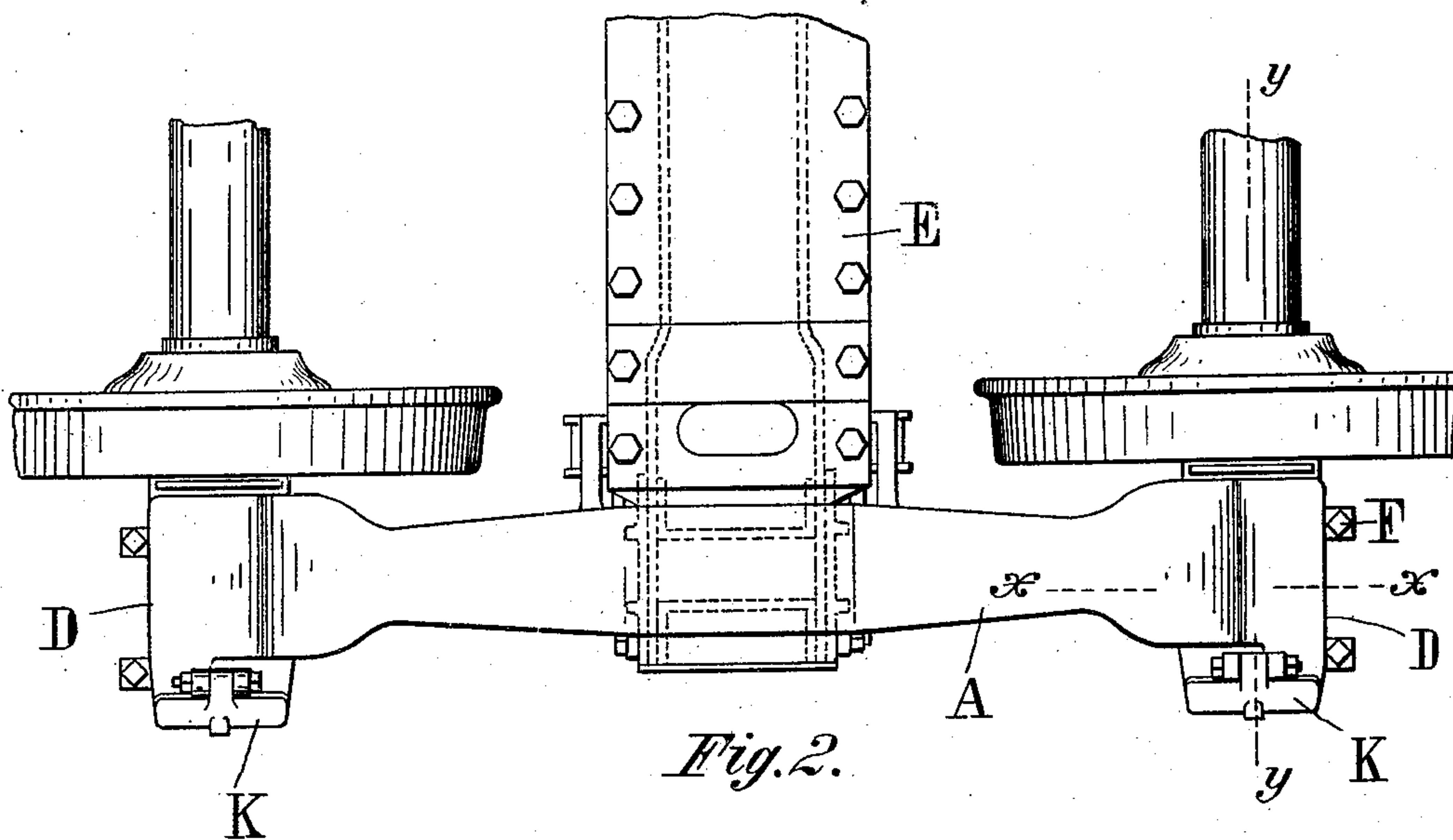
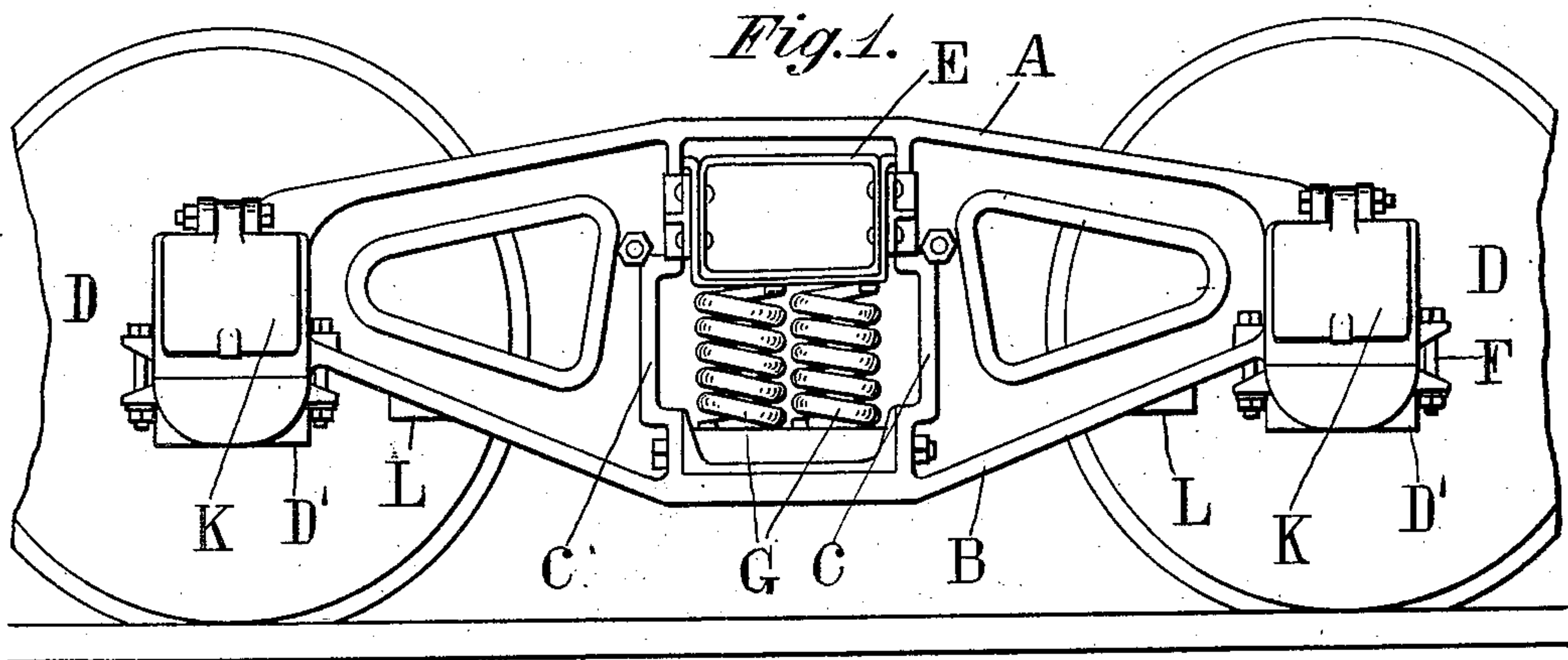


C. D. YOUNG.  
CAR TRUCK.  
APPLICATION FILED NOV. 26, 1908.

944,587.

Patented Dec. 28, 1909.

2 SHEETS—SHEET 1.



Witnesses

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2 SHEETS—SHEET 2.

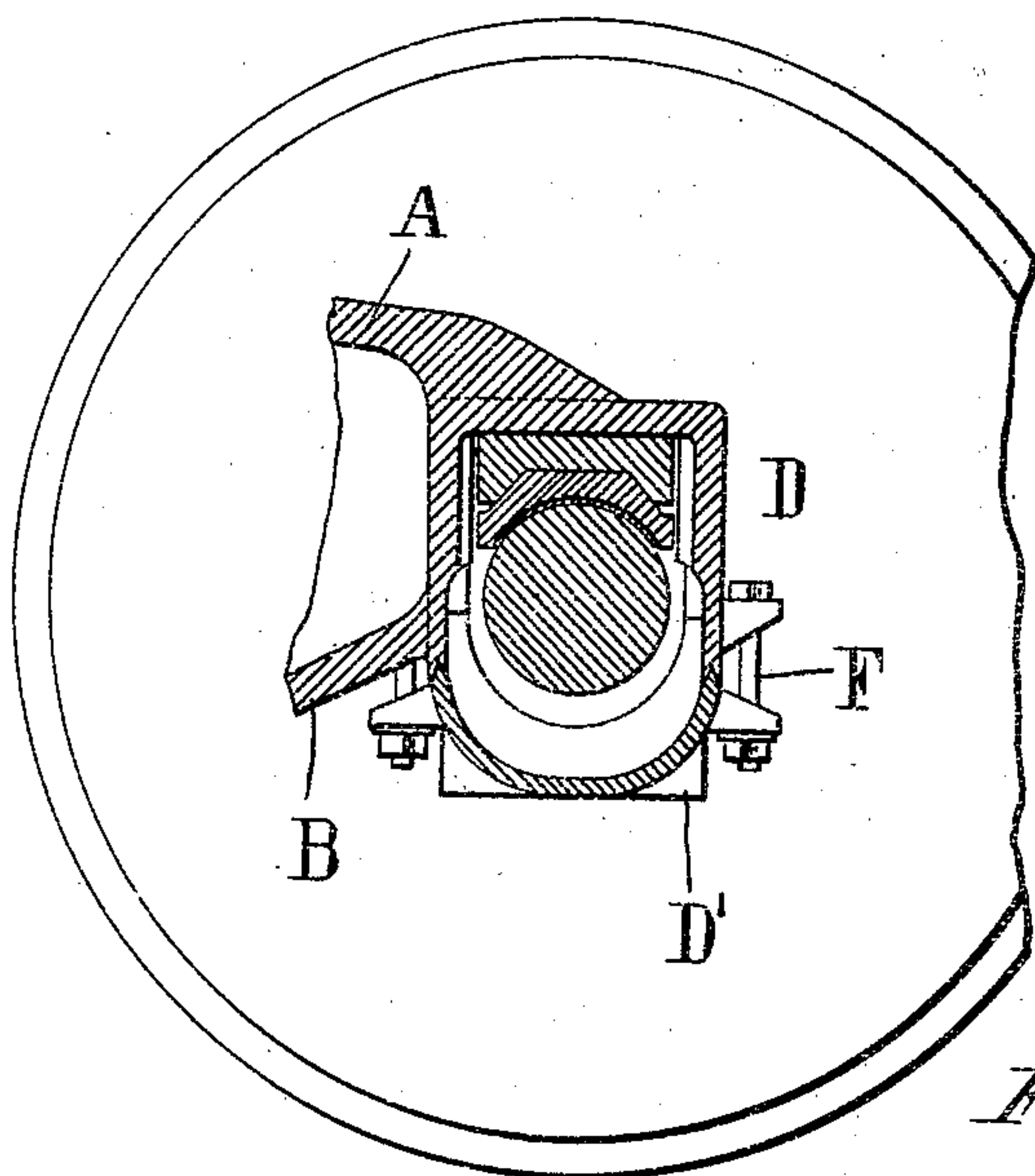


Fig. 3.

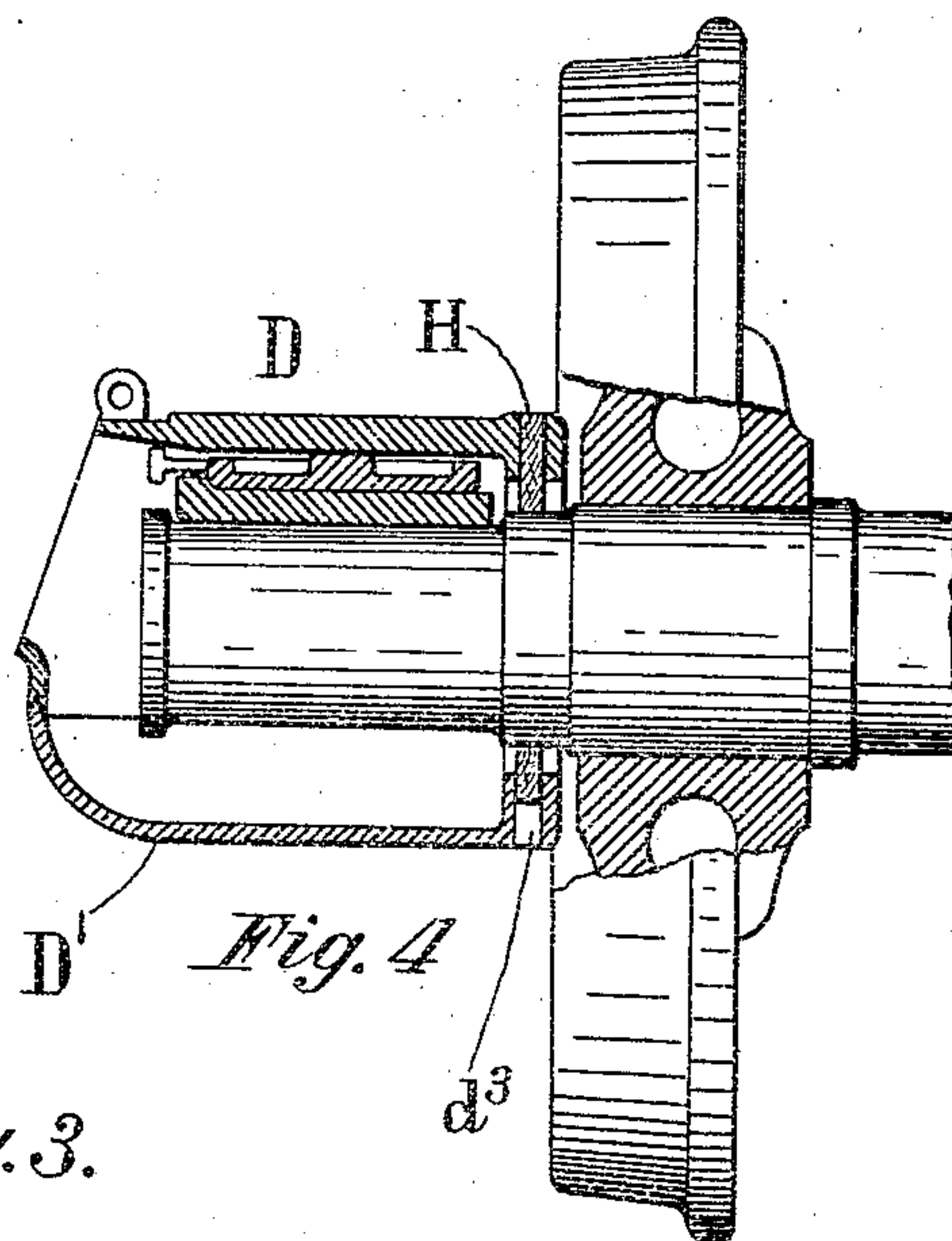


Fig. 4.

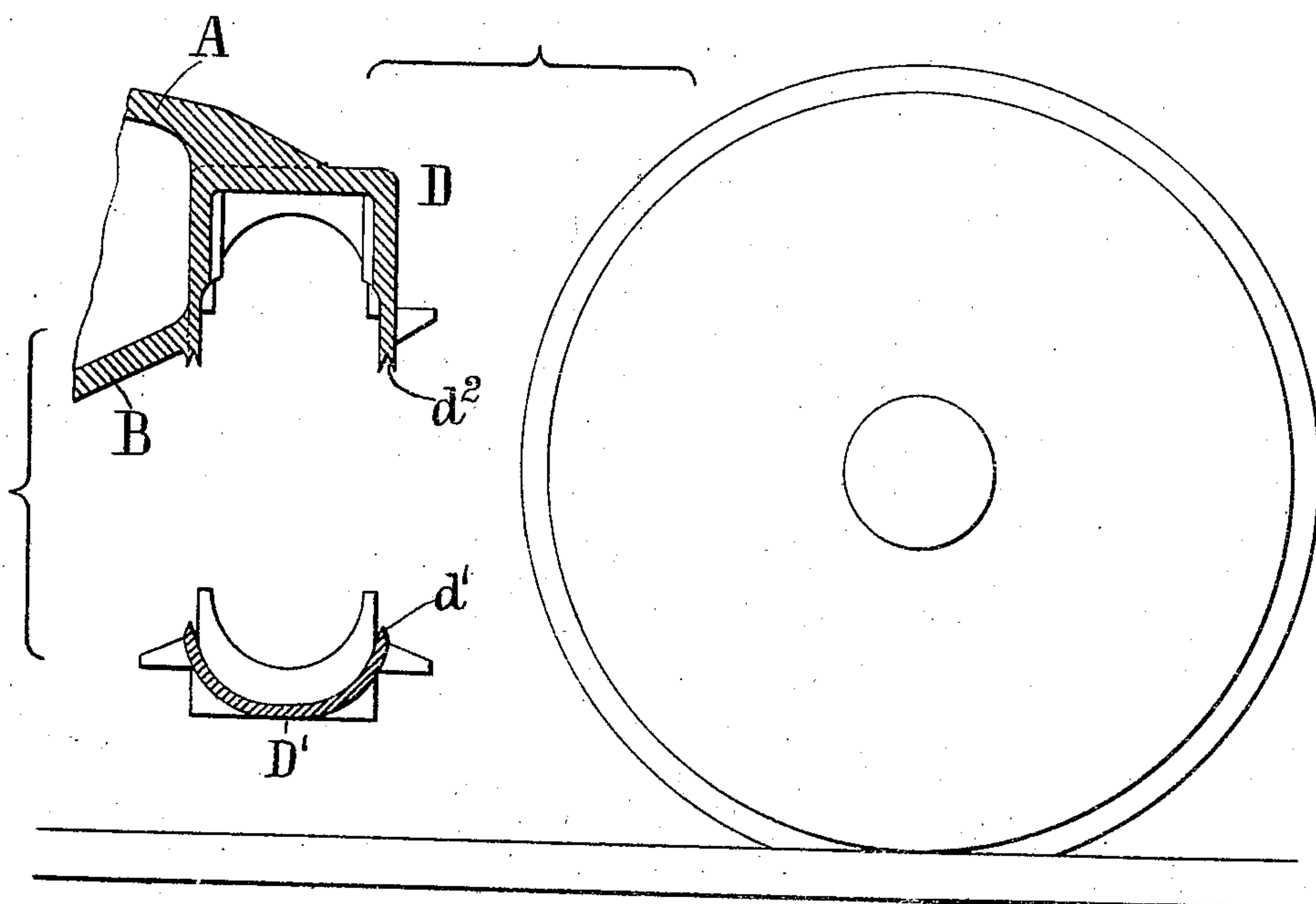


Fig. 5.

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# UNITED STATES PATENT OFFICE.

CHARLES D. YOUNG, OF COLUMBUS, OHIO.

## CAR-TRUCK.

944,587.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed November 25, 1908. Serial No. 464,391.

*To all whom it may concern:*

Be it known that I, CHARLES D. YOUNG, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Car-Trucks, of which the following is a specification.

It is frequently necessary to remove the wheels and axles of car trucks for the purpose of repairs or renewal due to defects or worn out condition.

The object of this invention therefore is to provide an improved car truck with side frames having journal boxes from which the wheels and axles can be readily removed without removing the side frames and other parts of the truck.

The invention is embodied in the construction hereinafter described in connection with the accompanying drawings and pointed out in the claims.

In the aforesaid drawings—Figure 1 is a side elevation of the invention. Fig. 2 is a top plan view. Fig. 3 is a vertical section on the line  $x-x$ , Fig. 2. Fig. 4 is a vertical section on the line  $y-y$ , Fig. 1. Fig. 5 is a compound view with parts in section and full, illustrating how the parts are separated to permit the removal of the car wheels and axle.

The form of side frame shown in the accompanying drawings is, generally speaking, like those heretofore in common use, that is to say, A represents the upper arch of the side frame of the truck; B, the inverted arch thereof; C, C, the columns, and D, D, the journal boxes. The opening between the columns C, C, is enlarged at its lower end to permit the entrance of the end of the truck bolster E, and the end of the bolster has the usual sliding connection with the walls forming the upper contracted portion of said opening.

G, G, are springs inserted in the side frame below the ends of the bolster to yieldingly support the bolster.

The journal boxes D, D, in my invention, as shown herein, instead of being made altogether integral with the side frame, are each integral therewith at their upper and both their side portions only, the bottom portions being formed as separate pieces or sections, as seen at D' complementing the upper and side portions. The journal box section D' is

preferably made with a taper tongue, as seen at  $d^1$ , around its edges to fit in a groove  $d^2$  in the upper portion to make an oil tight and dust proof joint; and the bottom section is shown to be bolted to the upper portion or section by means of bolts F passed through suitable ears on both sections and held by nuts. But any other suitable means can be employed to secure the bottom section of the journal box to the upper portion. The bottom section of the journal box is provided at its inner end with a suitable recess or opening, as seen at  $d^3$ , into which the dust guard H projects when said section is fitted to the upper portion of the box. The line of division between the side and lower portions of the journal box is such that when the lower portion is removed, the entire truck and car, including the side frames, can be raised, leaving the wheels and their axles remaining on the rails free to be rolled away.

L designates a lug cast on the lower portion of the side frame, under which a lifting jack head may be placed to lift the side frame. By the shown construction, I obtain substantially the advantages of a side frame having boxes cast integral with the body of the frame without the disadvantages incident to a construction where the boxes are wholly cast integral with the frame. In Fig. 5 is illustrated the elevated position of a side frame and box portion thereon, for the purpose of showing how car wheels (indicated at the right on a track) can be rolled to or from a position under the fixed portion of the journal box.

The journal box can have the usual hinged lid K, and other parts incident to the Master Car Builders' journal box construction.

Because the portions of the box that are integral with the side frames include the top and both sides, the wheel spindles or axles will not leave the boxes should the bottom section in any way become accidentally detached from the side portions of the box. In other words, before the axles can become separated from their proper bearings the side frames must be lifted off them. For this reason many railroad accidents may be averted.

By beveling the registering edges of the two parts of the box, I obtain a joint that is dust and oil proof, and in assembling the same the parts thereof will naturally move



into their proper relative positions, and be retained there without regard to the fit of the bolts and bolt holes.

What I claim and desire to secure by Letters Patent is:

1. The combination with a metal side frame for a car truck, having the upper and both side portions of each journal box made integral therewith, of a separable bottom for each journal box, the meeting edges of the two parts of the box having correspondingly beveled surfaces, and bolts for securing the lower member of the box to the upper portion of the latter.

2. The combination with a metal side frame for a car truck having the upper, both side portions, and part of the front of each journal box made integral therewith, the journal box lid opening being formed wholly in said front, of a separable bottom for each journal box and bolts for locking the lower member of the box to the upper portion of the latter.

3. The combination with a metal side frame for a car truck, having the upper,

both side portions, and front of each journal box made integral therewith the journal box lid opening being formed wholly in the said front, of a separable bottom for each journal box, the meeting edges of the two parts of the box having correspondingly beveled surfaces, and bolts for securing the lower member of the box to the upper portion of the latter.

4. The combination with a metal side frame for a car truck, having the upper and both side portions of each journal box made integral therewith, of a separable bottom for each journal box, the meeting edges of the two parts of the box having correspondingly beveled surfaces, and both parts of the box having laterally projecting integral lugs, and bolts passing through said lugs for securing the lower member of the box to the upper portion of the latter.

CHARLES D. YOUNG.

Witnesses:

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