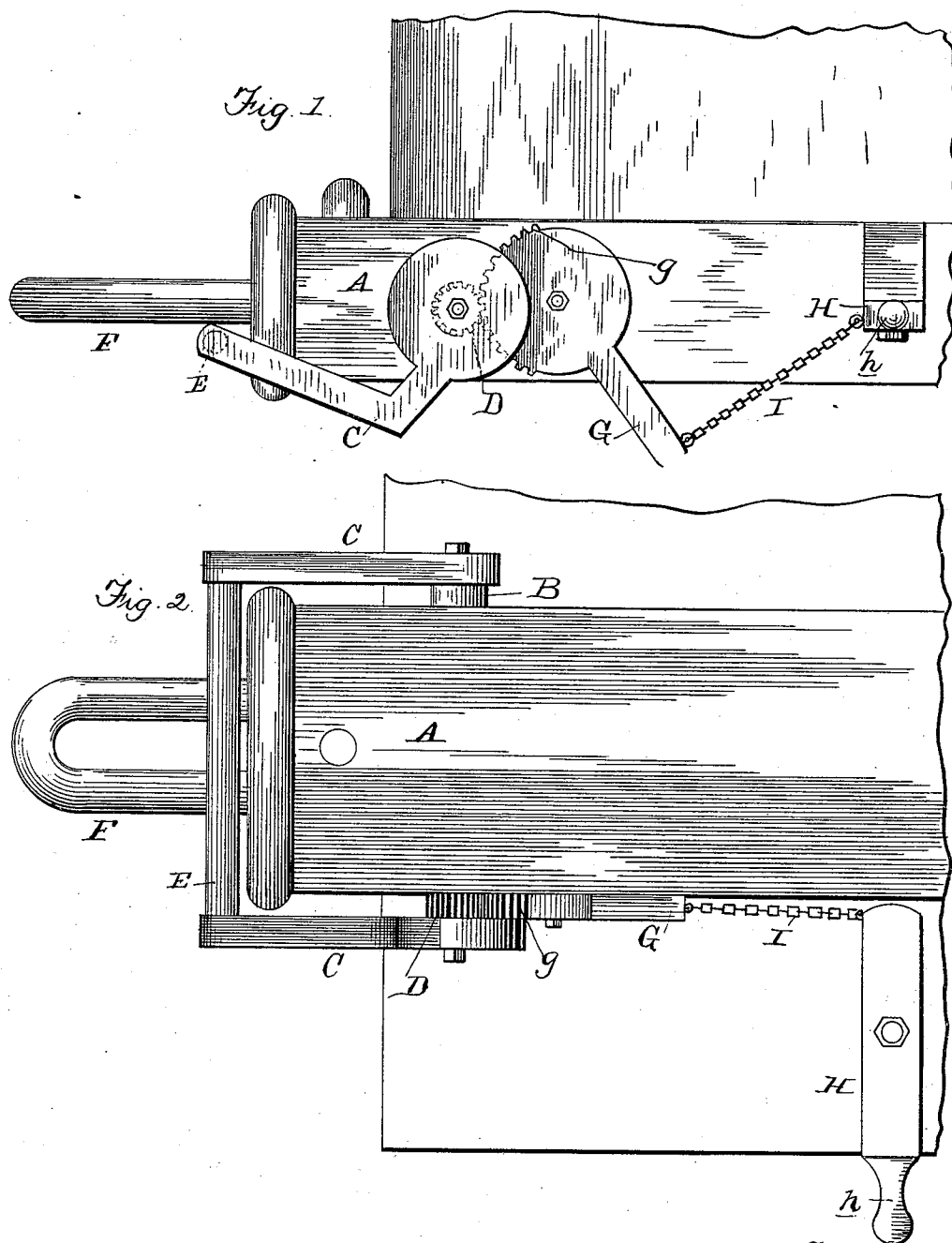


(No Model.)

J. FINNEY.
LINK LIFTER.

No. 478,932.

Patented July 12, 1892.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN FINNEY, OF PORTLAND, OREGON.

LINK-LIFTER.

SPECIFICATION forming part of Letters Patent No. 478,932, dated July 12, 1892.

Application filed November 6, 1891. Serial No. 411,094. (No model.)

To all whom it may concern:

Be it known that I, JOHN FINNEY, a citizen of the United States of America, residing at Portland, Multnomah county, Oregon, have
5 invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of car-couplings which is provided with devices for raising the link; and the invention consists in the peculiar construction, arrangement, and combinations of parts hereinafter more particularly described, and then definitely
15 claimed.

In the accompanying drawings, Figure 1 is a side view of a coupling provided with my improvement. Fig. 2 is a reversed plan of the same.

Referring now to the details of the drawings by letter, A represents an ordinary car-coupling, in which is mounted a rock-shaft B, carrying on its opposite ends the arms C, one of which is connected to a cog-wheel D. The
25 free ends of the arm C are connected by a cross-bar E, which is so arranged as to raise the coupling-link F when desired.

At G is shown a lever having a toothed segment *g* on its pivoted end, which segment
30 gears with the cog-wheel D.

Under the bed of the car is pivoted a lever H, having handle *h*, and which is connected with the lever G by a chain I.

The operation is as follows: When it is desired to couple two cars together, the operator
35 takes hold of the handle *h* and by moving the outer end of the lever toward the coupling pulls on the chain I, and thus operates the lever G, causing the segment *g* to act on the cog-wheel D, and thus lift the arms C, which will
40 cause the cross-bar E to act on and raise the link F to the desired elevation to enter the mouth of the opposite draw-bar. By this means cars can be coupled without any danger to the operator, thus saving many lives now
45 lost by going between cars to couple them.

If a duplicate of the lever H is attached on the opposite side of the car, the coupling can be done with equal facility on either side, although for all practical purposes a single lever
50 H is sufficient.

What I claim as new is—

The combination, with a draw-bar, of the arms C, carrying cross-bar E, a cog-wheel D, connected to the arms, a lever G, having
55 toothed segment *g* meshing with the wheel D, a lever H, and a chain I, connecting the levers G and H, all substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 28th day of October, 1891.

JOHN FINNEY.

Witnesses:

F. RUCKERT,
J. WOHLFARTH.