No. 692,074. Patented Jan. 28, 1902.

D. C. ROSS.

DRAFT RIGGING FOR RAILWAY CARS.

(Application filed July 22, 1901.)

(No Model.)

Fig. 2.

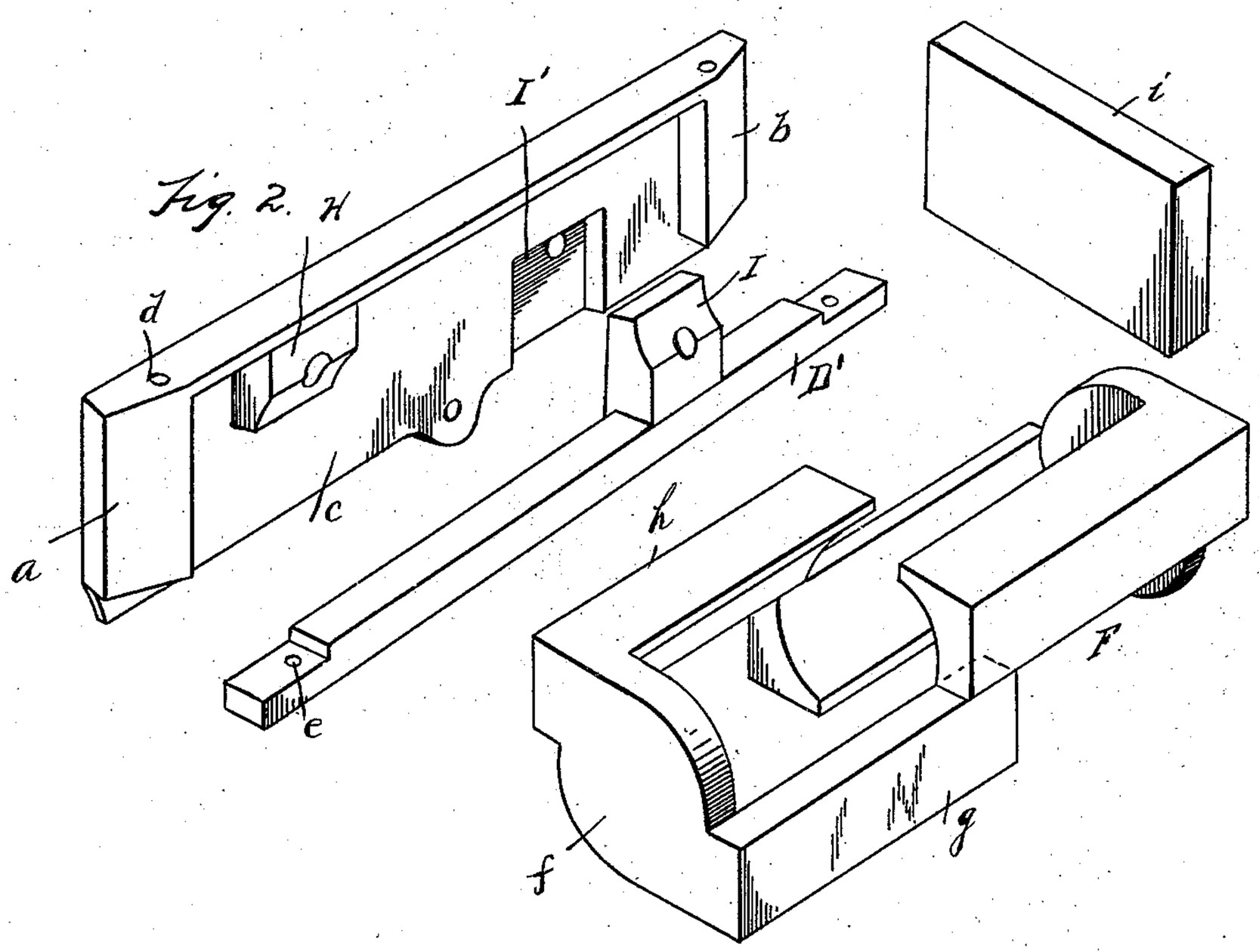
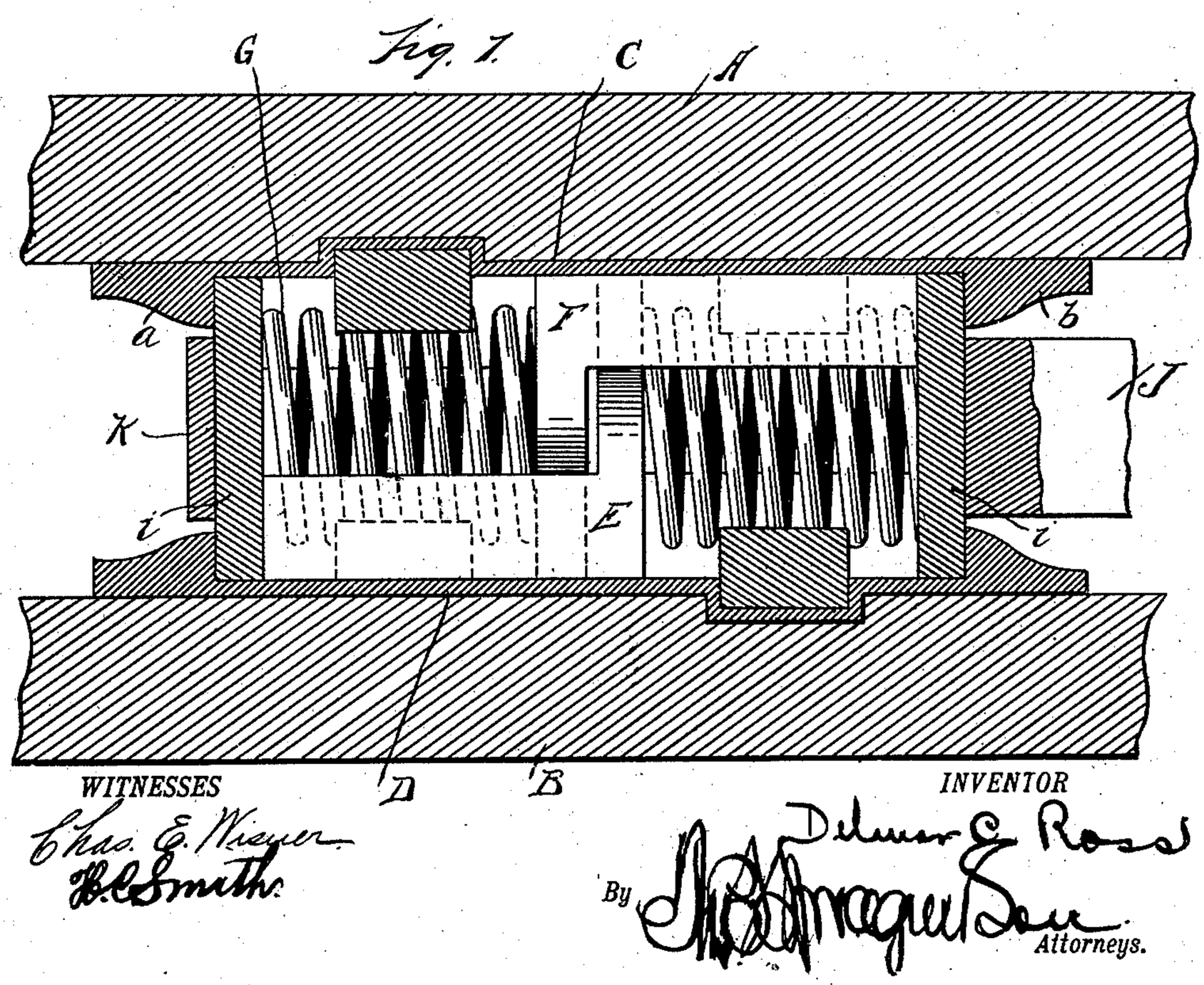


Fig. 1.



WITNESSES

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DRAFT-RIGGING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 692,074, dated January 28, 1902.

Application filed July 22, 1901. Serial No. 69,243. (No model.)

To all whom it may concern:

Be it known that I, DELMAR C. ROSS, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Draft-Rigging for Railway-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates particularly to a draft-rigging or draw-gear adapted when applied to a car to relieve the body of the latter from the strains and shocks incident to coupling and buffing; and the invention consists in the novel construction of the draft-rigging and in the peculiar arrangement and combination of its various parts, whereby a more durable draw-gear is obtained and one that may be more cheaply manufactured than those now in use.

In the drawings illustrating my invention, Figure 1 is a horizontal section through the draft-rigging, some of the parts above the plane of section being shown; and Fig. 2 is a perspective view of the parts of the rigging.

The reference-letters A and B designate the usual longitudinal sills or draft-timbers of the car, to the inner faces of which are secured the draft members C and D of the draft-rigging in any suitable manner. The draft members are preferably malleable-iron plates of like construction, each being provided at its opposite ends with shoulders *a* and *b*, forming therebetween a pocket or chamber *c*. The draft members are also provided each with a carrier-bar D, which is adapted to be detachably secured to the draft-bar by suitable bolts extending through openings *d* and *e* in the draft member and carrier-bar, respectively.

E and F designate spring-supporting followers which have a sliding engagement with the draft members, the followers interlocking one with another and being mounted upon and supported by the carrier-bars. As shown, each follower comprises a body member or section *f*, having oppositely-arranged spring-retaining arms *g* and *h* projecting from one of its sides, and an end section *i* independent of the arms and body member and adapted to abut against the free ends of the arms, as indicated in Fig. 1. The inner faces of each pair of spring-retaining arms are curved or grooved out in the manner indicated in Fig. 2, the arms being substantially L or angle shaped in cross-section for the purpose of embracing the coiled draft-springs G, which the followers carry. The followers interlock, as indicated in Fig. 1, with the inner faces of the body members in proximity one to the other, so that the two draft-springs upon the draft or thrust of the draw-bar will be simultaneously compressed. When the followers are arranged in position within the housing formed for the same by the draft members, the parts are so proportioned and the shoulders *a* and *b* so arranged that the body members of the followers are prevented from abutting under all circumstances. Thus I have provided means whereby the liability of breakage of parts due to the striking of portions of the followers against each other as the springs are released is prevented. I have also provided means for limiting the inward movement of the followers, and thus limiting the compression of the springs, the means consisting of stops H, one at the upper edge and in proximity to one end of each of the draft members, and similar stops I, arranged at the opposite end in proximity to the lower edges, as plainly indicated in the drawings. In this manner it will be observed that when the springs are compressed under the draft or thrust of the draw-head the opposite ends of each follower abut against the shoulders described, and thus the strain incident to coupling and buffing is distributed equally and evenly to the draft members and to the car-body, the liability of breakage being thus reduced to a minimum.

The draw-bar (not shown) may be of any suitable construction, the shank J of which abuts against one of the detachable end sections I of the followers and is connected to the followers by means of a yoke or strap K, Fig. 1, which encircles the followers and is attached at each end to the shank in the usual manner.

From the construction of the draft-rigging as thus set forth it will be observed that the parts of the same are all interchangeable, being

of like construction. Furthermore, when it is desired to remove the followers for the purpose of repair or replacement they may be disengaged from the draft-bars by simply removing the carrier-bars upon which the followers travel. To allow of the insertion or withdrawal of the followers in the manner set forth, the stops I of the draft-rigging are carried by the carrier-bars, so that they may be detached with the latter. Also for convenience I preferably form recesses, such as I′, in the draft members for the reception of the stops I, as plainly shown in Fig. 2.

What I claim as my invention is—

1. The combination with the draft members secured to the car-sills, of interlocking followers having a sliding engagement with the draft members, said followers being held from abutting one against the other, and springs carried by the followers.

2. The combination with the draft members adapted to be secured to the car-sills, of a plurality of axially-arranged spring-supporting followers having a sliding engagement with the draft members, said followers interlocking and being held from abutting one against another upon their outward movement, and springs arranged within the followers.

3. The combination with the draft members adapted to be secured to the car-sills, of two interlocking and axially-arranged spring-supporting followers having a sliding engagement with the draft members, springs within the followers, and fixed stops upon said draft members against which the inner and outer ends of each follower are adapted to strike upon the compression of its springs.

4. The combination with the draft members adapted to be secured to the car-sills, of carrier-bars detachably secured to the draft members, a plurality of interlocking and spring-supporting followers mounted and adapted to travel upon the carrier-bars, springs carried by the followers and stops rigidly secured to the carrier-bars and detachable with the latter, said stops limiting the inward movement of the followers.

5. The combination with the draft members adapted to be secured to the car-sills, of carrier-bars detachably secured to the draft members, a plurality of followers mounted and adapted to travel upon the carrier-bars, springs for the followers adapted to be compressed upon the movement of the latter in either direction, and stops secured to the carrier-bars and detachable with the latter, the stops limiting the inward movement of the followers.

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

DELMAR C. ROSS.

Witnesses:
L. J. WHITTEMORE,
H. C. SMITH.