July 21, 1931. G. T. COOKE 1,815,704

ROD SUPPORT AND HOLDER

Filed May 31, 1930

Fig. 1.

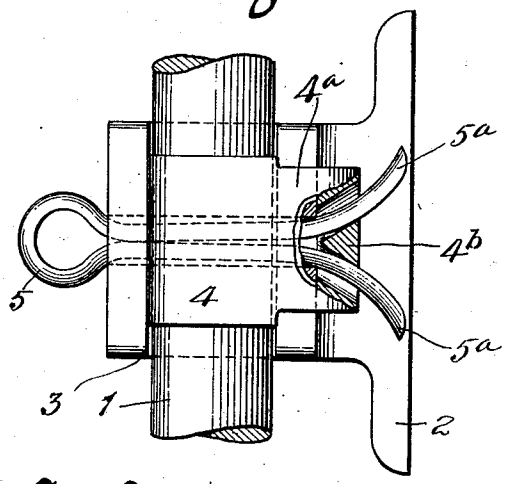


Fig. 2.

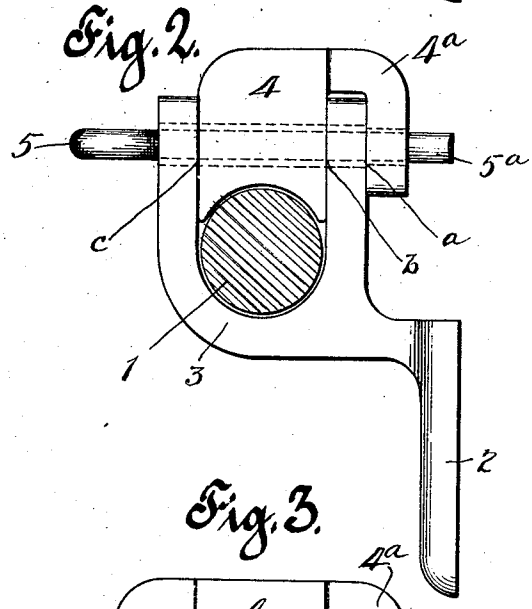
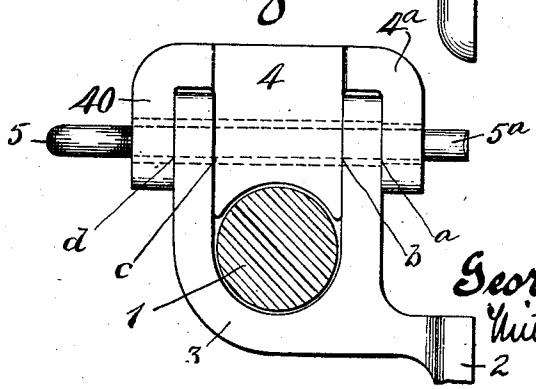


Fig. 3.



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ROD SUPPORT AND HOLDER

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This invention relates to improvements in equipment for railroad cars. More particularly it applies to what is known as a coupler release rigging, wherein brackets are provided to support the coupler release rod, in which brackets said rod is rotatably supported for the purpose of operating the car coupling from either side of a car, thus making it unnecessary for the train man to enter between the cars for that purpose. Such parts are subjected to very severe vibration, and it is hence of great importance that they should be securely held.

One purpose of the present invention is to provide an improved means for holding the rod in place which permits of the use of the present standard brackets.

Another object is to so construct said means that when it is assembled the keeper which holds the rod in place will be very securely held.

In the accompanying drawings—

Fig. 1 is a plan view of the invention, the ends of the coupler release rod being broken away, said view also being partly in section;

Fig. 2 is an end elevation of the parts shown in Fig. 1;

Fig. 3 is an end elevation of a modification.

In that particular form of the invention shown in the drawings, 1 represents a rod, which constitutes part of the coupler release rigging. This rod is supported in two brackets mounted on the end of a car, and each of which brackets comprises a suitable base 2, which is designed to be securely fastened on the car end by any suitable means, said bracket carrying a U-shaped rod supporting portion 3, the rod resting in the bottom of said U-shaped portion, as shown in Figs. 2 and 3. 4 is a keeper block or saddle, which is designed to fit in between the two upright sides of the U-shaped rod support, as shown in the drawings, the lower end of the keeper standing over the rod 1, thus holding it in place. 5 is the head of a cotter pin, and 5^a—5^a are the two ends thereof.

The keeper block in the form shown in Figs. 1 and 2 is provided with a laterally and downwardly extending lug 4^a, that extends over one side of the end of the bracket and downwardly along the back thereof. A cotter pin passage is formed in both sides of the U-shaped portion of the bracket and a corresponding passage is formed in the block 4, in line therewith. Two divergent cotter pin exit passages are formed in the lug 4^a, so as to form between them a wedge 4^b, the apex of the wedge being in line with the passage through the bracket and block 4.

It will now be seen that when the rod 1 is dropped into the bracket and the block 4 is in place, a cotter pin applied from the outer side of the bracket and passed through the cotter pin passages will engage the wedge 4^b, so that, as the cotter pin is driven in, the ends 5—5 of the cotter pin will be automatically spread, as shown in Fig. 1, thus locking the cotter pin against unintentional removal or escape by vibration, similarly locking the block 4 in place. It will now be noted that the block 4 is held in place effectively by the cotter pin 5 and that before it can escape the pin 5 must be sheared off. Resistance to any shearing strain is offered at three places, to wit, on the lines *a*, *b* and *c*. In view of the fact that such cotter pins as are employed for this use are usually made of heavy material, and in view of the fact that resistance to shearing occurs at so many places, the danger of cutting off the pin and releasing the block 4 is almost entirely eliminated.

In Fig. 3 I have shown a construction identical with that shown in Figs. 1 and 2, excepting that I have added another ear on the outer side of the block 4, said ear being indicated at 40. The only difference between the ear 40 and the ear 4^a is that the pin passage through the ear 40 is a straight passage, to permit the pin to be inserted. In this construction it will be noted that another line of resistance is offered to any shearing strain on the pin, so that, in all, four lines of resistance are offered, the same being indicated at the points *a*, *b*, *c* and *d*.

In view of the fact that there are very many thousands of such standard rod supporting brackets in use, and in view of the fact that it would involve almost prohibitive expense to replace all of such brackets on cars now in use, the importance of the present in-

vention will be appreciated, since it permits of the brackets now in use being maintained, and yet provides an improved means to be associated therewith for the purpose of effectively holding the rod in place, which mechanism, when applied and secured by a cotter pin, requires no separate act to open the cotter pin, but always guarantees a certain opening thereof, so that, by no chance can the cotter pin escape and release the keeper block. Furthermore, owing to the inaccessibility of the end of the pin at the back of the bracket, any manual act to open such a pin in such a place is difficult and could not be depended upon to always be effectively done. By the present invention, however, the ends of the pin are always open and spread sufficiently to guarantee that the pin will be held in place against longitudinal escape.

While I have shown and described my invention in certain preferred forms and for one particular use, it should be understood that it is not limited thereto and that various changes and adaptations may be employed without departure from the spirit and scope of the appended claim.

I claim:

In a device of the character described, a U-shaped bracket for rotatably supporting a rod, a keeper block removably mounted in the U-shaped part of said bracket to overstand a rod therein, a lug on said block, extended so as to lie along one of the outer walls of said bracket, said bracket, block and lug having pin passages to receive a pin for holding said lug in place in said bracket, and a wedge in the passage through said lug, the apex thereof facing the passage through said bracket and block to engage and spread the ends of a cotter pin passed through said lug.

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