

G. C. HUGG.
Car Coupling.

No. 103,618.

Patented May 31, 1870.

Fig. 1

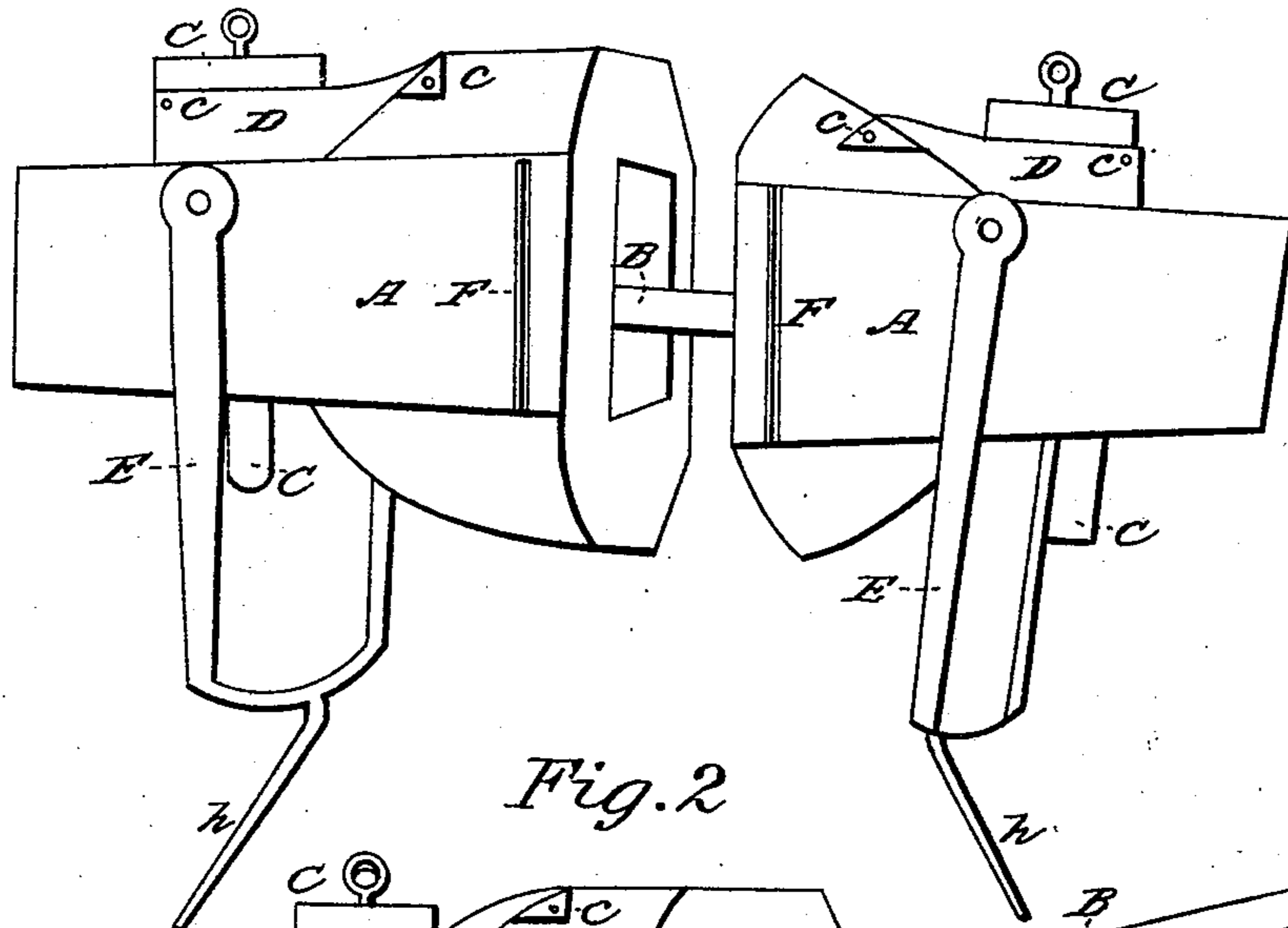


Fig. 2

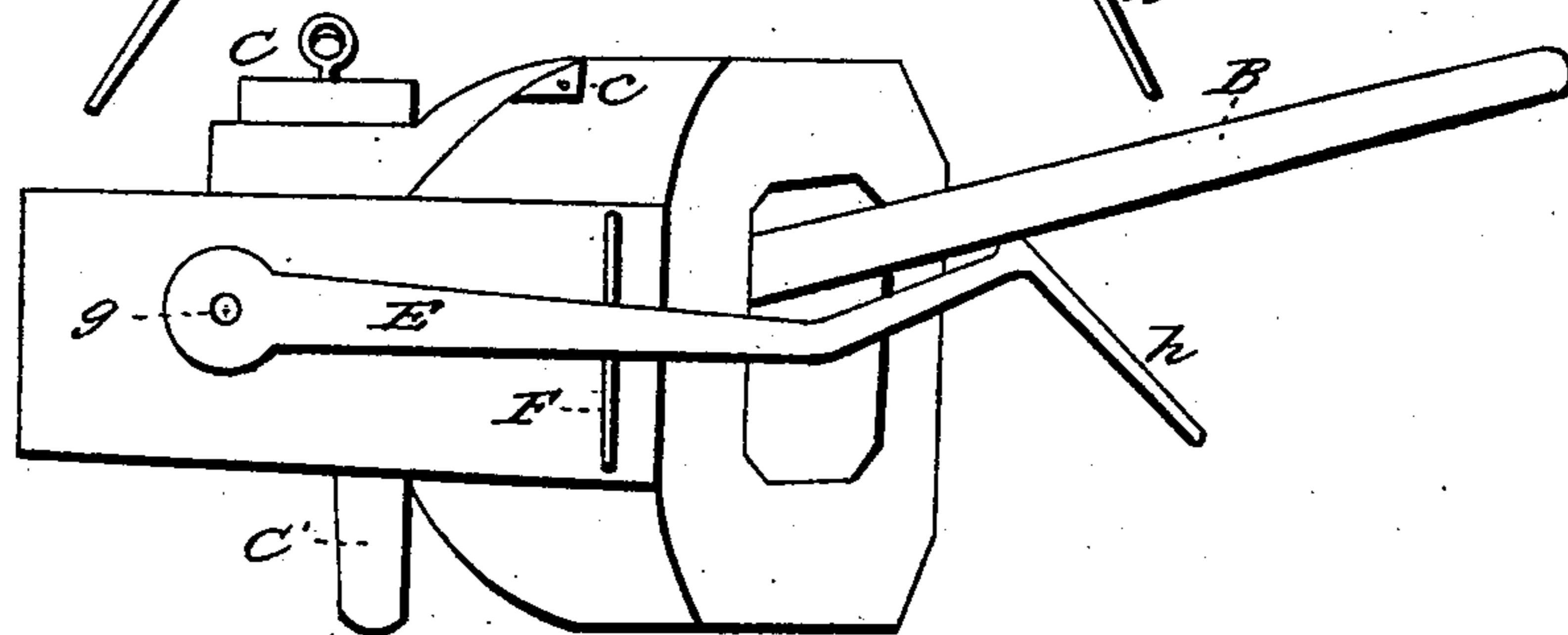
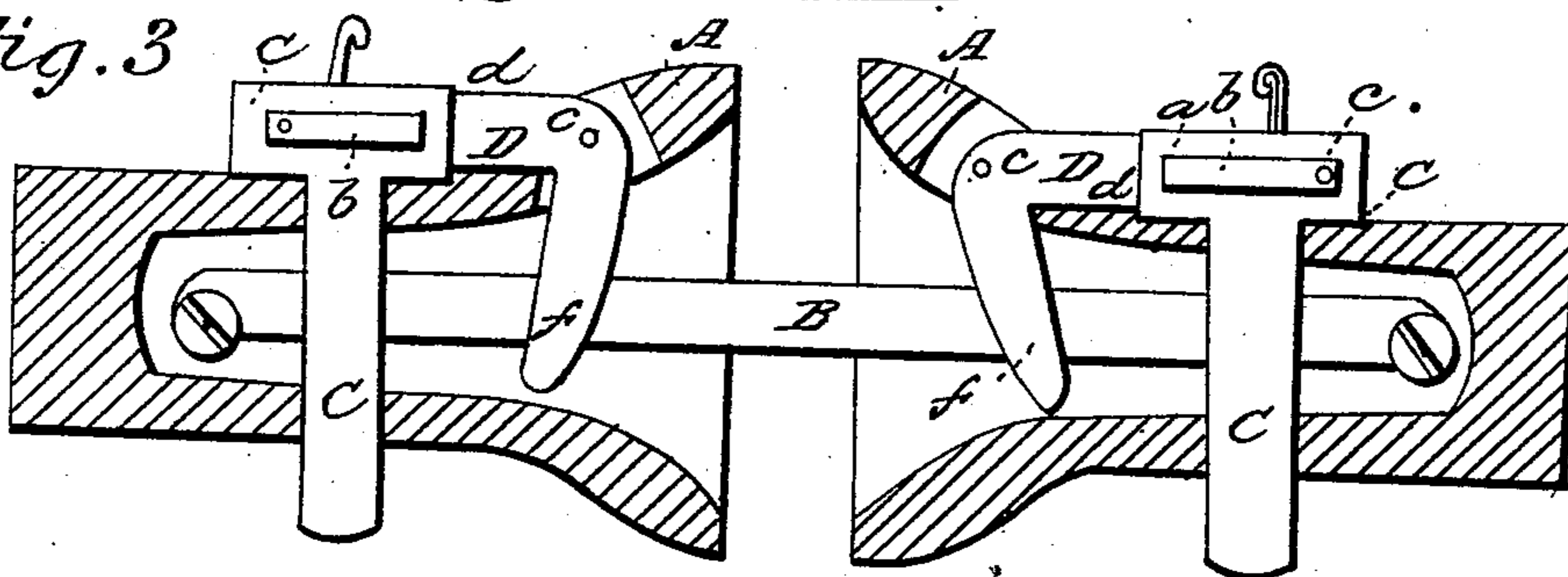


Fig. 3



Witnesses:
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GEORGE C. HUGG, OF BERLIN, NEW JERSEY.

Letters Patent No. 103,618, dated May 31, 1870.

IMPROVEMENT IN RAILWAY-CAR COUPLING.

The Schedule referred to in these Letters Patent and making part of the same.

I, GEORGE C. HUGG, of Berlin, in the county of Camden and State of New Jersey, have invented certain Improvements in Car-Couplings, of which the following is a specification.

My invention consists in a lifter, constructed of two arms made in one piece, one of which is within the draw-head and the other above it, the latter being connected to the bolt through the medium of a slot and pin, so that when the shackle or link strikes the lower arm the upper arm raises the bolt in a truly vertical line, without binding or clamping.

It also consists in forming on the side of the draw-head, stays, which project therefrom, and are made of bow or swelling shape, so that the guide which holds the shackle at the proper elevation to enter the draw-head may be firmly retained in position during the operation of coupling, without assistance, other than at first properly adjusting it.

Figure 1 a side view of two draw-heads, embodying my invention.

Figure 2 is a view, showing the end or face of the draw-head, with the link-guide elevating the link.

Figure 3 is a perspective view, showing the draw-heads coupled.

A is the draw-head, and is the part which is bolted to the end of cars, and by which they are linked and bolted together, and is like those now used by the different railroad companies.

B is a link, which is used in fastening cars together by means of a bolt, by passing the bolt through the draw-head, and through the end of the link.

C is a straight bolt, which passes perpendicularly through the draw-head, and couples the cars together by means of link B.

The head of the bolt, marked *a* in fig. 3, is flat on its perpendicular sides, and has a long horizontal slot in it, marked *b*.

D is a bolt-lifter, made slightly in the shape of a triangle, with jaws at the end, marked *d*, which are placed on either side of the bolt-head, marked *a*, fig. 3, and are fastened to it by a pin, marked *e*, which passes through the jaws, and through the slot *b*, with a roller on that part of the pin which is in the slot. This will better be seen by an examination of the model.

E is the link-guide, and is made in the shape of a clevis, and is bolted to the draw-head A by bolt *g*, as seen in fig. 2.

In the center of link-guide is a strong iron bar, which stands at an angle of about forty-five degrees, marked *h*.

This iron bar is used as a handle, when setting the link-guide in the desired position.

It is also used in forcing the link-guide down, when, in coupling, the link has fairly entered the opposite draw-head.

F is link-guide stay. There are two on each draw-head. They swell gradually toward the center, so that, when the link-guides E are brought over them, the pressure is sufficient to retain them in any position that they may be set.

In coupling cars with the use of my invention, the manner is safe and simple.

One end of the link B is attached to the car, which is at rest. Then the link-guide E is brought against the link B, and it is raised or lowered, to suit the draw-head of the end car of the approaching train.

As the train backs up, the end of the link B strikes the lower end of the bolt-lifter D, marked *f* in fig. 3, the link-guide E is crowded down, the bolt C is raised, and the link B, having passed beyond the lower end of the bolt-lifter D, the bolt D drops, and the cars are securely coupled, without endangering the life of the brakeman.

I claim as my invention—

1. The bolt C and arm *d*, connected together by means of the longitudinal slot *b* and lifting-pin *e*, in combination with the arm *f*, made in one piece with the arm *d*, and operating as and for the purpose described.

2. The swelling or bowing stays F, fitted to the sides of the draw-head, in combination with the link-guide E, operating together as and for the purpose described.

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