

No. 628,909.

Patented July 11, 1899.

E. LITTEN.
SHADE CUTTER.

(Application filed Feb. 11, 1898.)

(No Model.)

Fig. 1.

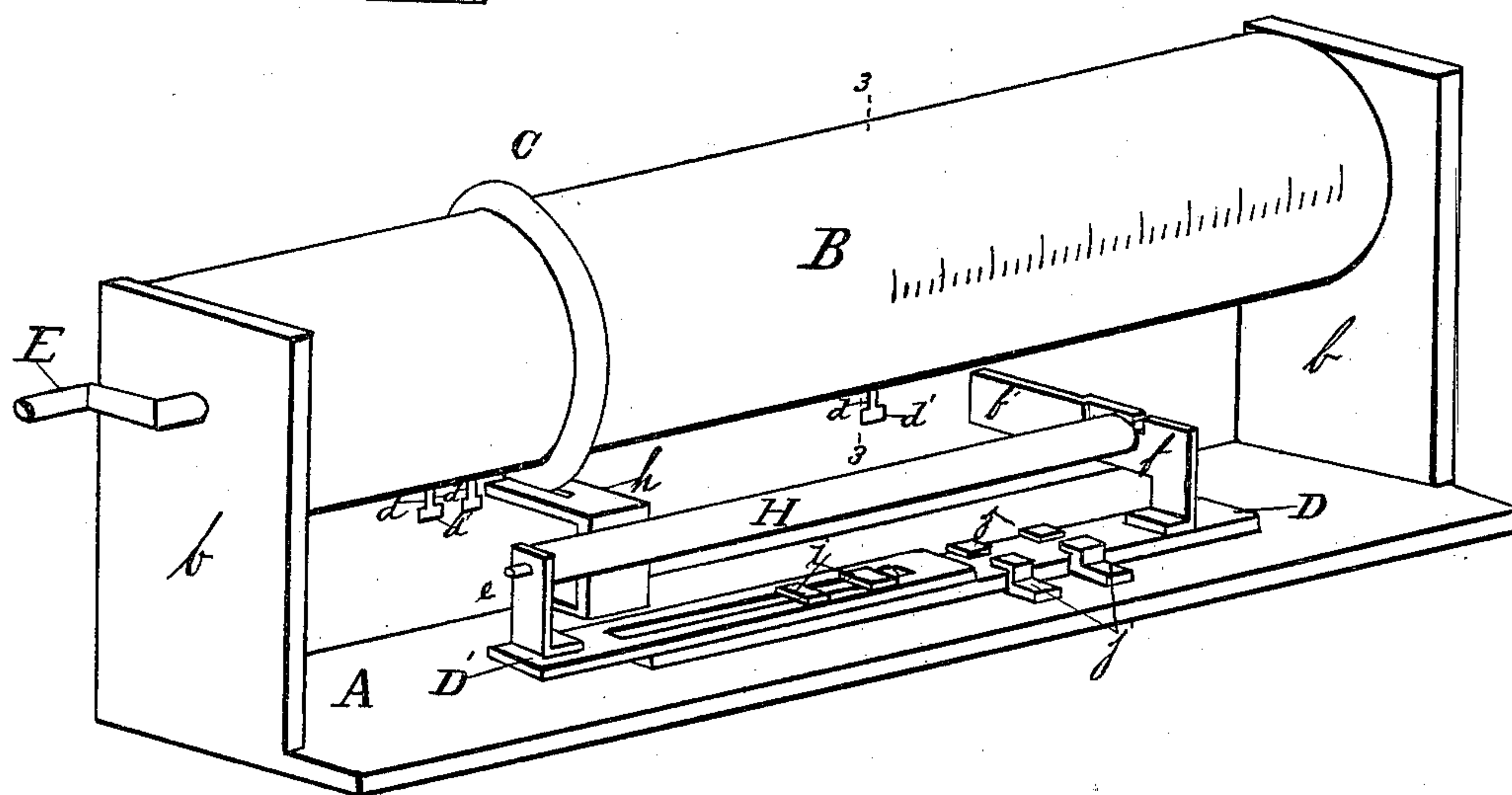


Fig. 2.

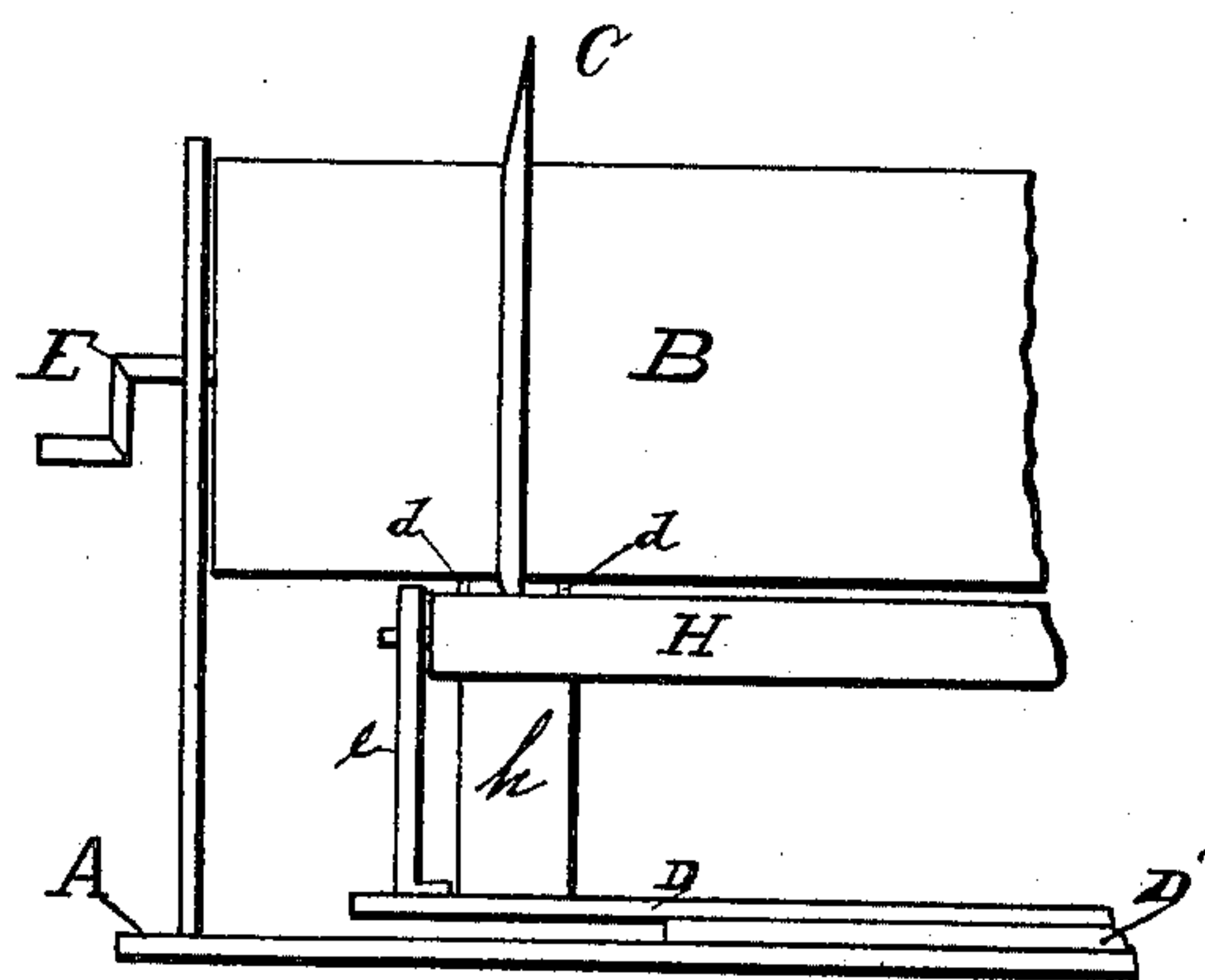
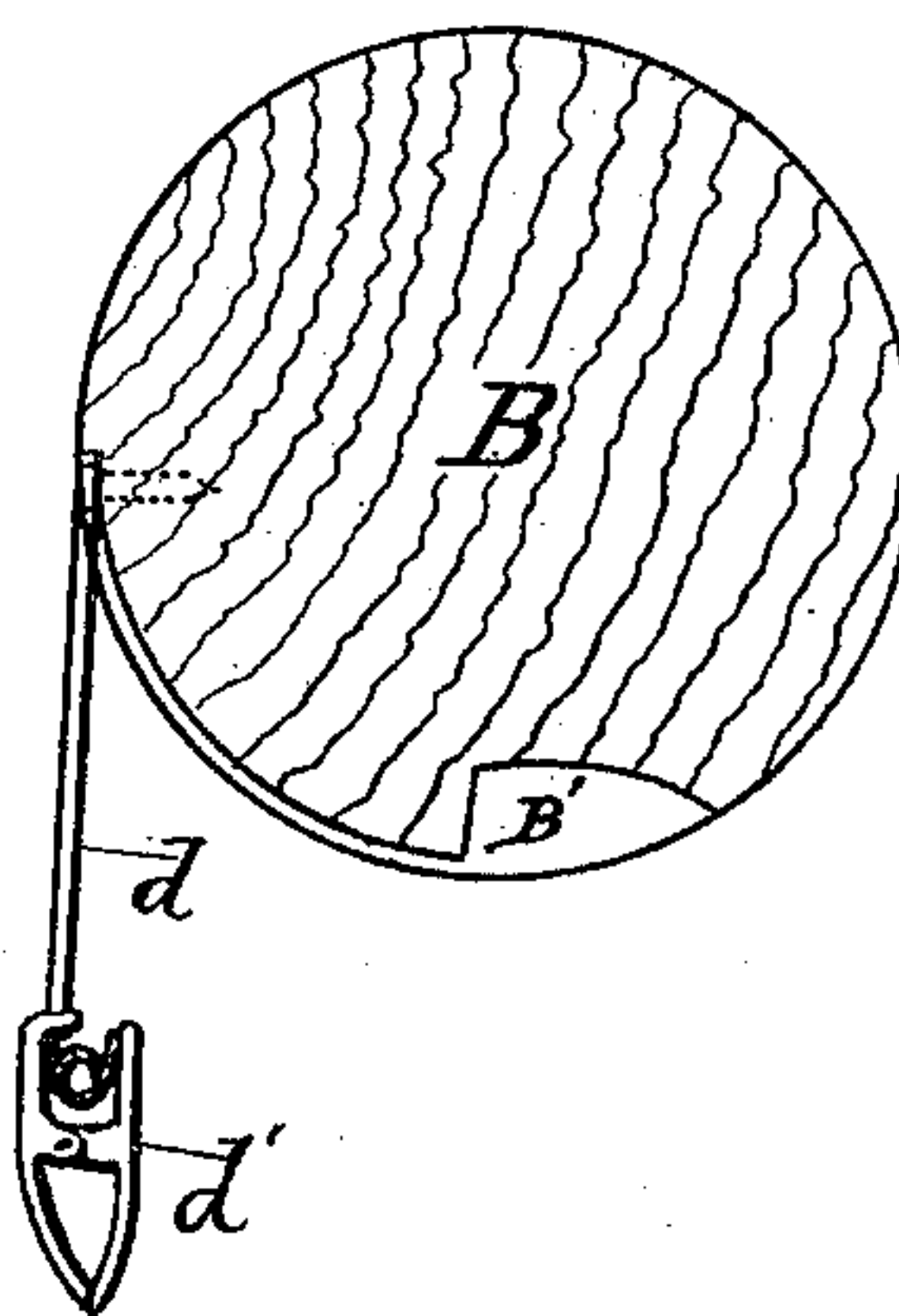


Fig. 3.



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UNITED STATES PATENT OFFICE.

EUGENE LITTEN, OF SANTA ANA, CALIFORNIA, ASSIGNOR OF ONE-HALF
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SHADE-CUTTER.

SPECIFICATION forming part of Letters Patent No. 628,909, dated July 11, 1899.

Application filed February 11, 1898. Serial No. 669,987. (No model.)

To all whom it may concern:

Be it known that I, EUGENE LITTEN, a citizen of the United States, residing at Santa Ana, in the county of Orange, in the State of California, have invented a new and useful Improvement in Window-Shade Cutters, of which the following is a specification.

My invention relates to improvements in cutters designed for cutting window-shades uniformly to any desired width.

The objects of my improvement are, first, to provide a machine of simple construction that will enable one person to cut a window-shade to a uniform width without the use of a straight-edge, and, second, to provide a machine for cutting window-shades uniformly to any desired width without the necessity of first unrolling the shade and measuring it before it is cut down to a narrower width. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my machine with a shade in it ready to be attached to the clips. Fig. 2 is a front view of the cutter end of the machine, the other parts cut away, and a part of a shade. Fig. 3 is a cross-section of the roller B on line 3 3 of Fig. 1 and a side view of the tape and clip.

Upon the base A of my machine I rotatively mount a roller B, having a crank E in suitable bearing on uprights *b b*. On the roller B and affixed thereto I place a circular cutter C, having a sharp edge and having one face at right angles to the face of the roller B and the other face beveled, the beveled face being next to the crank E. To the roller B, I attach three tapes *d d d*, each having on the free end thereof a spring-clip *d'* for gripping and holding the free end of the shade. Two of these gripping attachments are attached to the roller B, one on either side of the cutter C and as close thereto as they can be conveniently put, and the other is placed so as to grip and hold the other corner of the shade.

B' is a recess in the roller B for the reception of the clip *d'* when the shade is wound around the roller.

Mounted on the base A are slidably attached two base-plates D D', the plate D being slidably connected to the base A by the guides or brackets *j j*, rigidly affixed to the base,

and the other plate D' being adjustably attached to the plate D by means of bolts *i* or otherwise for adjustment. Upon one end of the plate D' is placed the upright *e* for the reception of the axis projecting from the shade-roller. Upon the other end of the plate D is placed the upright *f*, having a slot for the insertion therein of the extension on the other end of the shade-roller and forming a bearing therefor. The upright *f* has an extension *f'* extending from the upright *f* to the roller B, which serves as a guide for the edge of the shade as it is being wound upon the roller B.

To the base A, I attach the guide *h*, extending on each side of the cutter C to hold the shade up on a line with the bottom of the roller B, thereby causing the shade to come against the cutter C while being cut. I provide the roller B with a measuring-scale measuring from the cutter C toward the guide *f'*. The tapes *d d d* should be elastic.

In the drawings, H represents a shade placed in the machine ready for attachment to the spring-clips *d'*.

My machine is operated as follows: A window-shade H, having Heartshorn or other spring-fixtures, which it is desired to trim to a narrower width is placed in the machine, as shown. This is done by inserting the round axis of the shade-roller in the upright *e*, a round hole being provided therein, as shown, and the square axis or projection at the other end of the shade-roller in the slot in the upright *f*. It is then adjusted by moving the plates D D', carrying the shade H, so that the cutter C is at the point where it is desired to cut the shade. The free end of the shade H is then drawn out and fastened to the spring-clips *d'*. The roller B, carrying the cutter C, is rotated by means of the crank E, and thereby the shade is drawn under and wrapped around the roller B and the shade is drawn against the cutter C, which cuts the shade into two parts. When the shade is unwound from the shade-roller, the small remaining part between the shade-roller and the cutter C is cut with any cutting instrument, as a knife, or it may be caught with the fingers and torn off. The roller B is then allowed to unwind the spring in the shade-roller operating there-

to and the shade is wound back on its proper roller.

I have described my machine as operating upon a shade wound on a spring-retracting roller. Should it be desired to cut shades or other material which are not wound upon a spring-retracting roller, it would be necessary to attach some suitable device to keep the shade or material taut while being cut.

It will be observed that as the plates D and D', which carry the support for the shade to be cut, are adjustably attached together my machine can easily be used for cutting shades of different widths. Should it be desired to use my machine for cutting to only one width, the bearings for holding the shade may be mounted rigidly on the base A instead of on the plates D and D'.

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

1. In a shade-cutter, the combination of the frame, A, having uprights, *b b*, and upright guide, *h*, and brackets, *j j*, the roller, B, rotatively mounted on uprights, *b b*, the roller having a measured scale marked thereon, and carrying a rotary cutter, C, having also operating-crank, E, the plate, D, having upright, *f*, slotted for the reception of the extension on the shade-roller; plate, D', having upright, *e*, with hole for axis of the shade-roller, adjusting-bolts, *i*, all in combination as shown and described.

2. The herein-described cutter, consisting of a suitable base, A, bearings, *b b*, mounted one on each end of the base, A; roller, B, having on one end a crank, E; a cutter, C, affixed to the roller, B; guide, *h*, affixed to the base, A; elastic tapes, *d d d*, attached to the roller, B, each having spring-clip, *d'*,

adapted to catch and hold the end of the material to be cut; the adjustable plates, D, D', the plate, D' having upright, *e*, and the plate, D, having upright, *f*, with the extension or guide, *f'*, the uprights, *e*, and, *f*, adapted to support and hold the shade to be cut.

3. A shade-cutter, consisting of a base, having attached thereto suitable means for supporting the material to be cut, a roller rotatively mounted in uprights attached to said base, carrying a rotary cutter and having a crank at one end and means for attaching to it the material to be cut.

4. In a shade-cutter, the base-plate, A, having upright supports, *b b*, and brackets, *j j*; the roller, B, rotatively mounted on the upright supports, *b b*, having rotary cutter, C, and elastic tapes, *d d d*, and crank, E; the adjustable plates, D, D', the said plates carrying upright supports, *e* and *f*, respectively, and adapted to rotatively support the shade, H; the guide, *f'*, forming part of the upright support, *f*, and the guide, *h*, adjustably mounted on base, A, all in combination as shown and described.

5. A shade-cutter consisting of a roller, rotatively mounted on a base and having attached thereto a rotary cutter, means for turning said roller, means for attaching the material to be cut to the roller, means attached to the base for supporting the material to be cut, and guides for guiding the material to be cut to the roller, and also guides for guiding the material against the edge of the cutter.

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Witnesses:

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