

No. 636,431.

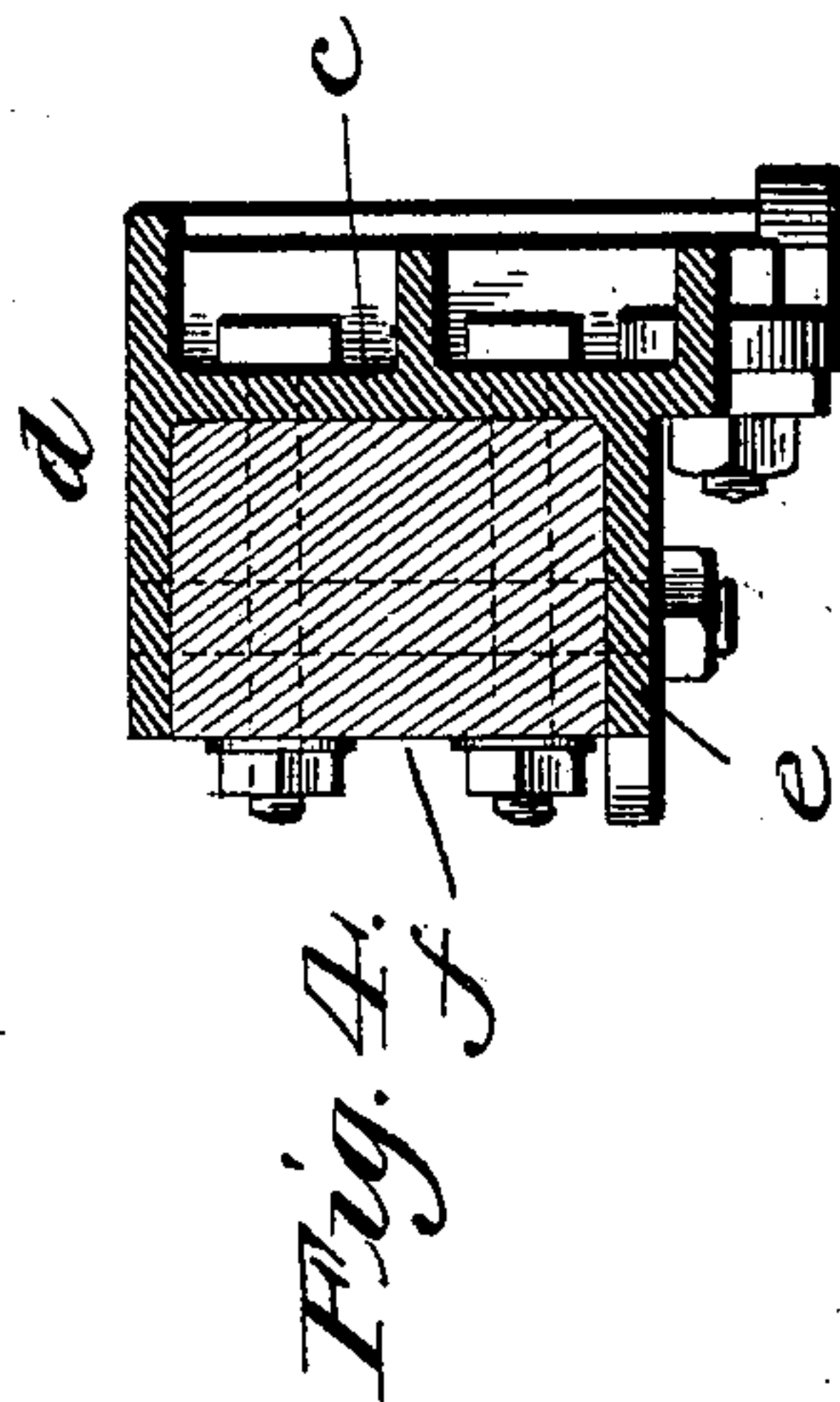
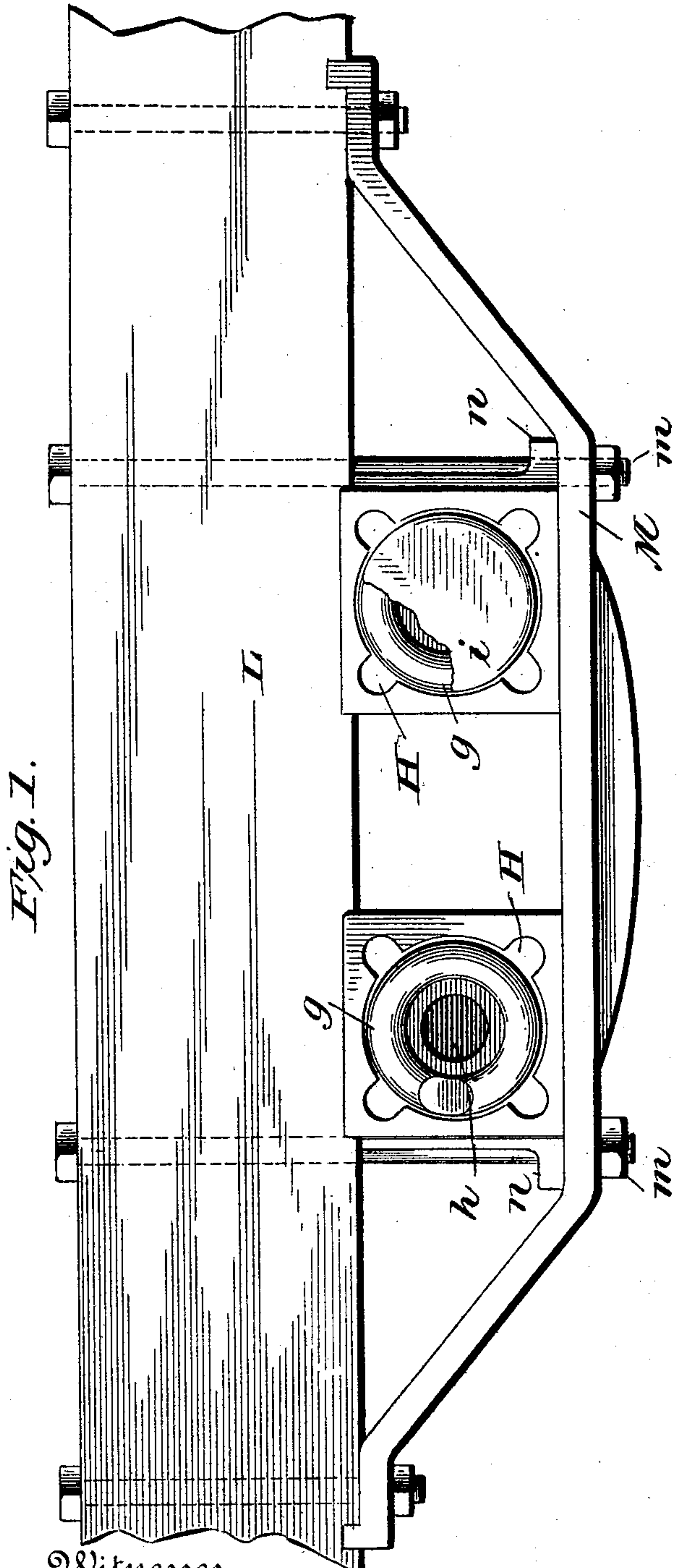
Patented Nov. 7, 1899.

J. A. HINSON.
DRAFT SILL FOR RAILWAY CARS.

(Application filed Jan. 25, 1899.)

(No Model.)

2 Sheets—Sheet 1.



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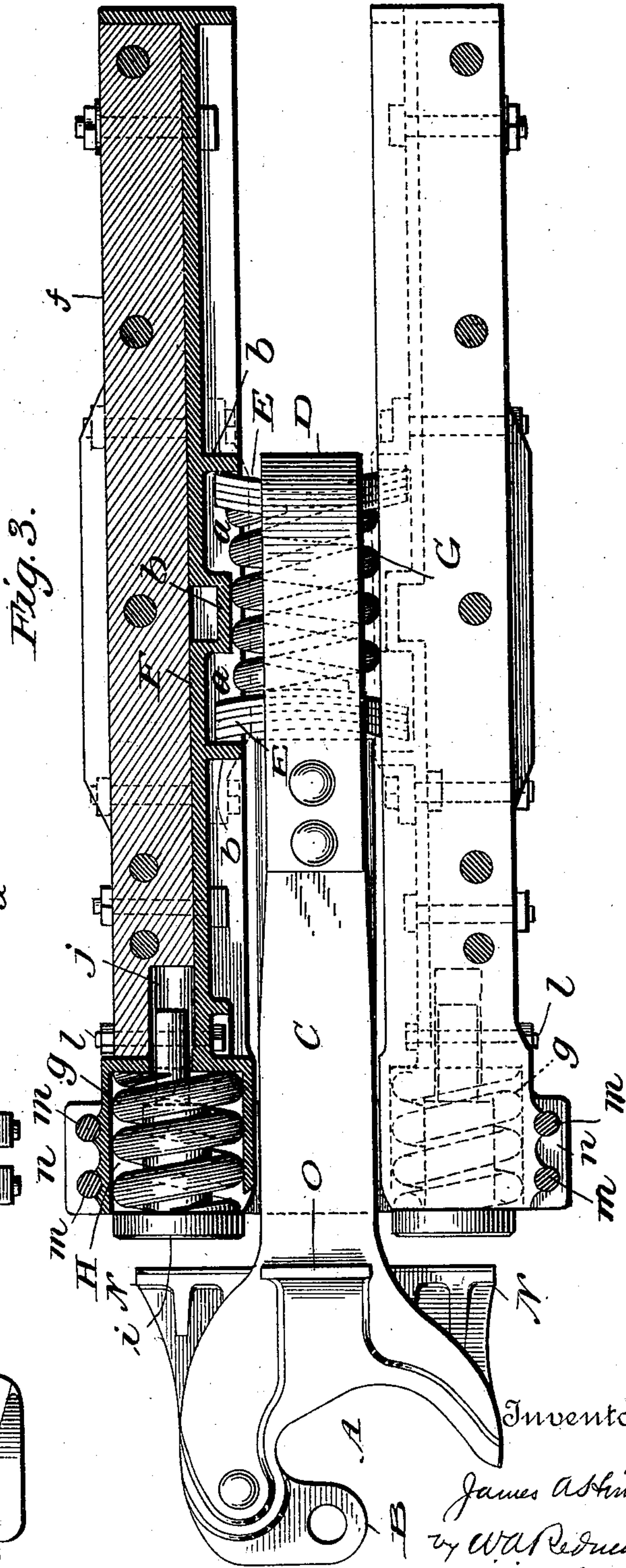
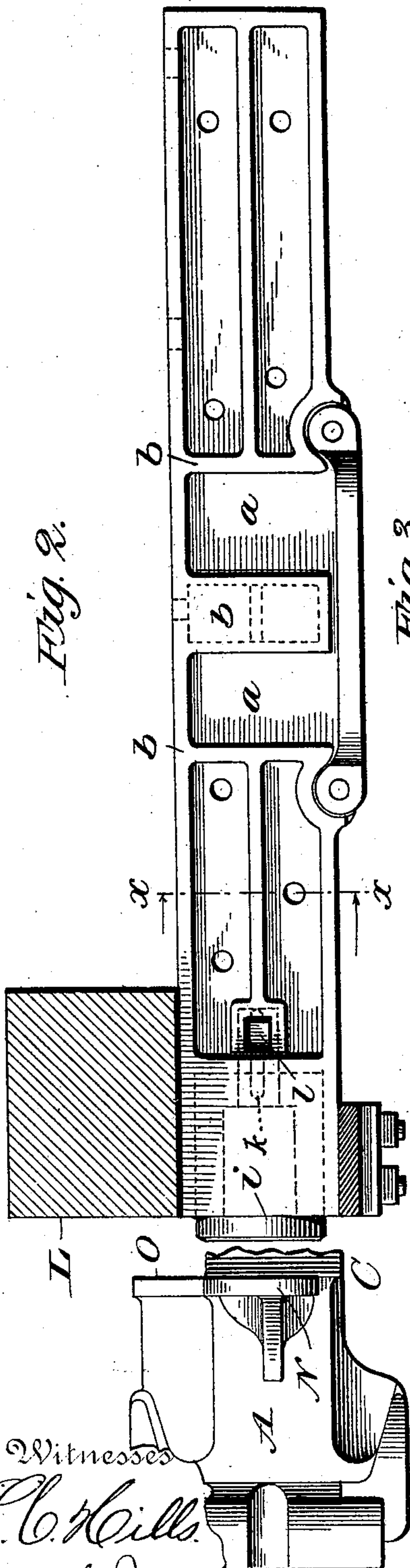
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UNITED STATES PATENT OFFICE.

JAMES A. HINSON, OF CHICAGO, ILLINOIS.

DRAFT-SILL FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 636,431, dated November 7, 1899.

Application filed January 25, 1899. Serial No. 703,365. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. HINSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Draft-Sills for Railway-Cars; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates generally to railway-cars, and particularly to a device for relieving the cars of the injurious effects of buffing-blows; and it has for its object to provide a strong and durable sill for the cars, in combination with a coupler peculiarly adapted to coact with said sill; and it consists of the parts and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a front elevation of my improved sill with coupler removed; Fig. 2, a side elevation showing coupler in place; Fig. 3, a plan view, partly in section; and Fig. 4, a vertical section looking in the direction of the arrow on the line *x x*, Fig. 2.

Similar letters indicate similar parts in all the views.

A represents a draw-head of the Janney type of car-coupler with the usual or any desired type of knuckle B, and C the draw-bar or stem. The stem C is secured to a strap or yoke D, through which the follower-plates E extend and have their ends resting in recesses *a*, formed between stops *b* in the draft-plates F, which are secured to the draft-timbers.

G is the main draft-spring for the coupler, arranged in the strap or yoke D and having its ends bearing against the follower-plates.

The parts described operate in the usual manner to take up the buffing and pulling strains on the coupler when in use.

The draft-plates F according to my present invention are cast in one piece and form three sides of a rectangle, comprising the vertical wall *c*, the top wall *d*, and the bottom wall *e*, and in the space formed thereby the timbers *f* may be secured by vertical or transverse bolts, as found necessary, to provide sufficient strength for the work to which the plates are

subjected. While the wood backing will ordinarily give sufficient strength, still I do not desire to be limited thereto, as I may find it convenient to cast the plates in the form of hollow rectangles. At the forward or outer ends of the plates F a pocket H is formed to receive a buffing-spring *g*, through which extends the stem *h* of a buffing-head *i*, the rear end of the stem being reduced to pass through an opening in the rear wall of the pocket and enter a smaller pocket *j*, formed in the timber *f*, a slot *k* being formed in the stem, through which a bolt *l* is passed in order to secure the same in place and limit the longitudinal movement of the buffing-head. The spring *d* abuts at one end against the rear wall of the pocket and at the other end against the head *i*.

A wooden or metal sill L is secured across the end of the car and is bolted to the draft-plates by bolts *m*, passing through the perforated lugs *n* in said plates, and the said plates are further secured to said sill by the strap-iron M, through which the bolts *m* also pass and which extends across the lower sides of the plates at the front and has its ends carried up to and bolted to the sill, as best shown in Fig. 1. This strap or bar M also serves for a rest to support the coupler in its proper position.

The draw-head is cast or otherwise provided with a laterally-extending flange N at each side in position to engage the buffing-heads *i* when the coupler is driven back in buffing and then only when the draft-spring has been compressed to a degree which is determined by the distance between the said flanges and the buffing-heads and which distance may be regulated when placing the coupler in position between the draft-sills, so that the effect of violent buffing-blows may be distributed and equalized, thus preventing injury to or the breaking of main draft-springs or any of the parts of the buffing mechanism. The draw-head is also formed with a vertical flange O, adapted when the buffing-springs and the main draft-springs have been fully compressed to engage the sill, and thus equalize the further strain on all of the parts.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A sill for railway-cars comprising draft-plates formed with lateral recesses for the follower-plates and pockets at one end, said pockets opening forwardly, springs arranged
5 in said pockets, buffing-heads to engage said springs, and means for limiting the compression of said springs.

2. A sill for railway-cars, comprising draft-plates formed with recesses and stops in said
10 recesses for the follower-plates, and longitudinal pockets for buffing-springs at one end opening forwardly, said plates being formed channel-shaped and in one piece.

3. The combination with the sill of a railway-car comprising draft-plates having pockets formed therein, springs in said pockets, and buffing-heads adapted to engage said
15 springs, of a car-coupler having lateral flanges adapted to engage said buffing-heads.

In testimony whereof I affix my signature
20 in presence of two witnesses.

JAMES A. HINSON.

Witnesses:

GEO. E. WALDO,
B. E. TILDEN.