

(No Model.)

I. L. BROWN.
CAR COUPLING.

No. 511,042.

Patented Dec. 19, 1893.

Fig. 1.

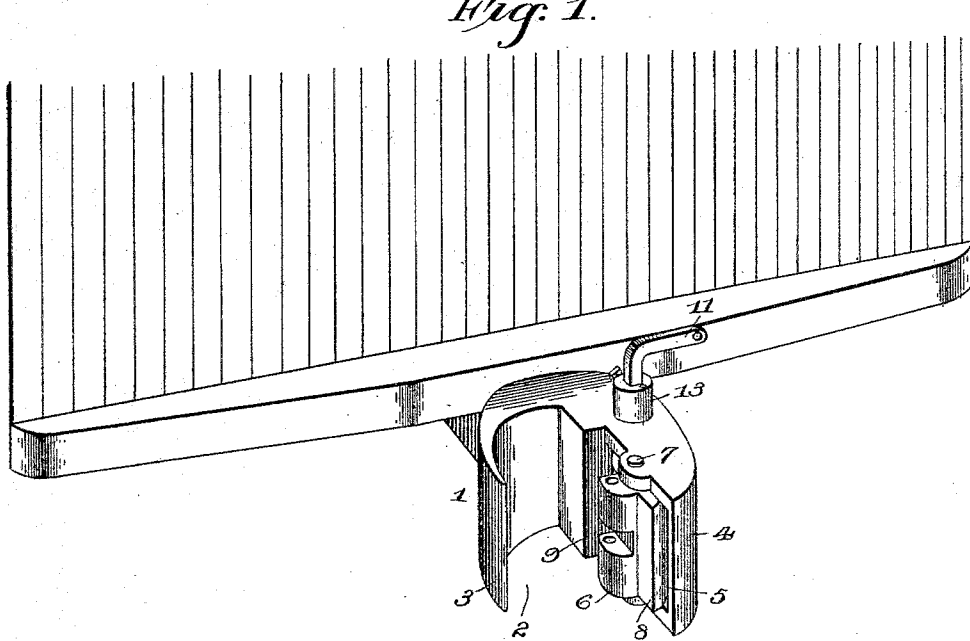


Fig. 2.

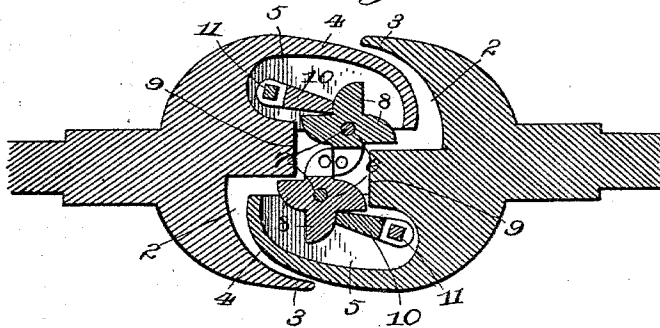
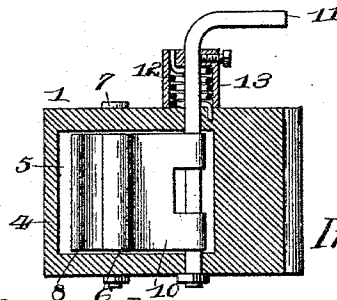


Fig. 3.



Witnesses

Chas. Ford
N. W. Wiley

By *his* Attorneys.

Inventor
Irvin L. Brown,

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UNITED STATES PATENT OFFICE.

IRVIN L. BROWN, OF WAVELAND, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 511,042, dated December 19, 1893.

Application filed October 7, 1893. Serial No. 487,449. (No model.)

To all whom it may concern:

Be it known that I, IRVIN L. BROWN, a citizen of the United States, residing at Waveland, in the county of Montgomery and State of Indiana, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

The object of the present invention is to improve the construction of car couplings, and to provide one which will be capable of coupling automatically, and which may be readily uncoupled from the top and sides of a car, and which will not necessitate going between cars.

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

In the drawings—Figure 1 is a perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a horizontal sectional view showing two draw-heads coupled. Fig. 3 is a vertical sectional view.

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

1 designates a draw-head provided at one side of a recess or opening 2 with an outward projecting arm 3, and having at the opposite side of the recess or opening an outwardly projecting portion 4 provided with a recess or cavity 5 at its inner side or face receiving a vertically disposed rotatively mounted compound knuckle 6, adapted to co-operate with a similar knuckle of a corresponding draw-head. The compound knuckle is pivotally mounted by a vertical pin 7, and is provided with a series of vertically elongated jaws 8, beveled at their outer sides, and having their inner sides or faces shouldered. One of the vertically elongated jaws projects at all times into the opening or recess 2 to interlock with a similar projecting jaw of a corresponding coupling and ar-

ranged adjacent to and in rear of the projecting jaw is a shoulder 9 of the draw-head, 50 which forms with the projecting jaw a rectangular recess for confining the engaging jaw of another coupling.

The compound knuckle is adapted to rotate rearwardly to permit, in coupling, the projecting jaws of two draw-heads to pass each other; and the knuckle is prevented from rotating forward and allowing the draw-heads to separate by a hinged catch or pawl 10 mounted on a vertical pintle 11 and held 60 in engagement with the knuckle by a spiral spring 12 arranged within a cap or cylinder 13, and having one end connected with the pintle, and its other end connected with or attached to the draw-head. The spring may 65 be arranged at the top or bottom of the draw-head; the lower end of the pintle is threaded and provided with a nut or other means for retaining it in its perforation of the draw-head; and the upper end of the pintle is 70 provided with an arm and may be connected by any suitable means with the top and sides of a car to enable the operation of uncoupling to be performed from those points without going between cars.

It will be seen that the car coupling is simple and comparatively inexpensive in construction, that it is automatic in its operation, and that it does not necessitate persons going between cars. It will also be apparent 80 that the vertically elongated jaws of the compound knuckle permit draw-heads to couple at different elevations.

Changes in the form, proportion, and the minor details of construction may be resorted 85 to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

In a car coupling, the combination of a 90 draw-head having a recess or opening and provided at one side of the same with a cavity and having a shoulder 9 arranged at the rear end of the cavity, a rotary compound knuckle mounted in the cavity and provided 95 with a series of jaws beveled at their outer

faces and having their inner or rear faces shouldered, said knuckle having one of its jaws projecting outward into the recess or opening with its shouldered portion or face
5 arranged adjacent to the shoulder 9 of the draw-head, a catch engaging the knuckle, and means for operating the catch, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 10 the presence of two witnesses.

IRVIN L. BROWN.

Witnesses:

WILL C. BUTCHER,
JOSEPH R. SHARP.