No. 822,979. PATENTED JUNE 12, 1906.

S. OTIS.

RAILWAY CAR BOLSTER.

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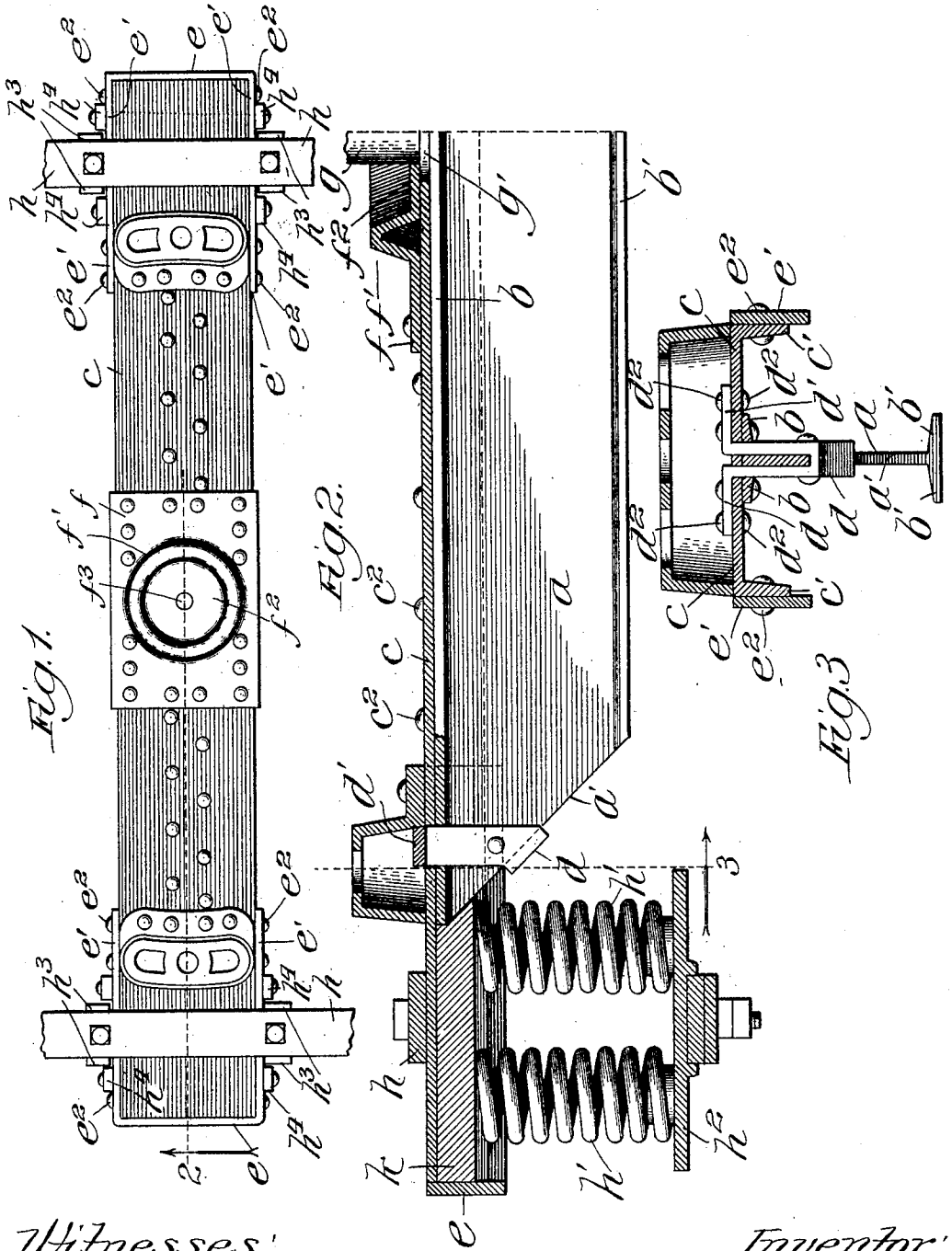

Witnesses:
Ed. L. Gaylord.
John Enders.

Inventor:
Spencer Otis,
By Thomas F. Sheridan,
Atty.

UNITED STATES PATENT OFFICE.

SPENCER OTIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO NATIONAL PATENT HOLDING COMPANY, OF RAPID CITY, SOUTH DAKOTA, A CORPORATION OF SOUTH DAKOTA.

RAILWAY-CAR BOLSTER.

No. 822,979. Specification of Letters Patent. Patented June 12, 1906.

Application filed February 26, 1906. Serial No. 302,993.

To all whom it may concern:

Be it known that I, SPENCER OTIS, 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 Railway-Car Bolsters, of which the following is a specification.

My invention relates to bolsters for railway-cars, and has for its object to produce a simple, strong, and efficient bolster.

My invention consists in the details and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a plan view of my improved bolster; Fig. 2, a longitudinal section on the line 2 of Fig. 3; and Fig. 3 a transverse section on the line 3 of Fig. 2.

I have shown my invention as applied to a bolster of the type in which an upper channel-bar member and a lower **I**-beam member are used.

In the drawings, *a* represents the lower **I**-beam having upper flanges *b* and lower flanges *b'*, the upper flanges *b* being secured by rivets c^2 to the web of the upper channel-bar member *c*. The upper channel-bar member has the usual flanges *c'*. The upper flanges of the **I**-beam member are slotted near their ends, and the web of the channel-bar member is provided with corresponding slots which register therewith when the members are secured together. The **I**-beam member has its ends *a'* inclined inwardly, as shown. Passing around the inclined ends of the lower member is a metallic brace-strap *d*, having the general shape of the letter **U**. The ends of this brace-strap are passed through the slots in the flanges of the lower member and the web of the upper member and are firmly secured thereto by means of rivets d^2, as clearly shown in Fig. 3. This brace-strap forms a very efficient means for holding the parts together when they are subjected to the strains incident to service. Passing around the ends of the upper channel-bar member is a ⊏-shaped brace *e*, having its ends *e'* secured to the depending flanges of the upper member. As is well known, the flanges of the upper member in bolsters of this type are liable to buckle or spread when weight is applied to them. By the use of the brace which I have just described this tendency is entirely overcome. This brace also forms an inclosing box in conjunction with the flanges of the channel-bar member for the spring bearing-block *k*.

It will be observed that the web of the channel-bar member and the upper flanges of the **I**-beam member form upper and lower plates for the upper member of the bolster. The web or upper plate is provided with a central opening f^3, while the flanges of the **I**-beam forming the lower plate form a bottom portion for this opening. Surrounding this central opening is the center bearing *f*, having the bearing portion *f'* and a flange f^2, which surrounds and partly overhangs the central opening. Thus a space is formed between the flange f^2 and the lower plate. A headed king-bolt *g* rests in this opening, the head *g'* of the bolt being loosely held between the flange and the lower plate. This forms a very simple and efficient means for retaining the king-bolt in place, at the same time allowing the necessary play thereof.

It will be seen that I have provided a very simple and efficient bolster.

I do not intend to limit myself to the exact details of construction which I have described, but intend to cover such variations as may fall within the spirit and scope of my invention.

I claim—

1. A bolster for railway-cars, comprising an upper channel-bar member, a lower member secured thereto, and a ⊏-shaped brace member secured to the end of the channel-bar member.

2. A bolster for railway-cars, comprising an upper channel-bar member, a vertical **I**-beam member secured thereto, and a ⊏-shaped brace member secured to the end of the channel-bar member, said brace member also forming an inclosing box for the spring bearing-block.

3. A railway-car bolster, comprising a slotted upper horizontal member and a correspondingly-slotted lower vertical member secured thereto, said lower member having inwardly-inclined ends, and a brace-strap passing around the inclined ends and through the slots on the upper and lower members.

4. A bolster for railway-cars, comprising an upper channel-bar member, a lower **I**-beam member secured to the web of the upper chan-

nel-bar member, said lower member having inwardly-inclined ends, said upper member and lower member being provided with slots in the web and flanges thereof respectively, and a metallic brace-strap embracing the inclined end portion of the lower member and having its ends passed through the slots in the bolster members and secured thereto.

5. A railway-car bolster having a horizontal upper member, comprising upper and lower plates, the upper plate having a central opening, a center bearing having a flange surrounding and overhanging the opening, and a headed king-bolt having its head loosely held in the opening between the lower plate and the flange on the center bearing.

SPENCER OTIS.

Witnesses:
NORMAN A. STREET,
CHARLES F. FITTS.