No. 830,519. PATENTED SEPT. 11, 1906.

J. O. NEIKIRK.

BOLSTER FOR RAILWAY CARS.

APPLICATION FILED JUNE 8, 1906.

2 SHEETS—SHEET 1.

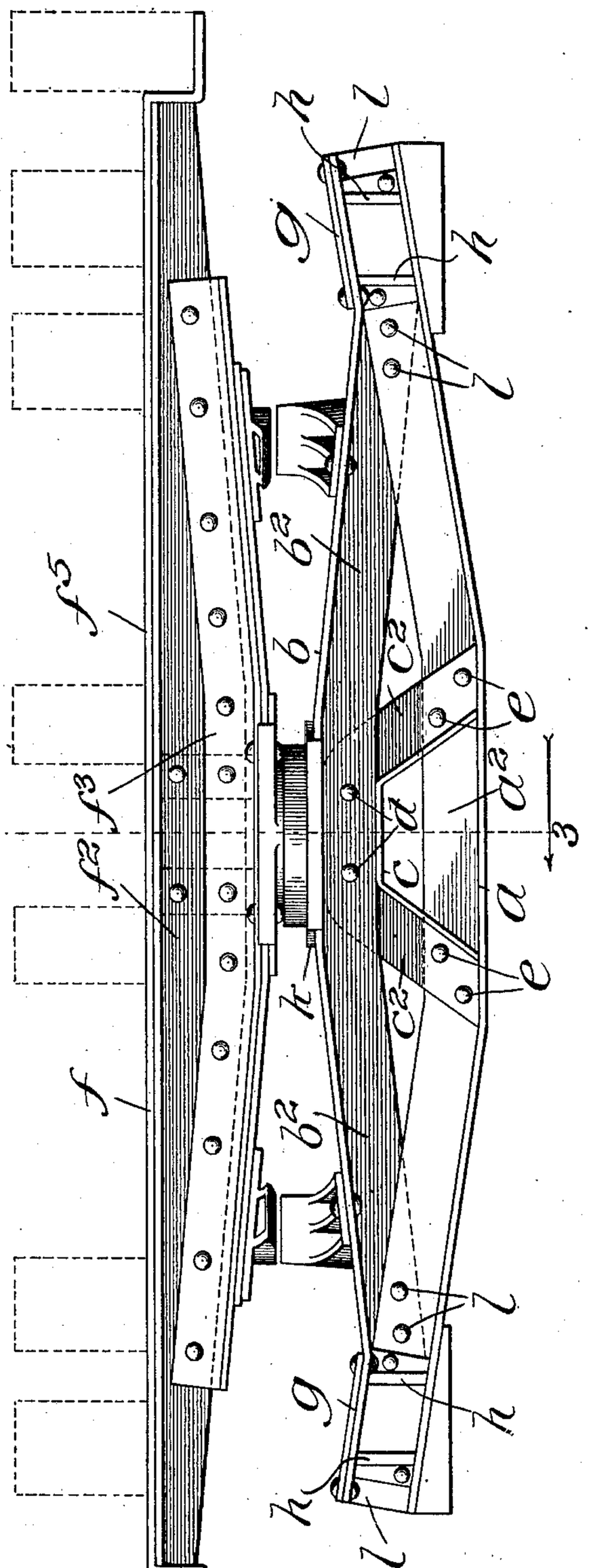

Fig. 1.

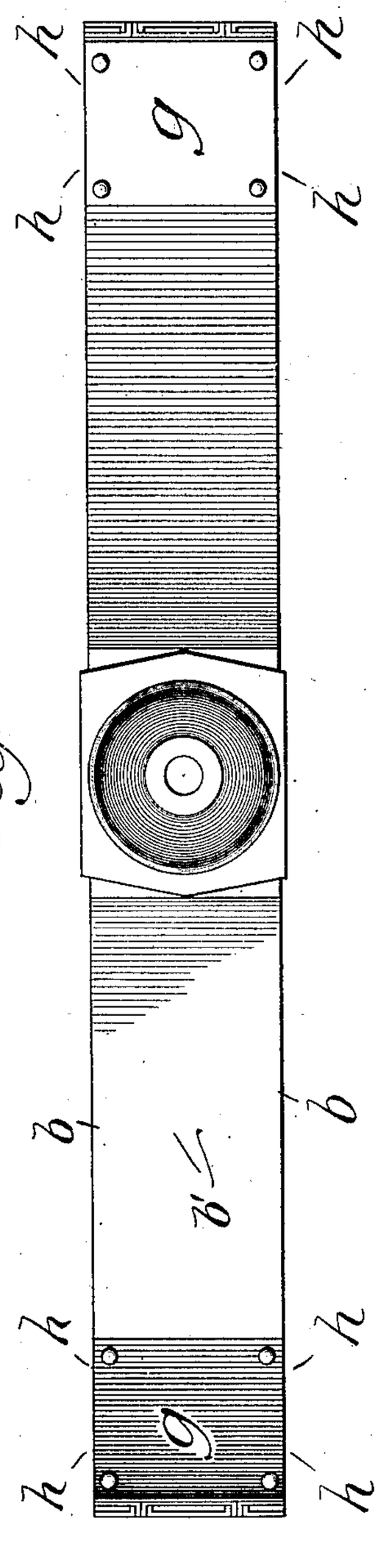

Fig. 2.

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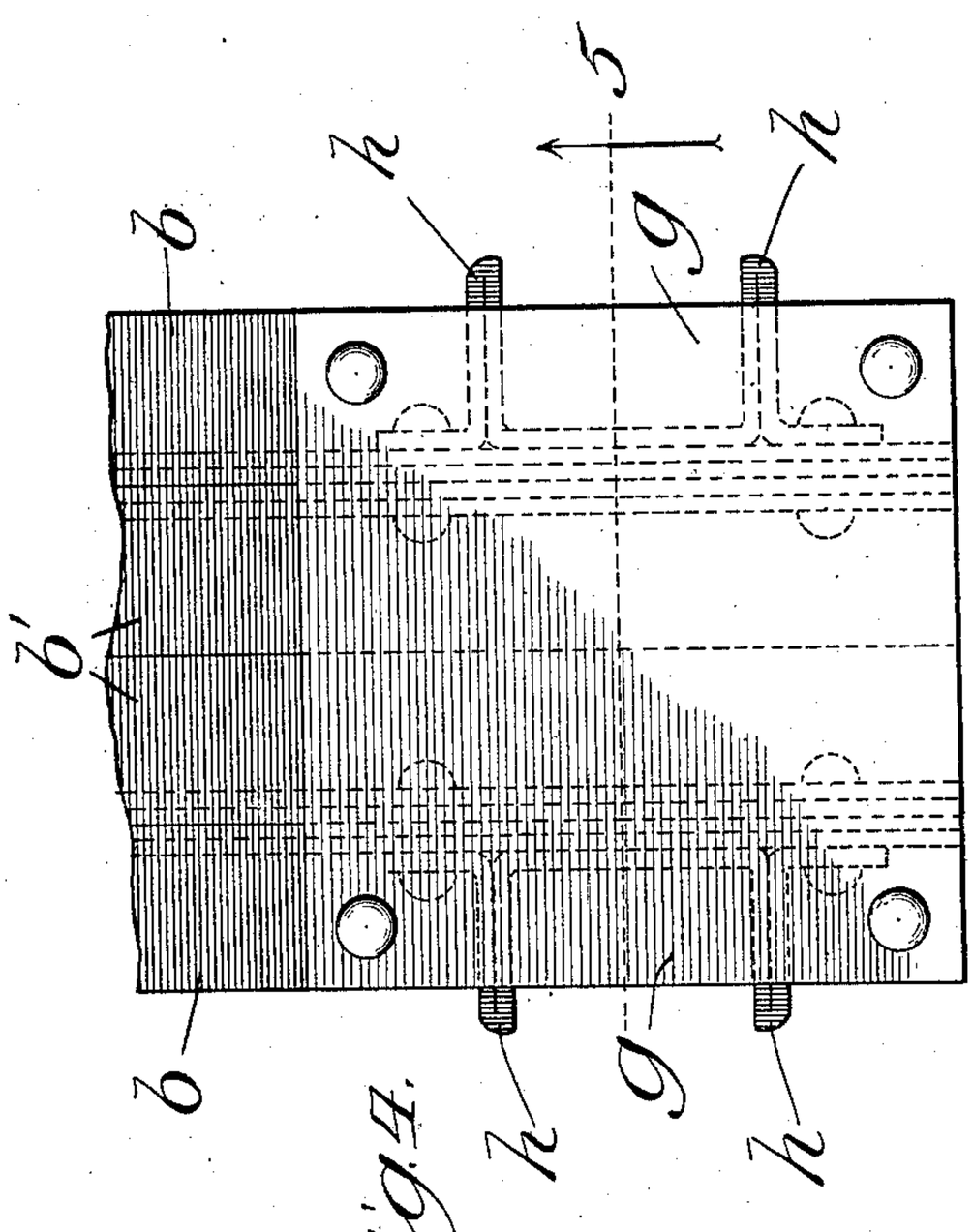

Fig. 4.

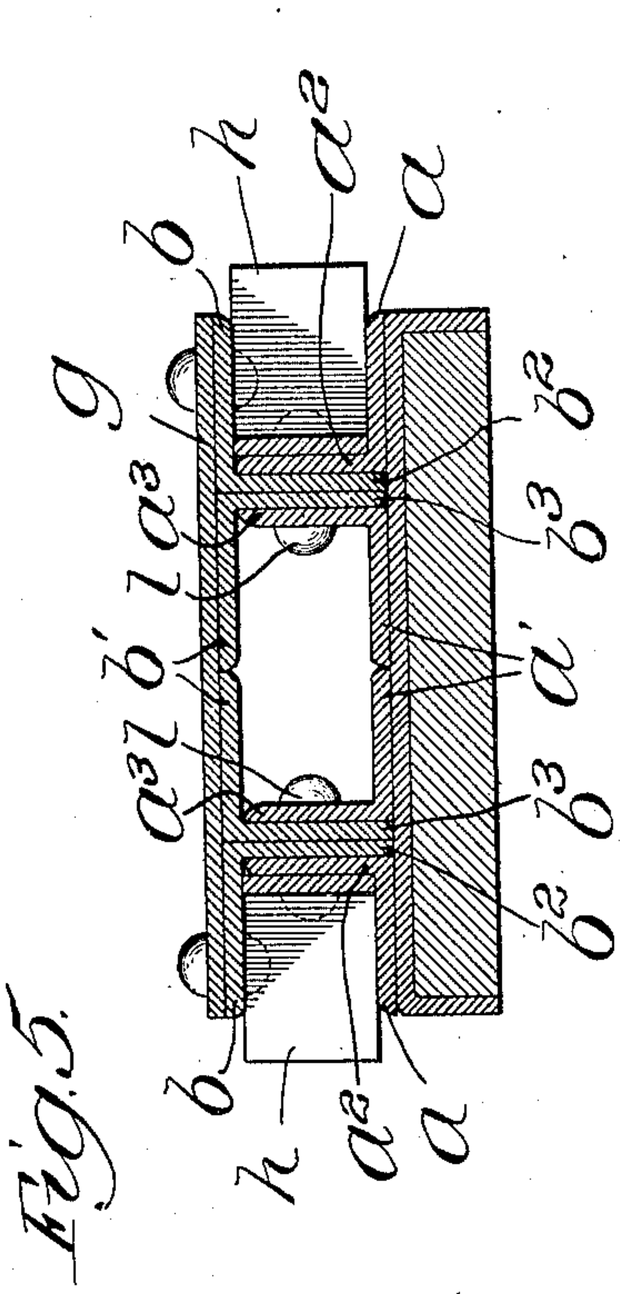

Fig. 5.

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN OSCAR NEIKIRK, OF CHICAGO, ILLINOIS.

BOLSTER FOR RAILWAY-CARS.

No. 830,519. Specification of Letters Patent. Patented Sept. 11, 1906.

Application filed June 8, 1906. Serial No. 320,804.

To all whom it may concern:

Be it known that I, JOHN OSCAR NEIKIRK, 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 Bolsters for Railway-Cars, of which the following is a specification.

My invention relates to railway-car bolsters, and has for its object to provide a bolster having the required strength and minimum weight and a bolster which can be made from iron of commercial shapes.

To this end my invention consists in the combinations and details hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of my improved bolster, showing both the truck and body-bolster. Fig. 2 is a top plan view of the truck-bolster. Fig. 3 is a transverse section on the line 3 of Fig. 1. Fig. 4 is a top plan view of one end of the truck-bolster. Fig. 5 is a transverse section on the line 5 of Fig. 4.

In practicing my invention I form a body-bolster of the usual top or compression member and bottom or tension member, these compression and tension members being each formed from pairs of angle-bars, each pair of bars having vertical flanges lying adjacent each other and oppositely-extending horizontal flanges, said horizontal flanges forming the top and bottom members of the bolster.

The letters a a' indicate the oppositely-extending horizontal flanges of the pairs of angle-bars forming a bottom or tension member, and the letters a^2 a^3 the upwardly-extending vertical flanges of the bottom or tension member. The top or compression member has similar oppositely-extending horizontal flanges b b' and vertical flanges b^2 b^3, and it will be observed that the vertical flanges of the top or compression member extend downwardly and the vertical flanges of the bottom or tension member extend upwardly. The compression and tension members are rigidly secured together at their ends by suitable rivets l. By referring to Fig. 5 it will be observed that each pair of angle-bars forming the tension member is separated, so as to receive between them the downwardly-extending vertical flanges of the compression member, the rivets l passing through and serving to secure all the flanges together.

The compression and tension members are bent upwardly and downwardly, respectively, so as to be spaced apart at the middle of the bolster, and they are held spaced apart by an angle-iron strut member of the general shape of an inverted letter U. This strut member is composed also of pairs of angle-bars having vertical flanges and oppositely-extending horizontal flanges. The vertical flanges of the strut member at its apex or upper point are received between the downwardly-extending vertical flanges of the compression member, which are separated to receive the flanges of the strut. At each end the flanges of the members of the strut are separated, so as to receive the upwardly-extending vertical flanges of the tension member. In the drawings the reference-letters c c' represent the oppositely-extending flanges of the strut, and the letters c^2 c^3 represent the flanges at right angles to the oppositely-extending flanges c c'. Rivets d and e serve to firmly secure the strut to the compression and tension members, respectively. Suitable cover-plates g at the ends of the bolster k and at the middle point thereof serve to secure the members of the compression member together. (Clearly shown in Figs. 1 and 2.)

There are many advantages arising from the use of angle-bars in building up a bolster. By using material of this form I not only am enabled to use an ordinary commercial shape, but at the same time secure additional strength where the parts are rigidly held together by rivets on account of the extended bearing for the rivets, which necessarily pass through four of the flanges. I am also enabled by building the compression and tension members of pairs of angle-bars to firmly secure the parts together, in the manner described, by separating the flanges of one or the other of the members, so as to receive the flanges of the opposite member between them. So, also, by using the angle-iron strut I am enabled to very rigidly and securely fasten the same to the members of the bolster.

f indicates the body-bolster, formed in the usual manner, as a built-up girder of a box-section consisting of angles f' f^2, having downwardly-extending vertical flanges, and angles f^3 f^4, having upwardly-extending flanges riveted together, with a cover-plate f^5 forming the top of the bolster.

It will be observed that my bolster is of

very simple construction, but at the same time has a maximum amount of strength with the minimum quantity of material.

I claim—

1. A bolster for railway-cars having compression and tension members composed of angle-iron bars arranged in pairs, said compression and tension members being rigidly secured together at their ends, and a strut separating the compression and tension members and secured thereto.

2. A bolster for railway-cars having compression and tension members composed of angle-iron bars arranged in pairs, said compression and tension members being rigidly secured together at their ends, and an angle-iron strut separating the compression and tension members.

3. A bolster for railway-cars having compression and tension members, said tension members being composed of angle-irons having upwardly-extending vertical flanges and said compression members being composed of angle-irons having downwardly-extending vertical flanges, and a strut separating the tension and compression members, said strut composed of angle-iron members having adjacent flanges received between the vertical flanges of the compression member, and said strut being separated at its ends and receiving the vertical flanges of the tension member between its separated parts.

JOHN OSCAR NEIKIRK.

Witnesses:

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