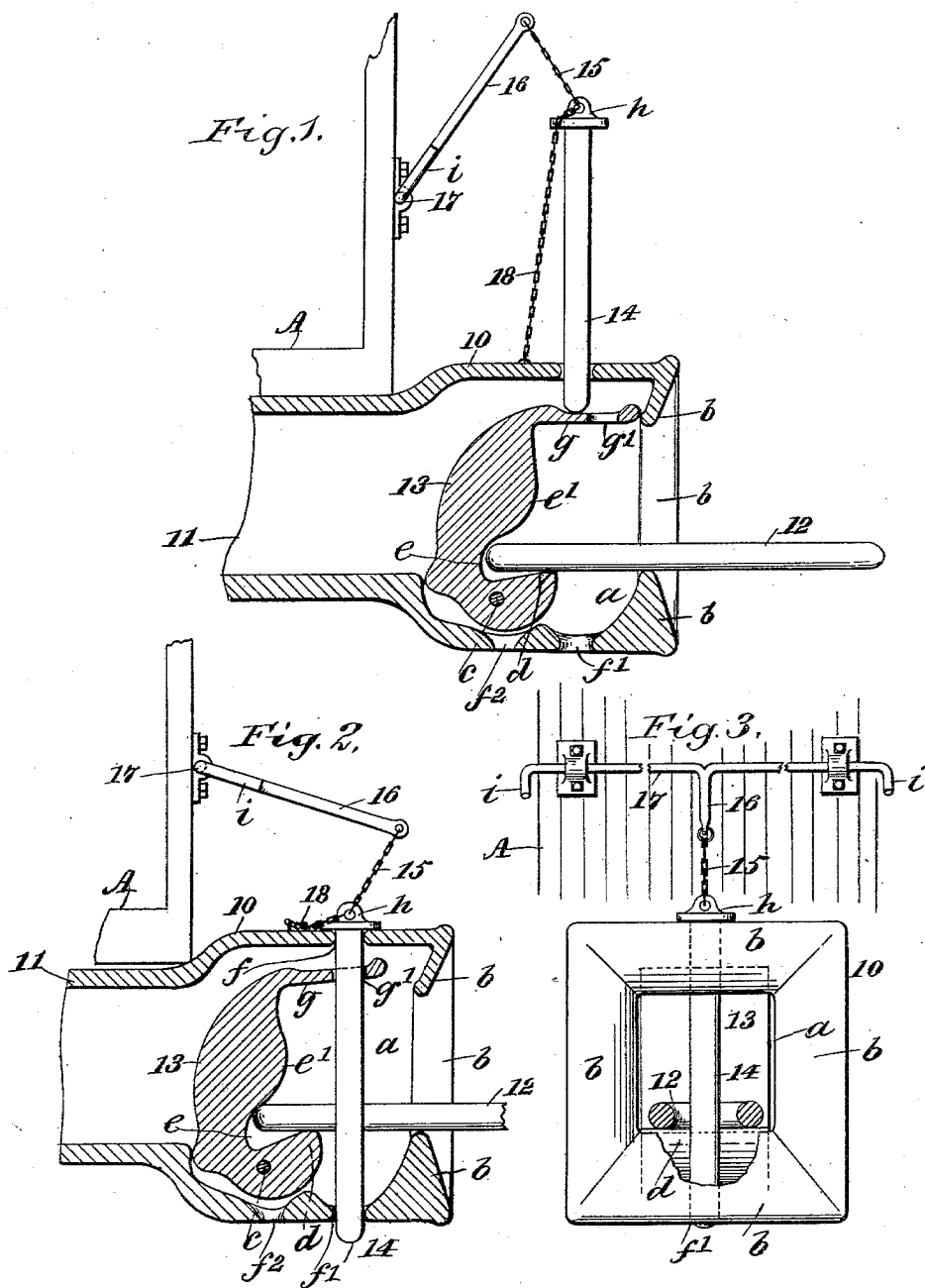


(No Model.)

P. BOGLER.
CAR COUPLING.

No. 566,650.

Patented Aug. 25, 1896.



WITNESSES:

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PHILIP BOGLER, OF ALAMOSA, COLORADO.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 566,650, dated August 25, 1896.

Application filed June 5, 1896. Serial No. 594,394. (No model.)

To all whom it may concern:

Be it known that I, PHILIP BOGLER, of Alamosa, in the county of Conejos and State of Colorado, have invented new and useful Improvements in Car-Couplings, of which the following is a full, clear, and exact description.

This invention relates to car-couplings of the drop-pin and link type, and has for its object to provide novel features of construction for a car-coupling of the indicated character which will adapt the same for effecting an automatic coupled connection with a similar coupling and that will permit the safe and convenient detachment of two couplings at the sides of the cars.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side view of the front portion of the improved car-coupling, showing parts thereof adjusted to support an uncoupled link and coupling-pin. Fig. 2 is a sectional side view of the parts shown in Fig. 1, showing the pin dropped and the link coupled to the draw-head; and Fig. 3 is a front end view of the coupling draw-head broken away, a dropped pin in the draw-head, and a pin-lifting device shown broken intermediately and in position on the end of the car shown in part.

The draw-head 10 is preferably cast into form from suitable metal, and the draw-bar 11, integrally formed with the draw-head, in completed condition is adapted for a suitable attachment on the car A at its ends. The draw-head 10 is chambered, as at *a*, and open at the front end, that is furnished with the flaring throat-walls *b* to adapt said draw-head for the convenient insertion therein of the elongated coupling-link 12. Preferably the throat-walls *b* are in the form of inclining flange-walls, rounded on their free inner edges, said edge on the lower flange-wall affording support to the link 12 when it is introduced within the chamber *a*.

An essential feature of the invention consists of the peculiarly-shaped gravity-block

13, that is pivoted at *c*, so as to have a limited rocking movement within the chamber *a*. As shown, the gravity-block 13 has a forwardly-projecting toe *d* at the front of the pivot *c*, and said toe is level on the upper side, the lower wall being rounded to permit the upper portion of the block to rock forwardly a limited distance.

At the rear of the toe *d* the front wall on the block 13 is curved forwardly and upwardly, thus producing an open recess *e*, wherein the end of an inserted link 12 will enter, and, as shown in Fig. 1, when the link is fully inserted and the gravity-block forwardly rocked in its normal position the swell *e'* that is above the toe *d* on the block 13 will contact the lower portion of its defining wall with the upper side of the link at its inserted end and hold the link in a level condition.

From the upper end of the gravity-block 13 a table-flange *g* is forwardly extended, and, as shown in Fig. 1, the front edge of said table-flange contacts with the upper throat-flange *b* when the gravity-block is in its normal position or forwardly rocked to admit the end of a coupling-link in the open recess *e*.

The top and lower walls of the draw-head 10 are perforated, as at *f f'*, in the same vertical plane at the transverse center of the draw-head, for the loose insertion of the cylindric coupling-pin 14, that has a headed enlargement *h* on its upper end, to which a flexible connection 15 is secured by one end, having its opposite end attached to the outer extremity of a rock-arm 16, that projects from the rock-shaft 17. The lower perforation *f'* is cupped or countersunk to insure the passage of the pin 14 through the lower wall of the draw-head when dropped, and an adjacent hole *f²* is formed behind the hole *f'* to permit the escape of snow or water.

The shaft 17 is journaled on the end wall of the car A, and is provided with a handle *i* at each end, and the length of the shaft slightly exceeds the width of the car-body whereon it is placed in a level condition, so that the handles *i* will be operative from the sides of the car by a trainman on the ground.

The table-flange *g* is perforated at a point *g'*, which will permit the pin 14, that rests on the flange named when the gravity-block 13 is forwardly rocked, to pass loosely through

said table-flange when the gravity-block is pressed upon at the front by a forcible insertion of the link 12, that impinges said block in the recess *e*, as clearly shown in Fig. 2.

5 It will be seen that the tendency of the gravity-block 13 to incline forwardly rests the rear edge of the perforation in the table-flange *g* on the body of a dropped pin 12, and thus prevents said pin from being jarred out
10 of a correct vertical position while in service. There is a guard-chain 18, attached by one end to the draw-head 10 and at its opposite end to the head of the pin 14, having such length as will permit the correct elevation of
15 said pin, while the upward removal of the pin from the draw-head is prevented, as shown in Fig. 1.

It will be evident from the foregoing description that the elevation of the pin 14 by
20 means of the rock-shaft 17, as before explained, will allow the gravity-block 13 to automatically rock forward until its front edge strikes the top throat-flange *b*, which arrests said block, thus affording a table on
25 the flange *g* for the pin to rest on; and it will be seen that the weight of the pin, together with the heft of the block 13 that is now disposed forward of the pivot *c*, will retain an inserted link 12 level and outwardly
30 projected from the draw-head to enter a similar draw-head.

When there are two of the improved car-couplings on cars that are to be coupled by
35 a link 12, the link may be either placed in one draw-head and left uncoupled, as shown in

Fig. 1, or be coupled by dropping the pin, as in Fig. 2. In either case the link will be held projected by the gravity-block 13 to enter and rock a similar block in a like draw-head, and which has been adjusted to support the pin 12 on the table-flange *g*, the rearward movement of the table-flange on the impinged block dropping the coupling-pin and effecting an automatic coupling of the two cars having the improvements. 45

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination with a chambered draw-head that is perforated in its top and lower
50 walls near the front end, and an elongated coupling-link, of a gravity-block pivoted in the chamber of the draw-head near the lower edge of the block, said block having a forwardly-extended toe, a transverse open recess immediately above the toe, a forwardly-projecting swell above the recess, affording
55 an overhanging wall that contacts with the end of the link when the latter occupies the recess, the block being further provided with a forwardly-projecting table-flange, that is perforated to drop the pin when the block is rearwardly rocked, and adapted to sustain
60 said pin at the rear of the perforation when the block is forwardly rocked, substantially as described. 65

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Witnesses:

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