July 24, 1928. 1,678,141

L. A. HOERR

DRAFT GEAR

Filed Aug. 24, 1925

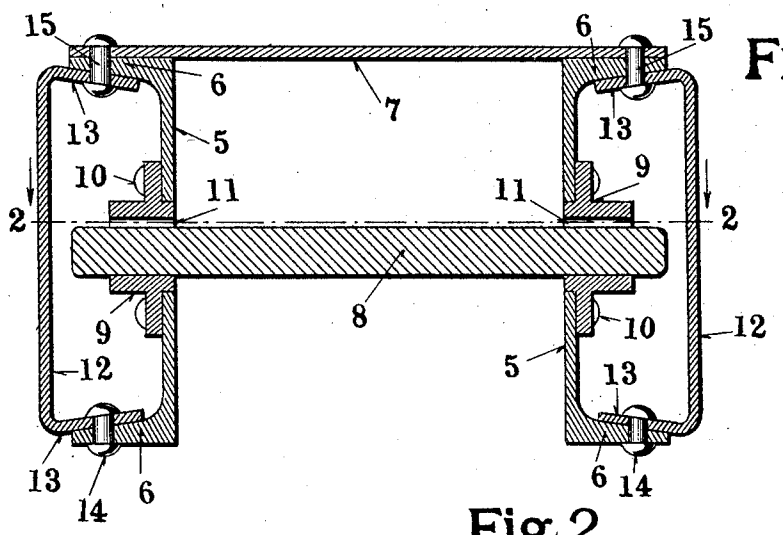
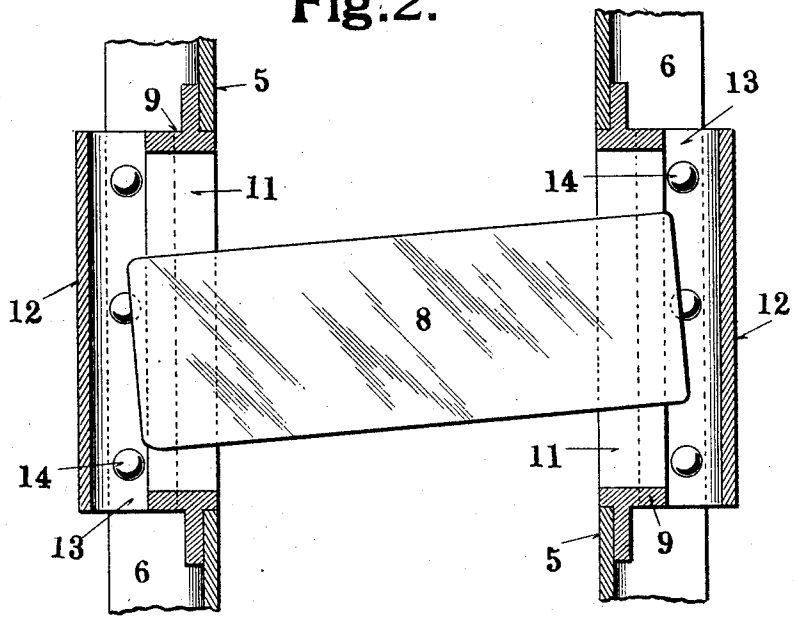


Fig.1.

Fig.2.



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UNITED STATES PATENT OFFICE.

LOUIS A. HOERR, OF ST. LOUIS, MISSOURI, ASSIGNOR TO WESTERN RAILWAY EQUIPMENT COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF MISSOURI.

DRAFT GEAR.

Application filed August 24, 1925. Serial No. 51,923.

My invention relates to improvements in draft gear and particularly to improvements in the means for holding the key of the gear in position. Heretofore, it has been customary to secure the key by providing the key itself at each end with an abutment adapted to contact with the cheek pieces; the most common construction being that in which the key is provided at one end with an integral head, and at the other with a cotter pin or similar removable abutment.

The object of the present invention is to obviate the necessity of providing the key itself with abutments, and this I accomplish by the use of abutments or stop plates, independent of the key and carried by some other part of the car, preferably the draft sills.

In the accompanying drawings which illustrate one form of draft gear made in accordance with my invention. Fig. 1, is vertical section, and Fig. 2 is a section taken on the line 2—2 of Fig. 1.

The draft sills indicated at 5 are preferably formed of channel bars having flanges 6 and are spaced apart by a top plate 7. Situated between the sills 5 are the coupler shank draft yoke, draft springs, etc. which are not shown as they form not part of the present invention and may be of any desired form. Extending laterally through the sills is the key 8 which differs from the usual form of key in being unprovided with abutments of any kind to limit its lateral movement. The key may pass through slots formed directly in the sills 5, but I prefer to provide the sills with separately formed cheek pieces 9 secured to the sills by any suitable means, such as bolts or rivets 10. In the cheek pieces 9 are formed slots 11 for the reception of the key.

In order to limit the lateral movement of the key in either direction, I provide a pair of stop plates 12, preferably of approximately the same length as slots 11 in the cheek pieces. These stop plates have their edges turned over to form wings 13 arranged at an angle to correspond with the inner faces of the flanges 6 of the draft sills. Rivets 14 secure the lower wings to the lower flanges and rivets 15 secure the upper wings to the upper flanges, and at the same time hold the upper or spacing plate 7 in position.

My construction not only produces a simple, effective and cheap structure, performing the same function as the prior devices of its class, but has the further advantage that in case the key becomes broken, the device will still be operative for the parts of the key will be held in alignment by the coupler shank and draft yoke (not shown) while the stop plates will effectively check the lateral movement of either part of the key. This would not be the case where abutments on the key itself are depended upon to retain the key.

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 pair of draft sills each having upper and lower flanges of a draft key extending laterally through the said sills, a stop plate provided with substantially horizontal wings above and below the plane of said key, and means for securing said wings to the flanges of the sill, said plate limiting the lateral movement of the key.

2. In a device of the class described, the combination with a pair of draft sills each having upper and lower flanges of an unheaded draft key extending laterally through said sills, a pair of stop plates each having wings above and below the plane of the key, and means for securing said wings to the flanges of the sills, said stop plates limiting the lateral movement of the key in either direction.

In testimony whereof, I have hereunto affixed my signature, this 21st day of August, 1925.

LOUIS A. HOERR.