P. LAFLIN.

Car Coupling.

No. 83 512. Patented Oct. 27, 1868.

Fig. 1.

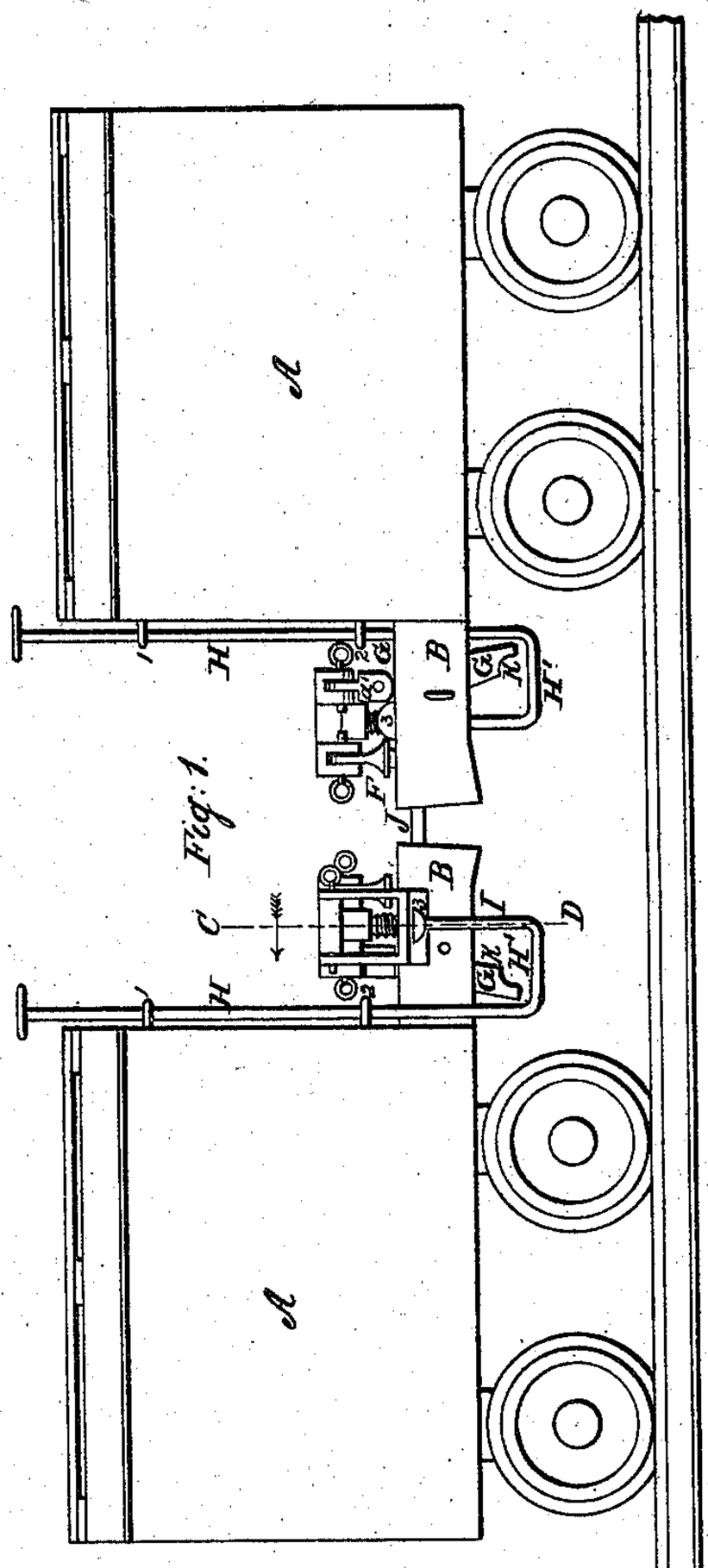


Fig. 2.

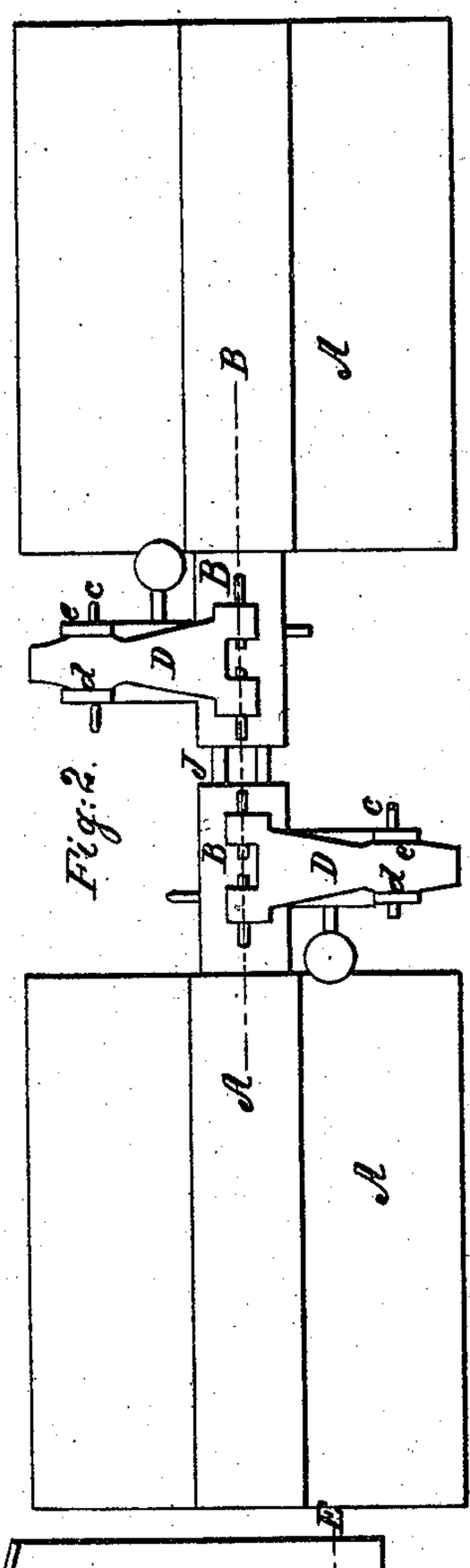


Fig. 3.

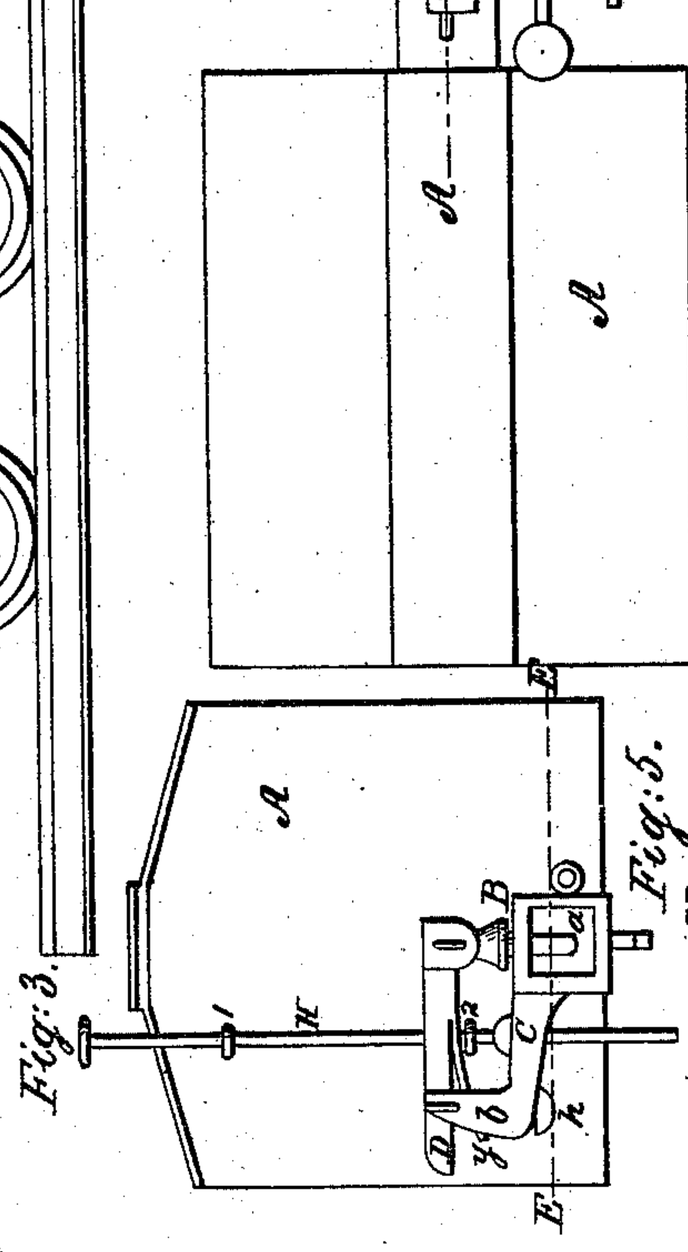


Fig. 4.

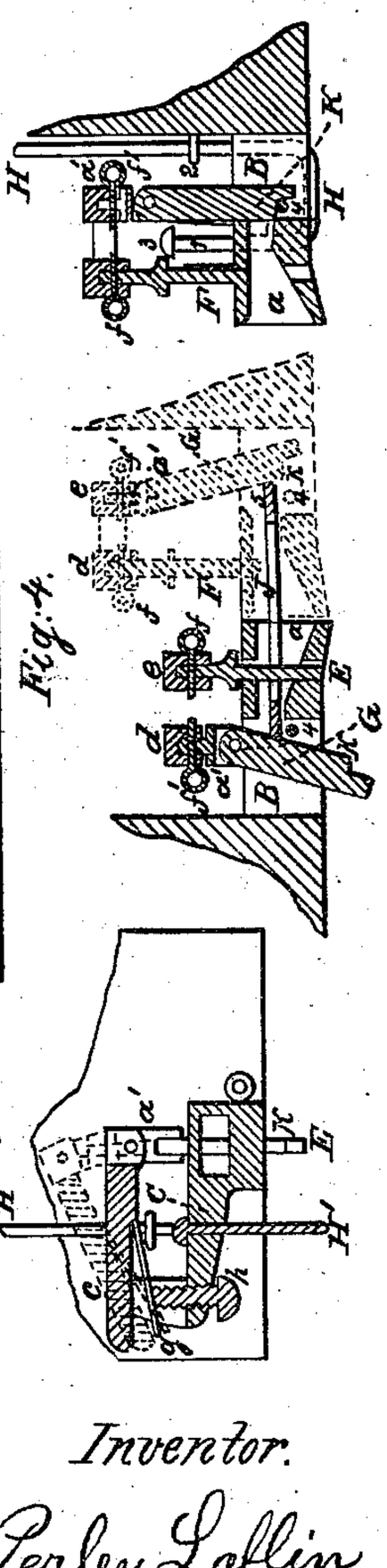
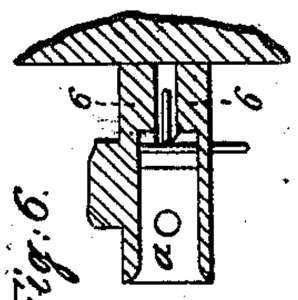


Fig. 5.

Fig. 6.



Witnesses.

J. W. Chadsey

H. B. Chadsey.

Inventor.

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PERLEY LAFLIN, OF WARREN, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND JOHN J. SPRAGUE, OF PROVIDENCE, RHODE ISLAND.

Letters Patent No. 83,512, *dated October* 27, 1868.

IMPROVED AUTOMATIC CAR-COUPLING.

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

Know all men by these presents:

That I, PERLEY LAFLIN, of Warren, in the county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Car-Shackles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view of two cars with my improved shackle appplied thereto;

Figure 2 represents a top or plan view of the same;

Figure 3 represents an end view;

Figure 4 represents sections on line A B, A B, fig. 2;

Figure 5 represents a section on line C D, fig. 1; and

Figure 6 represents a section on line E F, fig. 3.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

It has long been a desideratum to obtain some simple, strong, and durable shackle for cars, that could be operated from the top of the cars, but which has never before been accomplished.

The cars, A A, are to be supplied with the usual draw-pieces or tongues, B, which are to be attached to the cars in the usual manner. For convenience, they are shown in the drawings without the usual spring-attachments.

The mouths *a* are made flaring in each direction.

From one side of the draw-piece B projects an arm, C, having an upward projection, *b*, the upper end of which is slotted, to receive the rear end of the arm D, which is pivoted at *c* in the end, *b*. The inner end of arm C is provided with two projections, *d e*, both of which are slotted, one to receive the toggle-pin E, fastened by pin *f*, and the other the prop-bar G, which is secured by means of a connection, *a'*, which is, in turn, connected to arm D by a pin, *f'*. The prop-bar G, it will be seen, is provided with a double joint, to insure free action, for reasons hereafter set forth.

The arm D is provided with a spring, *g*, on its lower side, to bear or rest on the screw *h*, which is inserted in the under side of the arm C, the point of the screw passing up in the slot in the end, *b*, and a little in rear of the point or pivot *c*.

Rod H is supported by two loops, 1 2, in the frame of the car. The lower end, H', of rod H is bent, as shown in the drawings, so that the lower end, I, of said rod, which is provided with a projection or knob, 3, strikes against the under side of arm D when rod H is raised, which raising-operation can be performed by the brakeman while sitting or standing upon the top of the cars.

The prop-bar G is to be so suspended as to always have a tendency to swing from the car, even when the latter is standing on an inclined or up-grade track; consequently there is never any difficulty experienced in the operation of my improved shackle, no matter what the grade may be. The prop-bar G will always, it will be seen, catch on the pin 4, when raised, for the reason above stated.

The operation is as follows:

If a car is to be shackled, the operator can, while sitting or standing upon the top of the car, raise rod H, and thereby elevate arm D by the end, I, of rod H. As soon as the arm D is raised high enough to allow the hinged prop-bar G to swing forward, its notch *k* will catch upon the pin 4, which passes through the draw-piece B, thus supporting the toggle-pin E and arm D in the elevated position shown in dark lines on the right in fig. 4. The draw-link J being attached to one car, as shown in dark lines on the left in fig. 4, the cars are now run together, when the end, 5, of the draw-link J enters the flaring mouth of the draw-piece B of the car to be shackled, and striking against the prop-bar G, knocks it off of the pin 4, as fully indicated in red lines, fig. 4, and when arm D falls, and the toggle-pin E entering the shackle or draw-link J, the cars are securely shackled. The draw-pieces B are made with shoulders or projections, 6 6, against which the end of the link J strikes, after it has knocked off the prop-bar, as shown in red lines, fig. 4; consequently there is no danger of the prop-bar being injured by the concussion or force of the cars when shackled.

It will be seen that by my invention, cars can be shackled and unshackled with ease and safety, and that the construction is both simple and strong.

My invention fully obviates the danger attending the shackling and unshackling of cars by the ordinary modes in use, and will be highly appreciated by all those skilled in the art to which my invention belongs.

It will be apparent that the construction may be varied somewhat, without departing from the principle of my invention.

Having described my improved car-shackle,

What I claim therein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The combination, with the draw-piece B, the projecting arm C, and its slotted standard or upright piece, *b*, of the hinged or pivoted arm D, and the prop G and toggle-pin E, attached to said arm, substantially in the manner described, the whole being arranged to operate as set forth.

2. In combination with the parts named in the preceding clause, the rod H, constructed and arranged to operate in connection with the swinging arm D, substantially as described.

3. The combination and arrangement, with the arms C and D, of spring *g* and screw *h*, substantially in the manner and for the purposes set forth.

PERLEY LAFLIN.

Witnesses:

J. W. CHADSEY,

N. B. CHADSEY.