

(No Model.)

A. S. DINSMORE.

CLOTH CLAMP FOR GIGGING MACHINES, &c.

No. 356,455.

Patented Jan. 25, 1887.

Fig:1.

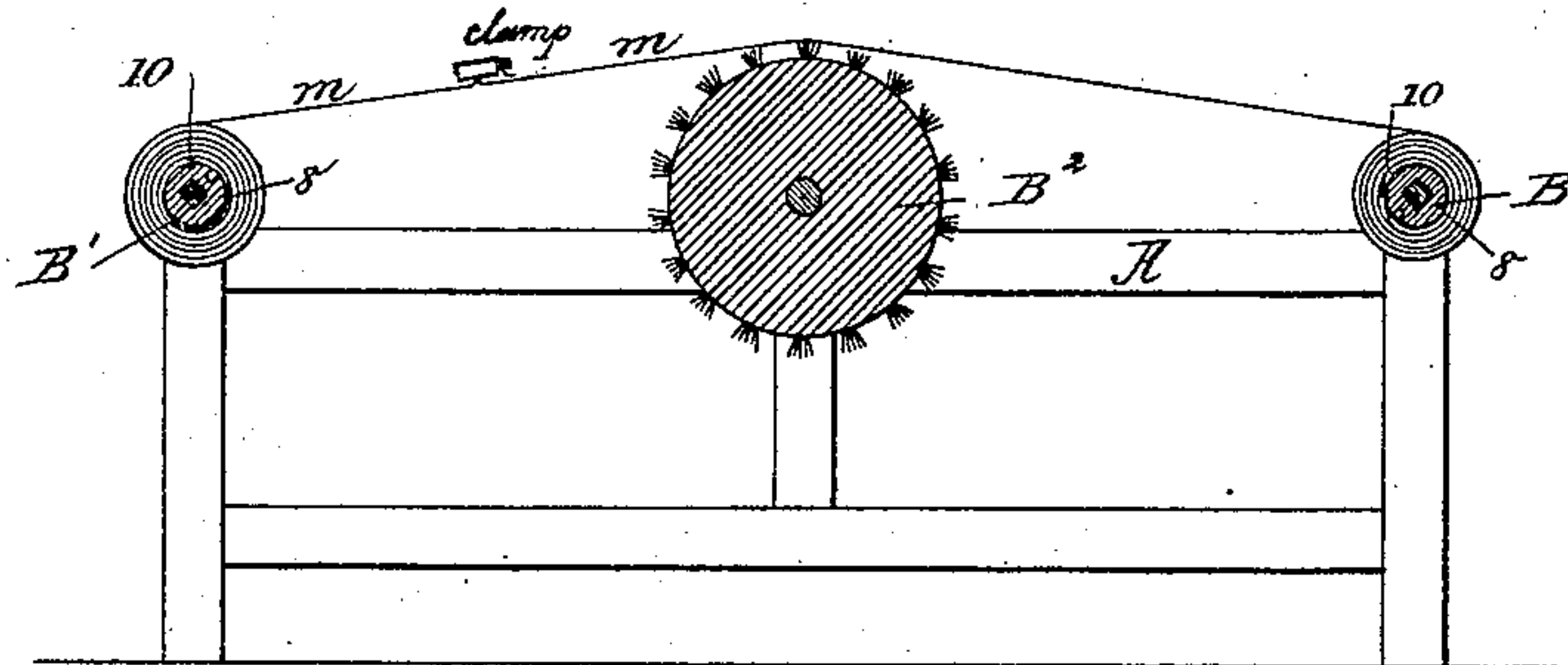


Fig:2.

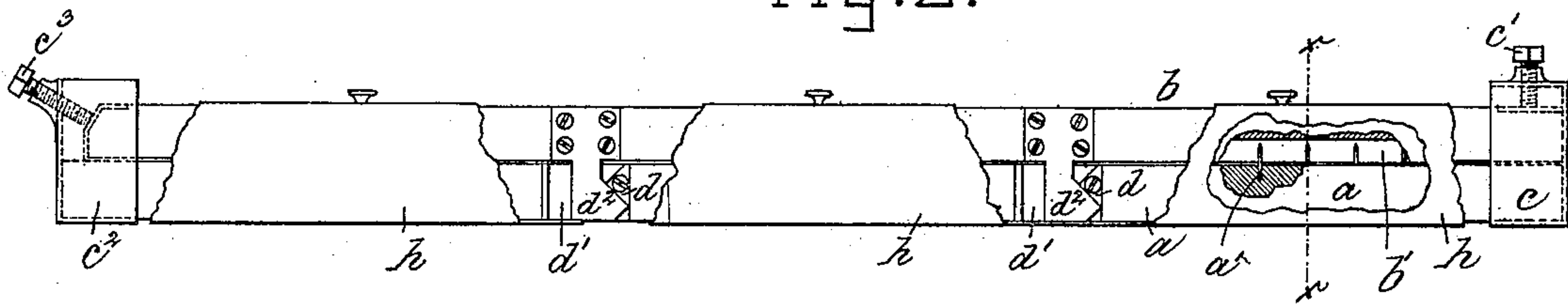


Fig:3.

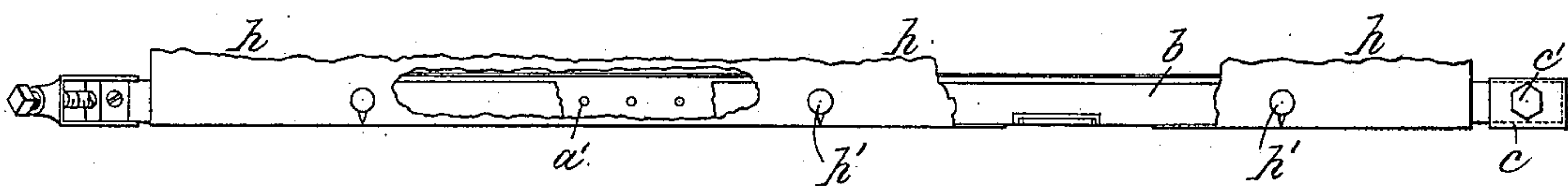
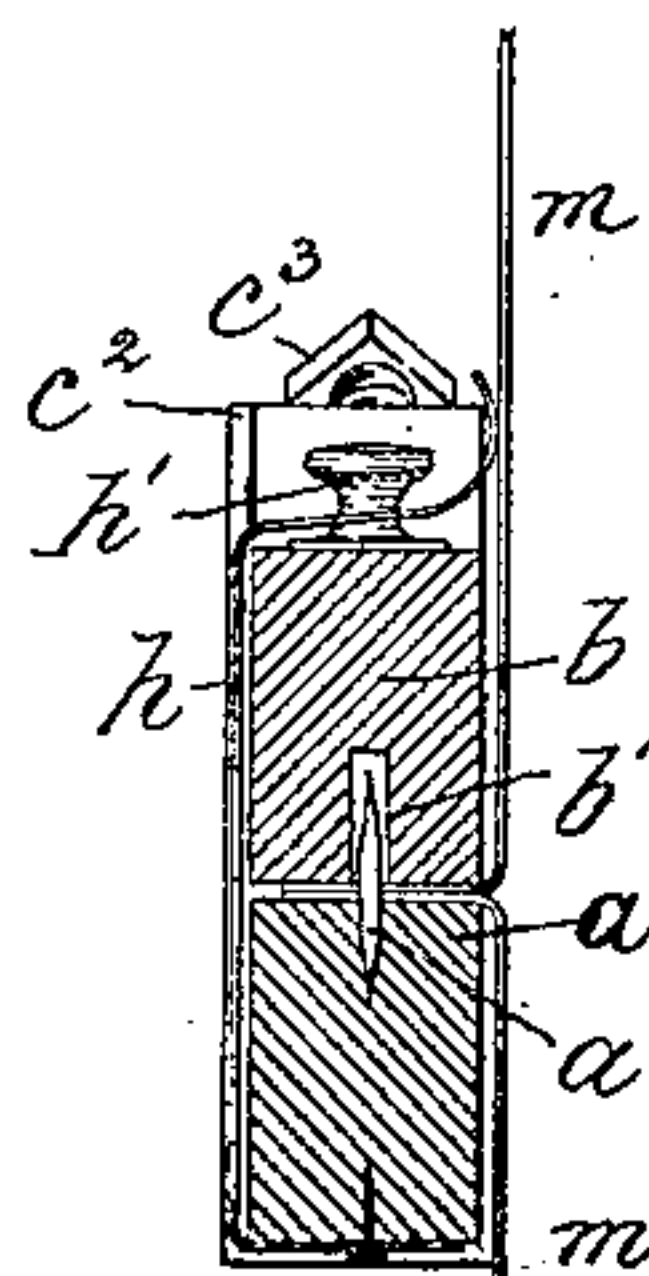


Fig:4.



Witnesses.

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UNITED STATES PATENT OFFICE.

ALFRED S. DINSMORE, OF BOSTON, MASSACHUSETTS.

CLOTH-CLAMP FOR GIGGING-MACHINES, &c.

SPECIFICATION forming part of Letters Patent No. 356,455, dated January 25, 1887.

Application filed July 27, 1885. Serial No. 172,731. (No model.)

To all whom it may concern:

Be it known that I, ALFRED S. DINSMORE, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Cloth-Clamps for Gigging, Brushing, and other Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

Woven fabric, after leaving the loom and while being prepared or finished for market, is subjected to several operations, among which may be mentioned gigging, wherein, by means of teazles or other substitutes, the knots or bunches are pulled off and a nap raised, and so also the cloth is frequently brushed. To save time and expense, it is customary, when the cloth is being so treated, to sew two or more webs end to end, joining the ends of the combined webs to "starting-pieces," which are short pieces of strong cloth, about one yard long and permanently attached at one end to the winding-rolls at each side of the gigging or brushing cylinder. The stitching of the webs requires considerable time, the waste of which I desire to avoid, and to do this I have provided a clamp which may be quickly applied to the ends of the webs to be joined, holding the same securely while the cloth is being operated upon in the machine.

Figure 1, in longitudinal sections, shows a sufficient portion of a cloth gigging or brushing machine to enable my invention to be understood, the ends of the two webs of cloth being held by my improved clamp, which is shown in end view. Fig. 2 is an enlarged side elevation of my improved clamp, part of its fibrous cover being broken out to better show the locking-prongs, while near the right of the said figure the clamp is itself broken out to show the holding teeth or pins. Fig. 3 is a top view of the clamp, part of the covering being broken out, while at the left of the center of the clamp the uppermost bar is broken partially out to show the acting-face of the other bar below it; and Fig. 4 is a section of Fig. 2 in the line *x x*.

The frame-work A, winding-rolls B B', and gigging roll or brush B² are and may be of usual construction. In practice each roll B B'

has permanently attached to it about one-half yard of strong cloth, as at 8, where it is shown by a heavy black line, which is considered as the starter, and to which is attached by sewing one end of each of the webs of cloth to be gigged or brushed, the ends of the web not so attached to the starters being joined together to thus lengthen the web to be treated. To effect this latter junction of the webs, I have provided a clamp, which I will now describe.

My clamp is composed, as herein shown, of a bar, *a*, having pins *a'*, and a bar, *b*, having a space for the reception of the sharp points of the said pins, the bars being of greater length than the width of the web. The two ends of two webs laid together, as shown in Fig. 4, are placed upon the points of the pins *a'*, and then the bar *b* is laid upon the cloth and pushed toward the bar *a* to cause the cloth to be impaled upon the said pins, as in Fig. 4, where it will be retained until the bars are separated.

To retain the bars in place one with relation to the other, I have applied to one end of the bar *a* a metallic loop, *c*, provided with a screw, *c'*, which acts as a stop, the screw being adjustable to accommodate the clamp to different thickness of cloth. The bar *b* where it receives the pins will preferably be grooved longitudinally, as shown at *b*.

The opposite end of the bar *a* has a loop, *c*², which has co-operating with it a clamping-screw, *c*³, placed preferably in diagonal position, as shown, so that as the screw is turned to force the two bars together the bar *b* will at the same time be moved somewhat longitudinally, the end of the screw acting upon one corner of the bar *b*.

A wide web of cloth, subjected to considerable strain, is liable to so pull upon the pins as to have a tendency to force the bars apart; but to obviate this I have provided the bar *a* with catches *d*, let into recesses *d'*, cut into the side of the said bar, and upon the bar *b*, I have secured hooked pieces *d*², narrower than the said recesses, so that the said hooked pieces, as the bar *b* is pushed toward the bar *a* to crowd the cloth on the pins, enter the said recesses, and thereafter, by a longitudinal movement of the bars, the hooked pieces pass under or engage the catches *d*.

I do not desire to limit my invention to the exact form or shape of hooked pieces shown.

In operation the cloth *m m* extends from the clamp in opposite directions, as in Figs. 1 and 4, the bars being at the upper side of the united webs, and in operation the clamp is wound in with the cloth upon one of the rolls, and to obviate creasing or marking the cloth by the hard corners of the clamp I have provided the latter with a cover or jacket, *h*, which is preferably of a thick soft cloth or fabric—such, for instance, as felt or canton flannel—the cover being tacked to one edge of the bar *a* and buttoned over buttons *h'* of the bar *b*.

Instead of the “starter” referred to, the rolls *B B'* may have hooks or pins 10, as shown in Fig. 1, upon which to catch one end of each length of cloth *m m*.

I claim—

1. The clamp composed of a bar, *a*, having pins, and bar *b*, recessed or grooved for the reception of the pins, loops to receive the ends of the bars, and clamping-screws in said loops to bind the bars and loops together, substantially as described.

2. The pin-carrying bar, the grooved or recessed bar, the loops to receive the ends of said bars, clamping-screws in said loops to hold the bars at their ends, and intermediate connecting devices, substantially as described.

3. The bar *a*, having pins and the attached catches, combined with the grooved or recessed bar and its attached hooked pieces to engage the said catches by a longitudinal movement of one of the bars with relation to the other, and with means, substantially as described, to hold the ends of the bars together, substantially as set forth.

4. The bar *a*, provided with pins to enter the cloth, and the bar *b*, grooved or recessed to receive the said pins, combined with the hooks and catches located one on one and the other on the other bar, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED S. DINSMORE.

Witnesses:

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B. J. NOYES.