

No. 810,815.

PATENTED JAN. 23, 1906.

F. F. SHAFER.
RAILWAY CAR TRUCK.
APPLICATION FILED JAN. 16, 1905.

FIG. 1.

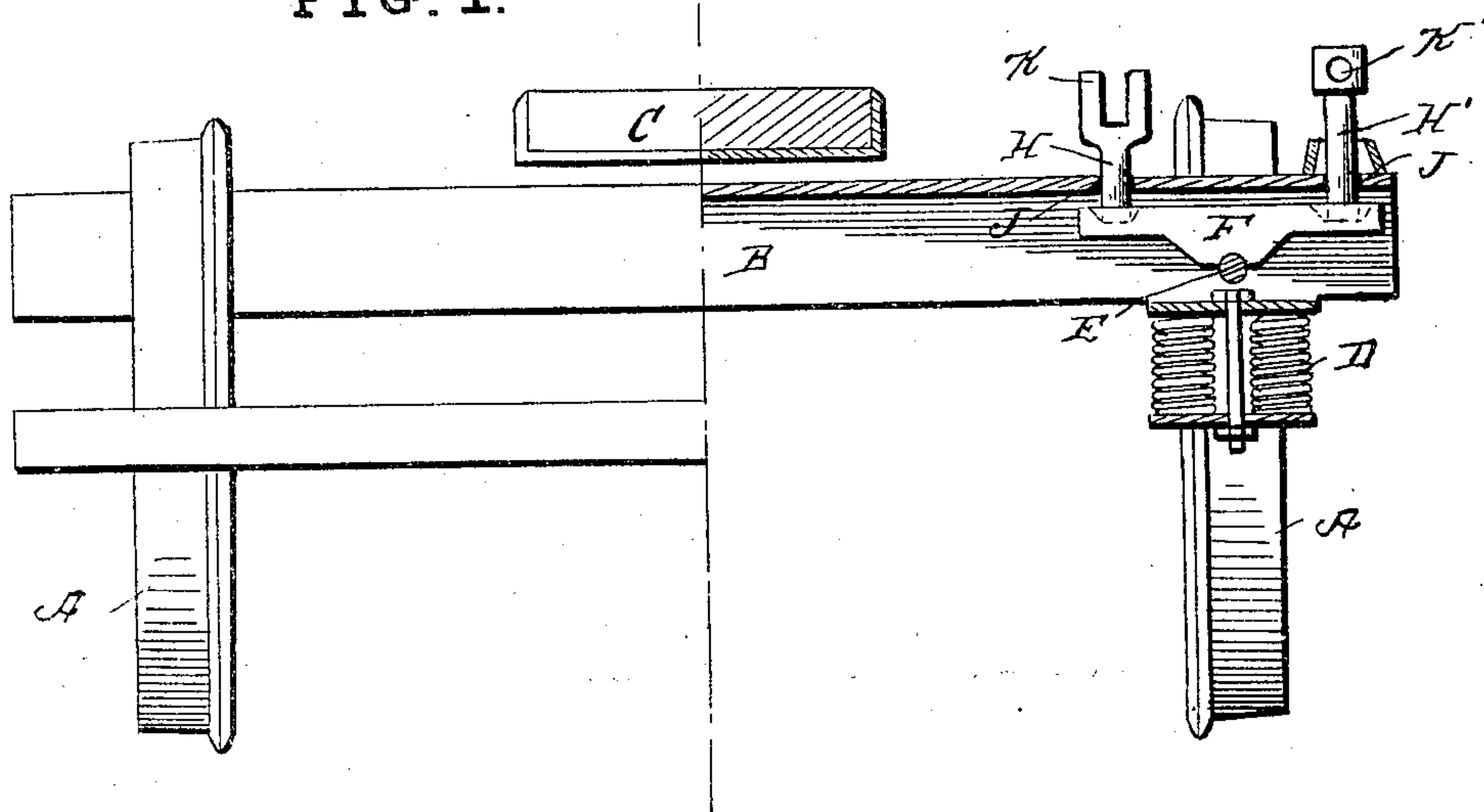
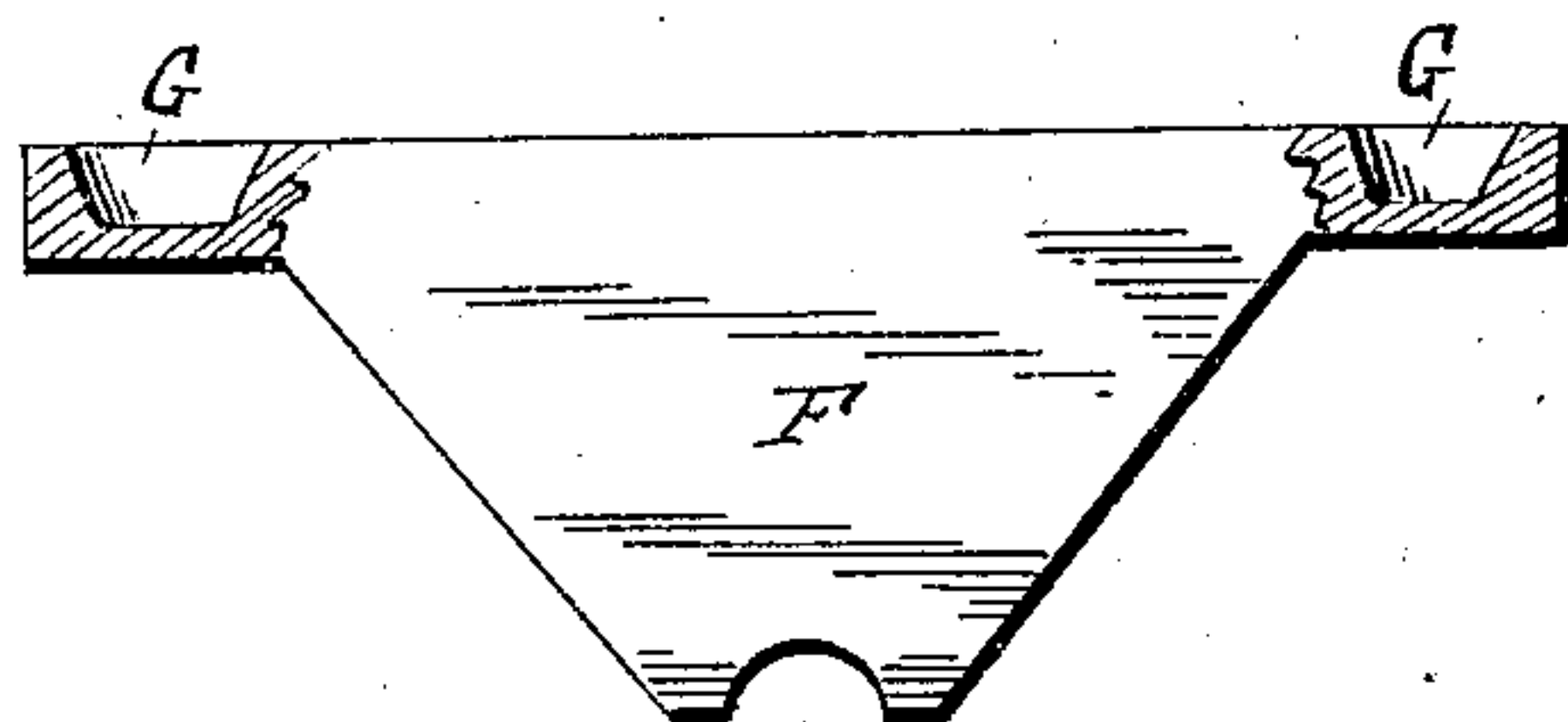


FIG. 2.



Witnesses

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FRANCIS F. SHAFFER, OF CUMBERLAND, MARYLAND, ASSIGNOR OF ONE-THIRD TO PATRICK W. CAVANAUGH, OF CUMBERLAND, MARYLAND.

RAILWAY-CAR TRUCK.

No. 810,815.

Specification of Letters Patent.

Patented Jan. 23, 1906

Application filed January 16, 1905. Serial No 241,492.

To all whom it may concern:

Be it known that I, FRANCIS F. SHAFFER, a citizen of the United States, residing at Cumberland, in the county of Allegany and State of Maryland, have invented certain new and useful Improvements in Railway-Car Trucks, of which the following is a specification.

My invention relates to improvements in railway-car trucks, and is an improvement upon the car-truck for which Letters Patent were granted to me February 18, 1902, No. 693,672, the object being the production of more practical and efficient means for distributing or equalizing the strain upon the connection between the pillow-block and bolsters.

With this object in view my invention consists of an equalizing device for railway-car trucks embodying novel features of construction and combinations of parts substantially as disclosed herein.

Figure 1 represents an elevation, partly in section, showing my equalizer applied to a railway-car truck, the mechanism being shown on one side of the truck only, as similar mechanism is of course used on both sides. Fig. 2 represents a detail view of the pivoted lever or equalizing-plate.

In the drawings the letter A designates the wheels. B designates the bolster. C designates the pillow-block, and D designates the springs arranged under the bolster, all of these parts being the same in general arrangement as in my patent referred to, except that the bolster in the present case is of metal, preferably steel, and made hollow.

The bolster at each end is provided with a transverse pin or stud E, upon which is pivoted or fulcrumed the lever or plate F, each end of said plate being formed with a cup or socket G, in which fit the lower ends of the pair of rods H and H', these rods passing through openings J in the upper wall of the bolster and having upper connection portions K and K'. These connection-points K and K' are similar to the points 40 and 51, Fig. 6, of my patent before referred to. On reference to said patent, Fig. 2, the connection of the toggle-levers 56 to the bar H' and of beam 25 to the bar H will be apparent. The use of the pivoted or fulcrumed lever in this construction forms a connection which will have a vibrating or tilting action when turning

curves or at other times to properly distribute the strain and make the truck move smoothly and evenly.

It will be understood that while I have shown my equalizing device on only one side of the truck both sides are equipped with similar mechanism, and it is evident that I provide a device which is very sensitive and will instantly respond to the movements of the body of the car and properly distribute and equalize the strains due to movement of the car.

I claim—

1. In a railway-car truck, the combination with the bolster, of a lever fulcrumed at each end of said bolster, sockets in the ends of said levers, and rods having their lower ends engaging the sockets in the levers.

2. In a railway-car truck, the combination with the bolster having a transverse stud or pin at each end thereof, of a lever pivoted on said stud and having sockets on each end, and rods passing through the top of the bolster and having their lower ends engaging the sockets on the levers.

3. An equalizing device for railway-car trucks, comprising a pair of vertically-movable rods adapted to be arranged at each end of a bolster, and means adapted to be suspended within and at each end of the bolster for receiving the movement of the rods.

4. In a railway-car truck, the combination with a bolster, of a pair of vertically-movable rods arranged in the ends of the bolster, a lever supporting the lower end of each pair of rods, said lever receiving the movement of the rod, and means arranged in the bolster for supporting the lever.

5. In a railway-car truck, the combination with a hollow bolster, of a pair of vertically-movable rods arranged in each end thereof and extending through the top wall of the bolster, and means suspended within the bolster at each end thereof for receiving the movement of the rods.

6. An equalizing device for railway-car trucks, comprising a pair of vertically-movable rods adapted to be arranged at each end of a bolster, and a lever adapted to be suspended within and at each end of the bolster for receiving the movement of the rods.

7. An equalizing device for railway-car trucks, comprising a pair of vertically-movable rods adapted to be arranged at each end

of a bolster, a lever adapted to be suspended within and at each end of the bolster for receiving the movement of the rods, and transversely-extending pins arranged in each end
5 of the bolster and adapted to suspend the lever.

8. An equalizing device for railway-car trucks, comprising a pair of vertically-movable rods adapted to be arranged at each end
10 of a bolster, a triangular-shaped vibratory lever arranged at each end of the bolster and each having a pair of sockets adapted to re-

ceive the ends of a pair of rods so that the lever will receive the movement of the rods, and a transversely-extending pin arranged in
15 each end of the bolster and adapted to act as supports for the levers.

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

FRANCIS F. SHAFFER.

Witnesses:

CHAS. E. METZ,
W. M. DAVIS.