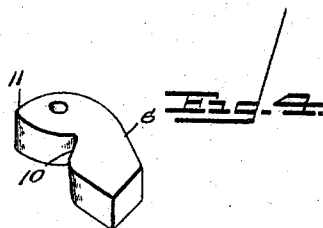
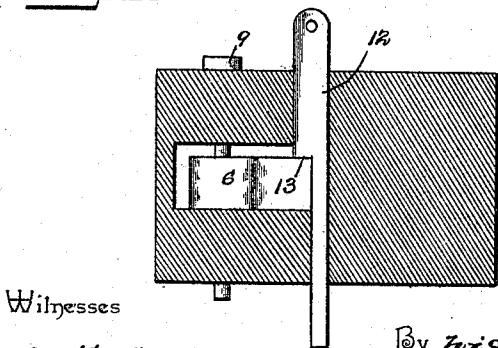
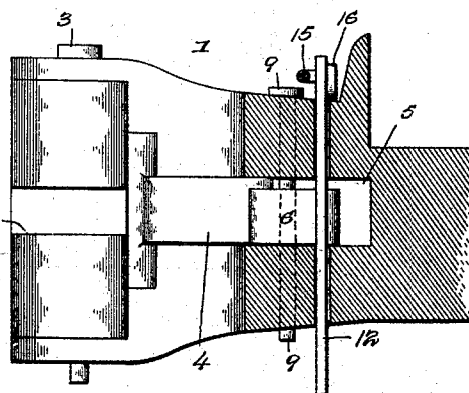
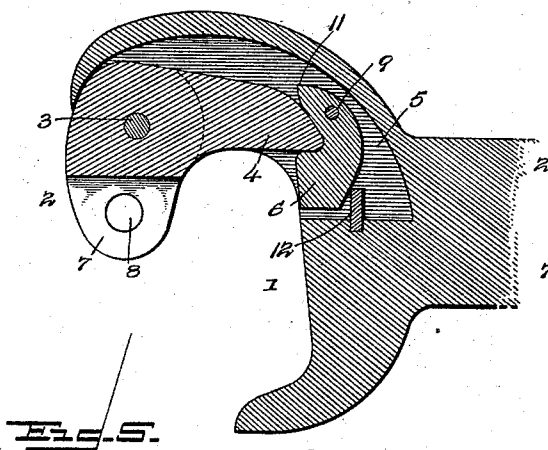
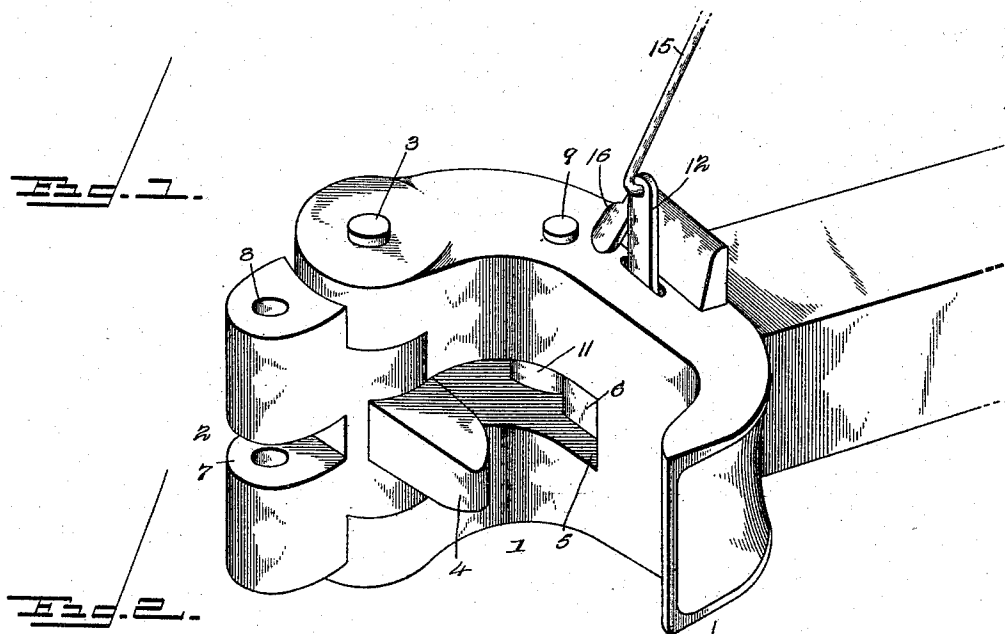


(No Model.)

J. P. ARMSTRONG.
CAR COUPLING.

No. 535,881.

Patented Mar. 19, 1895.



Inventor

James P. Armstrong

By his Attorneys.

Witnesses

E. H. Stewart
J. H. Pity

C. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES P. ARMSTRONG, OF BEAUMONT, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 535,881, dated March 19, 1895.

Application filed January 12, 1895. Serial No. 534,680. (No model.)

To all whom it may concern:

Be it known that I, JAMES P. ARMSTRONG, a citizen of the United States, residing at Beaumont, in the county of Jefferson and State of Texas, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

10 The object of the present invention is to improve the construction of automatic car couplings, and to provide a simple and inexpensive one of the Janney type, capable of readily coupling on short curves, and adapted to
15 be either coupled or uncoupled without going between cars.

A further object of the invention is to provide means whereby the parts may be readily set for automatic coupling, or to prevent coupling.
20

The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and pointed
25 out in the claims hereto appended.

In the drawings: Figure 1 is a perspective view of a car coupling, constructed in accordance with this invention, the parts being set for automatic coupling. Fig. 2 is a horizontal sectional view, the parts being in the position they occupy when coupled. Fig. 3 is a vertical longitudinal sectional view, the parts being arranged as shown in Fig. 2. Fig. 4 is a detail perspective view of the catch. Fig.
35 5 is a transverse sectional view illustrating the manner of supporting the vertically movable locking bar or pin for automatic coupling.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head having a knuckle pivoted to it by a knuckle pin 3, the knuckle 2 being provided with an arm 4 arranged, when
45 the knuckle is closed, to enter a recess 5 of one side of the draw-head, and to be engaged by a pivoted catch 6, located in the recess. The knuckle is adapted to engage one of a corresponding car coupling, and is provided
50 with the usual slot 7, and perforation 8, to enable the draw-head to be coupled with draw-heads having the ordinary pin and link.

The catch 6 is pivoted adjacent to its inner end by a vertical pin 9, and is provided with a shoulder 10, for engaging the arm 4 of the
55 knuckle, and it is provided at its inner end with a projecting heel 11, arranged to be engaged by the arm 4, whereby the shoulder 10 is swung outward into engagement with the arm of the knuckle. The catch is locked in
60 engagement with the arm of the knuckle by a vertically movable pin, or bar 12, provided at its bottom with a recess forming a reduced portion, and providing a shoulder 13 adapted to rest upon the catch, whereby the parts
65 are held in position for automatic coupling. When the heel of the catch is engaged by the arm 4, and the shoulder or engaging portion of the catch is swung forward or outward, the vertically movable bar is tripped and drops
70 behind the catch and locks it in engagement with the arm of the knuckle. When it is desired to uncouple the draw-head, the vertically movable bar or pin 12 is raised, until its enlarged upper portion above said shoulder,
75 which is formed by the recess, is carried above the catch, and the latter is free to swing rearward to release the arm of the knuckle.

The operation of uncoupling is performed by means of a lever 15, fulcrumed near its
80 lower end on the upper terminal of the vertically movable bar 12, and provided at that end with a foot-shaped head 16, adapted to engage the upper face of the draw-head, to permit the bar to be readily raised, without
85 slackening the speed of the train, if necessary. The lever may be arranged in a vertical position to prevent the vertically movable bar from falling, and by these means the draw-head may be maintained uncoupled.
90

Any suitable means may be employed for connecting the lever with the top and sides of a car, or for enabling it to be operated from the platforms of coaches, or the like.

It will be seen that the car coupling is exceedingly simple and inexpensive in construction, that it is capable of coupling on short
95 curves, and of being connected with cars having either a twin jaw car coupling, or the ordinary pin and link car coupling.

It will also be apparent that the car coupling is automatic in its operation, that it does not necessitate a person going between cars for the purpose of uncoupling, and that by
100

means of it cars may be uncoupled when in motion, without slackening the speed of a train, and without lessening the strain on the draw-head. Any car in a train may be uncoupled while the train is running at full speed.

Other objects and advantages will be readily understood and appreciated by those skilled in the art to which the invention appertains, and I desire it to be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In a car coupling, the combination of a draw-head, a knuckle pivoted thereto and provided with an arm, a horizontally swinging catch pivotally mounted in the draw-head and provided at one end with a heel and having at its other end a shoulder for engaging the arm of the knuckle, and a vertically movable bar mounted on the draw-head and provided with a shoulder and arranged in rear

of the catch and adapted to be supported by the same, substantially as described.

2. In a car coupling, the combination of a draw-head, a knuckle pivoted thereto and provided with an arm, a horizontally swinging catch mounted in the draw-head and arranged to engage the arm for locking the knuckle, a vertically movable pin located in rear of the catch and adapted to be supported by the same and capable of locking the catch in engagement with the arm of the knuckle, said bar being extended above the draw-head, and a lever pivotally connected to said bar and provided with a rounded head arranged to engage the draw-head, whereby the bar is raised out of engagement with the catch, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JAMES P. ARMSTRONG.

Witnesses:

DANDRIDGE A. BIBB,
HAL G. LAND.