(No Model.)

E. P. CALDWELL.

CAR COUPLING.

No. 456,552. Patented July 28, 1891.

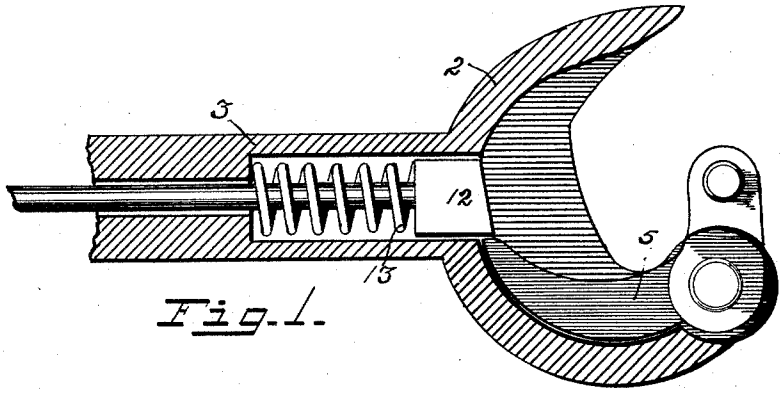


Fig. 1.

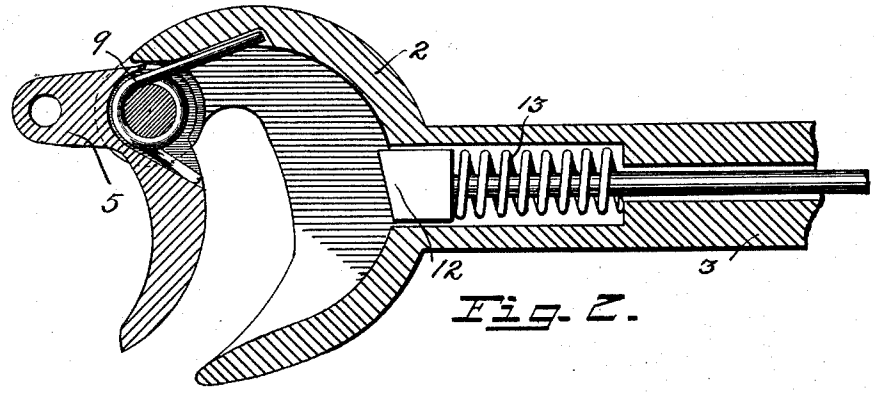


Fig. 2.

Witnesses.
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Inventor.
Edward P. Caldwell.
By Paul Queeny & Attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD P. CALDWELL, OF MINNEAPOLIS, MINNESOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 456,552, dated July 28, 1891.

Application filed October 18, 1890. Serial No. 368,509. (No model.)

To all whom it may concern:

Be it known that I, EDWARD P. CALDWELL, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain Improvements in Car-Couplers, of which the following is a specification.

My invention relates to improvements in car-couplers of the kind usually known as the "Janney" type, and the object I have in view is to provide a coupler of this class in which the jaw or knuckle will open automatically into position for coupling whenever it is released.

In the accompanying drawings, forming a part of this specification, Figure 1 is a horizontal section of one of my improved couplers showing the jaw closed. Fig. 2 is a similar section showing the jaw open.

In the drawings, 2 represents the head, and 3 the stem, of a draw-bar of the Janney type.

5 represents the movable jaw adapted to be closed when engaged by a corresponding member of a coupler. I provide this movable jaw or knuckle with a suitable spring, by which when the jaw is released it will be automatically opened and thus be in position for coupling. The spring that I use is a coiled or spiral spring 9, arranged upon the pivot pin or axis of the jaw and engaging the head and the movable jaw. When the jaw is closed the spring is put under tension and when the jaw is released the spring throws it open.

Any suitable latch may be used for locking the movable jaw in its closed position. I prefer to employ a latch 11, located in the center of the stem of the coupler and provided with a beveled end 12 and with a spring 13, by which it is thrown forward to engage the movable jaw. This latch may be connected with any suitable lever or other operating mechanism for moving it when it is desired to release the movable jaw. An ordinary locking-pin or gravity-latch may be used in place of the center latch, if desired. By this means the coupler is rendered absolutely automatic, as the movable jaw always opens when the latch is released, and it is therefore never necessary to go between the cars for any purpose.

I claim as my invention—

The combination, in a coupler of the described type, with the head 2 and the latch, of the movable jaw 5 and the spring 9, arranged upon the pivot or axis of the movable jaw within said head and engaging the movable jaw and the fixed head, whereby said movable jaw is opened when released by the latch and the spring is inclosed and protected by the head, substantially as described.

In testimony whereof I have hereunto set my hand this 15th day of October, 1890.

EDWARD P. CALDWELL.

In presence of—
A. M. GASKILL,
BESSIE BOOTH.