

W. A. MITCHELL & W. WALKER.
 EMERGENCY DRAFT SILL.
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1,007,227.

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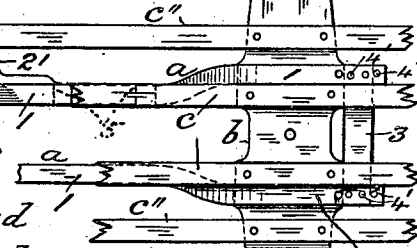
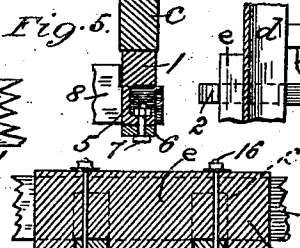
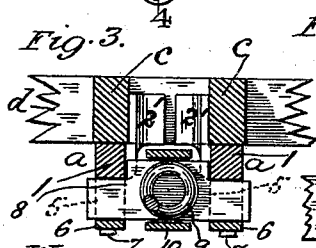
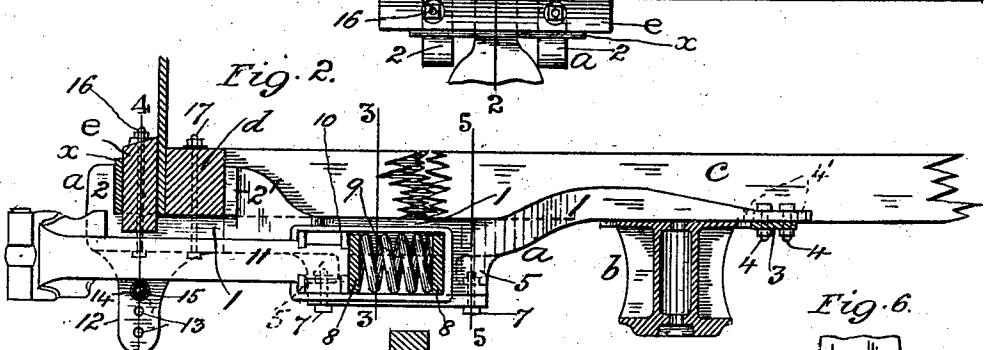
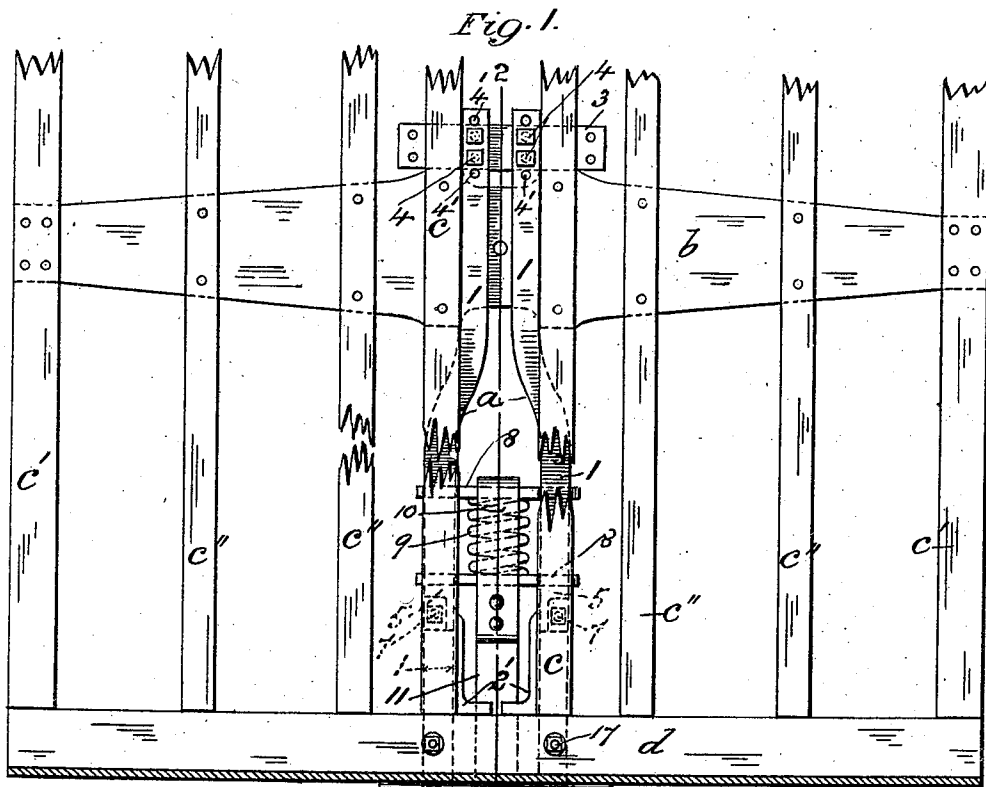


Fig. 6.

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EMERGENCY DRAFT-SILL.

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To all whom it may concern:

Be it known that we, WILLIAM A. MITCHELL and WILLIAM WALKER, citizens of the United States, residing, respectively, at Sedalia, in the county of Pettis and State of Missouri, have invented a new and useful Improvement in Emergency Draft-Sills, of which the following is a specification.

Our invention relates to a draw-bar pocket or follower stop-plate attachment to a railroad car for temporary use in lieu of the ordinary draw-bar pocket when the latter is rendered inoperative by the accidental breakage of or injury to the draft-timbers and combined middle and end sills of the car while in service, and has for its object to enable the damaged car to be hauled by its own draft-gear to the nearest siding or place of repair.

The invention consists in features of novelty as hereinafter described and claimed, reference being had to the accompanying drawing forming part of this specification, whereon,

Figure 1, is a top plan view of our improved emergency draw-bar pocket attachment and combined draft-gear as applied to the underside of the end portion of a car underframe; Fig. 2, a vertical longitudinal section thereof on line 2, 2 (in Fig. 1; Figs. 3 and 4, vertical transverse sections through the attachment and center sills of the underframe on lines 3, 3, and 4, 4, respectively, in Fig. 2; Fig. 5, a similar view to Figs. 3 and 4, through part of the attachment and one of the center sills on line 5, 5, in Fig. 2, and Fig. 6, a corresponding view to Fig. 1, showing an alternative arrangement of parts of the attachment (broken away).

Like letters and numerals of reference denote like parts in all the figures.

a represents our improved draw-bar pocket attachment which is adapted to be temporarily attached in lieu of the ordinary draw-bar pocket and draft-timbers when damaged in service, to the end portion of a car underframe which comprises in the present case the metallic body-bolster *b*, the ordinary longitudinal wood center, outer, and intermediate sills *c*, *c'*, and *c''*, the end sill *d*, and dead-block *e*, the center sills *c* being shown broken away between the bolster *b* and end sill *d*, and the ordinary

draft-timbers and draw-bar pockets removed.

The attachment *a* consists of two opposite and preferably, parallel horizontally arranged bars or members 1 which are composed preferably of cast steel integral throughout, and of any desirable shape in cross section. Each bar 1 for a suitable portion of its length preferably underlies and is adapted to bear at the top along and against the underside of the corresponding longitudinal center sill *c* forward of the bolster *b*, and across and against the underside of the end sill *d* and dead-block *e*, beyond which it is formed at its outer end with an upwardly projecting lug 2, and on the bar 1 at a suitable distance rearward from the lug 2 is formed an upwardly and laterally projecting lug or bracket 2', the lugs 2, and 2', in the assembled position of the parts, being adapted to bear respectively, against the outer face of the dead-block *e* and the inner face of the end sill *d*, and thereby cooperate to hold and prevent longitudinal movement of the bar 1 when subjected to the "buffing" and "pulling" stress of the draw-bar as hereinafter more particularly referred to.

At a suitable distance from the end sill *d* each bar 1 is directed laterally, preferably inward toward the longitudinal center of the underframe, and upward, and thence extended longitudinally across and against preferably the top of the bolster *b* to a suitable distance rearward therefrom, where the rear end portions of the bars 1 are connected together transversely by a plate 3 which underlies the bars 1 and is fixed thereto by bolts (rivets or otherwise) 4 so that the forward edge of the plate 3 bears directly against the rear edge of the top portion of the bolster *b*. A series of holes 4' are formed through the rear portion of each of the bars and passing through said apertures and through corresponding apertures formed in the plate 3 are bolts 4 and by such construction the position of the underlying plate 3 can be adjusted to correspond with the distance between the rear faces of the bolster *b* and the end sill *d*; and similarly, a liner *x* may be used either in front of the dead-block *e* as shown, or behind the end sill *d*, or both, for further adjustment of any difference between the lugs 2, 2', respectively and the underframe.

Each bar 1 is formed rearward of the end sill *d* with two opposite depending brackets or lugs 5 which are spaced apart along the bar 1, one behind the other, the brackets 5 being connected together at the bottom by a horizontal bar 6 which is fixed to the brackets 5 by bolts 7, and forms therewith a space or draw-bar pocket beneath the bar 1 adapted to receive the corresponding end portions of suitable follower-plates 8 to which the brackets 5 operate as stops, and between which is placed the "draft" and "buffing" spring 9 having the yoke 10 and draw-bar 11. Each bar 1 is formed adjacent to its outer end and beneath the dead-block *e*, with a dependent bracket 12 having an upright series of suitably spaced holes 13 formed transversely therethrough and alined respectively, to the corresponding holes 13 of the opposite bracket 12, and through two opposite holes 13 (according to the normal or required level of the draw-bar 11) and a tubular sleeve 14 intermediate to the brackets 12, is passed a bolt 15 which is secured to the brackets 12, the sleeve 14 operating to hold the bars 1 at the proper distance apart and as a carry-iron for the draw-bar 11, as shown in Figs. 2 and 4.

The bars 1 are rigidly fixed to the underframe either by bolts 16 and 17 which pass therethrough and through the dead-block *e* and end sill *d* respectively as shown, or in any other suitable manner, the bolts 16 and 17 cooperating with the bearing of the bars 1 against the underside of the center sills *c*, end sill *d*, and dead-block *e* for preventing upward displacement of the bars 1, and the lugs 2, 2', cooperating with the end plate 3 for preventing longitudinal movement of the bars 1 when subjected to the "buffing" and "pulling" stress of the draw-bar 11 as before mentioned.

In the case of a car underframe in which

a heavy timber is arranged between and in the plane of the longitudinal center sills *c*, the bars 1 are directed laterally outward instead of inward as described, and thence extended longitudinally across the bolster *b* at the outside of the sills *c* as shown in Fig. 6, the construction of the device otherwise being practically the same as previously described.

By this invention in the case of injury to the ordinary follower-plate stop pockets and draft-timbers of the car while in service, the damaged parts can be removed and our emergency device quickly substituted so that the car can be hauled by its own draft-gear to the nearest place of repair without delay and obstruction of traffic and without removal of the broken timbers beyond what is absolutely necessary in applying the device.

What we claim as our invention and desire to secure by Letters Patent is:—

In an emergency draft-gear attachment to a car underframe, the combination of two opposite metallic members arranged longitudinally across the body-bolster and forwardly therefrom beneath the adjacent end portion of the said frame, two lugs projecting upward from each of the said members, one behind the other, and adapted to engage the corresponding sides respectively, of the end of the said frame, two opposite brackets dependent from each of the said members, one behind the other, a bar connecting the said brackets together and adapted therewith to form a follower-plate stop pocket for the said gear, and means for fixing the said members to the said frame.

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