

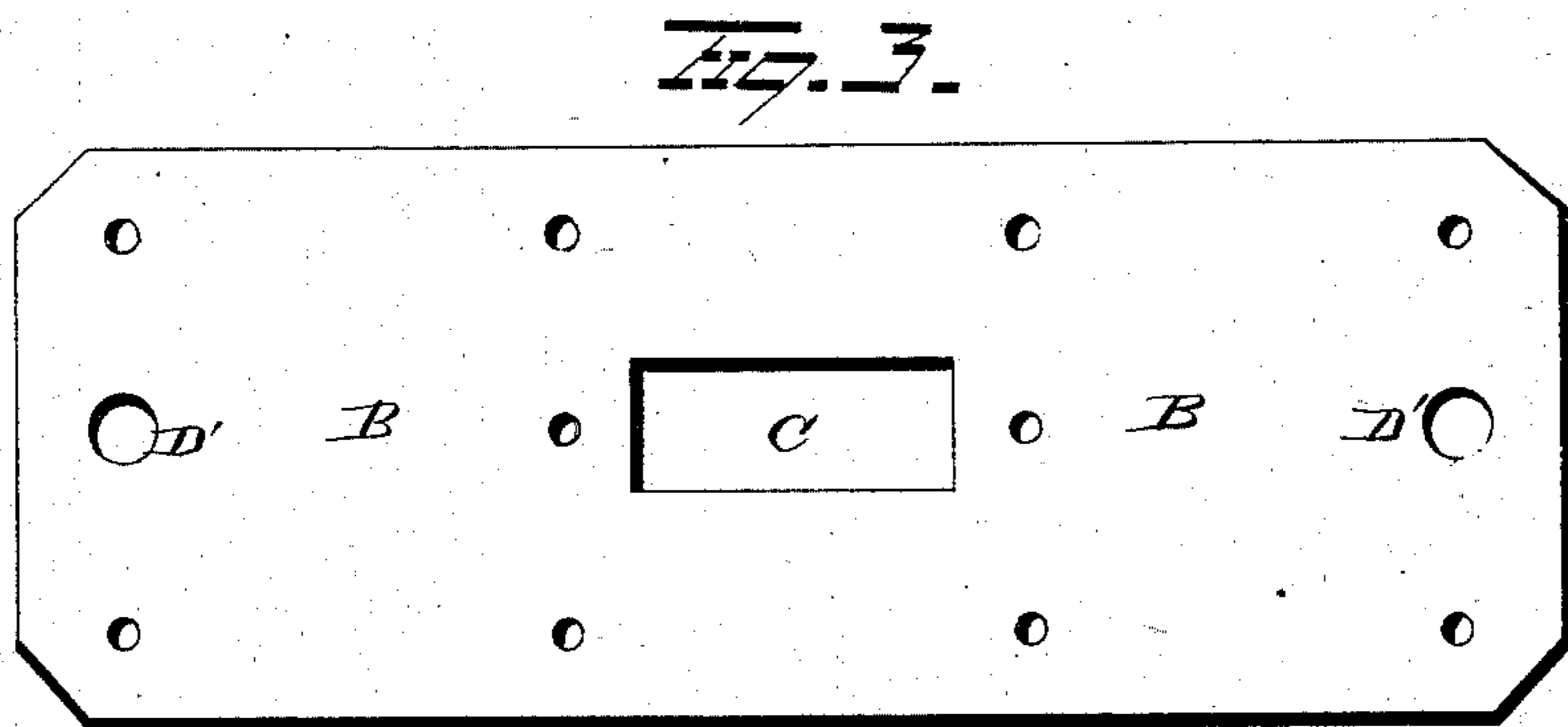
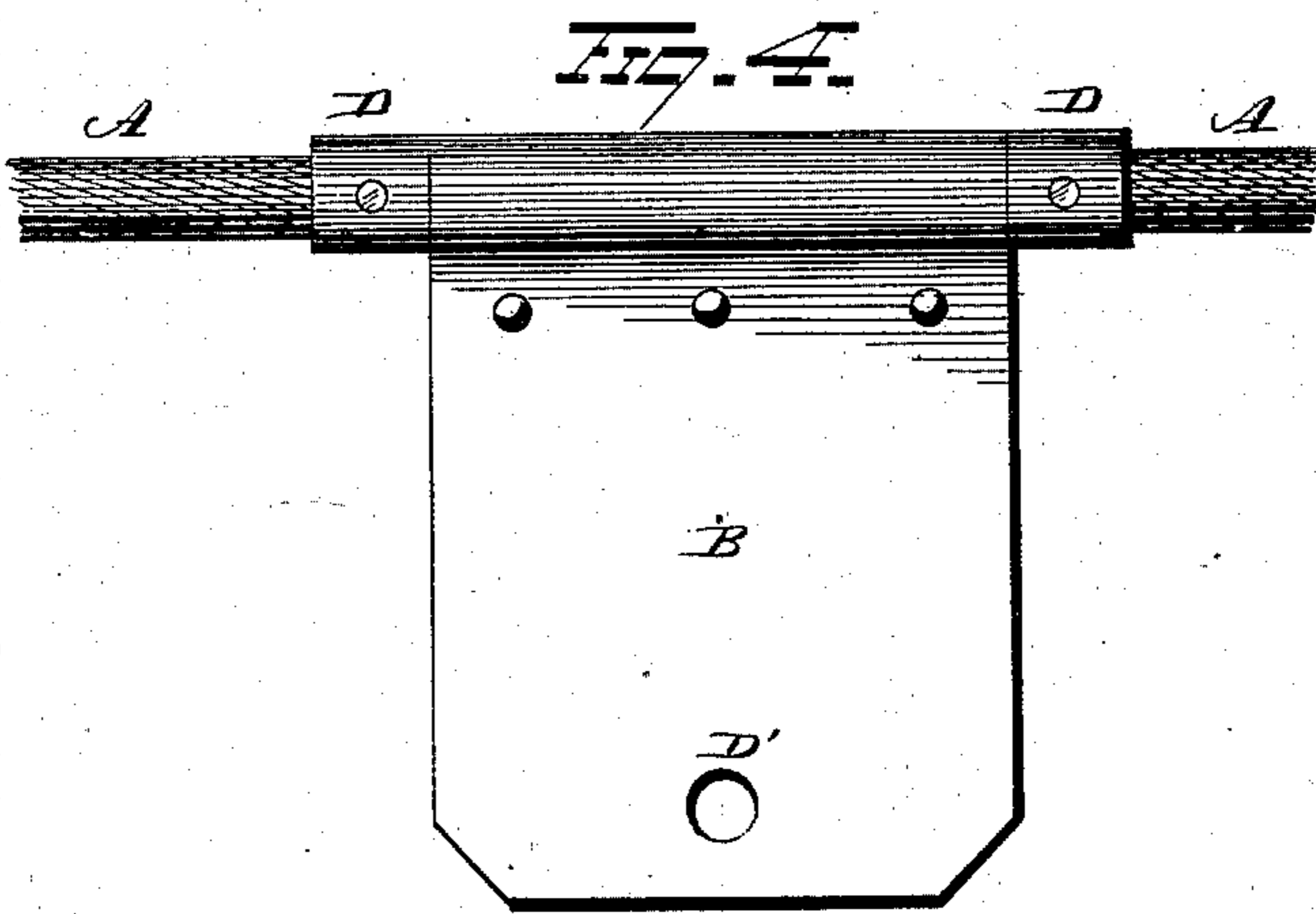
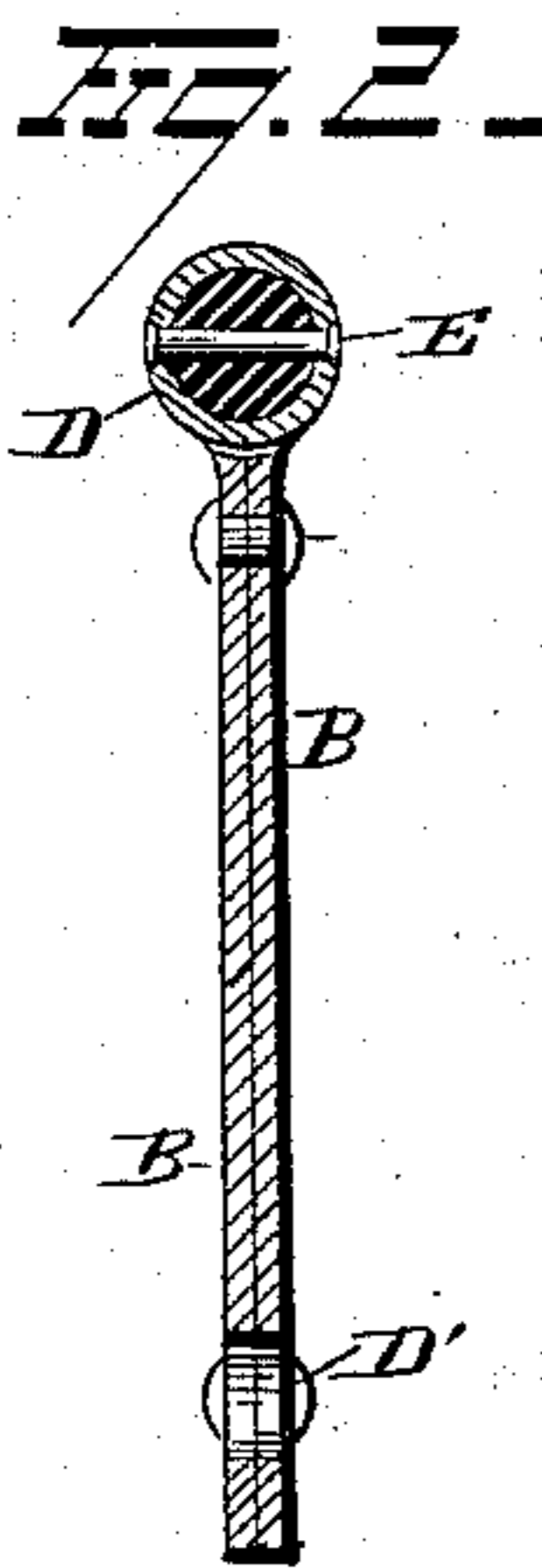
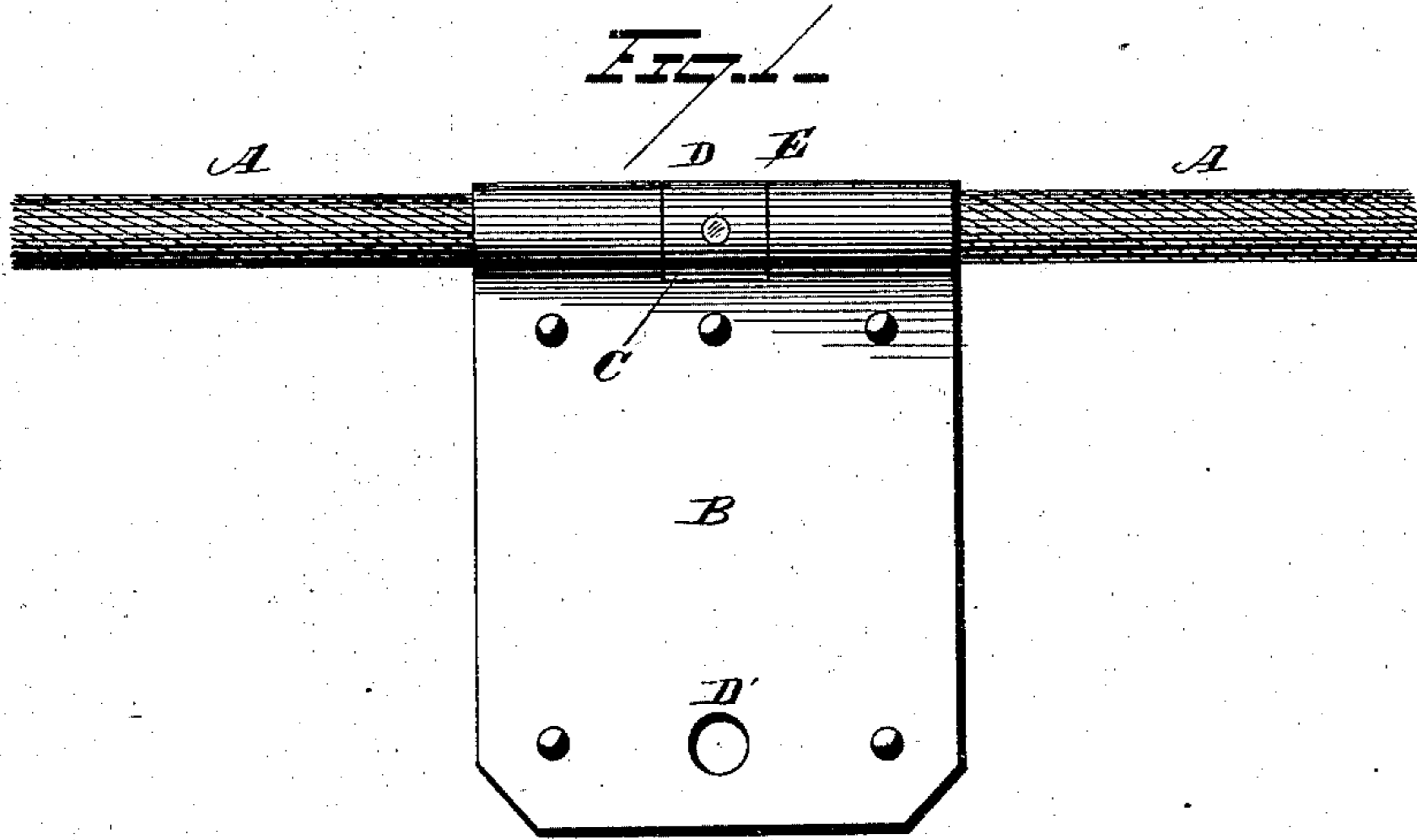
(No Model.)

C. H. ABBOTT & A. W. HARRINGTON.

CLIP FOR ROPE TRAMWAYS.

No. 255,752.

Patented Apr. 4, 1882.



WITNESSES:

E. J. Nottingham
Herman Moran.

INVENTORS:

C. H. Abbott.
A. W. Harrington.
By H. A. Sumner ATTY-

UNITED STATES PATENT OFFICE.

CHARLES H. ABBOTT AND ALBERT W. HARRINGTON, OF CHAFFEE, COLO.

CLIP FOR ROPE TRAMWAYS.

SPECIFICATION forming part of Letters Patent No. 255,752, dated April 4, 1882.

Application filed December 24, 1881. (No model.)

To all whom it may concern:

Be it known that we, CHARLES HENRY ABBOTT and ALBERT WHITE HARRINGTON, of Chaffee city, in the county of Chaffee and State of Colorado, have invented certain new and useful Improvements in Clips for Rope Tramways; and we do hereby 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 pertains to make and use the same.

Our invention relates to an improvement in clips for ropeways, the object of the same being to provide a cheap, strong, and durable clip for supporting a weight or load, and so secured to the traveling rope that it can pass between the supporting-pulleys in a vertical line, thereby permitting the load to be suspended directly below the rope without the intervention of angular rods.

With these ends in view our invention consists in certain details in construction and combinations of parts, as will be more fully explained, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side view of our improvement. Fig. 2 is a transverse vertical section of the same. Fig. 3 represents the clip-blank, and Fig. 4 is a modification.

A represents the wire-rope, chain, &c., which latter can be supported or suspended in any suitable manner between pulleys, the latter being so arranged that the clip can pass between them while in a vertical position.

B represents the sheet-metal clip-blank, which latter can be of any desired shape and size, and is provided centrally with a rectangular opening, C, which latter, when the clip is folded or bent around the rope, comes in the center of the lap, leaving the rope exposed at that point. Before the clips B are secured on the rope A a metallic collar, D, is placed on the said rope and secured thereto by one or more rivets, E, which pass completely through the said collar and rope. This collar D is about as long as the rectangular opening C is wide, so as to completely fill up the space in the clip and prevent any sliding movement thereof. After the collar D has been secured in position the clip is bent around the rope A, with the collar D occupying the opening C, and the two sides thereof are riveted or other-

wise secured together just below the lap to prevent any up-and-down movement of the clip. The lower or free end of each clip is provided with a hole, D', or other suitable means for attaching the bucket or car thereto.

By constructing and attaching the clip as above described the slipping thereof with its attached load in passing up or down declivities or steep inclines is avoided, while at the same time it is allowed to turn freely on the rope and allow the rope to turn freely in it, so as to enable the car or bucket to always hang pendent or otherwise.

In the modification shown in Fig. 4 the collar D, secured as above described, is dispensed with, and instead thereof two collars, D, are secured to the ropes A on opposite sides of the clip B and answer all the necessary purposes.

Instead of securing the collars D to the rope as above described, they can be brazed or shrunk on the cable and perform the same function. Instead of providing the clip with two thicknesses of metal throughout its entire length, as shown in the drawings, the rectangular opening C can be formed near one end, so that when the clip is wrapped around the rope the end nearest the opening C will just project below the lap sufficiently to allow them to be untied; but we prefer the construction shown, as it is stronger and is not so liable to become distorted in shape from hard and continued usage.

It is evident from the foregoing that slight changes in the construction and manner of securing the different parts of our clip might be resorted to without departing from the spirit and scope of our invention; and hence we would have it understood that we do not limit ourselves to the exact construction of parts shown and described, but consider ourselves at liberty to make such changes as come within the spirit and scope of our invention.

Having fully described our invention, what we claim as new and desire to secure by Letters Patent, is—

1. The combination, with a suitable traveling rope, of a metallic clip bent in the form shown and adapted to be loosely secured to the said traveling rope by one or more collars, substantially as shown.

2. The combination, with a suitable travel-

ing rope, of a metallic clip provided with a rectangular opening and bent in the form shown and a collar firmly secured to the said rope and adapted to occupy the said rectangular opening in the clip and hold it against displacement, substantially as set forth.

3. The combination, with the rope A, of the clip B, bent in the form shown, and having the opening C formed therein, and provided
10 with means for securing a bucket or car thereto, and the collar D, rigidly secured to the said

rope, and adapted to occupy the opening C of the clip B, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses. 15

CHARLES HENRY ABBOTT.
ALBERT WHITE HARRINGTON.

Witnesses:

FRANK C. BOWEN,
A. W. BRIGHT.