Jan. 29, 1929. 1,700,120

S. H. CAMPBELL

RETAINING VALVE BRACKET

Filed Feb. 23, 1927

Fig.1.

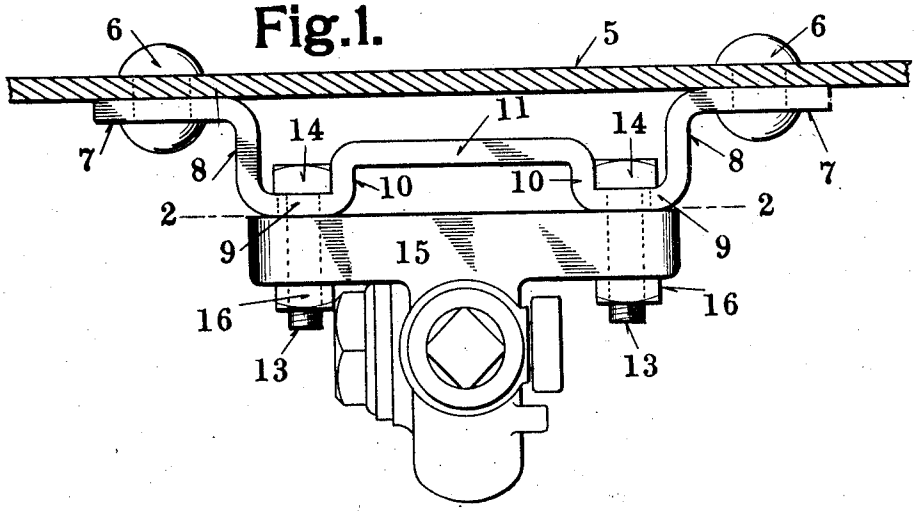


Fig.2.

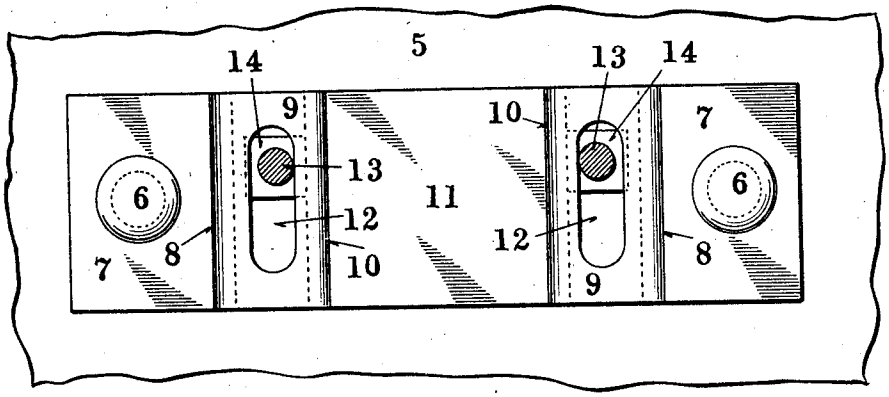
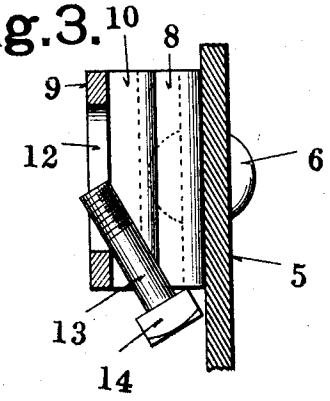


Fig.3.



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UNITED STATES PATENT OFFICE.

STERLING H. CAMPBELL, OF ST. LOUIS, MISSOURI, ASSIGNOR TO WESTERN RAILWAY EQUIPMENT COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

RETAINING-VALVE BRACKET.

Application filed February 23, 1927. Serial No. 170,183.

My invention relates to a retaining valve bracket and particularly to improvements in the type of bracket shown and described in Patent No. 1,600,311 granted to me September 21, 1926.

One object of my invention is to so construct this type of bracket that ordinary square headed bolts may be used to hold the valve in position on the bracket. Another object of my invention is to permit of greater vertical adjustment of the valve with relation to the bracket and at the same time to allow of the removal and replacement of the bolts securing the valve while the bracket is in position on the car.

In the accompanying drawings, which illustrate one form of bracket made in accordance with my invention, Figure 1 is a top plan view of the bracket together with a retaining valve and a portion of the end of a car to which the bracket is attached; Figure 2 is a section taken on the line 2—2 of Figure 1; and Figure 3 is a vertical section through the bracket, the valve being removed and one of the bolts being shown in position for insertion.

The end of the car 5 has secured to it by means of rivets 6 a bent plate forming the bracket. This plate comprises ends 7 through which the rivets pass, forwardly projecting walls 8 terminating in bearing parts 9, and rearwardly projecting walls 10 connected by the central part 11. Formed in the bearing parts 9 are slots 12 for the passage of bolts 13 provided with square heads 14. These bolts pass through the lugs of a retaining valve 15 which is secured in position by nuts 16 on the bolts.

Guide ways for the bolt heads are formed by the spaces between the walls 8 and 10, which guide ways are slightly greater in width than a side of the bolt head but less than its diagonal. Lateral adjustment of the bolts necessary to accommodate slight variation in the bolt holes in the valve lugs is thus secured and at the same time rotation of the bolts is prevented. The slots 12 are slightly wider than the diameter of the bolts to permit the lateral adjustment above referred to and their length not only permits sufficient vertical adjustment of the valve with respect to the bracket but also allows of the insertion and removal of the bolts while the bracket is in position on the car, as shown in Figure 3, notwithstanding the fact that the distance between the rear face of the part 9 and the end of the car 5 is less than the length of the bolt. I thus provide means for renewing worn or damaged bolts without removal of the bracket and at the same time avoid undue spacing of the valve from the car end.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. In a device of the class described, the combination with a bracket adapted to be secured to a car, the rear face of said bracket being provided with a pair of guide ways having open ends and spaced from the car wall a sufficient distance to allow the insertion of fastening bolts through said open ends, said guide ways being adapted to receive the heads of said bolts and prevent their rotation, and slots in said bracket communicating with said guide ways, said bolts being vertically adjustable in said slots and being adapted to engage and secure a retaining valve.

2. In a device of the class described, the combination with a bracket adapted to be secured to a car, the rear face of said bracket being provided with a pair of guide ways having open ends and spaced from the car wall a sufficient distance to allow the insertion of fastening bolts through said open ends, and slots in said bracket communicating with said guide ways, said fastening bolts being situated in said slots and provided with square heads, the walls of said guide ways being spaced to prevent rotation of the fastening bolts by contact with their heads but to allow of their limited lateral movement, said fastening bolts being adapted to engage and secure a retaining valve.

In testimony whereof, I hereunto affix my signature, this 19th day of February, 1927.

STERLING H. CAMPBELL.