

(No Model.)

E. F. O'HAVER.
CAR COUPLING.

No. 333,147.

Patented Dec. 29, 1885.

Fig. 1.

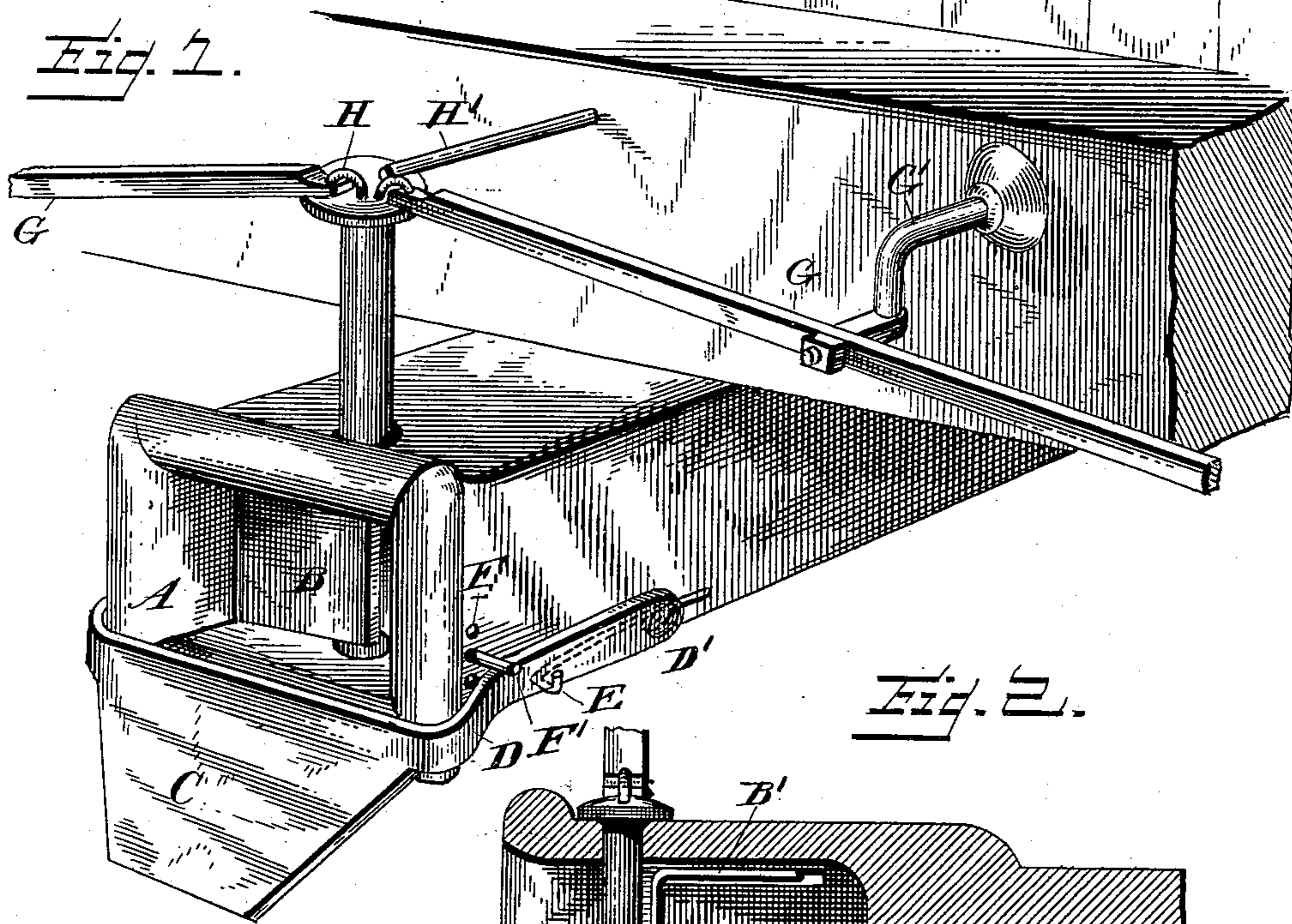


Fig. 2.

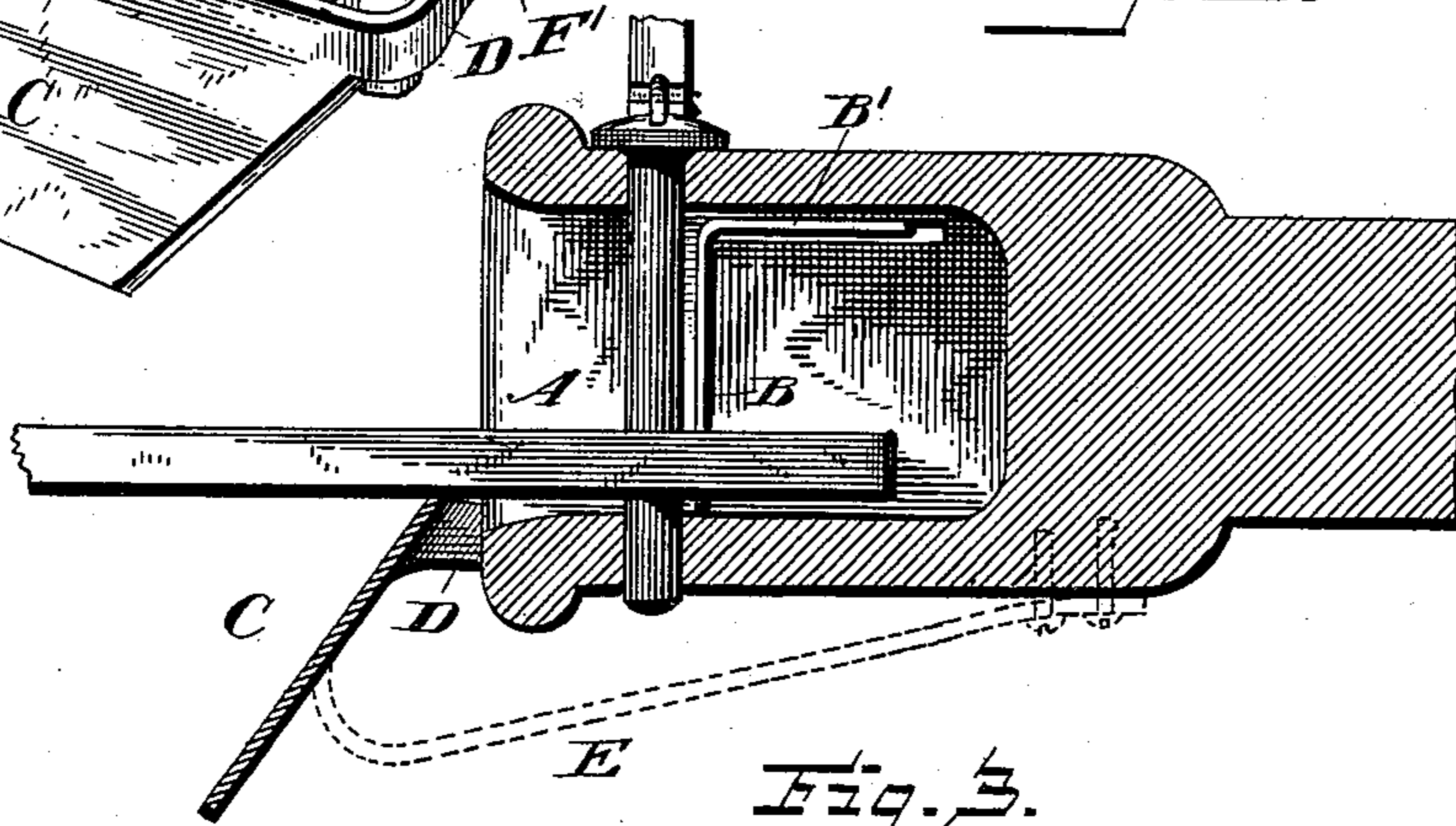
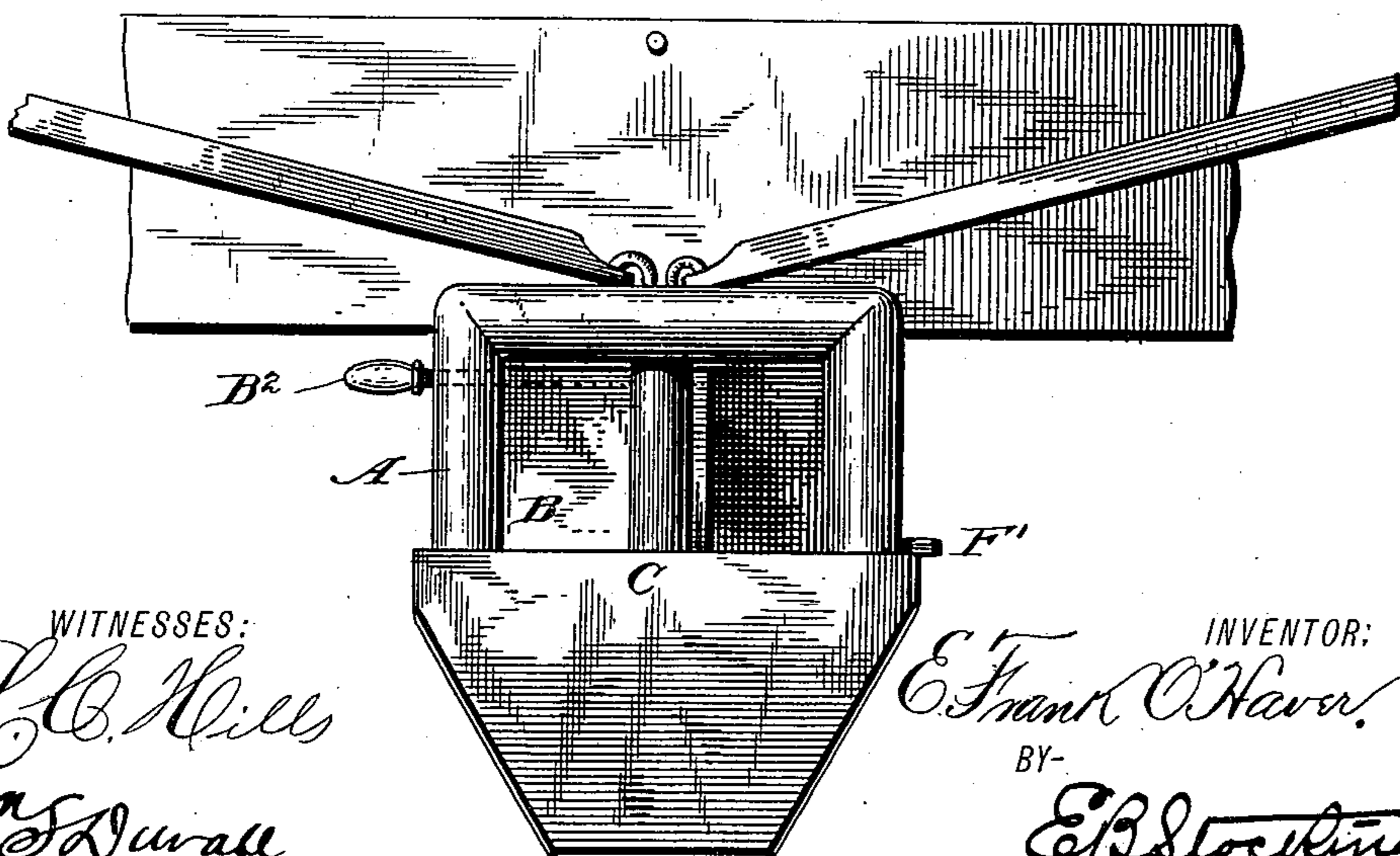


Fig. 3.



WITNESSES:

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E. FRANK O'HAYER, OF MURPHYSBOROUGH, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 333,147, dated December 29, 1885.

Application filed October 16, 1885. Serial No. 180,037. (No model.)

To all whom it may concern:

Be it known that I, E. FRANK O'HAYER, a citizen of the United States, residing at Murphysborough, in the county of Jackson and State of Illinois, have invented certain new and useful Improvements in Link-Guides for Car-Couplings, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to a link-guide for car-couplers, which can be attached to any kind of a draw-head, and will serve its function of guiding the coupling-link upon cars of the same or of different heights, and prevent the necessity of the person whose duty it is to couple cars stepping in between the same for the purpose of presenting the link to the approaching draw-head.

The invention consists in certain features of construction, hereinafter described, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective, Fig. 2 is a central longitudinal section, and Fig. 3 a front elevation, of a car-coupler provided with my improved link-guide.

I have shown my invention in connection with a car-coupler constructed in accordance with my Patent No. 323,720; and in order that a better understanding may be had I will briefly describe the same. To one side of the draw-head A is secured a spring-actuated gate, B, which has a tendency to remain closed. The gate is bent at a right angle to its front portion rearwardly, as at B', and passes out of a slot in the draw-head, where it terminates in an operating-handle, B². The form of link used is in the shape of a bar having an arrow-head or locking-shoulder at either end and upon one side; but the head is provided, also, with an ordinary pin-hole, whereby the ordinary coupling-link may also be used, in which case the locking spring-actuated gate is drawn back and held by means of a locking-pin.

It is well known that often cars of different heights are coupled together, and that although said cars may be provided with automatic coupling devices to be operated from the side or top of the car, still it is necessary in such cases that persons whose duty it is to couple and uncouple cars should go in between the

cars to elevate or depress the link, as the case may require, to bring it in proper position to couple with an opposite approaching draw-head. This of course exposes such persons to serious and fatal accidents; and to obviate this necessity of having to pass in between the cars for the purpose of presenting the link is, therefore, the object of my invention.

The device consists, principally, of a guiding plate or apron, C, arranged in front of the draw-head, and in this instance is formed at its upper end with two rearwardly-projecting supporting-arms, D D, which are pivoted, as at D' D', to the sides of the draw-head. At each side of the head A, and arranged to bear against the under surfaces of the arms, are springs E, which have a tendency to force the plate upwardly.

For the purpose of limiting the upward movement of the guiding-plate C, I have provided at the sides of the head, immediately in rear of its front end, holes F, which are adapted to receive a stop-pin, F'. It will now be seen that a link of an approaching draw-head, if it be some distance below the draw-head A, will come in contact with the upwardly-slanting apron C at or near its lower edge, and thus be deflected or directed into the chamber of the head A.

In Fig. 2 I have shown a modification of my device, which merely consists in arranging a flat spring under the head A, the forward or free end of which bears against the under surface of the guiding-plate C; or it may be a rearward extension of said plate, in which case the supporting-arms D may be dispensed with. When the approaching link strikes against the apron C, the shock will cause said apron to yield and then fly back into position, thus causing the link to move up to the top of the apron and enter the chamber of the draw-head, whereupon the spring-actuated gate will catch and hold it from being withdrawn by means of its locking-shoulder; or, when the ordinary link is used, a pin will drop down through the same, and thus couple the cars together. The levers G, pivoted to the frame-work of the car by means of brackets G', are pivotally connected to the pin H, and serve to elevate the pin without entering between the cars. Any suitable stop, as H', limits the upward movement

of the pin, which, when in contact with said stop, permits the gate B to automatically assume the position shown in Fig. 1, whereby the pin is retained in a temporarily elevated position.

Having described my invention, what I claim is—

1. The combination, with a car-coupler having a spring locking-gate, of the yieldingly supported and forwardly - inclined guiding plate or apron C, having the arms D, pivoted to said draw-head, substantially as specified.

2. The combination, with the draw-head A, having the spring-gate B, bent, as at B', and terminating in an operating - handle, B², of the

guiding-apron C, having arms D, pivoted, as at D', and spring E, substantially as specified.

3. The combination, with the draw-head A, of the apron C, having the arms D, pivoted to said draw-head, the spring E, and the stop-pin F, arranged to enter holes F' in the sides of the draw-head, whereby the upward motion of the guiding-apron C is limited, substantially as specified.

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

E. FRANK O'HAYER.

Witnesses:

W. W. KIMBALL,
JOHN G. HARDY.