

(No Model.)

2 Sheets—Sheet 1.

W. P. HENSZEY.
ELECTRIC LOCOMOTIVE TRUCK.

No. 562,607.

Patented June 23, 1896.

FIG. 1.

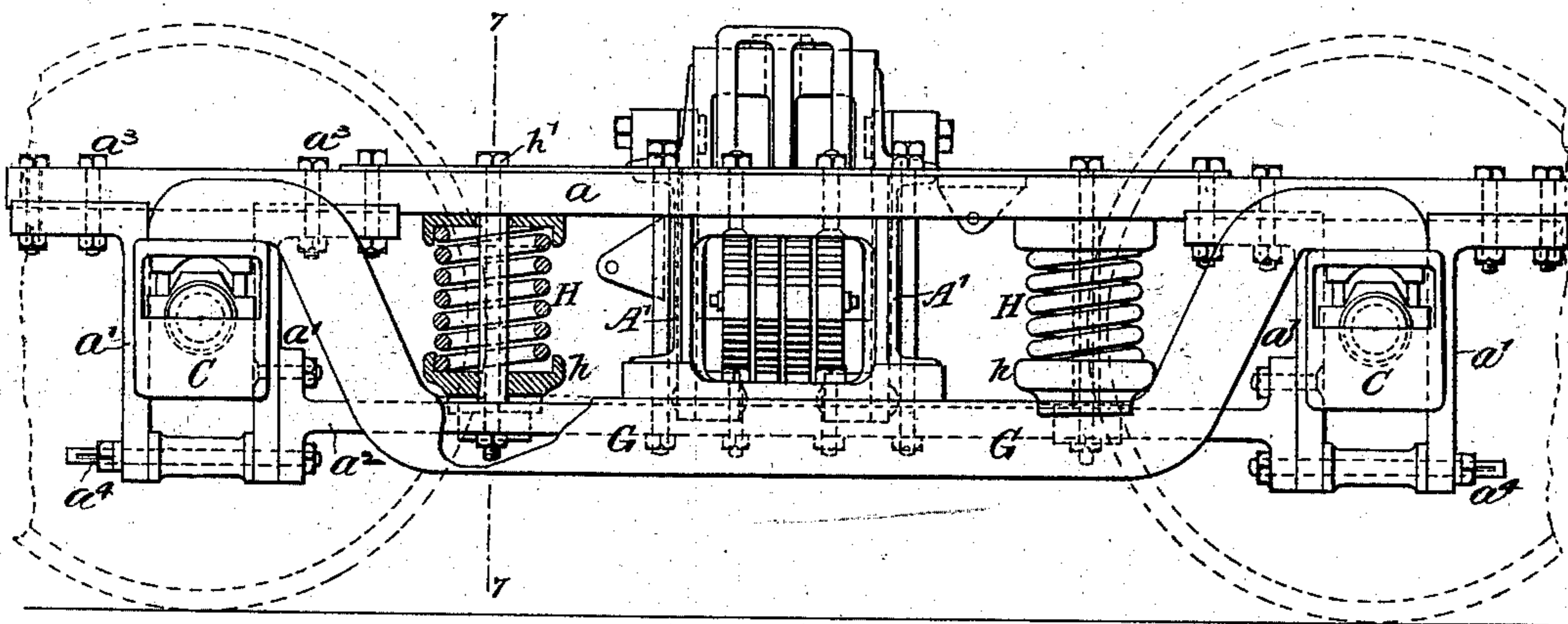
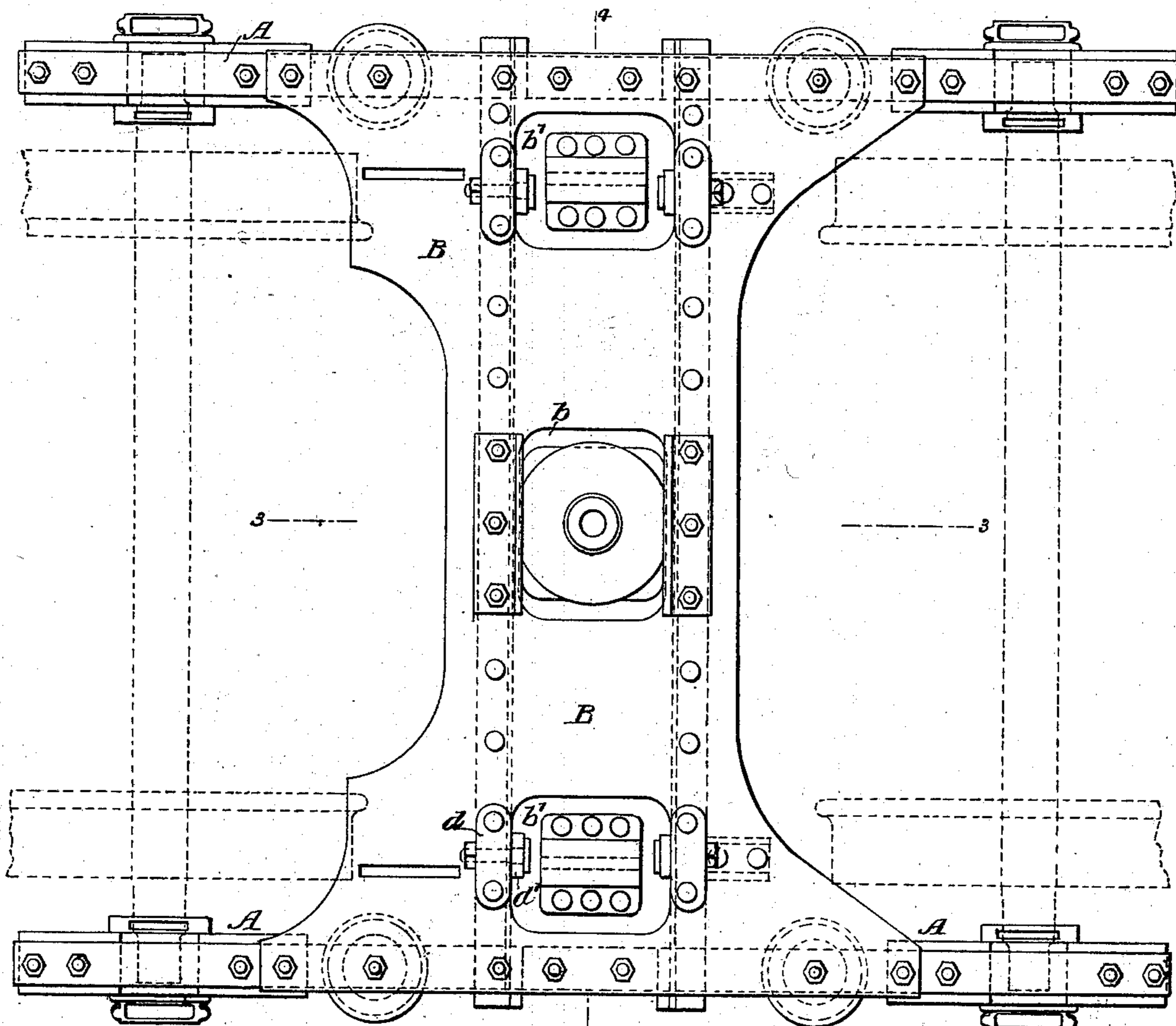


FIG. 2.



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(No Model.)

2 Sheets—Sheet 2.

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FIG. 3.

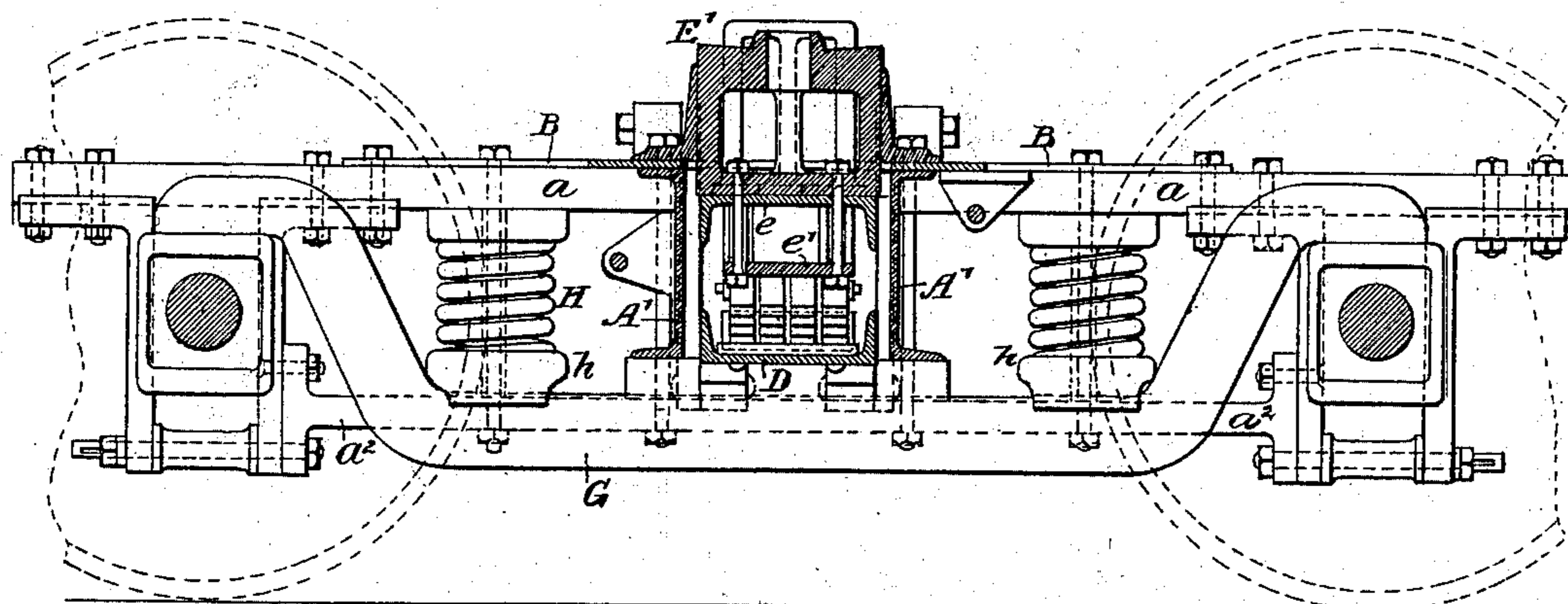


FIG. 7.

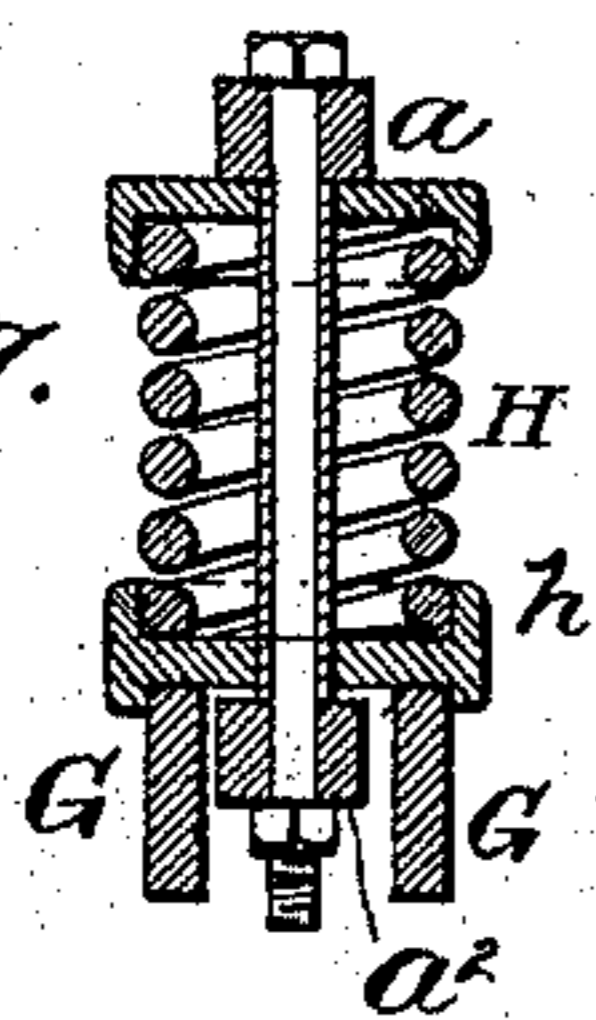


FIG. 5.

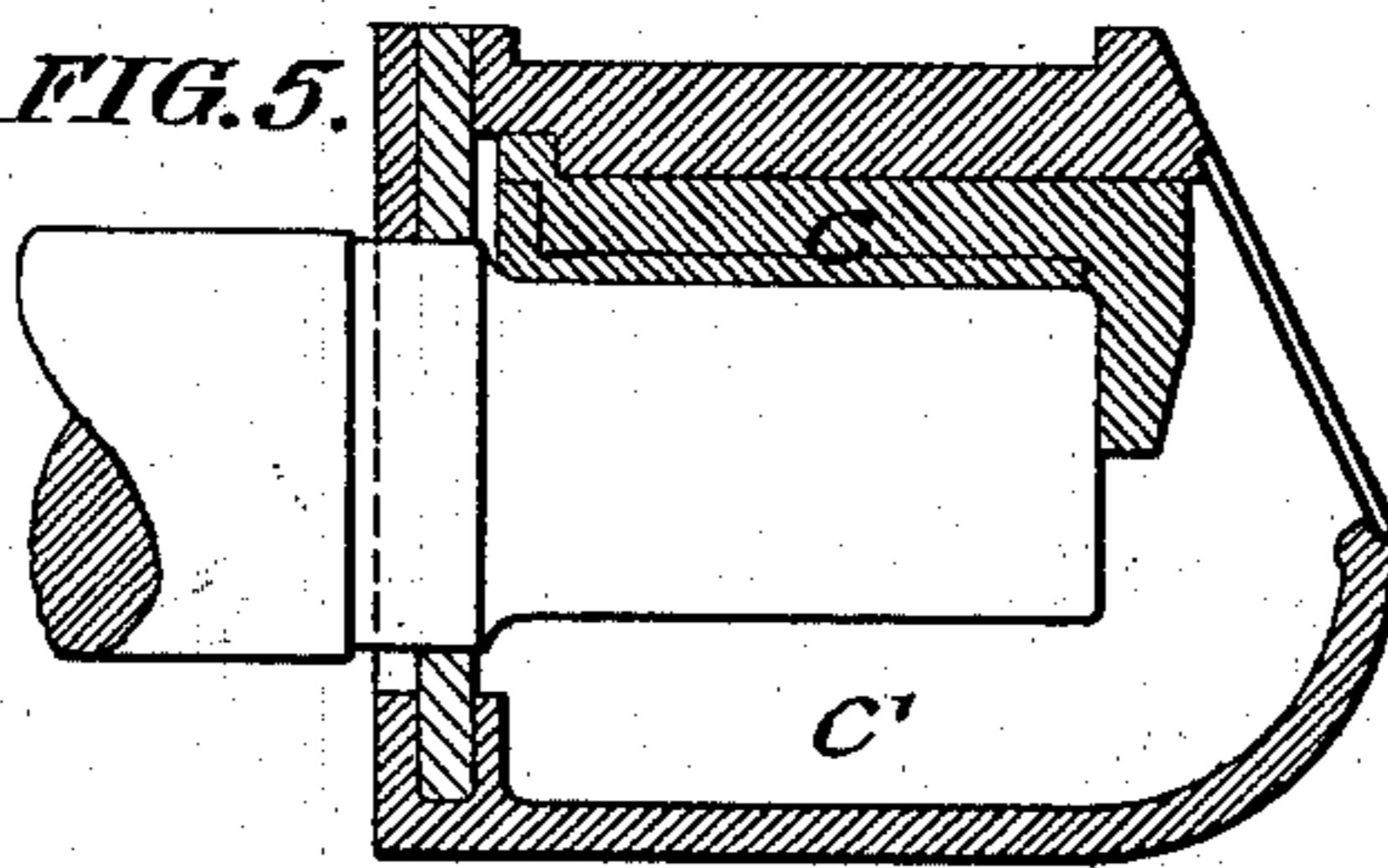


FIG. 6.

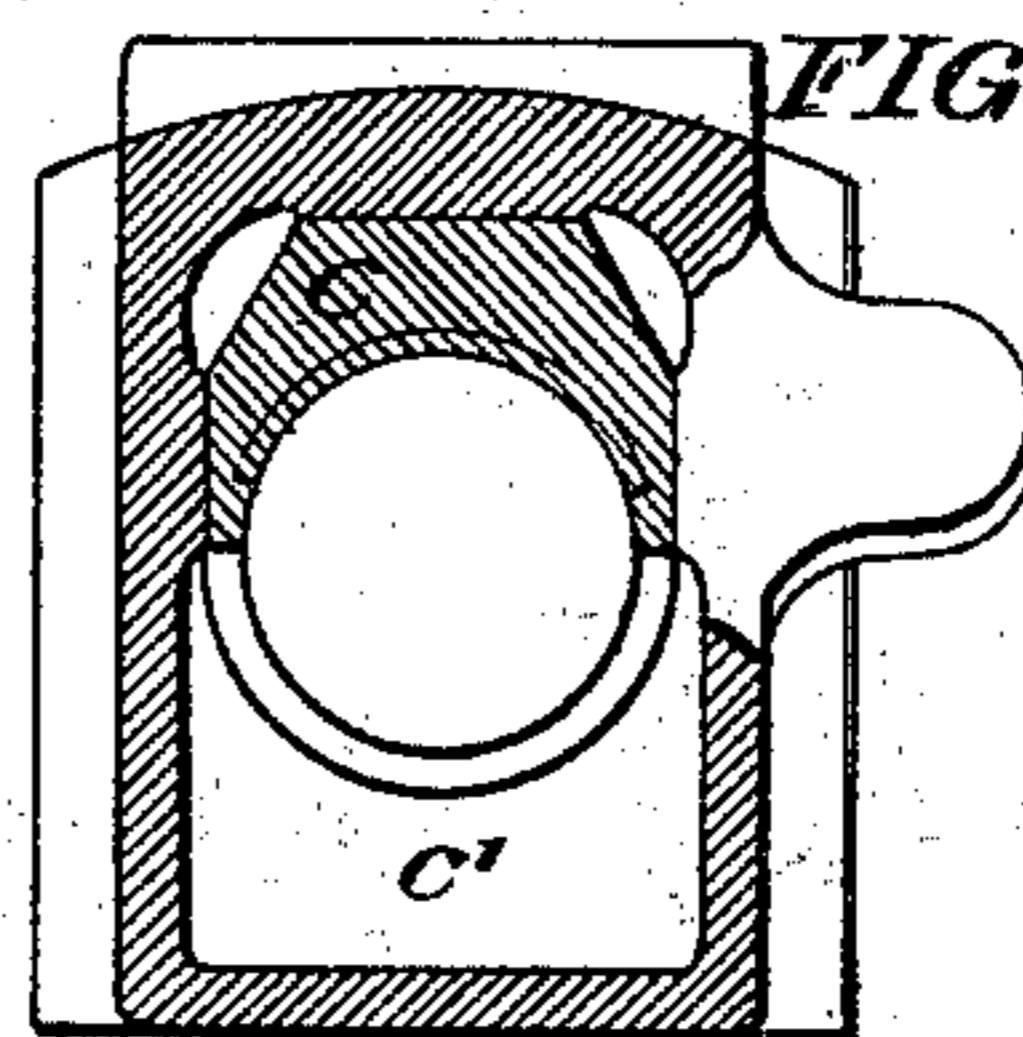
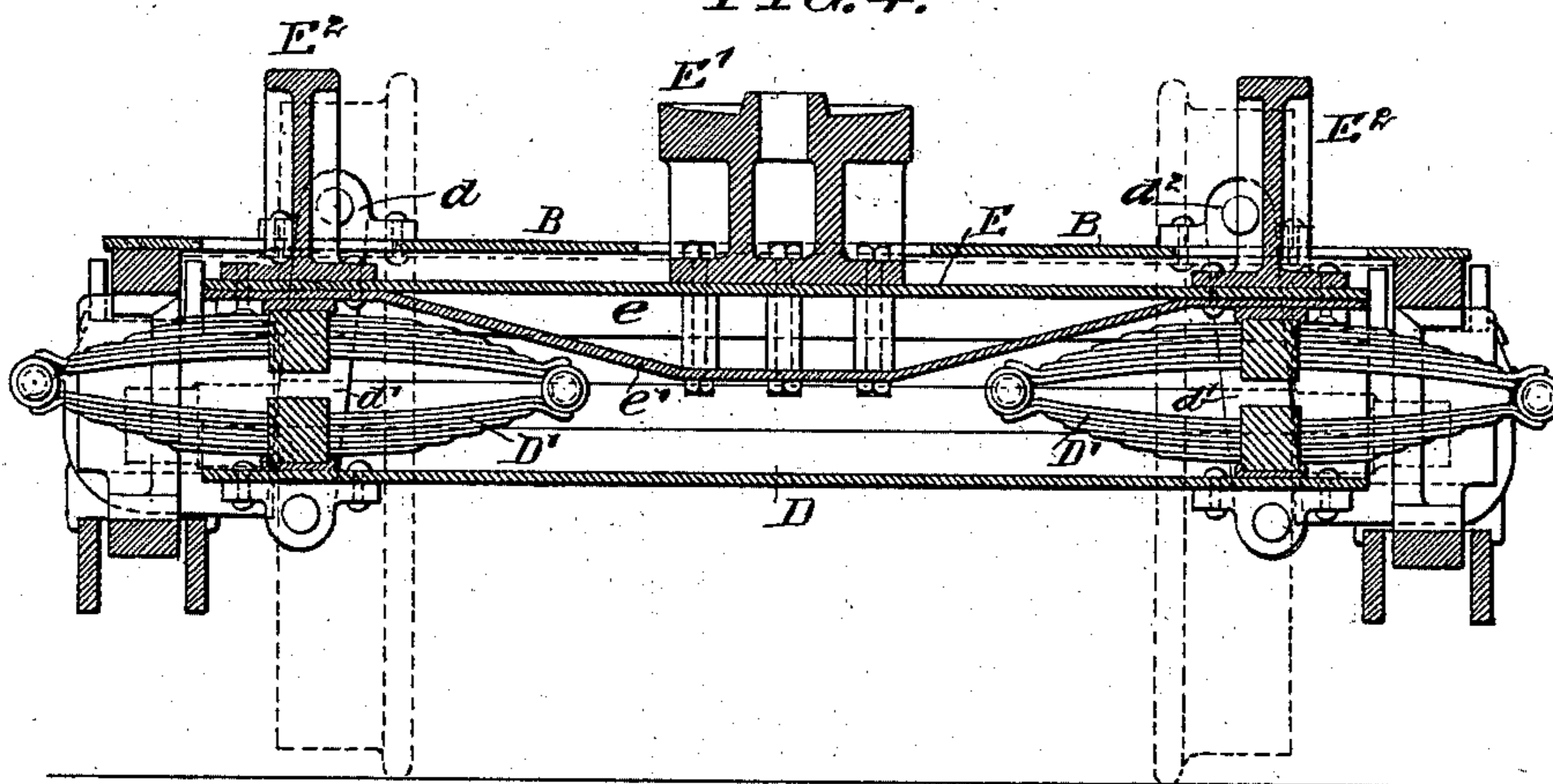


FIG. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM P. HENSZEY, OF PHILADELPHIA, PENNSYLVANIA.

ELECTRIC-LOCOMOTIVE TRUCK.

SPECIFICATION forming part of Letters Patent No. 562,607, dated June 23, 1896.

Application filed October 4, 1895. Serial No. 564,643. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. HENSZEY, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Electric-Locomotive Trucks, of which the following is a specification.

My invention relates particularly to the trucks of electric locomotives, and the main object of my invention is to so construct the truck that it will be perfectly rigid and capable of withstanding the strains to which a truck of an electric locomotive is subjected.

My invention relates, further, to the special arrangement of the equalizing-bars, the construction of the boxes, and the arrangement of the bolster; but it will be understood that my improvements can be applied to any car-trucks.

Referring to the accompanying drawings, Figure 1 is a side view of my improved truck. Fig. 2 is a plan view. Fig. 3 is a longitudinal section on the line 3 3, Fig. 2. Fig. 4 is a longitudinal section on the line 4 4, Fig. 2. Fig. 5 is a longitudinal sectional view through the axle-box of the truck. Fig. 6 is a transverse sectional view; and Fig. 7 is a section on the line 7 7, Fig. 1.

A A are the side frames of the truck, consisting of the upper beam a , the side bars a' , forming the pedestal, and the lower bar a^2 , extending from one pedestal to the other. The side bars $a a'$ of the pedestal are secured to the upper beam by bolts a^3 and at the lower ends are held together by a bolt a^4 . Adapted to the pedestals are the journal-boxes C C for the axles of the truck, as shown by dotted lines. B is a plate extending over the upper surface of the truck from one side frame to the other. This plate is made in one piece and has extensions at each end. The plate is securely bolted to the side frames and to the channel-bars A', which extend below the plate from one side frame to the other. The plate B has openings $b b'$ for the center plate and side bearings. By this arrangement the truck-frame is made perfectly rigid and will not work loose by the action of the motors carried by the trucks.

Suspended by links d' from bearings d on the plate B is a swinging spring-beam D, carrying the elliptic springs D', which in turn

carry the bolster E, mounted directly under the plate B of the truck-frame. This bolster consists of a channel-beam e and a brace-plate e' , suitably tied together, in the present instance by the bolts which secure the truck center E' to the bolster.

At each end of the bolster are the side bearing-blocks E². The truck center and side bearing-blocks, as will be noticed on reference to Figs. 2 and 4, extend through the openings in the plate B and these openings are of sufficient size to allow for the free movements of the bolster. By this arrangement the bolster and spring-plate are placed in position from below, so that the rigidity of the truck is not affected by the bolster.

At each side of each side frame A is an equalizing-bar G, as shown clearly in Figs 1 and 7. These equalizing-bars rest upon the boxes C C and are bent, so as to extend under the plates $h h$ of the spring-boxes H. These spring-boxes are mounted between the bars $a a^2$ of the side frame A and are secured in position by a bolt h' , passing entirely through each box. The plate h is clear of the frame a^2 and is carried by the equalizing-bars G, as shown clearly in Fig. 7. By providing two equalizing-bars, one at each side of the frame, I do not weaken the frame in any manner and provide a much better support for the truck.

The boxes C C (shown clearly in Figs. 5 and 6) are constructed in a manner different from those usually employed in trucks of this character. The bearing-block or brass in an ordinary box is loose in the box, so that the axle will have a certain amount of freedom to seat itself; but I fit the brass or bearing-block c snugly in the box, as indicated in Fig. 6; in fact, I make it a tight fit, so as to prevent lost motion and extend the brass down to or past the center of the axle and thus prevent the axle from jamming or moving laterally in the box. I form the usual chamber c' under the journal of the axle for the lubricating-oil and waste. Each box snugly fits its pedestal, so that the truck is perfectly rigid in all its parts.

I claim as my invention—

1. The combination in a car-truck, of the side frames A A, the top plate B extending from one side frame to the other, openings in the top plate, with a bolster having a center

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plate and side bearing-blocks extending through openings in the top plate, substantially as described.

2. The combination in a truck, of the side frames A A having a pedestal for the axle-box, the bars A' extending from one side frame to the other and inclosing the bolster, a top plate extending from one side frame to the other and secured to the side frames and the bars A', openings in said plate for the passage of the center plate, substantially as set forth.

3. The combination in a car-truck, of the side frames carrying the pedestals for the axle-boxes, the channel-bars A' extending from one side of the frame to the other, a bolster mounted within the space between said bars, a top plate B extending from one side frame to the other and secured thereto and to the channel-bars, a spring-plate hung from the frame thus formed and carrying the bolster,

openings in the top plate through which the center bearing-plate and side bearing-blocks extend, substantially as described.

4. The combination in a car-truck, of the frame consisting of the side frames A A and the top plate B extending from one side frame to the other, axle-boxes snugly fitting the pedestals of said side frames, each box having a bearing snugly fitted thereto, and extending down on each side of the axle forming side bearings as well as a top bearing for the axle, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WM. P. HENSZEY.

Witnesses:

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JAS. H. M. HAYES.