

(No Model.)

J. HAMPSON.
LOOM HARNESS FOR WEAVING LENO GOODS.

No. 572,007.

Patented Nov. 24, 1896.

FIG. 1.

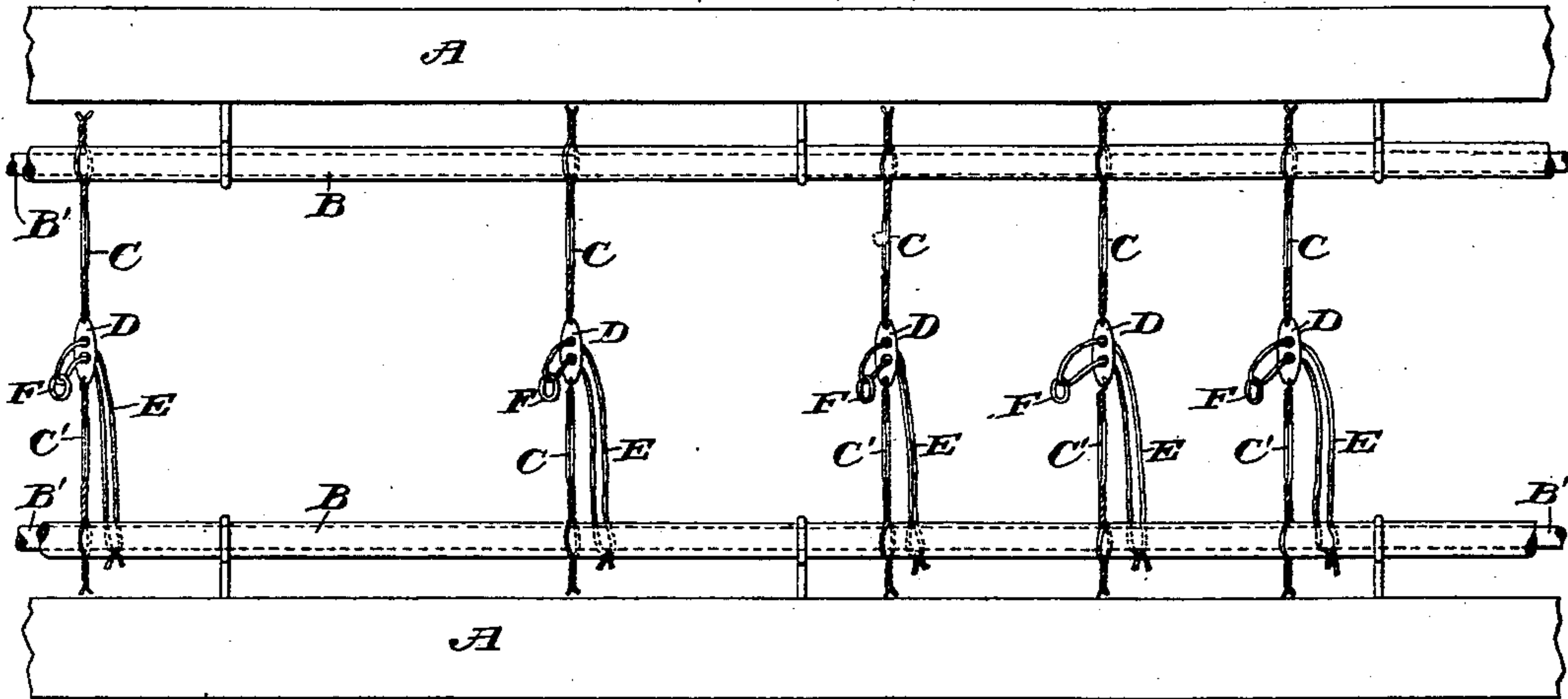


FIG. 2.

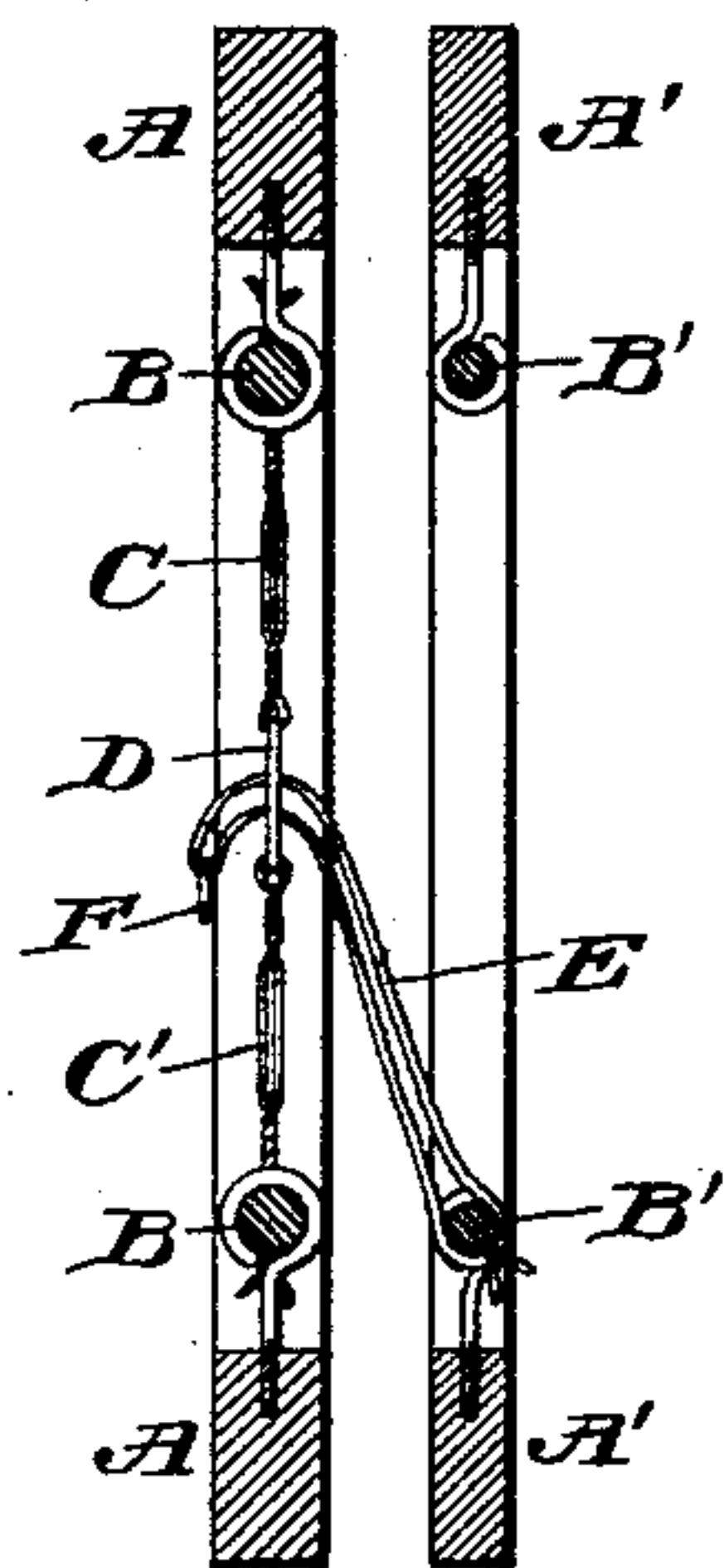
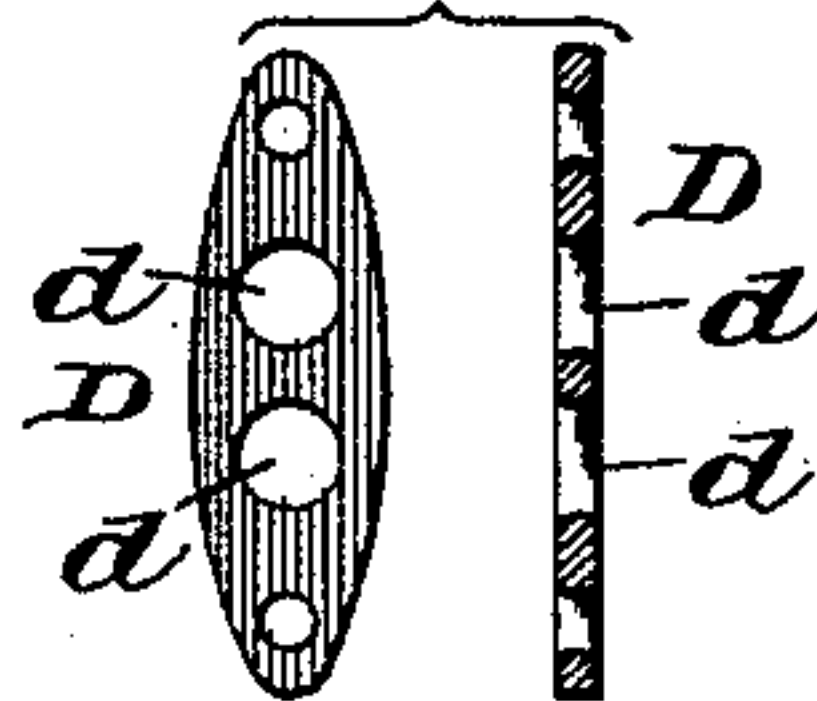


FIG. 3.



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JOSEPH HAMPSON, OF FALL RIVER, MASSACHUSETTS.

LOOM-HARNESS FOR WEAVING LENO GOODS.

SPECIFICATION forming part of Letters Patent No. 572,007, dated November 24, 1896.

Application filed April 28, 1896. Serial No. 589,443. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH HAMPSON, a citizen of Great Britain, residing at Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Loom-Harness for Weaving Leno Goods; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to looms for weaving figured goods, more especially leno muslins. These goods are usually woven with several harnesses, in some of which the warp-threads do not pass directly through the leashes, but are run through the bight of a double cord, which is rove through the eye in the leash and is attached to an adjacent heddle. These cords are called "doups," and serve to pull down certain warp-threads at each pick of the loom, so that the shuttle will pass over instead of under said threads, as the figure demands. The varying action of the heddles causes the doups to work back and forth through the eyes of the leashes and the warp to pull through the doups, so that the doups break very frequently, the usual life of one being not more than a day or two, and sometimes much less. The material of which they are made is the best, and they are quite expensive, so that the loss of material and of the time required to make repairs is excessive and costly. My invention aims to avoid this delay and expense by improving the construction of the leashes and the doups.

My invention is embodied in the construction and arrangement of parts hereinafter described.

In the accompanying drawings, Figure 1 is a front elevation of a heddle-frame provided with my improved doup attachment. Fig. 2

is a cross-section showing the manner of connecting the doups. Fig. 3 shows forms of guide-plates for the doups.

The heddle-frame A has near its top and bottom the metallic rails B, to which are attached the upper and lower ends of the respective strands C C' of the leashes, which are preferably made of wire. The adjoining ends of the strands C C' are fastened to guide-plates D of rigid material, such as metal, bone, ivory, celluloid, hard rubber, glass, or the like. Each plate contains two enlarged apertures or eyes *d*, which are arranged between and in alinement with the end apertures of the plate. Said eyes are provided with rounded edges to prevent wear of the doups in working through them.

The doups E are made of cord, preferably doubled and rove through the eyes in the guide-plates. The ends of the doup are secured to a rail B' on an adjoining heddle-frame A' which has no leashes.

In the bight of the doup is a loose ring F, of rigid material, such as metal, hard rubber, or the like, through which the warp-thread is passed.

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

The improved doup apparatus hereinbefore described, which consists of a series of plates D, having two apertures in the middle portion, the doups, passing through said apertures, and having a warp-thread ring attached to their looped ends, the leashes securing said plates, and the heddle-frames, to one of which the ends of the doups are attached, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH HAMPSON.

Witnesses:

ARBA N. LINCOLN,
ARMEL L. ANDET.