June 17, 1958 P. J. LAHEY ET AL 2,839,204

COUPLER OPERATING ROD BRACKET

Filed March 4, 1957

Fig. 1

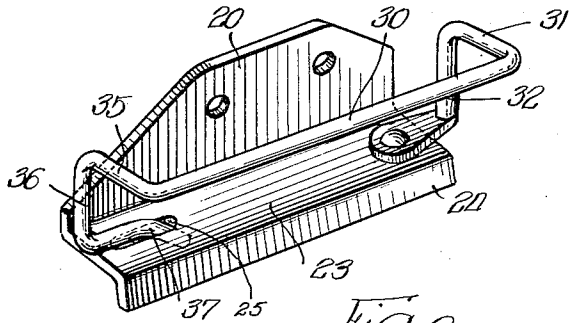


Fig. 2

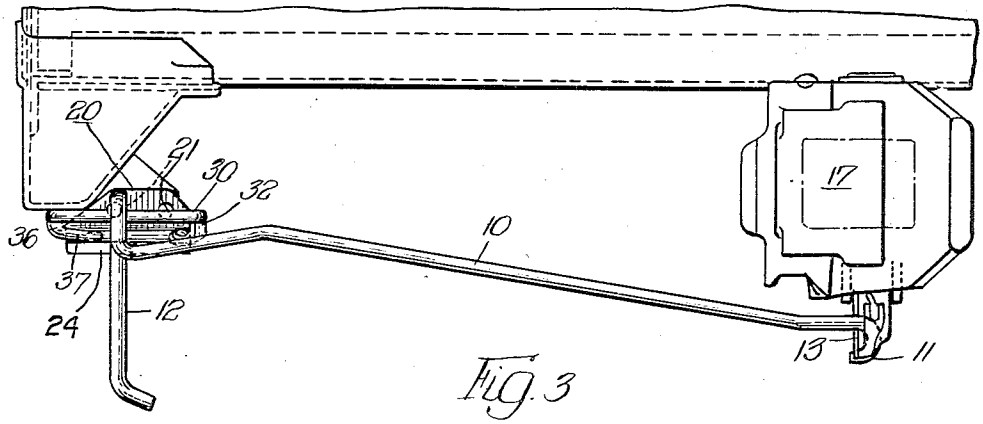
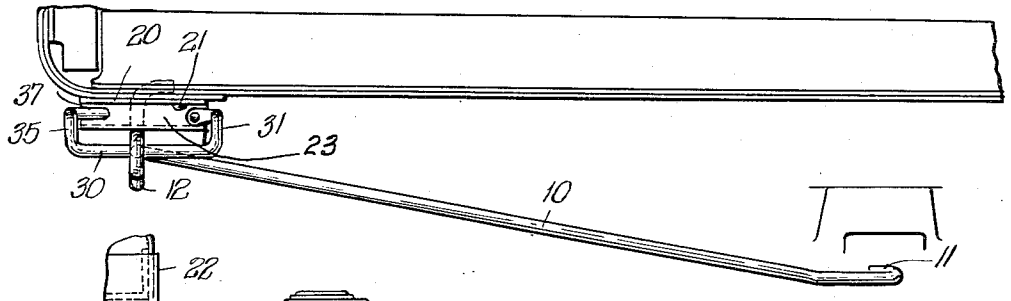


Fig. 3



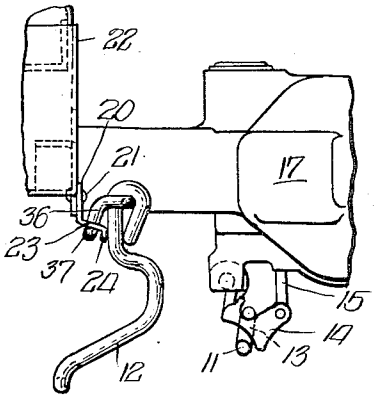


Fig. 4

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COUPLER OPERATING ROD BRACKET

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Application March 4, 1957, Serial No. 643,599

5 Claims. (Cl. 213—171)

This invention relates as indicated to railway car coupler operating mechanisms. More particularly the invention is concerned with an improved bracket for supporting the operating rod in an apparatus for manipulating the coupler by a trainman from the side of a railway car.

The principal object of the invention is to provide a bracket for supporting the operating rod of such mechanisms adjacent a corner of the car, and is an improvement upon the type of bracket shown in our copending application, Serial No. 623,016.

An increasing number of cushion underframes and long travel draft gears are being used in railway freight cars in which a total movement of car coupler and uncoupling lever of 24" is required; which in combination with the side travel of the coupler, takes up the clearance between the uncoupler lever hook and the coupler rotor. Therefore, a considerable lateral and angling movement of the operating rod in the supporting bracket must be maintained, as otherwise the lack of clearance between the lever hook and coupler rotor would be a contributing factor in causing undesirable break-in-twos. On the other hand there are literally hundreds of thousands of freight cars now operating having standard underframes and draft gears where just ordinary clearance between lever hook and coupler rotor is sufficient.

Our improved bracket is made in two parts, one part being a pressed mounting plate which is attached to the car, and the other part being a bar, one end of which is secured to said plate and the other end bent to extend through a hole therein. Thus the bars may be made in different lengths with the ends shaped to fit the same mounting plate. Consequently, the mounting plate of the bracket would be the same for all cars, with the bars varying according to the type of underframe and draft gear. This forms the principal object of our invention.

Other objects and advantages of the invention will appear in the following description thereof and from an examination of the accompanying drawing which illustrates one embodiment of the invention and wherein like reference characters indicate like parts.

In the drawings—

Figure 1 is a perspective view of the improved bracket for supporting an uncoupling rod adjacent its handle.

Figure 2 is an elevational view showing the uncoupling rod supporting adjacent its handle end by the improved bracket.

Figure 3 is a top plan view of the rod and its supporting bracket showing fragmentary portions of the car.

Figure 4 is an end elevation of Figure 1.

In the drawings **10** indicates the body portion of an operating rod for an Association of American Railroads long travel draft gear. The inner end of rod **10** is formed into a hook portion **11**, adapted for connection with an eye **13**, of the rotor **14** which is pivotally connected to the lock lifter **15**. Thus rotation of rod **10** anti-clockwise will cause the rotor to raise the lock lifter, thereby uncoupling the coupler 17. The outer end of said rod is

provided with a depending handle portion **12** by which the rod is manually rotated to unlock the coupler.

The bracket for said rod comprises a pressed mounting plate having an upright portion **20** provided with spaced holes through which rivets **21** may extend and secure said bracket to a corner bracket **22** of the car. The mounting plate is bent at less than a right angle to form a flange **23** extending substantially the entire width of the plate, to provide said plate with the requisite strength and rigidity. At the outer edge of the flange **23** is formed a downturned flange **24** which acts as a stop for the handle when in rest position. Adjacent one end of flange **23** there is provided a round hole and adjacent the other end of said flange there is provided an elongated hole **25**.

A round bar is supported at opposite ends in these holes in flange **23**, said bar having a horizontal body portion **30**, at the inner end of which said bar is turned inwardly toward the car as at **31** then downwardly as at 32 toward flange **23**, and then laterally on said flange. This end of said rod is flattened, and provided with a hole therethrough, registering with the round hole in flange **23**, through which fastening means such as a bolt or rivet passes in holding the bar to the bracket. The other outer end of the bar **30** is also turned inwardly as at 35, corresponding to the inturned portion **31**, then downwardly as at **36**, then inwardly and downwardly in the form of an S-curve as at **37** through the elongated hole **25**. As long as the fastening means securely holds the other end of the bar, the curved end **37** cannot come out of the elongated hole **25**, as the end underlaps the flange **23** and the bar **30** is thus attached to the bracket.

The handle portion **12** of the rod extends upwardly behind the bar **30** over and down around the bar, forming an eye surrounding the bar as clearly shown in Figure 4. The inner diameter of the eye is greater than the diameter of bar **30** to provide a loose fit, so that there can be considerable angling of the rod **10** in relation to the fixed bar **30** without causing any binding of the eye on bar **30**. The eye just described completely surrounds the bracket bar **30** and contacts the handle portion as shown in Figure 4, so that when the handle **12** is manipulated to rotate the rod **30** in anti-clockwise direction about its axis of rotation, there is no tendency in case of strain to open the eye.

The bar **30** is in length at least the same as the distance of travel laterally of the coupler, so that the eye of the rod **10** may slide freely on said bar **30** during movements of the coupler without binding.

In case of long travel draft gears the same bracket would be used, but the bar **30** would be longer and the ends turned in more to fit the fixed holes in the flange **23** of the bracket. Thus the bracket is suitable for all draft gears, and only the bar need be changed to suit the individual requirements of the draft gear.

In assembly, the mounting plate is attached to the car by the rivets **21**. The eye in the operating rod is then slid over the curved end of the bar **30** onto the horizontal portion thereof and then the curved end **37** of the bar is passed into the elongated hole **25**. The fastening means is then applied through the other flattened end of the bar and the flange to hold the bar securely in place.

We claim:

1. A supporting bracket for an operating rod adapted to operate a car coupler upon manual operation of said rod, said bracket comprising an upright portion, for attaching said bracket to a car, a lower flange issuing from the lower edge of the upright portion, said flange having an opening therethrough, a bar having a horizontal portion, spaced from said flange, and end portions, one of which is removably secured to said flange and the other of which terminates in a curve extending through said opening.

2. A supporting bracket for an operating rod adapted to operate a car coupler upon manual operation of said rod, said bracket comprising an upright portion, a lower flange issuing from the lower edge of the upright portion, said flange having spaced openings therethrough, a bar having a horizontal portion, spaced from said flange, and end portions, one of which is removably secured to said flange and the other of which terminates in a curve extending through one of said opening.

3. A supporting bracket for an operating rod adapted to operate a car coupler upon manual operation of said rod, said bracket comprising an upright portion, a lower flange issuing from the lower edge of the upright portion, said flange having an opening therethrough, a bar having a horizontal portion, spaced from said flange, one end of said bar being in the form of an S-curve extending through said opening and underlapping said flange, the other end of said bar being secured to said flange.

4. A supporting bracket for an operating rod adapted to operate at car coupler upon manual operation of said rod, said bracket comprising a pressed mounting plate having an upright portion for attaching said bracket to a car, a lower flange issuing from the lower edge of said upright portion, said flange having spaced openings therethrough adjacent the ends of said flange, one of said openings being elongated, a bar having a horizontal portion spaced from and parallel to said flange and end portions, one end portion being removably secured to said flange through one of said openings, and the other end portion terminating in a curve extending through said elongated opening.

5. A supporting bracket for an operating rod adapted to operate a car coupler upon manual operation of said rod, said bracket comprising a pressed mounting plate having an upright portion for attaching said bracket to a car, a lower flange issuing from the lower edge of said upright portion, said flange having an elongated opening therethrough adjacent one end thereof, a bar having a horizontal portion spaced from and parallel with said flange and end portions, one end portion being secured to said flange adjacent one end thereof, and the other end portion terminating in a curve extending through said elongated opening.

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