

(No Model.)

G. L. WEISS.  
DRAFT RIGGING FOR CARS.

No. 569,695.

Patented Oct. 20, 1896.

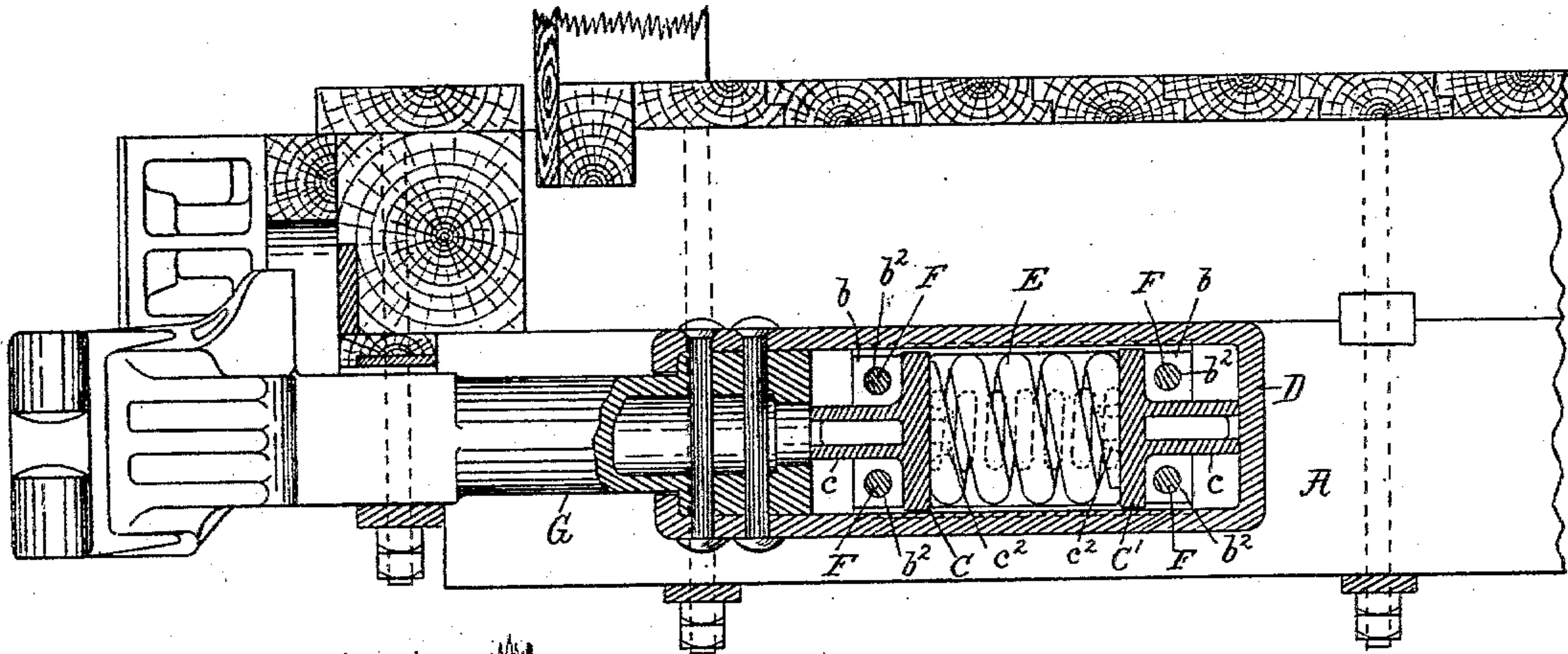


Fig. 1

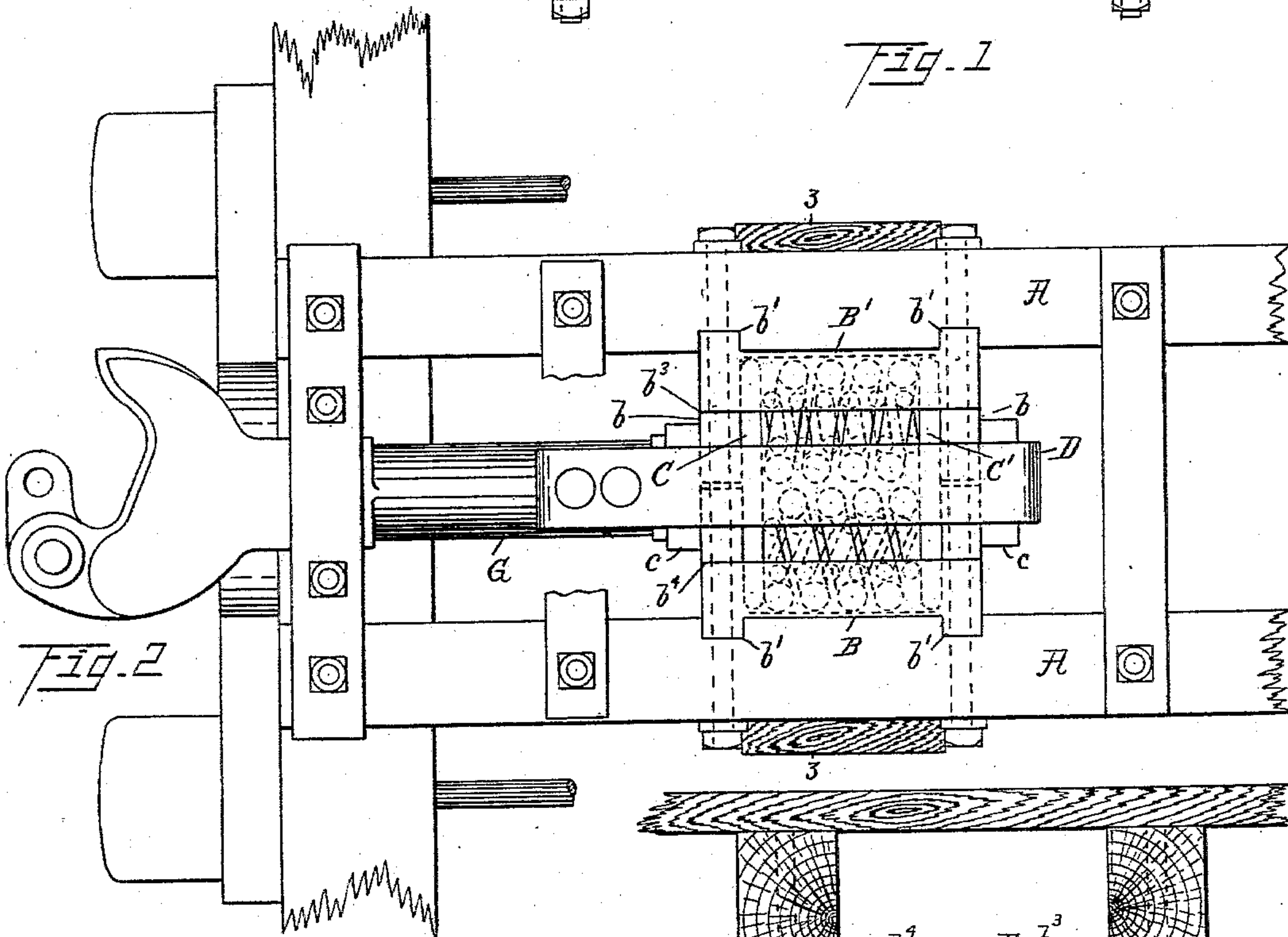


Fig. 2

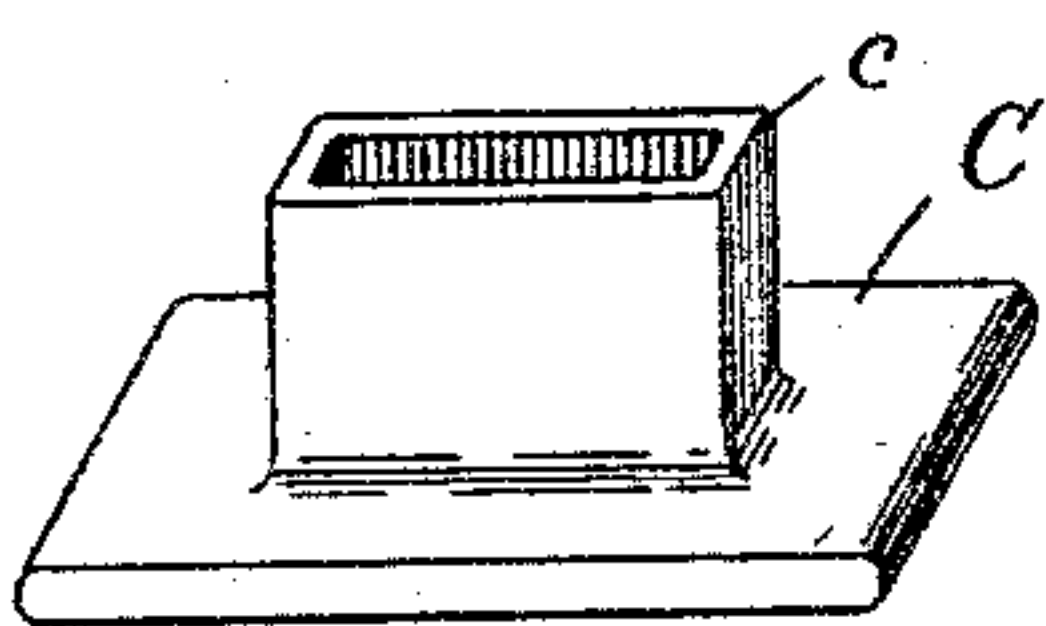


Fig. 4

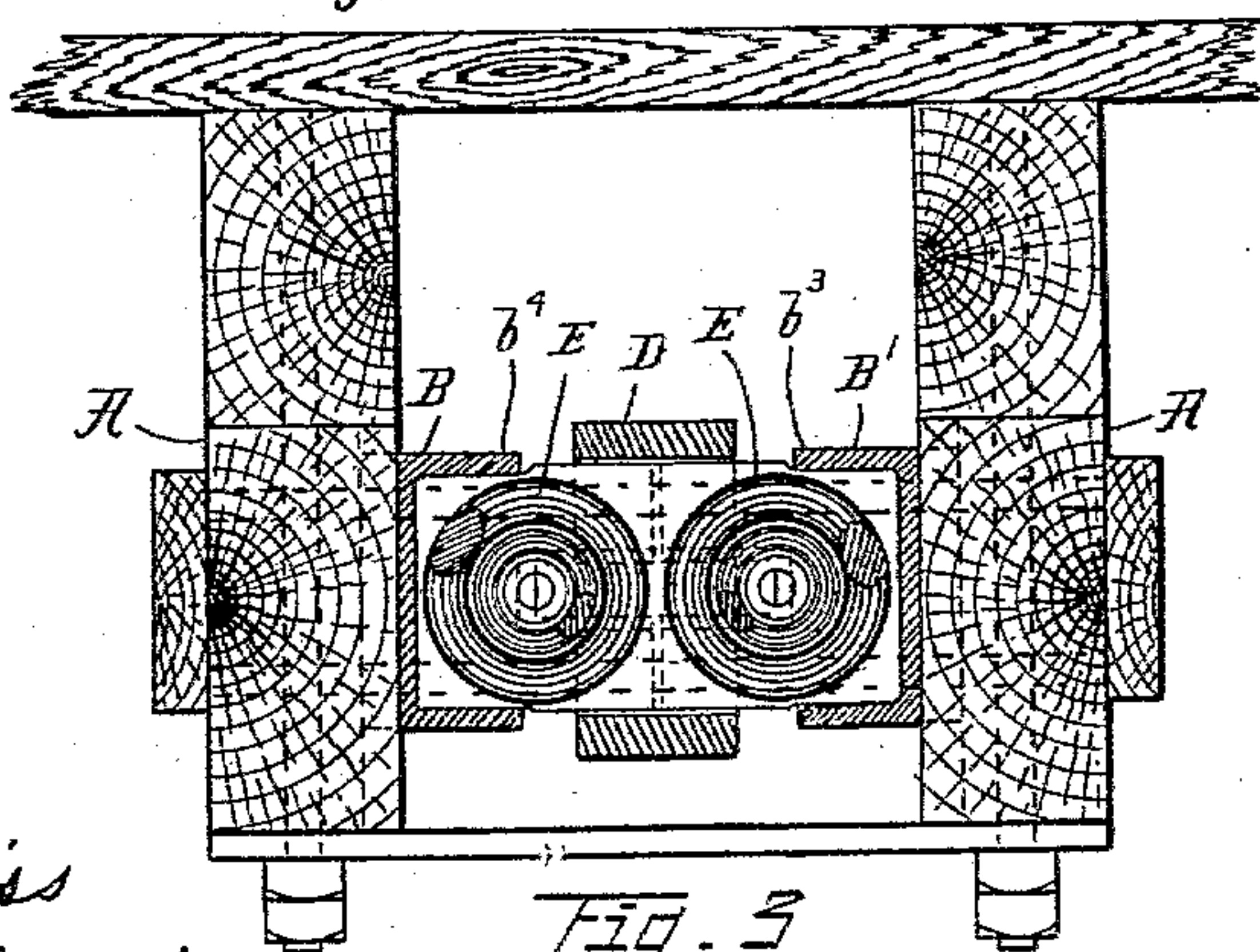


Fig. 3

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## DRAFT-RIGGING FOR CARS.

SPECIFICATION forming part of Letters Patent No. 569,695, dated October 20, 1896.

Application filed March 19, 1896. Serial No. 584,005. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE L. WEISS, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Draft-Rigging for Cars; and I 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 appertains to make and use the same.

My invention relates to the class of draft-rigging for cars in which a spring or springs are employed to cushion the shocks or jars and to take up the strain incident to pushing and pulling the cars through the draw-bar.

The object of the invention is to provide a strong, durable, and inexpensive device of the described character, which may be securely fastened to the draft-timbers, and which includes in its construction two springs set side by side and adapted to act conjointly to effect the desired result both in pulling and buffing the car.

The invention which is hereinafter described consists in the novel construction and combination of the parts constituting the device, which are definitely pointed out in the claims.

In the drawings, Figure 1 is a central longitudinal vertical sectional view. Fig. 2 is an inverted plan view. Fig. 3 is a transverse section on line 3 3 of Fig. 2, and Fig. 4 is a perspective view of one of the follower-plates.

Referring to the parts by letters, A A represent the draft-timbers of a car, to which the draft-rigging hereinafter described is connected.

B B' represent the two halves or twin sections of a casing in which the springs E E are confined. Each section has at its ends the inwardly-directed ends  $b$   $b$ , which serve as buffer-blocks for said springs. These ends are also extended outward, forming the external vertical ribs  $b'$   $b'$ , which are let into the draft-timbers, as shown. In each end  $b$  and rib  $b'$  are formed two holes  $b^2$  for the transverse bolts F F. These bolts, when the two sections B B' are placed in the proper relation to each other, pass through said holes  $b^2$  in both sections and through the draft-timbers, thereby fastening said sections in place.

Within the case and at the ends thereof are the two follower-plates C C', which are approximately twice as wide as they are high. The two springs E E set side by side within the case, and they are slightly compressed between said follower-plates, being held in place by the lugs  $c^3$  (shown in dotted lines) on the inner faces of said plates. Each plate is formed with an integral stem  $c$ , rectangular in cross-section, being longer from side to side than from top to bottom, wherefore it acts as a truss, strengthening the follower-plate, so that it is not liable to be broken by the pressure of the two springs E E against opposite sides of the middle of said plate. The stems are cored out, so as to lighten them without materially weakening them or diminishing their capacity to perform their functions. These stems project through correspondingly-shaped holes in the end plates  $b b$ , and because of the shape of said holes and stems a sufficient body of metal remains between the stem and top and bottom of the casing for the bolt-holes  $b^2$  to be formed in without materially weakening said ends.

A strap D passes around (over and under) the casing and follower-plates, and its front end embraces and is secured to the rear end of the draw-bar G. This strap rests upon the ends of the casing. Its rear end is normally in contact with the stem  $c$  of the rear follower-plate C', and the rear end of the draw-bar is normally in contact with the stem of the front follower-plate C.

When the draw-bar is pulled forward, the rear follower-plate is pushed forward in the case, thereby compressing both of the springs E E until the end of the strap strikes the casing. When the draw-bar is pushed backward, it pushes the front follower-plate, thereby compressing both springs until said draw-bar strikes the casing.

On the upper and lower edges of both of the casing-sections are the flanges  $b^3 b^4$ , which project inwardly toward each other and prevent the removal, accidentally or otherwise, of the springs from the casing.

Having described my invention, I claim—

1. In draft-rigging for railway-cars, the combination of a casing having end plates  $b b$  and outwardly-extending ribs  $b' b'$  in line with said end plates, said plates and ribs having



transverse holes  $b^2$   $b^2$  for the retaining-bolts, follower-plates within the casing at both ends thereof having integral stems which project through said end plates between the bolt-  
5 holes, two springs side by side within said case, between said follower-plates, a strap which embraces said casing, follower-plates and springs, and the draw-bar connected with the front end of said strap, substantially as  
10 and for the purpose specified.

2. In draft-rigging for railway-cars, the combination of a casing composed of two twin sections, each having end buffer-plates  $b$   $b$  at both ends, said end plates at each end of both  
15 sections having two transverse horizontal bolt-holes, bolts in said holes, the follower-plates  $C$   $C$  within said casing at both ends

thereof, having integral stems, wider than they are high, which extend out through the end plates between the bolt-holes, two springs  
20 set side by side within said casing, flanges upon the upper and lower edges of said casing-sections which prevent the removal of the springs, a strap which embraces said casing, follower-plates and springs, and the draw-bar  
25 secured to the front end of said strap, substantially as and for the purpose specified.

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

GEORGE L. WEISS.

Witnesses:

E. L. THURSTON,

L. F. GRISWOLD.