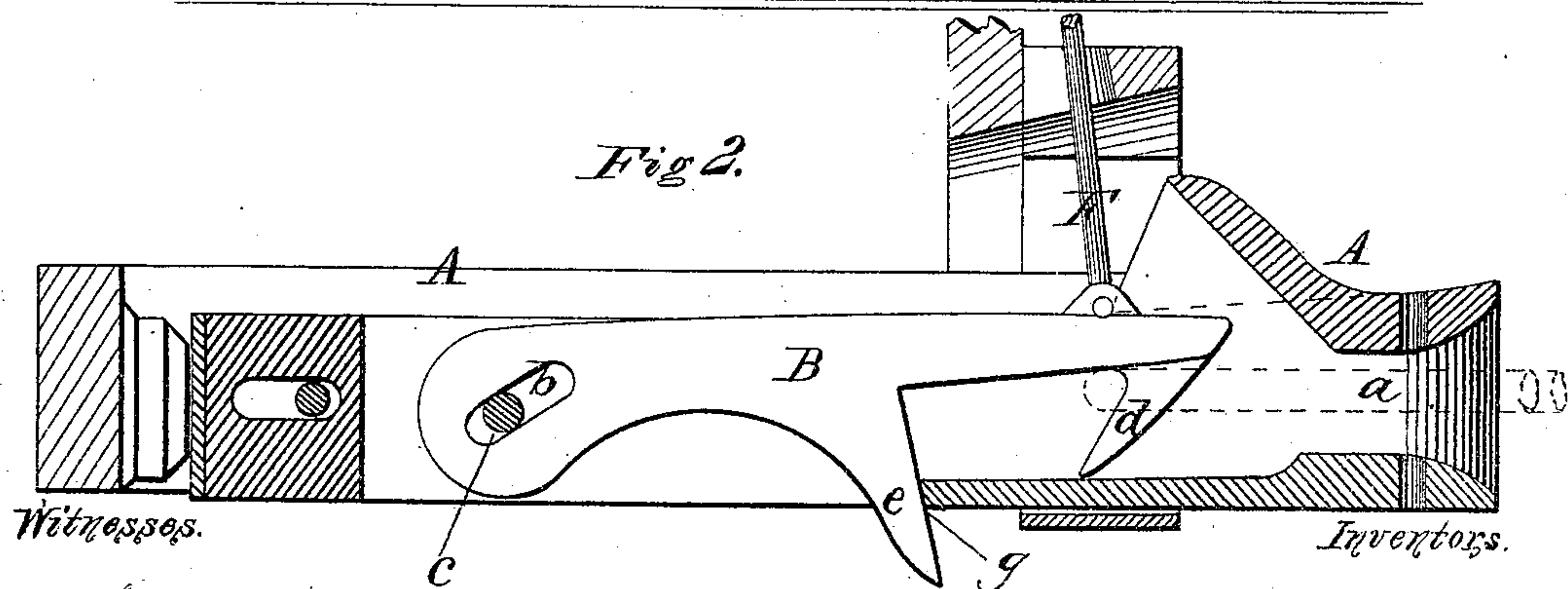
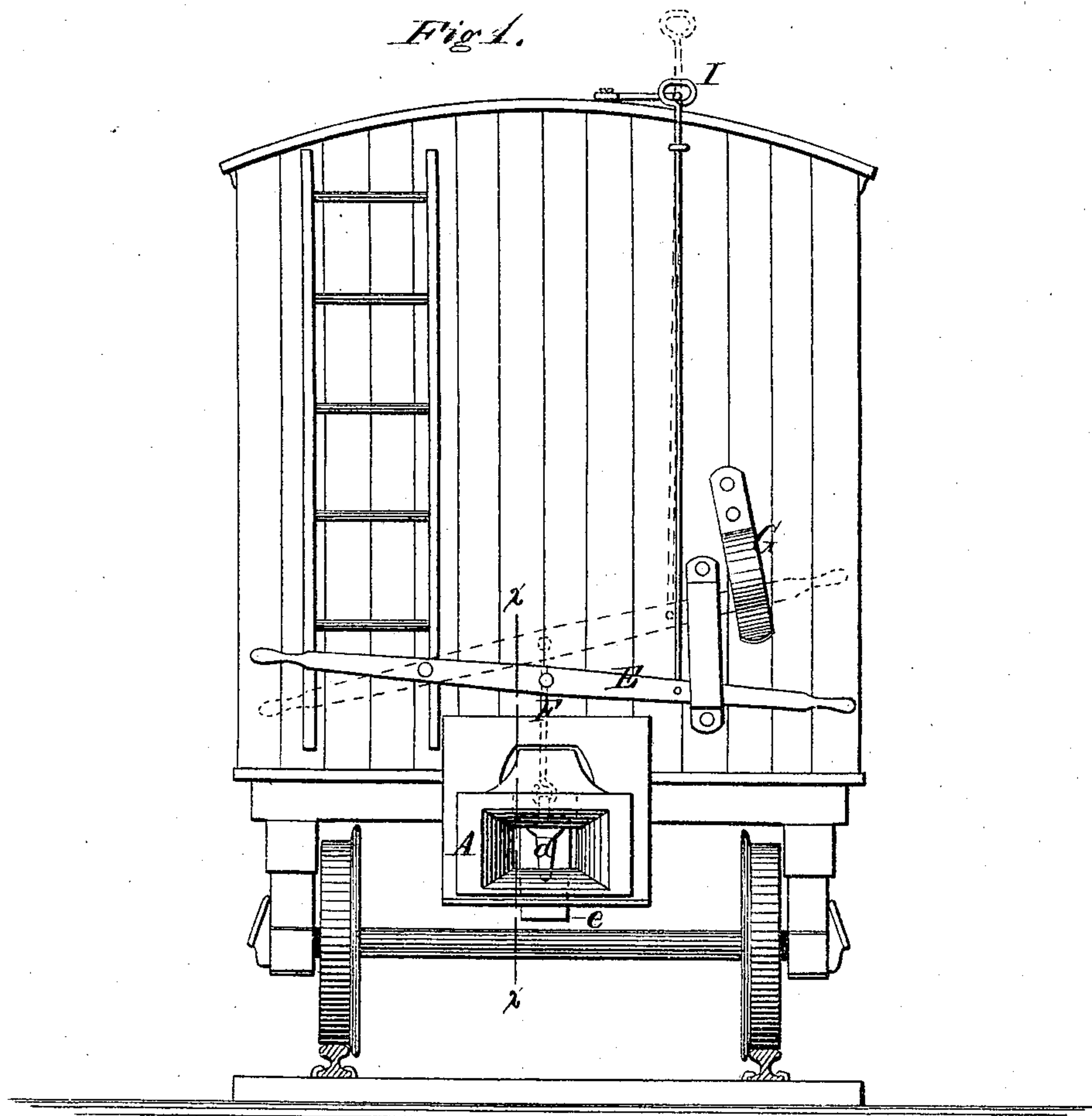


P. VON LACKUM & J. DOUGLAS.

Car-Couplings.

No. 151,523.

Patented June 2, 1874.



Witnesses.

Harry King.
H. H. Dodge

Inventors.

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UNITED STATES PATENT OFFICE.

PETER VON LACKUM AND JOHN DOUGLAS, OF WINONA, MINNESOTA.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **151,523**, dated June 2, 1874; application filed August 18, 1873.

To all whom it may concern:

Be it known that we, PETER VON LACKUM and JOHN DOUGLAS, of Winona, in the county of Winona and State of Minnesota, have invented certain Improvements in Car-Couplings, of which the following is a specification:

Our invention relates to that class of automatic couplings in which a pivoted falling hook is used to hold the coupling-link; and it consists in a peculiar manner of constructing and operating said hook.

Figure 1 is an end elevation of a car provided with our coupling; Fig. 2, a longitudinal vertical section through the draw-head and coupling-hook.

A represents the draw-head of the car, constructed with the usual mouth or throat *a*, and with a longitudinal slot or mortise containing a long coupling-hook, B. The rear end of the hook B is provided with an inclined slot, *b*, through which a pivot, *c*, passes, as shown in Fig. 2, the arrangement permitting the hook to move endwise, and to play vertically at the forward end. The front end of the hook is made with a point or nose, *d*, inclining backward, and with an arm, *e*, located in rear of the nose *d*, and inclining forward. When the coupling-link is inserted into the mouth of the draw-head, it passes under and raises the nose of the hook, which then falls into and holds the link. When the link is drawn outward by the strain upon it, it draws the coupling-hook forward until the arm *e* bears against a shoulder, *g*, in the draw-head, as shown in Fig. 2, so that the whole strain is thrown upon said arm, and the pivot relieved entirely. As the nose of the hook is inclined in the manner shown, the strain of the link tends to hold it down, and consequently there is no danger of the hook accidentally releasing the link. The release of the link is also prevented by the arm *e*, which, locking under the shoulder *g*, renders it impossible for the hook to rise until

relieved from the strain of the link, so that it can slide back and unlock the arm *d*. When the coupling-link enters the draw-head, it strikes the arm *d*, and thereby forces the front end of the hook B downward, so that it is certain to engage with the link. The arm *e* also serves to prevent the link from passing too far into the draw-head, so that, when two cars are brought together, a link in the draw-head of one will be certain to enter the draw-head of the other. Across the end of the car there is mounted a lever, E, provided with a handle at each end, and connected, by a link, F, with the coupling-hook B, so that a person standing on either side of the car can, by operating the lever, raise the hook B and uncouple the cars. A spring-arm, G, is also secured to the end of the car, to engage over and hold the lever when it is moved so as to raise the hook. By means of the spring the hook will be held up, so that the operator may leave and attend to other matters, while the cars will remain uncoupled and ready to separate at any time. When the cars are to be again coupled, the blow of the link against the arm *d*, in the manner already set forth, is sufficient to release the lever E and throw the hook B down. To the lever E there is attached a vertical rod, I, which extends above the car-roof, and has a handle on its upper end, as shown in Fig. 1, so that an operator on the roof of the car may, by means of the rod, operate the coupling.

Having thus described our invention, what we claim is—

In combination with the draw-head A, having the shoulder *g*, the hook B, having the slot *b*, nose *d*, and arm *e*, constructed to operate as set forth.

PETER VON LACKUM.
JOHN DOUGLAS.

Witnesses:

WILLIAM H. GALE,
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