

(No Model.)

H. S. & I. COVERT.
CAR COUPLING.

No. 369,232.

Patented Aug. 30, 1887.

Fig. 1.

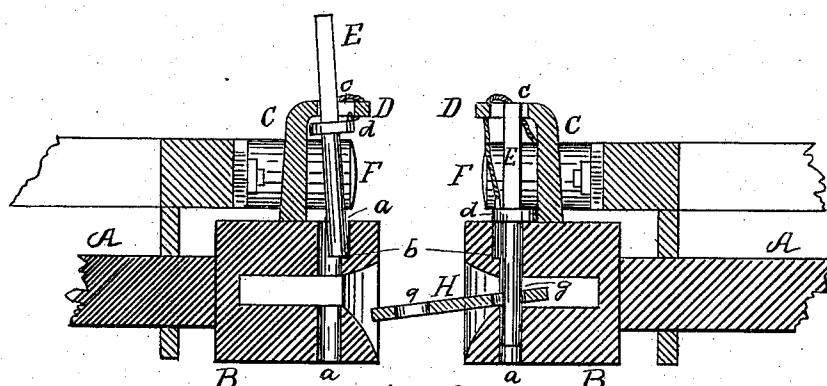


Fig. 2.

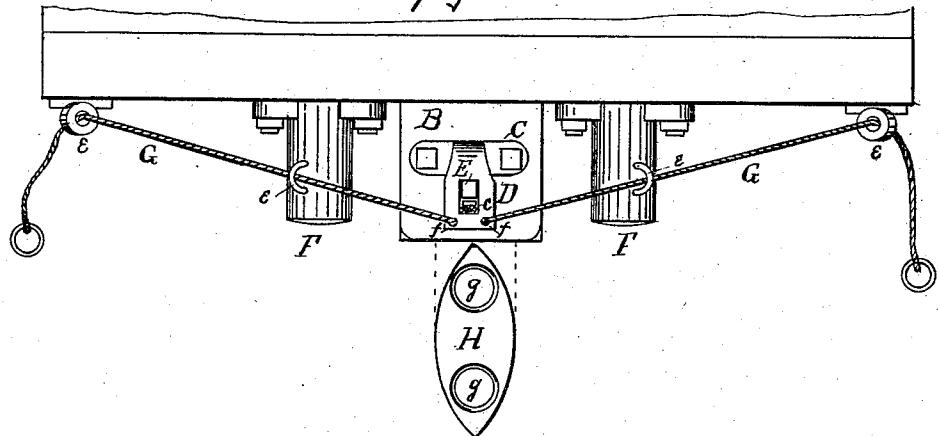
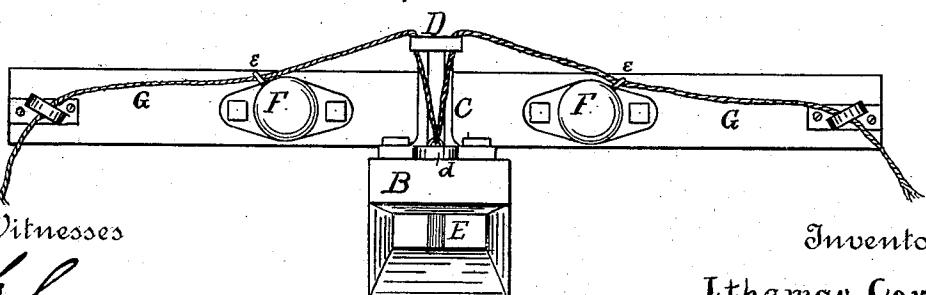


Fig. 3.



Witnesses:

H. S. Covert.
A. S. Brune.

Inventors:

Ithamar Covert,
Harvey S. Covert.
By their Attorneys:

Smale and Leo.

UNITED STATES PATENT OFFICE.

HARVEY S. COVERT AND ITHAMAR COVERT, OF LOUDONVILLE, OHIO.

CAR-COUPING.

SPECIFICATION forming part of Letters Patent No. 369,232, dated August 30, 1887.

Application filed June 10, 1887. Serial No. 240,882. (No model.)

To all whom it may concern:

Be it known that we, HARVEY S. COVERT and ITHAMAR COVERT, citizens of the United States, residing at Loudonville, in the county 5 of Ashland and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in 10 the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to automatic car-couplings more particularly adapted for freight-cars. The coupling devices consist of a link and pin, each of a peculiar construction, which are or may be used with any ordinary draw-bar, 20 so that the coupling devices may be applied to the draw-heads now in use and couple with the ordinary link-and-pin couplings. The pin is an elongated pin, extending at all times above the draw-head and through an elongated 25 slot or eye in an overhanging bracket, a flange on the pin preventing it from being withdrawn entirely from the upper aperture in the draw-head, through which it passes. To hold the pin in position ready for coupling its lower end 30 rests, when it is elevated, upon a ledge projecting a slight distance across the upper aperture in the draw-head. When the adjacent car carrying the link buff's against the car having the pin thus held elevated, the jar incident to the buffing of the cars displaces the 35 pin from the ledge, and permits it of its own gravity to drop through the slot in the link, and so couple the cars. The cars are uncoupled from either side of the car by operating-cords or light chains, which pass through 40 eyes in the pin-guide bracket and are attached to the flange on the pin. When either chain is pulled, the pin is lifted, and when it is lifted higher than the ledge its lower end is pulled 45 outward over the ledge, so that on releasing the chain the pin rests on the ledge. The link used differs from the ordinary link in having 50 two substantially-circular apertures instead of a single elongated slot, and in being of an approximately-elliptical form—that is, being wide across its center and somewhat pointed at each end. One aperture is entered by the

pin on the car which carries the link, and the other is brought beneath the elevated pin on the adjacent car to be entered by the same when displaced from its ledge. There are numerous advantages connected with this form of link. Having two small apertures instead of a single elongated slot, the link does not have much play on the coupled pin, so that on 55 encountering a rusty or uneven draw-head the link will nevertheless be forced in the draw-head, instead of being forced back into the draw-head in which it is held, so that the coupling is at all times assured. The pointed 60 ends are of great assistance in causing the link to enter the draw-head, co-operating with the flared mouth of the draw-head to guide the link properly into place. At the same time the broadened central portion of the link, 65 besides adding to its strength, prevents the link being turned so far out of the line of draft either horizontally or vertically as not to enter the opposite draw-head.

The improved coupling is illustrated in the 70 accompanying drawings, in which—

Figure 1 is a vertical longitudinal section of a draw-bar provided with the improvements. Fig. 2 is a plan view of the end of the car, and Fig. 3 a front view of the same.

80 A is the draw-bar, being a spring-bar, as is usual, and having a hollow draw-head, B, with a flared mouth. The draw-head is formed, as usual, with upper and lower apertures, *a a*, and extending partly across the upper aperture is 85 the pin-holding ledge *b*.

Bolted or otherwise secured to the upper part of the draw-head is a bracket, C, having a shelf, D, overhanging the apertures *a a*. This shelf has an elongated slot, *c*, through 90 which passes the coupling-pin E. This pin is so long that when in its lowermost position its upper end is still held within the slot *c*. The pin is formed with a flange, *d*, at or near its center, the flange being located between the 95 shelf and draw-head, so that the pin can be disengaged from neither. This pin moves up and down through the apertures *a a* in the draw-head and the slot in the guide-bracket to couple and uncouple the cars.

100 On either side of the draw-bar the car is provided with bumpers F F, and passing through eyes *e e* in the same and at the sides of the car are the operating cords or chains G

G. These chains also pass through eyes *ff* in the forward end of the shelf *D* in front of the slot *c*, and are attached to the flange *d* of the pin. By pulling on one of these chains the pin is elevated, and, owing to the arrangement of the eyes *ff*, when the lower end of the pin has been raised above the ledge *b* the upper end of the pin is moved back in the slot *c*, so that the lower end is swung forward 10 over the ledge.

H is the link, of the shape already described, having two apertures, *g g*.

This coupling is exceedingly efficient, costing but little more than the ordinary link and 15 pin, and can be applied quickly and readily to the draw-heads now in use.

We claim as our invention—

1. The draw-head having apertures in its top and bottom, and having a pin-holding 20 ledge extending partly across the upper aper-

ture, in combination with a guide-bracket for the pin, having an elongated slot above the draw-head aperture, an elongated pin sliding in and held by said aperture and slot, said pin having a retaining-flange between the draw-head and bracket, and operating cords or chains passing through other apertures in the bracket and connected to said pin, substantially as set forth. 25

2. A link having pointed ends and with its broadest portion at the center, said link having two apertures, one at each end, substantially as set forth. 30

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

HARVEY S. COVERT.
ITHAMAR COVERT.

Witnesses:

SADIE E. BIRD,
NORA BIRD.