

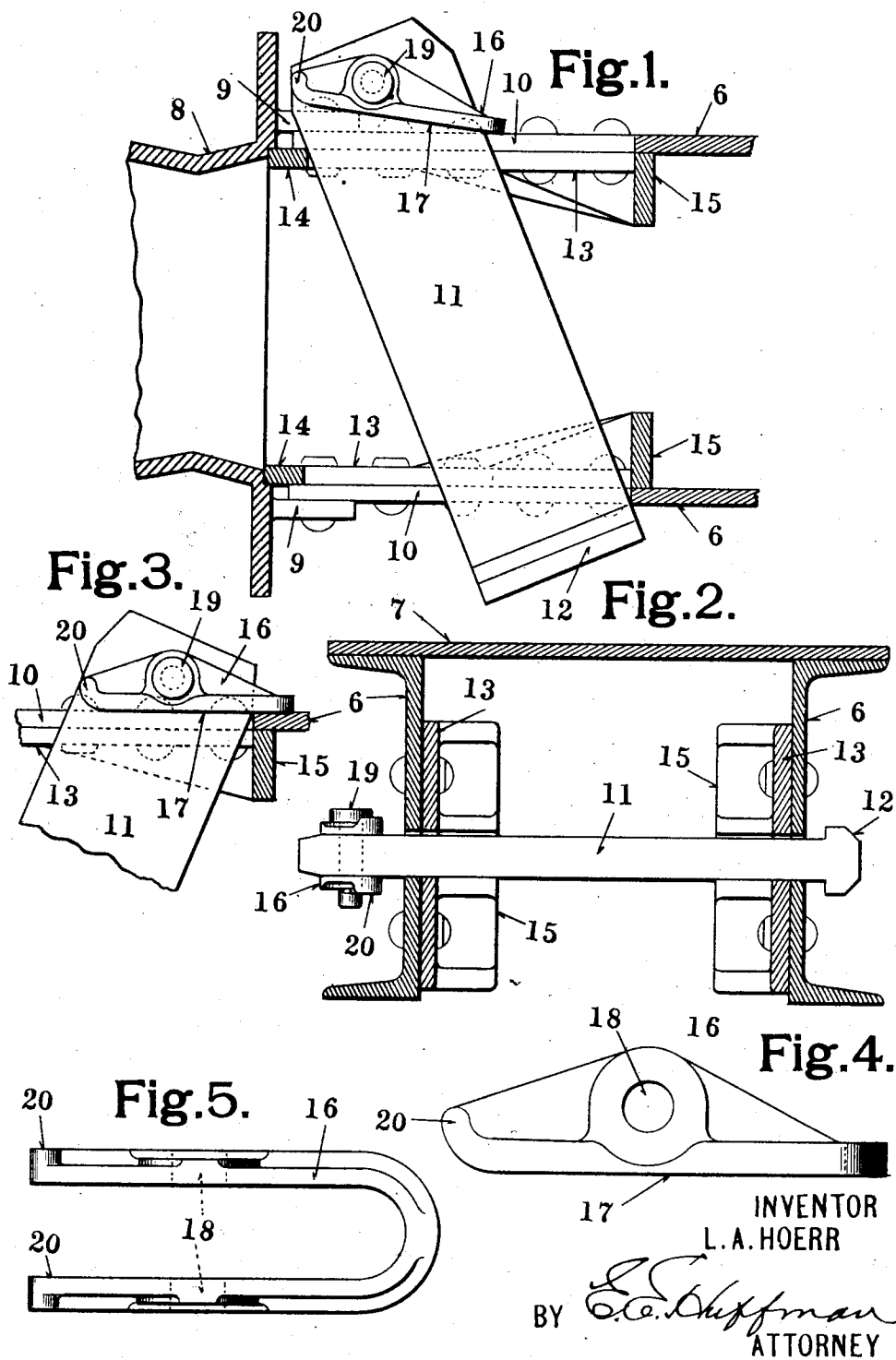
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L. A. HOERR

DRAFT GEAR

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UNITED STATES PATENT OFFICE.

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DRAFT GEAR.

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My invention relates to draft gear for railway cars and particularly to means for limiting the movement of the draft key in the direction of its length. One object of my invention is to provide a pivotal retaining member with a bearing face at least equal in length to the width of the key and which is so shaped and positioned that it will not project beyond the end of the key in any angular position which the key may assume. Another object of my invention is to provide the retaining member with an offset end adapted to guide the retaining member over the lugs securing the draft yoke to the sills so that said lugs will not interfere with the movement of the key.

In the accompanying drawings which illustrate one form of draft gear made in accordance with my invention, Figure 1 is a horizontal section; Figure 2 is a vertical cross section; Figure 3 is a fragmentary view showing the key in a different position from Figure 2; Figure 4 is an enlarged plan view of the retaining member; and Figure 5 is an enlarged side view of the retaining member.

The draft sills indicated at 6 are preferably formed of channel bars spaced apart by a top plate and secured at the forward ends to a draft yoke 8 by means of lugs 9. Formed in the sills 6 are slots 10 through which passes the usual draft key 11 provided at one end with a head 12 for limiting its longitudinal movement in one direction. Secured to the inner faces of the sills are cheek pieces 13 provided with slots registering with the slots in the sills. The front ends 14 of these cheek pieces form stops for limiting the forward movement of the draft key, and their rear ends 15 form follower plate stops.

As has been hereinbefore stated the longitudinal movement of the draft key in one direction is limited by the head 12. Its movement in the opposite direction is limited by a U-shaped retaining member 16 having a face 17 of a length at least equal to and preferably somewhat greater than the width of the key so as to provide ample bearing contact with the face of the sill. Formed

in the retainer is an opening 18 through which and an aligning opening in the key is passed a pin 19 to secure the retainer to the key pivotally so that the bearing face may remain parallel with the sills while the key assumes an angular position with respect thereto. In order that the forward movement of the key may not be prematurely stopped by contact of the ends of the retainer with the lugs 9, I provide the retainer with a rounded or beveled offset end 20 which will guide the retainer over the lugs, as shown in Figure 1.

It will be seen that my device provides a simple and effective retainer having a long bearing surface, as shown in Figure 3, where the key is in its extreme rear and angular position. This long bearing is maintained in all positions of the key except the extreme forward one (as shown in Figure 3) and in this position the retainer has two bearing points one at each side of the pin 19 so that the strain is transmitted to the pin in all positions of the key without shearing leverage.

Another advantage of my device is that in no position of the key does any part of the retainer project beyond its end. In some car constructions parts are positioned so close to the end of the key that there is just sufficient room for the key to pass, hence the retainer would be liable to strike these parts should any portion of the retainer project beyond the end of the key in any position of the parts. My retainer can be applied to such car structures as effectively as to any others.

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 draft sills provided with key slots, of a key projecting through said slots, and a U-shaped retaining member embracing and pivoted to one end of said key, said retaining member having its greater width at its pivotal point and tapering from said joint toward both ends.

2. In a device of the class described, the combination with draft sills provided with

key slots, of a key projecting through said slots, and a U-shaped retaining member embracing one end of said key; each side of said member comprising a thick bearing
5 portion extending in a straight line throughout the greater portion of its length to form an elongated contact face but offset at one end to form a guiding face, and a reduced web extending from the bearing portion, said web being provided at its widest part 10 with a pin opening and tapering toward both ends of the retaining member.

In testimony whereof, I hereunto affix my signature this 7th day of February, 1927.

LOUIS A. HOERR.