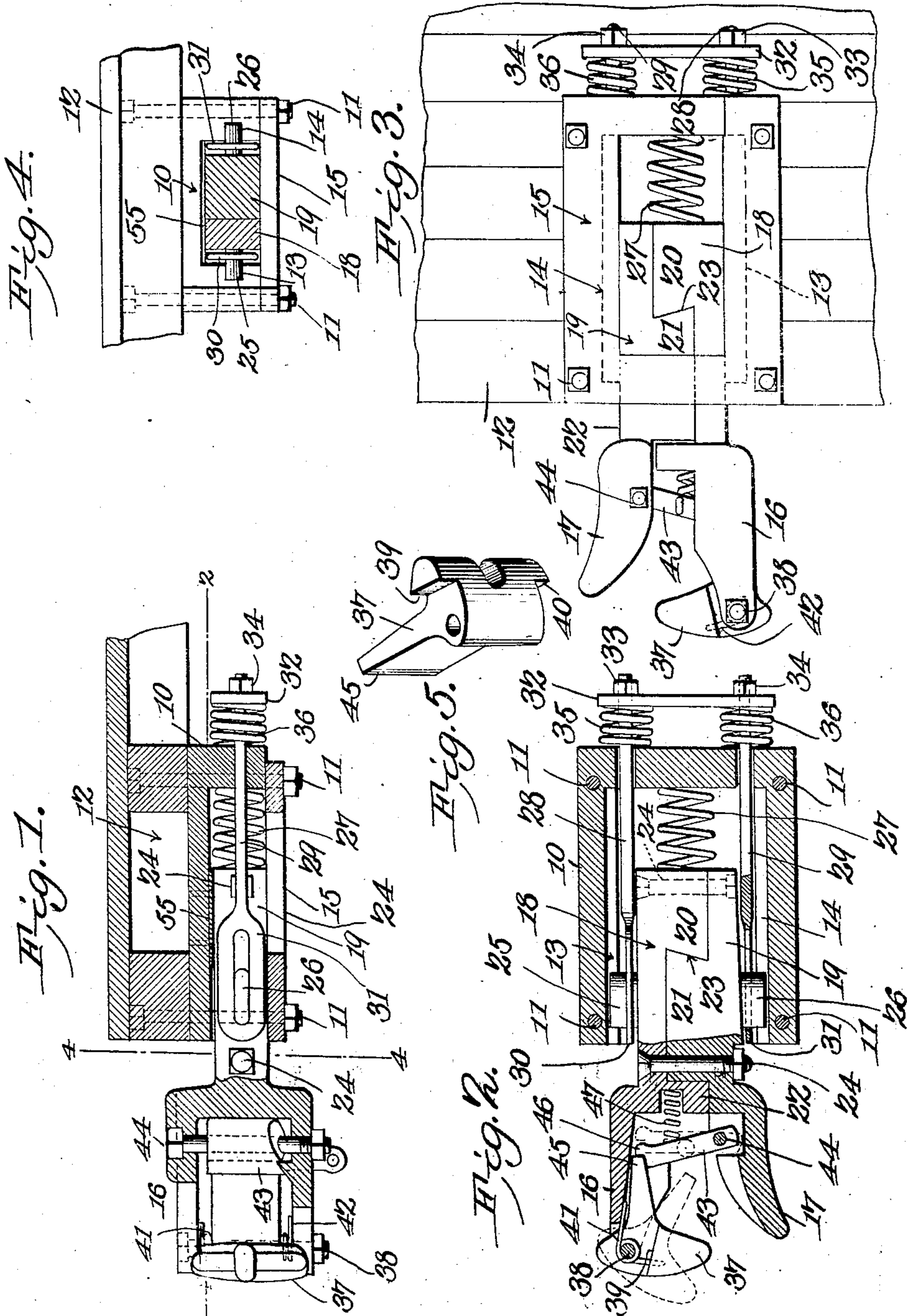


J. FARLOW.
CAR COUPLING.

APPLICATION FILED SEPT. 7, 1905.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES FARLOW, OF ANDERSON, INDIANA, ASSIGNOR OF ONE-HALF TO
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CAR-COUPLING.

No. 824,239.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES FARLOW, a citizen of the United States, residing at Anderson, in the county of Madison and State of Indiana, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, and has for its object to improve the construction and increase the efficiency and utility of devices of this character.

With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of embodiment of the invention capable of carrying the same into practical operation.

In the drawings, Figure 1 is a longitudinal sectional elevation. Fig. 2 is a plan view in section on the line 2 2 of Fig. 1. Fig. 3 is bottom plan view of the improved apparatus. Fig. 4 is a transverse section on the line 4 4 of Fig. 1. Fig. 5 is a perspective view of the knuckle member of the coupler detached.

The improved device comprises a supporting frame or base 10, suitably connected, as by bolts 11, to the under surface of the sill-timbers 12 of the car, the frame having depending sides provided with spaced grooves or channels 13 14, extending longitudinally thereof and with closed outer sides. The lower face of the frame is provided with a plate 15, secured thereto by the same bolts 11 by which the frame 10 is secured to the car-body.

The draw-head and draw-bar portion of the device is formed in two parts, the two parts of the draw-head represented, respectively, at 16 17 and the two parts of the draw-bar represented at 18 19. The draw-bar members are provided with interlocking lugs 20, 21, and 22 with the abutting faces of the lugs 20 21 inclined or arranged to form a dovetailed locking undercut joint (shown at 23,) the two parts united by clamp-bolts 24. By this arrangement it will be obvious that the longitudinal strains are borne by the in-

terlocking lugs and the bolts 24 relieved from shearing strains, while the inclined or undercut joint 23 relieves the bolts largely from lateral strains. Projecting in opposite directions from the shank members 18 and 19 of the draw-bar are guide-studs 25 26, operating in the channels 13 14 of the frame and bearing against the closed outer sides of the same.

The draw-bar portion of the device is yieldably supported in its outward position by a buffer-spring 27, bearing between the rear end of the draw-bar and the inner end of the frame 10. Passing inwardly through the rear end of the frame 10 are spaced draw-rods 28 29, having elongated eyes 30 31 at one end bearing over the studs 25 26 and coupled at the other ends by a yoke-bar 32, the latter secured in position by binding-nuts 33 34. Relief-springs 35 36 are disposed between the yoke-bar 32 and the rear face of the frame 10, the relief-springs preferably encircling the draw-rods.

The knuckle portion of the coupling is represented at 37 and pivoted in the draw-head portion 16 by a pin 38, the knuckle having recesses in its upper and lower sides forming shoulders 39 40, the recesses adapted to receive springs 41 42, coiled around the pin 38 and with one end extended into cavities in the shoulders and the other ends bearing against the inner face of the member 16, the springs 41 42 thus exerting their force to maintain the knuckle yieldably in outward position when released.

The lock portion of the coupling consists of a latch 43, pivoted at one end by a pin 44 in the member 17 and 5 bearing at its free end against the inner end 45 of the knuckle, the latch having a stop-lip 46 to limit its outward movement. The pivot end of the latch is extended for bearing against the adjacent face of the member 17, so that the longitudinal strains are borne by the body of the latch and the bolt 44 largely relieved from shearing strains. A spring 47 is disposed between the latch 43 and the rear wall of the member 16 to maintain the latch yieldably in its projected position. The elongated eyes 30 31 in the draw-rods 28 29 permit the requisite flexibility of the draw-bar and coupler-head, especially valuable in freight-car couplers. A

wear-plate 55 is disposed within the frame 10 to receive the upward thrust of the draw-bar and prevent undue wear of the frame.

Having thus described the invention, what is claimed is—

1. A car-coupler with a draw-head and a shank constructed in two parts divided longitudinally between the jaws of the draw-head and with one of the jaws upon each of said parts and with studs extending laterally one from each of said divided parts, means for detachably uniting said parts, draw-rods movably coupled to said studs, and means for connecting said rods to the body of the car.

2. In a car-coupler, a supporting-frame having a longitudinal guide-channel, a draw-head and its shank divided longitudinally into two parts with one of the jaws in each part and with laterally-extending studs slidably disposed in said channels, a buffer-spring between said shank and frame, draw-rods

movably coupled to said lateral studs and extending rearwardly of said frame, and relief-springs engaging said rods and bearing against said frame.

3. In a coupler, a supporting-frame having spaced side members provided with longitudinal guide-channels opening inwardly and with closed outer sides, a draw-head and draw-bar movable within said frame and provided with lateral studs bearing in said channels, draw-rods disposed between said frame members and draw-bar and with eyes engaging said studs, and relief-springs engaging said rods and bearing against said frame.

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

JAMES FARLOW.

Witnesses:

JOHN C. ARMINGTON,
W. F. PENCE.