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PATENTED MAY 29, 1906.

H. M. PFLAGER.

COMBINED BRACE AND DRAW BAR POCKET FOR CAR BODY BOLSTERS.

APPLICATION FILED FEB. 3, 1906.

Fig. 1.

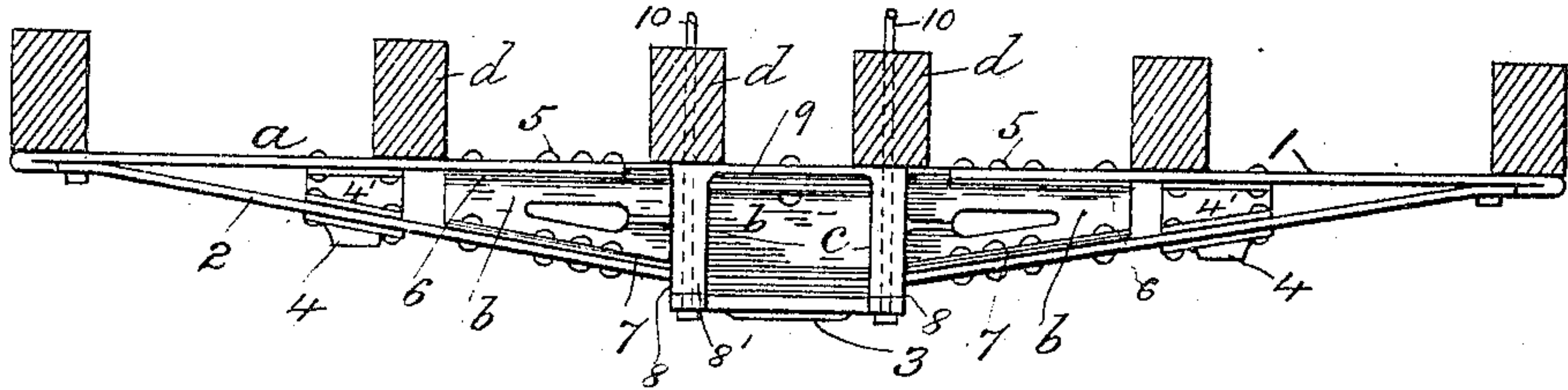


Fig. 2.

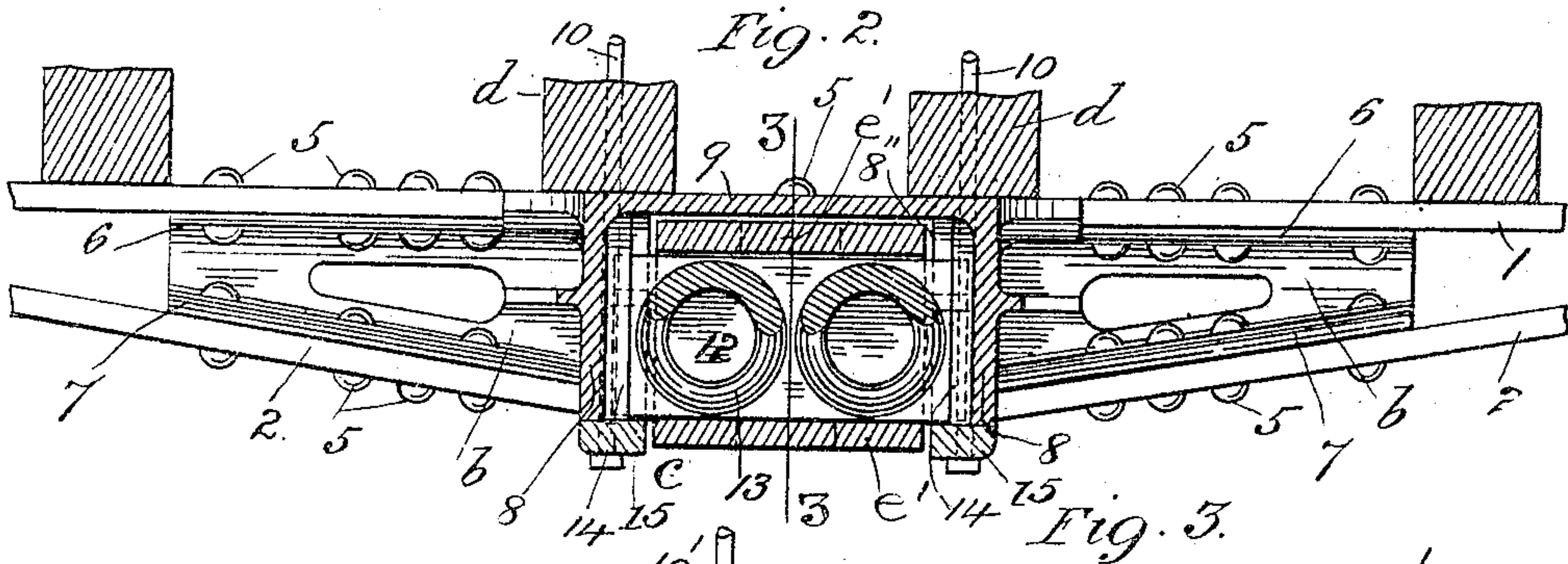


Fig. 3.

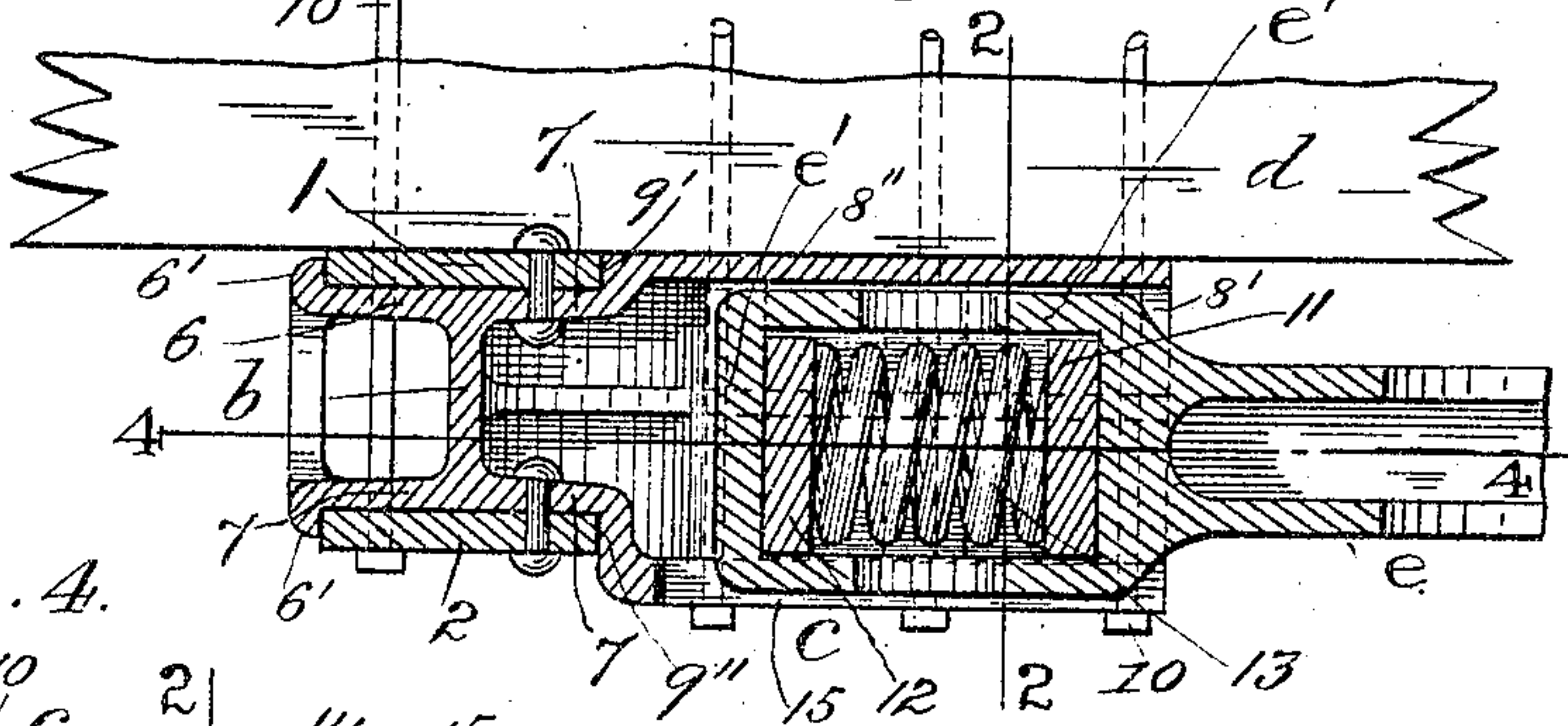
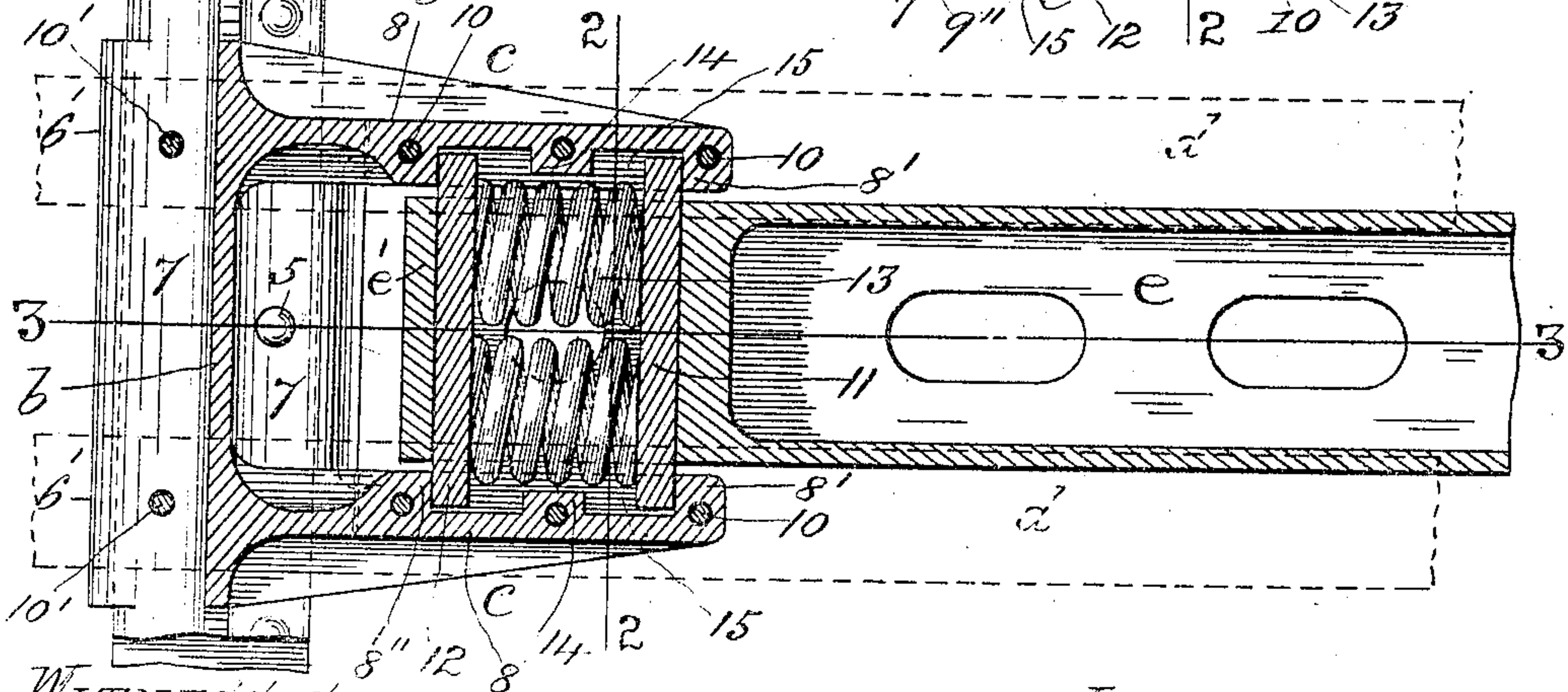


Fig. 4.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

HARRY M. PFLAGER, OF ST. LOUIS, MISSOURI.

COMBINED BRACE AND DRAW-BAR POCKET FOR CAR-BODY BOLSTERS.

No. 821,735.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed February 3, 1906. Serial No. 299,321.

To all whom it may concern:

Be it known that I, HARRY M. PFLAGER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and Improved Combined Brace and Draw-Bar Pocket for Car-Body Bolsters, of which the following is a specification.

My invention relates to a combined brace or filler and draw-bar pocket specially designed for the ordinary class of car-body bolster which is built up of top and bottom plates, having the center plate, side bearings, and thimbles attached thereto, and has for its object to enable the draft-gear, preferably that for which I have obtained Letters Patent in the United States dated January 10, 1905, No. 779,559, to be applied to old cars which are fitted with this class of bolsters and now in use, whereby the strain of the draft-gear is transmitted by the pocket and bolster to all the longitudinal sills of the car, the strength and rigidity of the bolster increased, and the ordinary draft-timbers eliminated.

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

Figure 1 is a side elevation of a car-body bolster of the class described having my improved brace and combined draw-bar pocket (seen in end elevation) applied thereto; Fig. 2, a similar view, to enlarged scale, of the bolster broken away and showing the pocket with the inclosed draft-gear in cross-section on line 2 2 in Figs. 3 and 4; Fig. 3, a cross-section through the bolster and brace and a vertical longitudinal section through the pocket and draft-gear on line 3 3 in Figs. 2 and 4, and Fig. 4 a horizontal section through the same on line 4 4 in Fig. 3.

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

a represents an ordinary car-body bolster having the top plate 1, bottom plate 2, center plate 3, side bearings 4, and intermediate thimbles 4', attached thereto in the usual well-known manner. Between the plates 1 and 2 at the middle portion of the bolster *a* is interposed a brace *b*, which extends for a suitable distance along and on each side of the center of the bolster *a* and is preferably I-shaped in cross-section of cast-steel, the brace *b* being rigidly fixed to the plates 1 and

2 by rivets 5, which pass through the plates 1 and 2, and top and bottom flanges 6 and 7, respectively, of the brace *b*.

From the front side of the brace *b* and integral therewith projects a horizontally-arranged draw-bar pocket *c*, which is closed at the top and open at the bottom for the insertion therethrough of the operative parts of the draft-gear. The pocket *c* consists of two upright side walls 8 at a suitable distance apart and united to each other at the top by a horizontal wall 9, which is flush on the outside with the top of the bolster *a* and forms at its junction with the top flange 6 of the brace *b* a shoulder 9', which overlaps and bears against the front edge of the top plate 1 of the bolster *a*, a similar shoulder 9' overlapping the front edge of the bottom plate 2, being formed at the bottom of the pocket *c* between its sides 8. The wall 9 is adapted on its upper side to bear at and adjacent to the upright side walls 8 against the under side of the middle longitudinal car-sills *d*, to which the pocket *c* is firmly secured by the bolts 10, which preferably pass upward through cored holes therefor in the side walls 8 and top wall 9 and through the middle sills *d*, as shown. Moreover, the brace *b* is secured with the bolster *a* to the car-sills *d* by bolts 10', which pass upward through the bolster *a*, brace *b*, and sills *d*, the bolts 10 and 10' thereby insuring a rigid fastening of all the parts to the sills *d* for the entire length of the pocket *c* and width of the bolster *a*.

The pocket *c* is specially adapted for receiving the draft-gear, preferably arranged and operating on the principle of that described in the said Letters Patent, and which in the present case consists of the two follower-plates 11 and 12, with their intermediate springs 13 arranged side by side in the same horizontal plane, the front follower-plate 11 being operated in "buffing" by the rear end of the draw-bar *e*, (broken away,) and the back follower-plate 12 in "pulling" by the yoke *e'*, which is integral with the draw-bar *e* and straddles the back follower-plate 12, all the said parts of the draft-gear being inserted and assembled within the pockets *c* through its bottom opening, as before mentioned. For this purpose each side wall 8 of the pocket *c* is formed on the inside at its front and rear ends with an upright lug or shoulder 8' 8'', respectively, the two opposite

lugs 8' forming the stops or abutment for the front follower-plate 11 and the two opposite lugs 8'' the stops for the back follower-plate 12, while in the middle of each side wall 8 is an upright lug 14, which limits the buffing play of the front follower-plate 11 and the pulling play of the back follower-plate 12.

On the inside of and along the bottom of each side wall 8 is fixed by the bolts 10 a bar 15, which projects beyond the inner face of the wall 8 and forms a ledge thereat, on which the follower-plates 11 and 12 ride at all times, or the pocket *c* may be otherwise formed and adapted internally for receiving any other suitable arrangement of draft-gear. It is here noted that the rear, top, and bottom flanges 6 and 7 of the brace *b* are formed along their outer edges, respectively, with a lug 6', which overlaps and bears against the rear edges of the top and bottom plates 1 and 2 of the bolster *a* immediately beneath each middle car-sill *d*, the lugs 6' cooperating with the shoulders 9' and 9'' of the draw-bar pocket *c* for holding the parts firmly together without play and at the same time transmitting the pulling and buffing strains, respectively, of the draft-gear more directly to the bolster *a*.

By this invention, the pocket *c* being integral with the brace *b* and secured with the bolster *a* to the longitudinal car-sills *d* for the entire length of the pocket *c*, the strain of the draft-gear is communicated directly to the bolster *a* and sills *d* without the use of draft-timbers and the separately-constructed parts of the draw-bar pocket attached thereto, as in present use on old cars; in other words, I am enabled to reinforce the

ordinary bolster of an old car and at the same time provide a direct draft-gear therefor.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a car-body bolster of the class described, the combination of a brace interposed between, and extending part way along the top and bottom plates of the bolster on each side of the longitudinal center line of the car, means for rigidly fixing the brace to the said plates, a draw-bar pocket projecting from and integral with the said brace, and means for fixing the said pocket to the middle longitudinal sills of the car, substantially as described.

2. In a car-body bolster of the class described, the combination of a brace interposed between, and extending part way along the top and bottom plates of the bolster on each side of the longitudinal center line of the car, means for rigidly fixing the brace to the said plates, a draw-bar pocket consisting of two opposite upright side walls adapted on their inner faces to support and limit the movement of the follower-plates of the draft-gear, and connected to each other at the top by a horizontal wall, the said walls being integral with the brace, and means for fixing the said pocket to the middle longitudinal sills of the car, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY M. PFLAGER.

Witnesses:

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EDWARD W. FURRELL.