April 18, 1939. V. E. SISSON 2,155,333

CAR COUPLER OPERATING ROD

Filed March 27, 1937

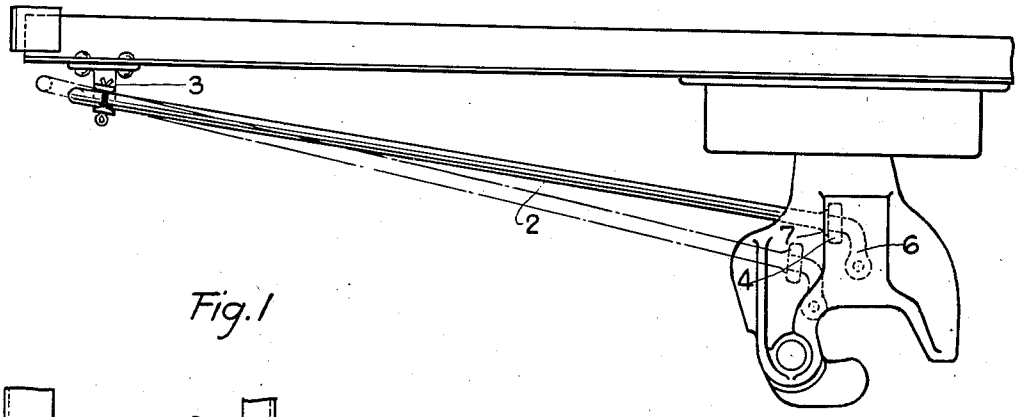


Fig. 1

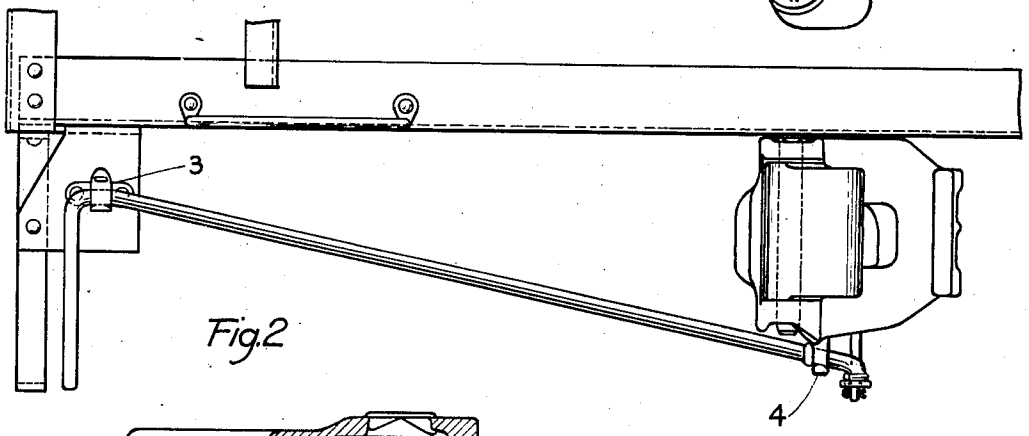


Fig. 2

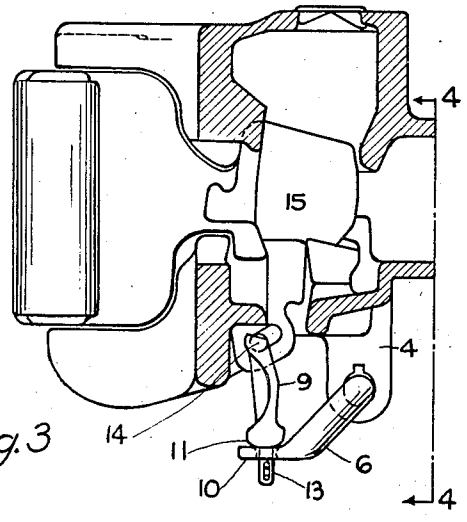


Fig. 3

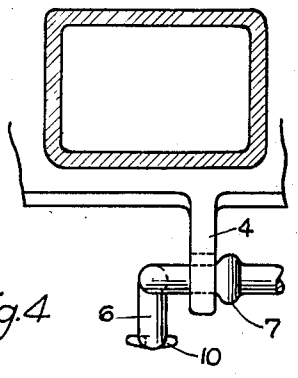


Fig. 4

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2,155,333

CAR COUPLER OPERATING ROD

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Application March 27, 1937, Serial No. 133,326

3 Claims. (Cl. 213—167)

The invention relates to railway car couplers mounted on the car to move longitudinally of the car in buff and draft; to move sidewise of the car in rounding curves and for coupling and for slight vertical movement, all of which movements occur while the car is in normal service.

The object of the invention is to provide means for operating such a car coupler from adjacent the side of the car, in any service position of the coupler, as required by the Safety Appliance Acts.

The device is especially adaptable to couplers provided with a depending part for transmitting operating movements to the coupler lock upon vertical movement thereof, such as, for instance, as shown in Kinne Patent No. 1,639,301 of August 16, 1927, and Kinne Patent No. 1,985,036 of December 18, 1934.

Another object of the invention is to provide an operating rod for remote control of the coupler which has one end solely supported by the coupler so as to move therewith upon service movements of the coupler so as to maintain a predetermined relationship between the operating rod and the mechanism for unlocking the coupler and for releasing the anti-creep feature.

In the drawing:

Figs. 1 and 2 show a typical application of my device to a railway car.

Fig. 3 shows a side view of a coupler and a portion of my device.

Fig. 4 is a section on line 4—4 of Fig. 3.

The operating rod 2 has its outer portion solely supported by the bracket 3 adjacent the side of the car and has its inner portion solely supported by the lug 4 depending from the coupler head. The inner end of the operating rod is bent to form a crank arm 6 and is preferably also provided with a shoulder 7. The lug 4 is positioned between the shoulder 7 and the crank 6 to restrict the lengthwise movement of the rod 2. (See Fig. 4.)

The crank arm 6 has a connection with the depending part or lock lifter 9 of the coupler for universal movement therebetween which, in the form shown, comprises a flat portion 10 of the end of the operating rod crank arm 6 provided with an aperture. The lug 4 is provided with an aperture forming a bearing for the inner end of the operating rod and this aperture is provided with a key slot (shown in Fig. 3) so that the flat portion 10 of the crank arm 6 may be inserted therethrough for assembling the device. The lock lifter 9 is provided with a semi-spherical end 11 which rocks on the flat portion of the crank arm for universal movement. The lock lifter 9 is provided with a pintle 13 extending through the aperture to accommodate a cotter, nut or other means to hold the lock lifter in engagement with the crank arm. The upper end 14 of the lock lifter is connected with the lock 15 so that an upward movement of the lock lifter releases the coupler, raises the lock and unlocks the coupler. (The coupler is shown in Kinne Patent No. 1,639,300 of August 16, 1927.)

When the coupler moves laterally of the car the operating rod swings around the bracket 3 so that, for instance, when the coupler has moved outwardly and sidewise, as shown by the dotted lines in Fig. 1, the relationship between the coupler and the end of the crank 6 has changed so that the lock lifter 9 rocks upon the crank arm, or in other words, a universal connection between the lock lifter and the crank arm is provided.

The accompanying drawing illustrates the preferred form of the invention, though it is to be understood that the invention is not limited to the exact details of construction shown and described, as it is obvious that various modifications thereof, within the scope of the claims, will occur to persons skilled in the art.

I claim:

1. In a railway car having a coupler mounted therein for sidewise and lengthwise service movements, which coupler is provided with a depending part for transmitting operating movements to the coupler lock upon vertical movement thereof in combination with an operating rod having its outer portion slidably supported by a bracket adjacent the side of the car and having its inner portion slidably supported by a lug depending from the coupler head, the inner end of said rod provided with a crank arm having a connection with said depending part to move therewith and providing for universal movement therebetween whereby rotation of the operating rod swings the arm upwardly which raises the depending part of the coupler and operates the coupler in any service position of the coupler.

2. In a railway car having a coupler mounted therein for sidewise and lengthwise service movements, which coupler is provided with a depending part for transmitting operating movements to the coupler lock upon vertical movement thereof in combination with an operating rod having its outer portion slidably supported by a bracket adjacent the side of the car and having its inner portion slidably supported by a lug depending from the coupler head, the inner end of said rod provided with a crank arm and spaced

shouldered elements on opposite sides of the depending part to provide limited lengthwise movement of the rod, said crank arm having a connection with said depending part to move therewith and providing for universal movement therebetween whereby rotation of the operating rod swings the arm upwardly which raises the depending part of the coupler and operates the coupler in any service position of the coupler.

3. In a railway car having a coupler mounted therein for sidewise and lengthwise service movements, which coupler is provided with a depending part for transmitting operating movements to the coupler lock upon vertical movement thereof, said part being provided with a semi-spherical lower end in combination with an operating rod having its outer portion supported by a bracket adjacent the side of the car and having its inner portion supported by a lug depending from the coupler head, the inner end of said rod provided with a crank arm having a flat portion engaging the semi-spherical end of said depending part for universal movement therebetween whereby rotation of the operating rod swings the arm upwardly which raises the depending part of the coupler and operates the coupler in any service position of the coupler.

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