No. 826,871. PATENTED JULY 24, 1906.

S. OTIS.

RAILWAY CAR TRUCK.

APPLICATION FILED DEC. 26, 1905.

Fig. 1.

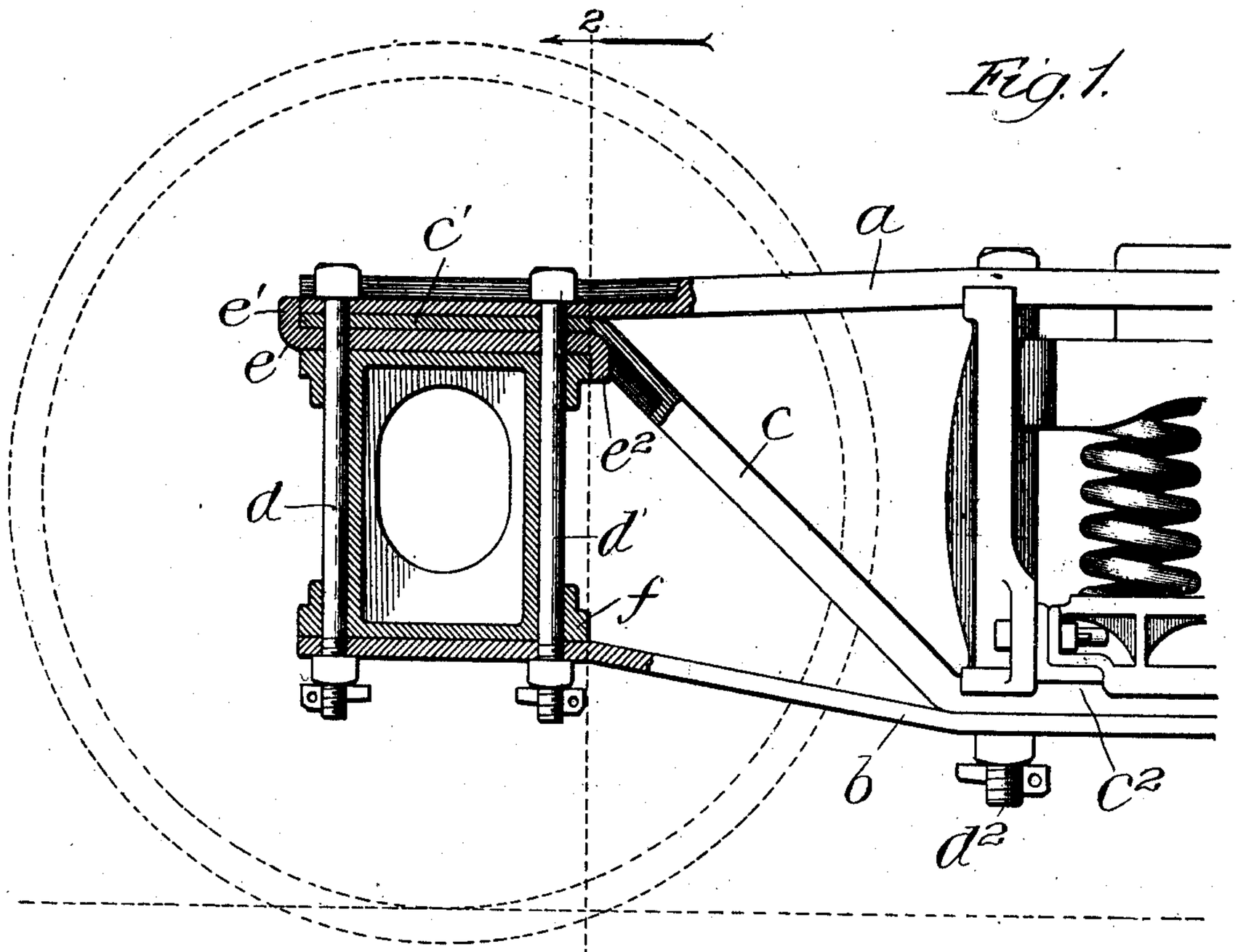
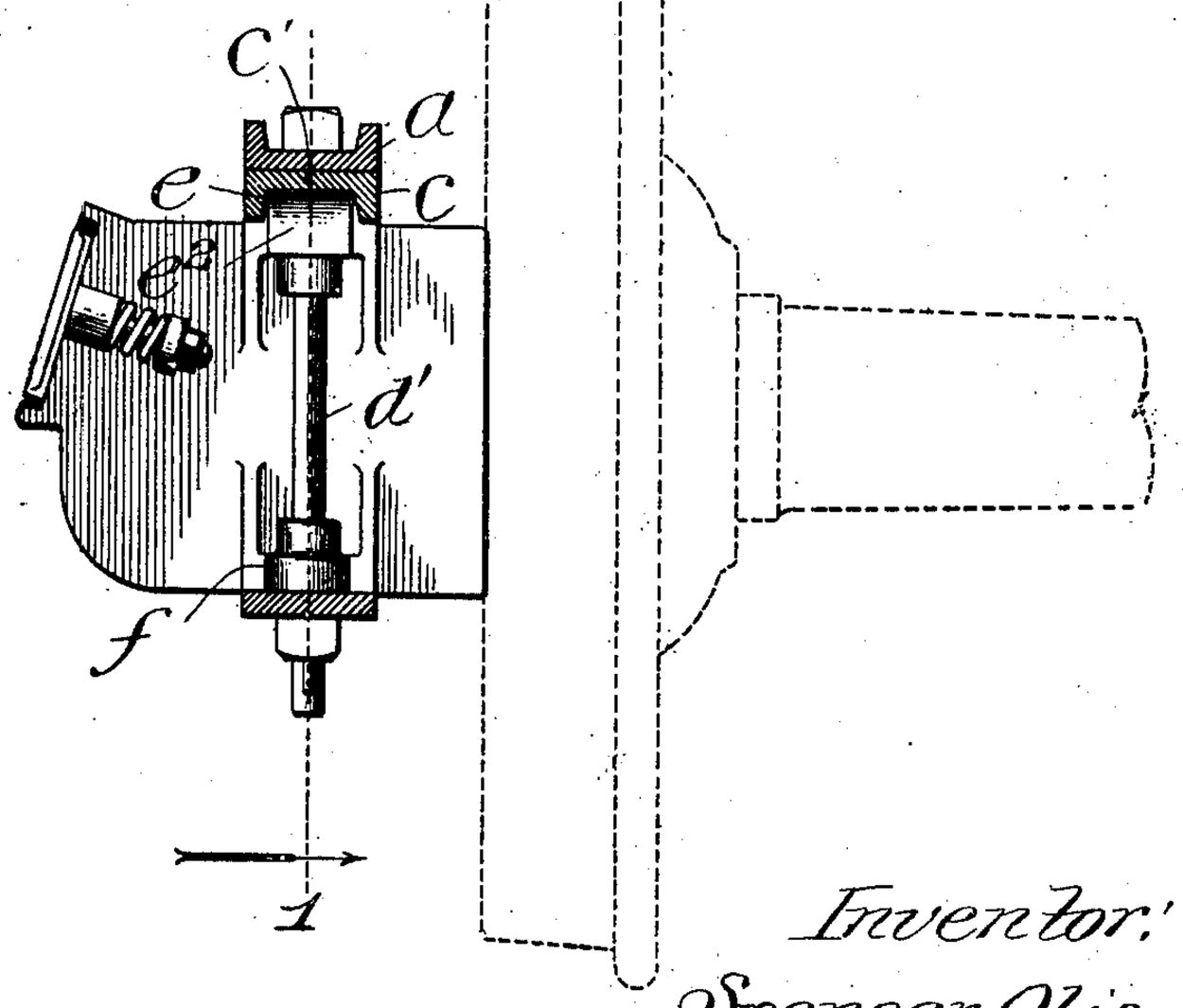


Fig. 2.



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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 TRUCK.

No. 826,871. Specification of Letters Patent. Patented July 24, 1906.

Application filed December 26, 1905. Serial No. 293,375.

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 Trucks, of which the following is a specification.

My invention relates to railway-car trucks, and has for its object to improve and simplify the construction thereof, whereby the parts are strengthened and the truck rendered more efficient.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of one end of a car-truck embodying my invention; and Fig. 2, an end elevetion, partly in section, taken on line 2 of Fig. 1 looking in the direction of the arrow.

Referring to the drawings, *a* represents the upper arch-bar or compression member of a car-truck, *b* the tie member, and *c* lower end bars having substantially horizontal ends *c'* and a substantially horizontal intermediate portion c^2, secured to the compression and tie members, as by bolts *d*, *d'*, and d^2, all as is usual and well known.

It will be understood that both ends of the truck are alike. I have illustrated, therefore, but one end and will describe only this end. The arch-bars are formed of channeled metal, as shown. This adds strength to these members. Resting in the outer end *c'* of the channeled lower arch-bar *c* and upon the journal-box casting is a supplementary brace *e*, having an upturned outer end *e'*, against which the ends of the lower arch-bar and the upper arch-bar or compression member bear. This supplementary member has also a downturned inner end e^2 resting against the side of the journal-box casting. Bolts *d* and *d'* pass through the upper arch-bar, the lower arch-bar, the brace member, and the journal-box casting and are properly secured thereto by nuts or otherwise to securely hold the parts together.

It will be seen that the strain upon the upper-member arch-bar is a compression strain tending to carry the end of this member outwardly in the direction indicated by the arrow in Fig. 1. This strain is usually wholly taken up by the bolts *d* and *d'*; but by the use of the supplementary brace member, having upturned and downturned ends, as described, I provide a means whereby a part of this compression strain is taken by the upturned end *e'* of the supplementary brace, thus relieving the bolts of a part of the strain. It will also be seen that I provide a longer and better bearing for the bolts by the use of this supplementary brace member. My invention, therefore, though simple, is of great efficiency in strengthening the parts of the truck, rendering it more durable in service.

I claim—

1. The combination in a railway-car truck having the usual journal-boxes, of a compression member, a channel tension member, a supplementary brace member resting in the channel brace member, said supplementary brace member having a downturned inner end bearing against the journal-box, and an upturned outer end bearing against the ends of the compression and side brace members.

2. The combination in a railway-car truck having the usual journal-boxes, of a compression member and a channeled tension member, a supplementary brace member resting in the channel brace member, said supplementary brace member having a downturned inner end bearing against the journal-box, an upturned outer end bearing against the ends of the compression and side brace members, and bolts passing through the compression, tension, both brace members and journal-box casting for securing the parts together.

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