(No Model.)

A. JOHNSTON.

UNDER BRAIDER FOR SEWING MACHINES.

No. 341,485. Patented May 11, 1886.

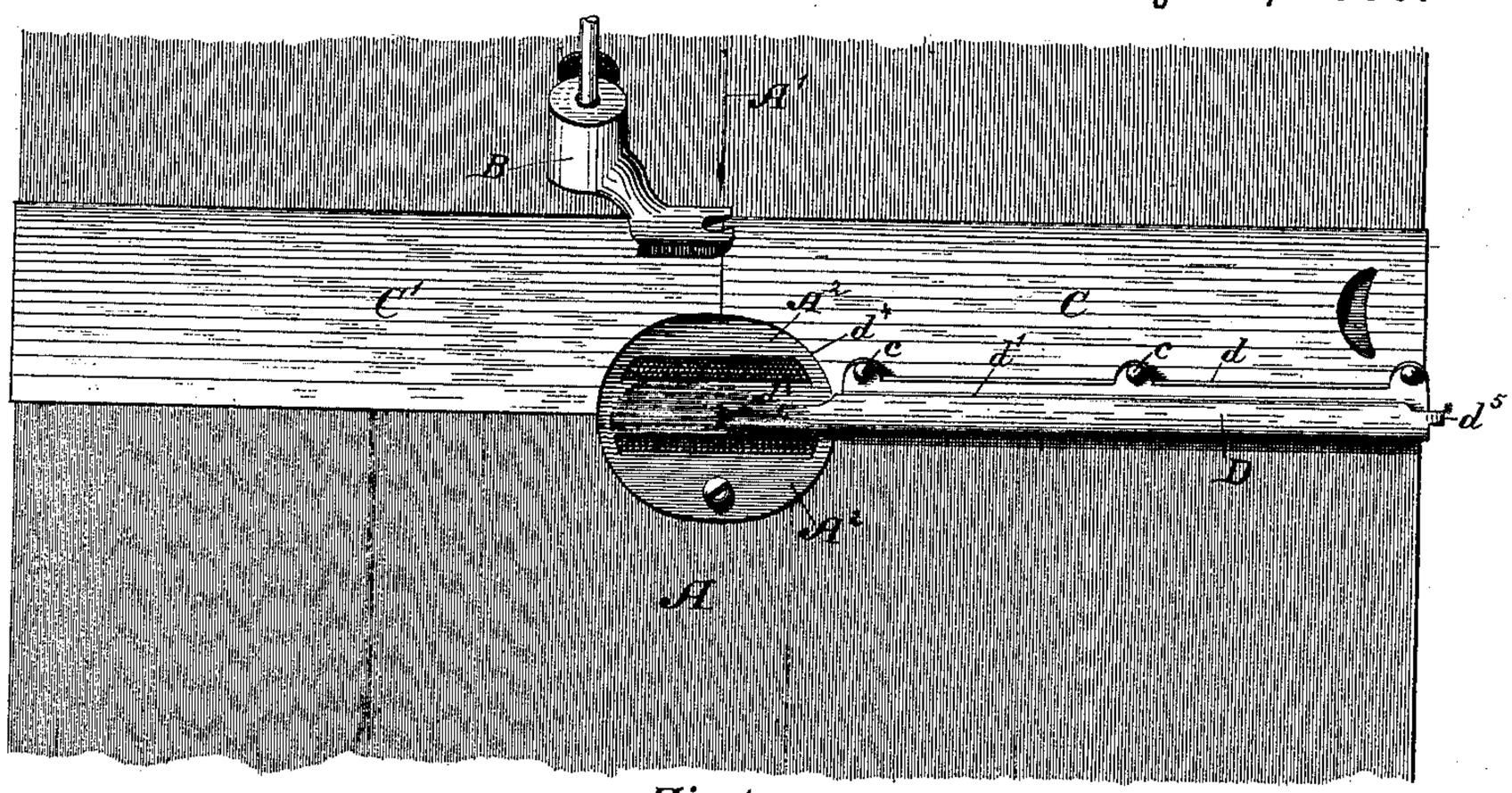

Fig. 1.

Fig. 3.

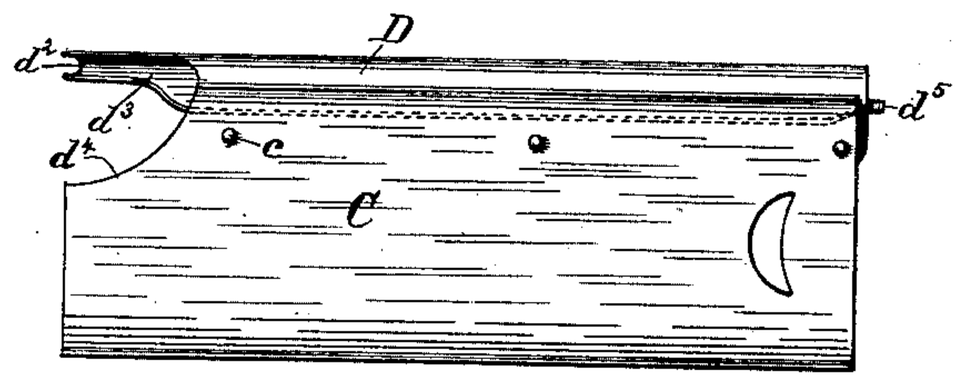

Fig. 6.

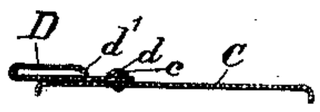

Fig. 5.

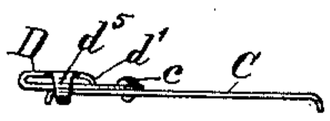

Fig. 2.

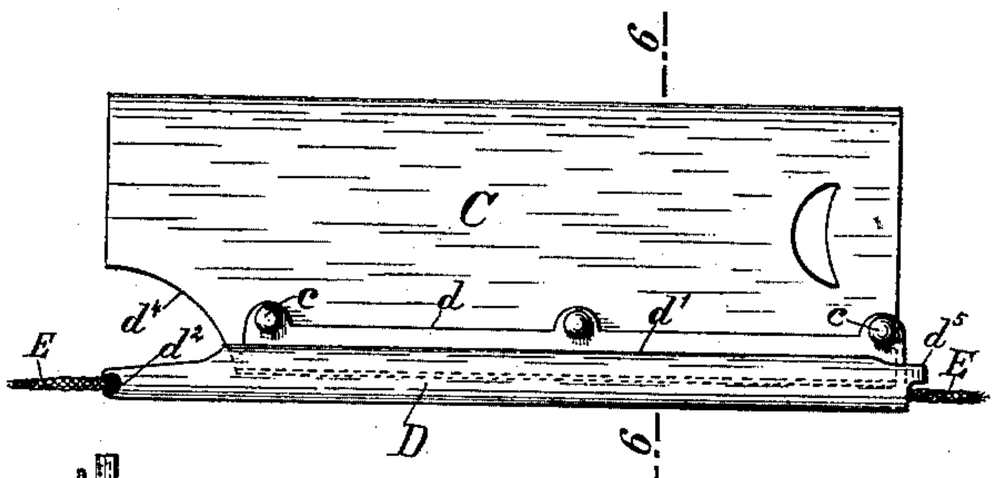

Fig. 4.

Witnesses:

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by Munday Evarts & Adcock

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UNITED STATES PATENT OFFICE.

ALLEN JOHNSTON, OF OTTUMWA, IOWA.

UNDER BRAIDER FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 341,485, dated May 11, 1886.

Application filed October 3, 1885. Serial No. 178,893. (No model.)

To all whom it may concern:

Be it known that I, ALLEN JOHNSTON, a citizen of the United States, residing at Ottumwa, in the county of Wapello and State of Iowa, have invented a new and useful Improvement in Under Braiders for Sewing-Machines, of which the following is a specification.

This invention relates to the construction of under braiders for sewing-machines, and its object is to simplify the construction and to render it easy to thread and efficient in operation.

In the drawings, Figure 1 is a perspective of a portion of a sewing-machine, showing the throat-plate and adjacent parts. Figs. 2, 3, 4, and 5 are respectively plan, bottom, side, and rear end views of my improved under braider. Fig. 6 is a section on the line 6 6 of Fig. 2.

In said drawings, A represents the bed, A′ the needle, and A^2 the throat-plate, of a sewing-machine.

B is a short presser-foot, sometimes employed with under braiders, and C C′ are the ordinary shuttle-race slides or covers.

To the slide C, I secure a device, D, for guiding the braid. This slide, with the guide attached, may be inserted or removed as readily as any slide can be put in or taken out, and as the guide has no hinged or moving parts it is ready for service as soon as it is threaded and in position. The guide may, however, possess several novel features in itself. Thus it may be formed of sheet metal bent upon itself, with one edge, *d*, secured to the slide by rivets *c*, and the other edge, *d′*, may be left free, so that the guide may be threaded through the longitudinal side opening thus formed. The metal may be spring-metal, so that the braid may be threaded or inserted within the tube by springing it in under the bent-over edge *d′*. The forward or needle end of the guide may be notched, as at d^2, to allow the passage of the needle, and to permit the points at either side of the notch to project to or slightly past the needle, and thus retain control of the braid until it is sewed. Said forward end of the tube may also be cut away on the under side, as at d^3, to allow it to extend over the throat-plate without interference therewith. The slide C is also cut away at d^4, so it may fit the exterior edge of the throat-plate, thereby adapting the entire device to use with the throat-plate. The rear end of the guide may be provided with a down-hanging lip, d^5, whereby to insure the proper entrance of the braid within the guide and prevent its slipping out from under the edge *d′*.

With this under braider I employ a short presser-foot, as that allows the points of the braider to extend to or past the needle, and the upper surface of the braider is preferably sloped off toward the needle to allow the braider and foot to come close together.

By the construction shown with the longitudinal side opening above the slide the braider can be threaded without removing it from the machine or changing its position.

E represents the braid, and E′ the cloth to which it is being sewed.

I claim—

1. The shuttle-race slide of a sewing-machine, having upon its longitudinal edge and secured to its upper face a spring-metal longitudinally-slotted tube, whereby the braid may be readily inserted and held against displacement, said tube being in the line of the path of the needle and cut away on its under side at the feed end, substantially as specified.

2. The shuttle-race slide of a sewing-machine, having upon its longitudinal edge and secured to its upper face a spring-metal longitudinally-slotted tube, whereby the braid may be readily inserted and held against displacement, said tube being in the line of the path of the needle, turned down at its front end, and cut away both for the passage of the needle and on its under side at the feed end, substantially as set forth.

3. The race-plate braid-guide carried longitudinally at that side of the race-plate which is in line with the needle-path, and made of spring metal, and slotted throughout its entire length for convenience in threading and security in retaining the threaded braid, substantially as specified.

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Witnesses:

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