(Model.) 2 Sheets—Sheet 1.

A. F. & J. B. LEWIS.

CAR COUPLING.

No. 263,544. Patented Aug. 29, 1882.

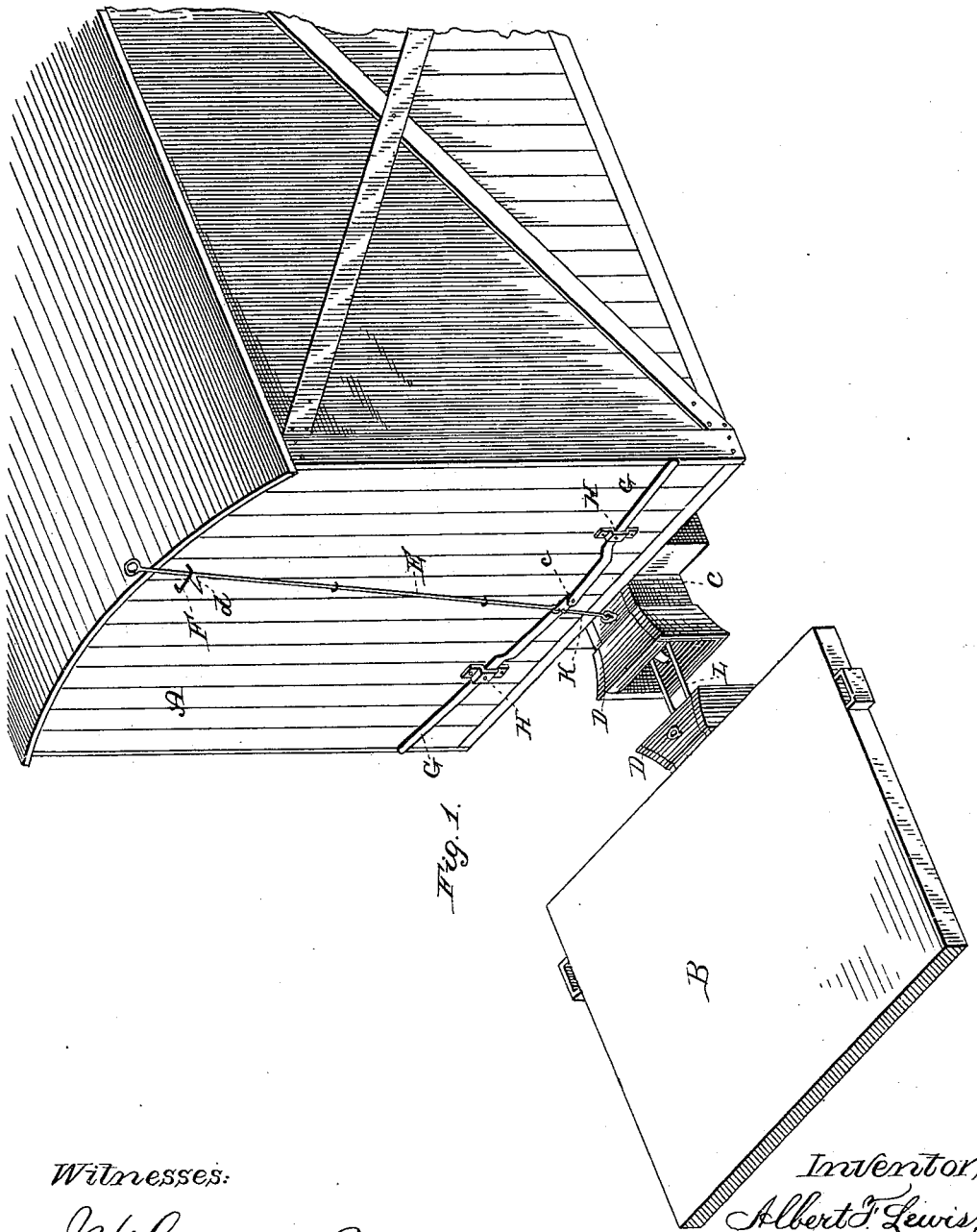

Fig. 1.

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(Model.) 2 Sheets—Sheet 2.

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Fig. 2.

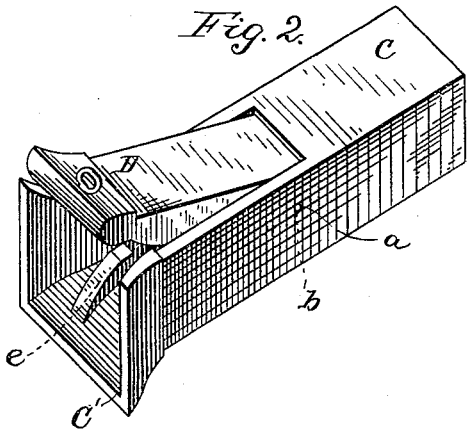


Fig. 3.

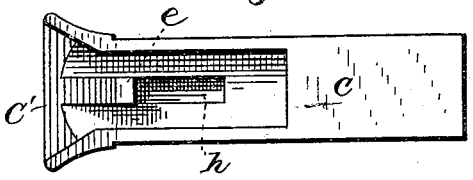
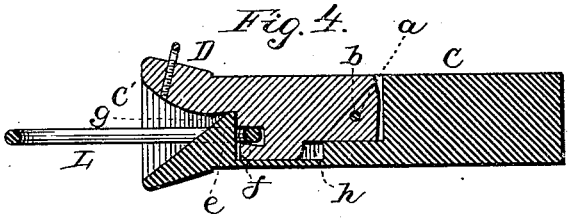


Fig. 4.



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UNITED STATES PATENT OFFICE.

ALBERT F. LEWIS AND JOHN B. LEWIS, OF URBANA, OHIO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 263,544, dated August 29, 1882.

Application filed May 26, 1882. (Model.)

To all whom it may concern:

Be it known that we, ALBERT F. LEWIS and JOHN B. LEWIS, citizens of the United States, residing at Urbana, in the county of Champaign and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and we 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention consists of a self-coupling car-coupler which can be used in connection with cars having the ordinary bolt and link.

By means of our invention the cars can be coupled and uncoupled from the top of the car, from the platform, or from the ground without danger to the operator. They can also be coupled by pushing them against each other. With our coupling two cars of a different height may be coupled together as readily as if they were exactly the same height, as shown in Fig. 1, as the difference in the height of cars is only a few inches. When one car is about fourteen inches lower than the other it will uncouple. This is an advantage when one car is thrown from the track, as the danger of dragging other cars off is thereby avoided.

Referring to the drawings, Figure 1 represents two cars in the act of coupling. Fig. 2 is a perspective view of the draw-bar with the top raised as required to uncouple. Fig. 3 is a top view of the draw-bar with the top removed. Fig. 4 is a longitudinal section of the draw-bar.

A is an ordinary box car.

B is a platform-car.

C is the draw-bar.

C′ is the draw-head.

D is the top of the draw-head and draw-bar, pivoted or hinged to the draw-bar C at *a* by the pin *b* or its equivalent.

G G are the two handles or levers pivoted at H H, and connected to each other by the pin or bolt *c*.

K is the short rod connecting the lever or handle G to the top of the draw-head D.

E is the rod secured to the lever or handle G, and extending to the top of the car, and provided at its upper end with a hook, *d*, by means of which it can be held in position by the staple F. The rod E may be so constructed that its lower end may be attached to the top of the draw-head D and one or both of the levers or arms G G may be attached to the rod, thus dispensing with the short rod K; but we prefer the arrangement first described, as shown in Fig. 1. The staple F may be directly over the center of the draw-head, thus bringing the rod E in a perfectly perpendicular line; but we have placed the staple F on one side of the center, giving the rod E an oblique course, in order that the spring of the rod may keep it on the side of the staple F farthest from the hook *d*, so that when the hook *d* is not used it cannot interfere with the action of the rod.

L is the link, which is held in a horizontal position by the weight of the top of the draw-head, D.

e is the lug, hook, or pin behind which the link L falls when the cars are coupled.

f is the lug or hook that lifts the link L for the purpose of uncoupling the car.

g is a recess into which the top of the lug, hook, or pin *e* fits when the top of the draw-head falls in its place after the link L passes over the lug, hook, or pin *e*.

h is a groove or recess into which the lug or hook *f* passes when the top of the draw-head, D, falls in its place.

m is the hand-hold upon the top of the draw-head, D.

The mode of operating, as shown in Fig. 1, is as follows: As the cars approach each other the link L strikes between the beveled fronts of the lug, hook, or pin *e* and the top of the draw-bar, D, lifting the top of the draw-bar, D, and passing into the draw-head until it passes over and falls behind the lug, hook, or pin *e*. The top of the draw-bar, D, then falls in its place and the link is secure, resting upon the lug or hook *f*. To uncouple the car the top of the draw-head, D, is raised, either by means of the rod E, the levers or handles G G, or by the hand-hold *m*. As the top of the draw-head, D, is raised the lug or hook *f* lifts the link L until it is high enough to pass over the lug, hook, or pin *e* and out of the draw-head. If it is required to push the cars upon the track without coupling,

the top of the draw-head, D, can be kept in an elevated position by means of the hook *d* resting upon the staple F, or by means of a hook, pin, or other device attached to the levers or handles G G.

We do not limit nor confine ourselves to any particular size or proportion, nor to the precise form or arrangement of the parts herein described, as they may be varied in many ways without departing from our invention.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The draw-bar C, having the draw-head C′ formed integral therewith, and provided with the lug *e* and recess *h*, in combination with the movable top D, pivoted thereto, the said top D being provided with the recess *g* and the lug *f* on its under side for the reception and retention of the link L, the top D being combined with and adapted to be held in a raised position by means of the rod E, provided with the hook *d*, for engaging with the staple or pin F, and secured to the front of the car in a slightly-bent position, so that the spring of the rod will keep the hook *d* normally out of contact with the staple F, all combined and arranged to operate substantially as shown and described.

2. The elevating-rod E, secured to the front of the car in a slightly-bent position, whereby the spring of the rod may be utilized for keeping the hook *d* normally out of contact with the staple F, with which it is adapted to engage when the rod is elevated, in combination with the pivoted top D of the draw-bar C, whereby the link L may be released, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

A. F. LEWIS.
JOHN B. LEWIS.

Witnesses as to the signature of John B. Lewis:

E. C. MILLER,
ALEX. A. RUHL.

Witnesses of A. F. Lewis:

MICHAEL GALLIGHER,
L. A. STEINBERGER.