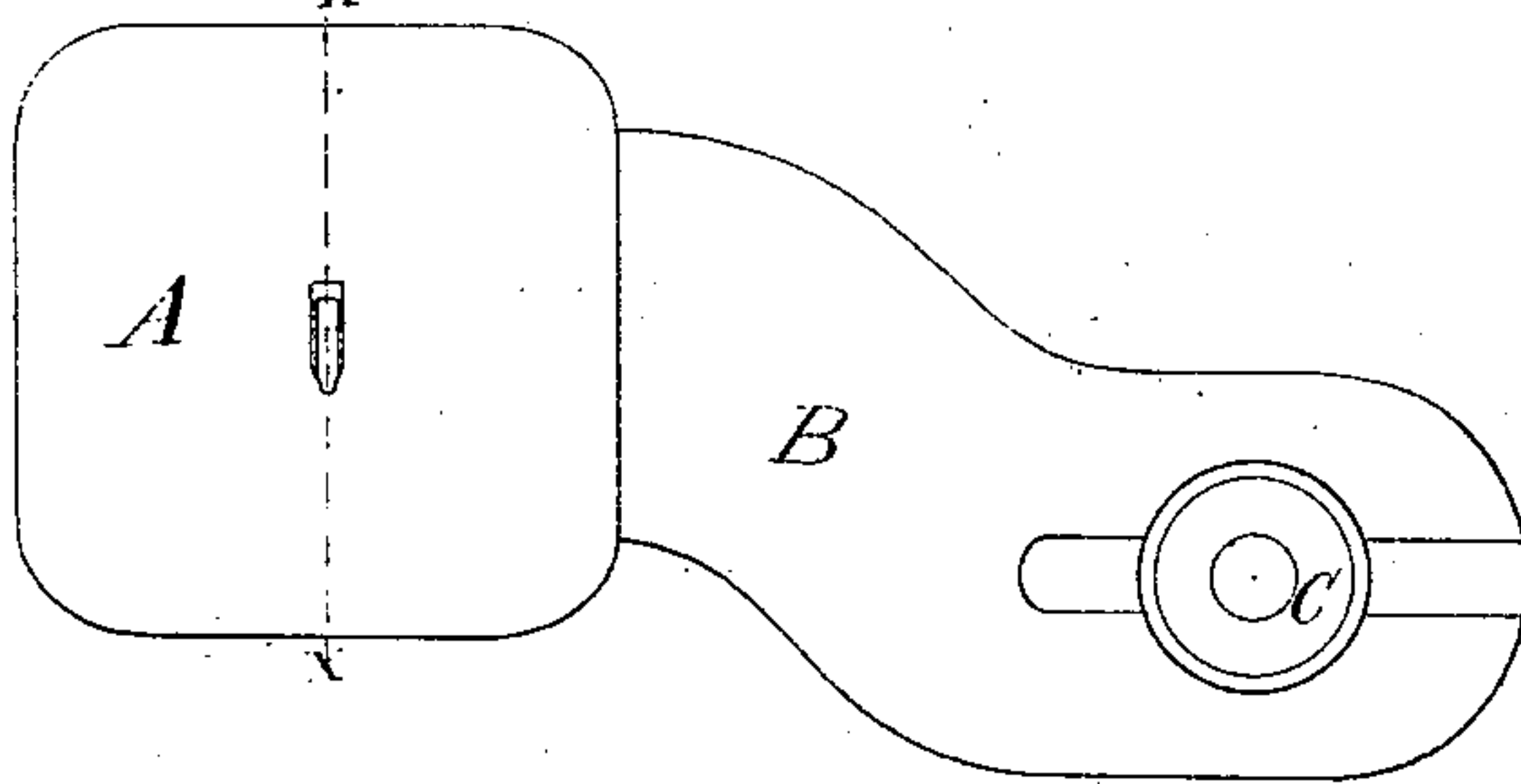


Fig. 2.

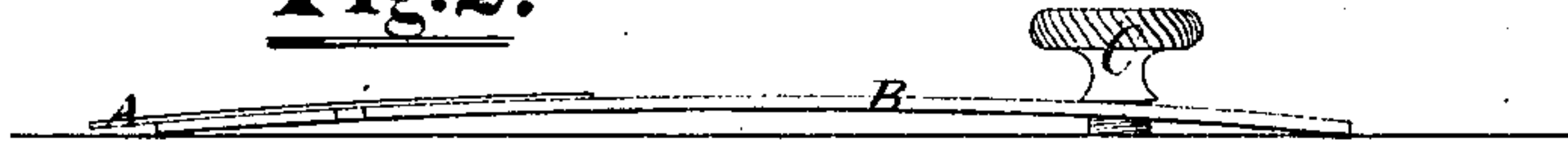


Fig. 3.

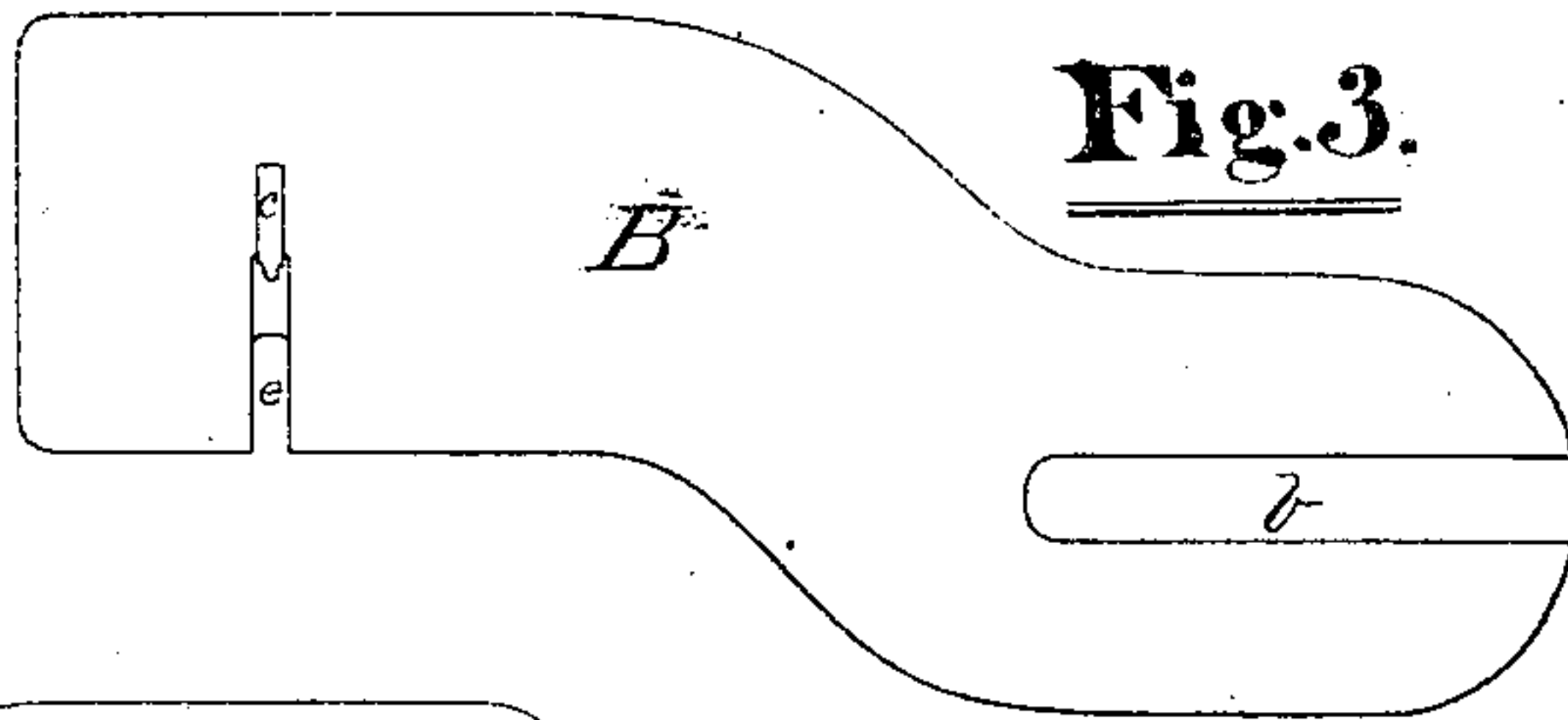


Fig. 4.

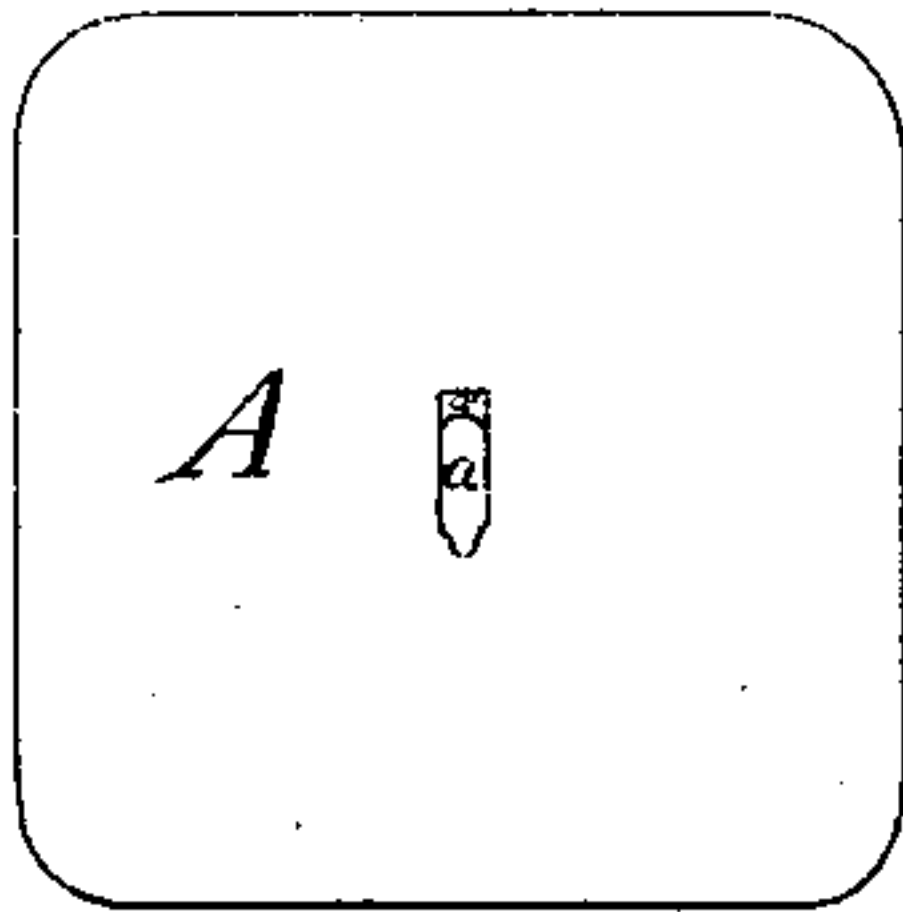
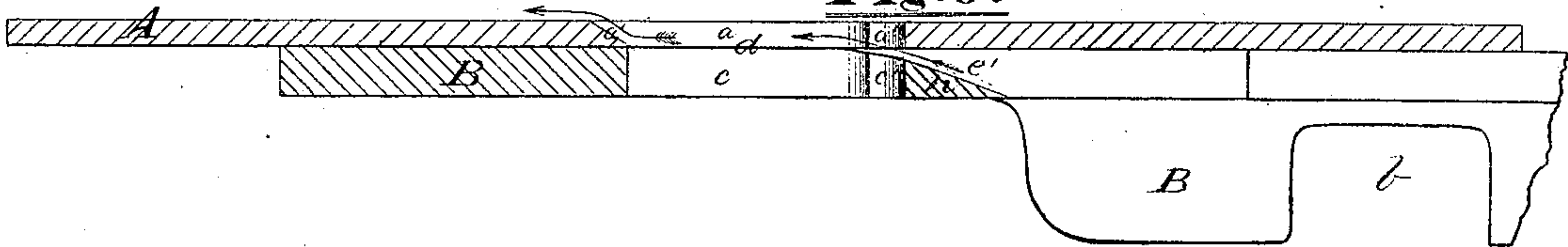


Fig. 5.



Witnesses.
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JAMES M. LYON, OF WATERTOWN, NEW YORK.

Letters Patent No. 98,985, dated January 18, 1870.

IMPROVEMENT IN BRAIDING-ATTACHMENT 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, JAMES M. LYON, of Watertown, in the county of Jefferson, and State of New York, have invented a new and valuable Improvement in Braiders for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a top view of my invention.

Figure 2 is a side view of the same.

Figure 3 is a top view of the shank.

Figure 4 is a top view of the table.

Figure 5 is an enlarged sectional view through the line *x x*.

My invention relates to sewing-machines, and consists, mainly, in the construction and novel arrangement of devices, whereby, on any vertical or needle-feed sewing-machine, braid may be guided to and sewn to the under side of cloth, according to a pattern traced on its upper or visible side.

The letter A, of the drawings, designates the upper plate of the braider, usually made of No. 25 gauge sheet-steel. This plate is square in shape, or nearly so, with rounded corners, and slightly convex, forming a small table, over which the cloth, to which braid is being sewn, will easily glide.

In the centre of this plate is formed an oblong slot or opening, *a*, fig. 4.

The sides of this slot are parallel and straight; one end forms an incline plane, *a'*, fig. 5, and the other end has a small semicircular recess formed in it, *a''*, fig. 5.

This plate or table A is riveted, or otherwise firmly secured, to the shank B, fig. 3. This shank is usually made of No. 18 gauge sheet-steel, and generally of the form shown in the drawings.

One end of the shank is slotted in the direction of its length, as at *b*.

Through this slot a thumb-screw, C, works, fastening the braider firmly to the bed of the sewing-machine.

The shank B is curved or bent upward from each end toward the centre, so that the action of the thumb-screw will confine both ends of the braider, before the part of the shank immediately under the thumb-screw touches the bed-plate.

In the other end of the shank B is formed a slot or

opening, *c*, fig. 3, of similar shape to the slot in the centre of plate A, but slightly narrower, so that when the plates A and B are fastened together, the slot *c*, being placed immediately below the wider slot *a*, will show an edge, *d*, on each side, forming a support or guide to the braid, while the needle is passing through it.

In the edge of the shank B, a notch, *e*, is cut, being, as it were, a continuation of the slot *c*, but separated from it by the incline plane *n*, on which the braid slides up to the cloth.

The operation of the braider is as follows:

The upper tension being made strong, and the lower tension easy, the braid is threaded from the under side of the braider, through the hole *e'*, which is between the incline plane *n* and the upper plate A, the end of the braid being allowed to pass over and back of the slot about one-half inch.

The braider is now attached to the machine, so that the slot in it will be directly over the slot in the needle-plate, and the needle will pass down through the semicircular recess in the front end of the slot, without touching.

The thumb-screw is firmly screwed down. The ordinary hemmer-screw will answer every purpose. The shuttle-thread is drawn up, as in ordinary sewing. The cloth, marked on the wrong side, is placed on the braider, with the marked side up, and the mark under the point of the needle. The presser-foot of the machine is now lowered, and the sewing performed as usual.

The braid passes up over the inclined plane *n*, along the ledges *d d*, and, being sewn to the cloth, up over the inclined plane *a'*, in the direction indicated by the arrows.

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

The braider, herein described, having table A, elastic bent shank B, set-screw C, needle-hole *a'' c''* opening into the oblong slot *a c*, provided with ledges *d d*, inclined plane *n*, and openings *b*, *e*, and *e'*, all constructed and arranged to operate as specified.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses.

JAMES M. LYON.

Witnesses:

O. T. JOY,

R. C. SCOTT.