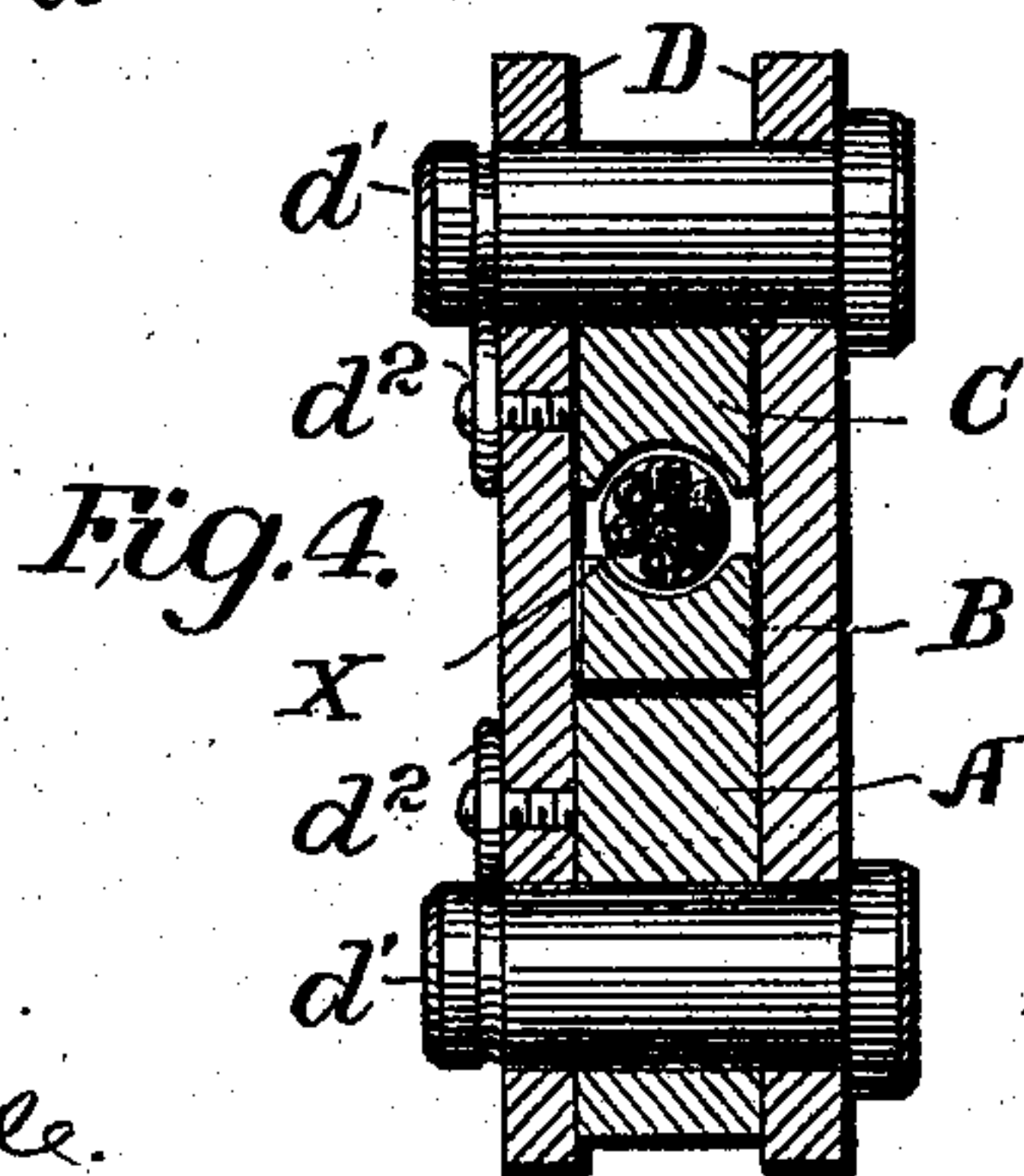
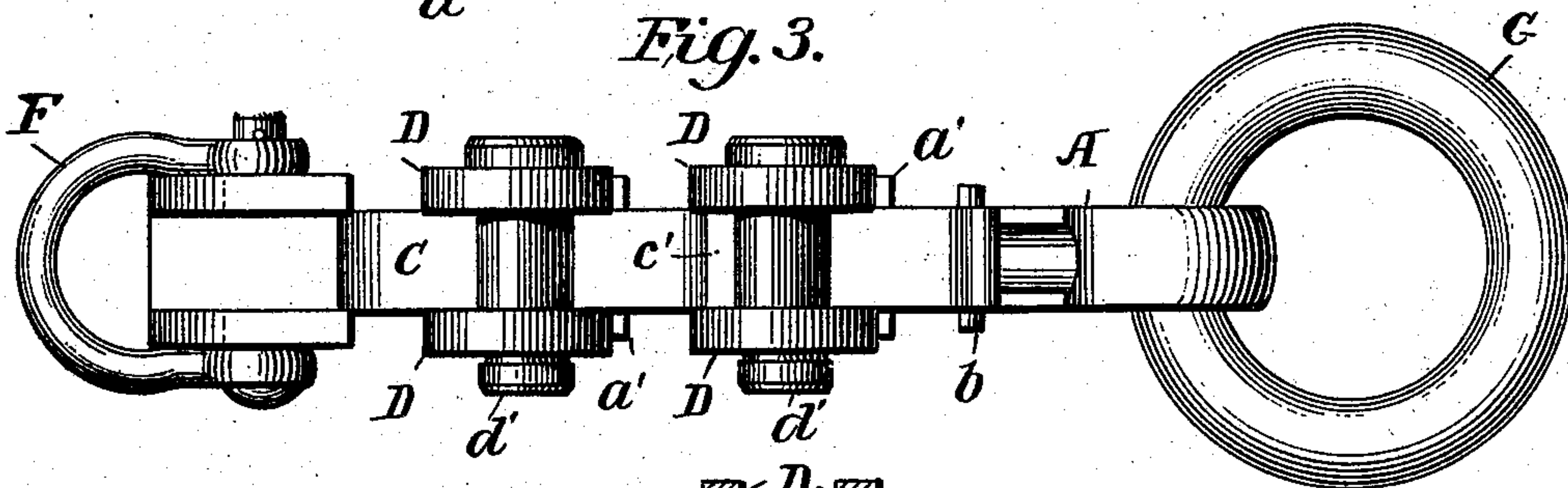
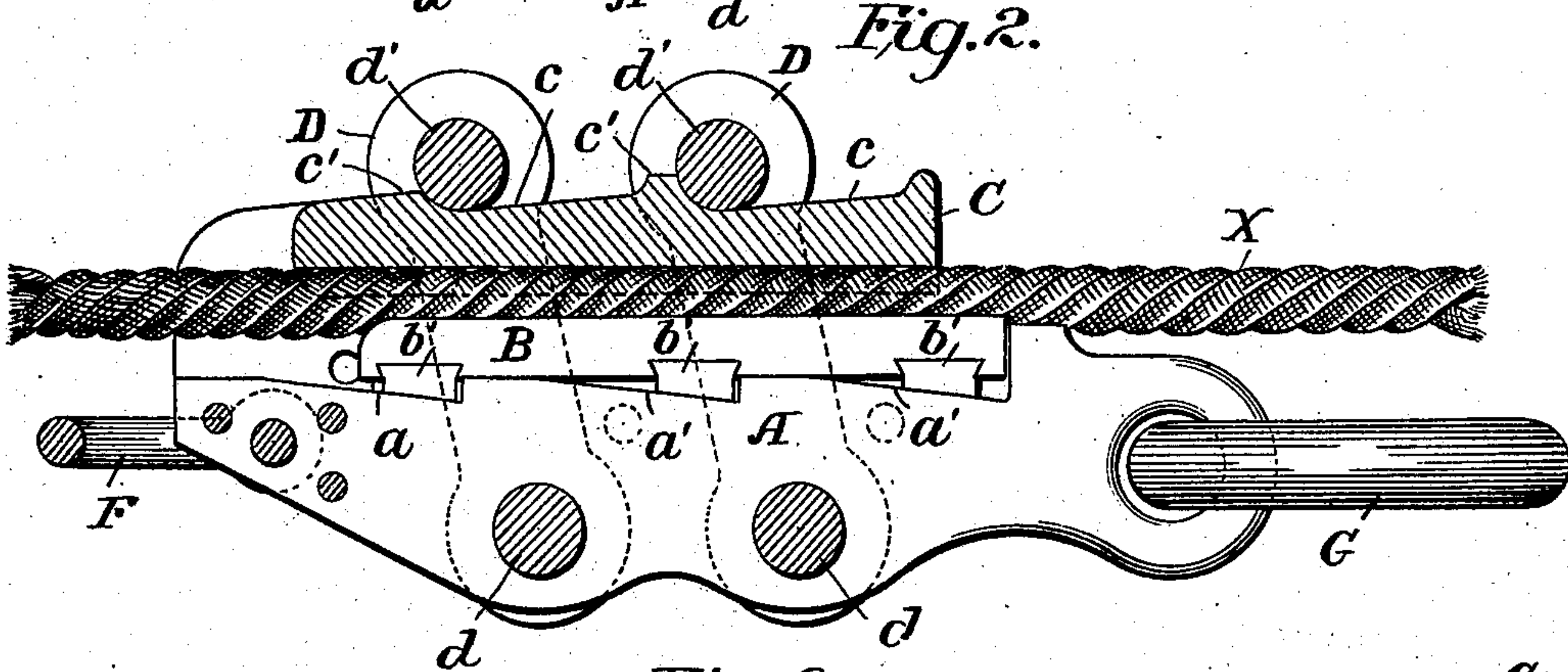
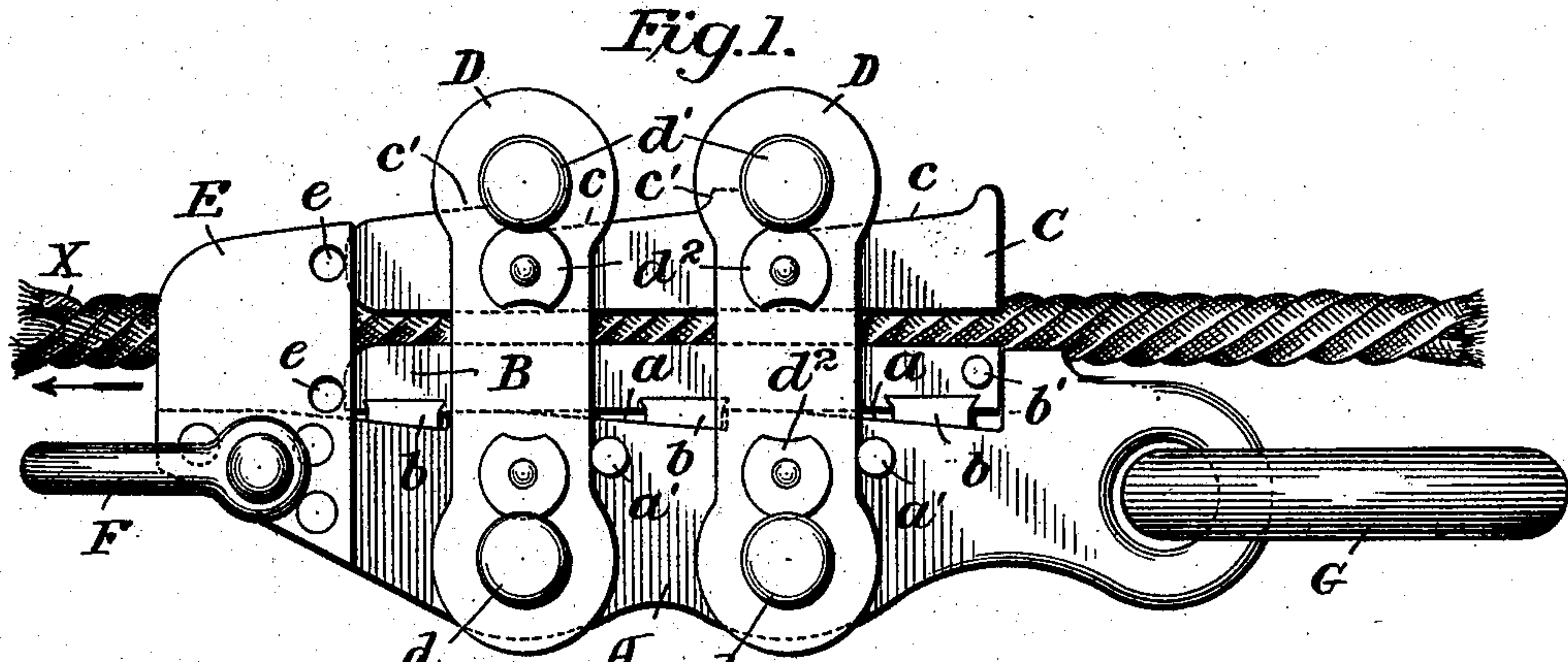


J. H. COLBY.
RELIEF GRIP FOR CABLES.
APPLICATION FILED NOV. 1, 1907.

899,786.

Patented Sept. 29, 1908.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN H. COLBY, OF LUFFENHOLTZ, CALIFORNIA.

RELIEF-GRIP FOR CABLES.

No. 899,786.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed November 1, 1907. Serial No. 400,312.

To all whom it may concern:

Be it known that I, JOHN H. COLBY, a citizen of the United States, residing at Luffenholtz, in the county of Humboldt and State of California, have invented certain new and useful Improvements in Relief-Grips for Cables, of which the following is a specification.

My invention relates to gripping devices especially designed and adapted for connecting a log or load of logs to a moving table for transportation to a point whence they may be shipped on the railroad.

The principal object of the invention is to provide a device which will act automatically to grip the cable when the latter starts, and also to automatically release its grip upon the cable when the attached load of logs begins to travel by gravity faster than the cable moves. This and other objects will more fully appear from a consideration of the following description, taken in connection with the accompanying drawings, in which—

Figure 1 is a side view in elevation of a device constructed according to my invention; Fig. 2 is a longitudinal section through the same; Fig. 3 is a plan view of the same; and Fig. 4 is a cross-section through the same taken between the links.

Referring to the drawings, A is the body portion formed with a series of inclined surfaces *a*.

B is a grip block capable of longitudinal movement and having friction pieces *b* engaging inclined surfaces *a*. A second grip block C coöperates with block B, and is also capable of longitudinal movement. Block C is provided, on its upper surface, with inclined surfaces *c* at the forward and lower end of each of which is an abutment *c'*.

In order to exert gripping pressure upon the blocks B and C, I provide what I term a tilting link mechanism. In the form shown, this consists of two links D, each pivoted by a pin *d* to body portion A and extending up and over the grip blocks. Pins *d'*, which constitute the upper ends of links D, and also pins *d*, are locked to the side plates of the links by turn buttons *d''* and rest against abutments *c'*.

Guide plates E for the grip blocks are secured to the forward end of the body portion, and are provided with perforations *e* for stop pins when necessary. At this end also I provide a stop shackle F. At the rear end

of the body portion is provided ring G to which the log or load of logs is attached.

a' are back stop pins for links D, and *b'* is a stop pin for grip block B.

X is the cable driven by any suitable power.

The operation is as follows: The links D in their upright position against back pins *a'* exert no pressure upon grip block C. Suppose now a log or load of logs is attached to ring G, and cable X started in the direction of the arrow. By friction with the cable, grip block C is drawn forward and tilts the links D. This shortens the right line distance between the ends *d'* of the links and the body portion, and causes pressure upon block C which grips the cable. If the load should travel faster than the cable, the links are tilted back again and the grip on the cable relieved. It will thus be seen that the gripping and relieving action is entirely automatic.

When the grip blocks become worn, or the device is used on a small cable, the parts will automatically adjust themselves to the changed conditions by reason of the inclined surfaces *a* and *c*.

It will be understood that the number of links may be varied, and many other changes made in the details of construction without departing from the scope of the invention.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a gripping device, a body portion, co-operating grip blocks formed to engage a cable therebetween, and parallel tilting links each pivoted to said body portion and exerting pressure to bring said grip blocks into gripping action, substantially as described.

2. In a gripping device, a body portion, co-operating grip blocks formed to engage a cable therebetween, and parallel tilting links each embracing said grip blocks and pivoted to said body portion, said link mechanism exerting pressure to bring said grip blocks into gripping action automatically when the cable starts, substantially as described.

3. In a gripping device, a body portion, co-operating grip blocks formed to engage a cable therebetween, parallel tilting links embracing said grip blocks and pivoted to said body portion, and stops to limit the movement of said links in one direction, substantially as described.

4. In a gripping device, a body portion, co-

operating grip blocks formed to engage a cable therebetween, and parallel acting pressure means comprising links pivoted to said body portion and engaging a grip block at points the same distance apart as said pivots to bring said blocks into gripping action when tilted, substantially as described.

5. In a gripping device, a body portion, a grip block upon said body portion, a second grip block capable of longitudinal movement and having an abutment, and link mechanism pivoted to said body portion and resting against said abutment, said link mechanism being tilted upon forward movement of said second grip block and exerting pressure thereon, substantially as described.

6. In a gripping device, a body portion formed with a series of inclined surfaces, a grip block capable of longitudinal movement and having friction parts engaging said surfaces, a cooperating grip block, and means for exerting pressure upon said second grip block to bring the same into gripping action, substantially as described.

7. In a gripping device, a body portion formed with a series of inclined surfaces, a grip block capable of longitudinal movement and having friction parts engaging said surfaces, a second grip block capable of longitudinal movement, and tilting mechanism pivoted to said body portion and exerting pressure to bring said grip blocks into gripping action, substantially as described.

8. In a gripping device, a body portion, cooperating grip blocks formed to engage a cable therebetween, tilting link mechanism comprising links having pivots connecting with said body portion and engaging one of said grip blocks, said pivots being grooved at their outer ends, and turn buttons on said links engaging the grooves of said pivots, substantially as described.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JOHN H. COLBY.

Witnesses:

EDMUND BOND,
J. H. G. WEAVER.