

No. 638,549.

Patented Dec. 5, 1899.

J. L. BOWEN.

CAR TRUCK.

(Application filed May 5, 1899.)

(No Model.)

Fig. 1.

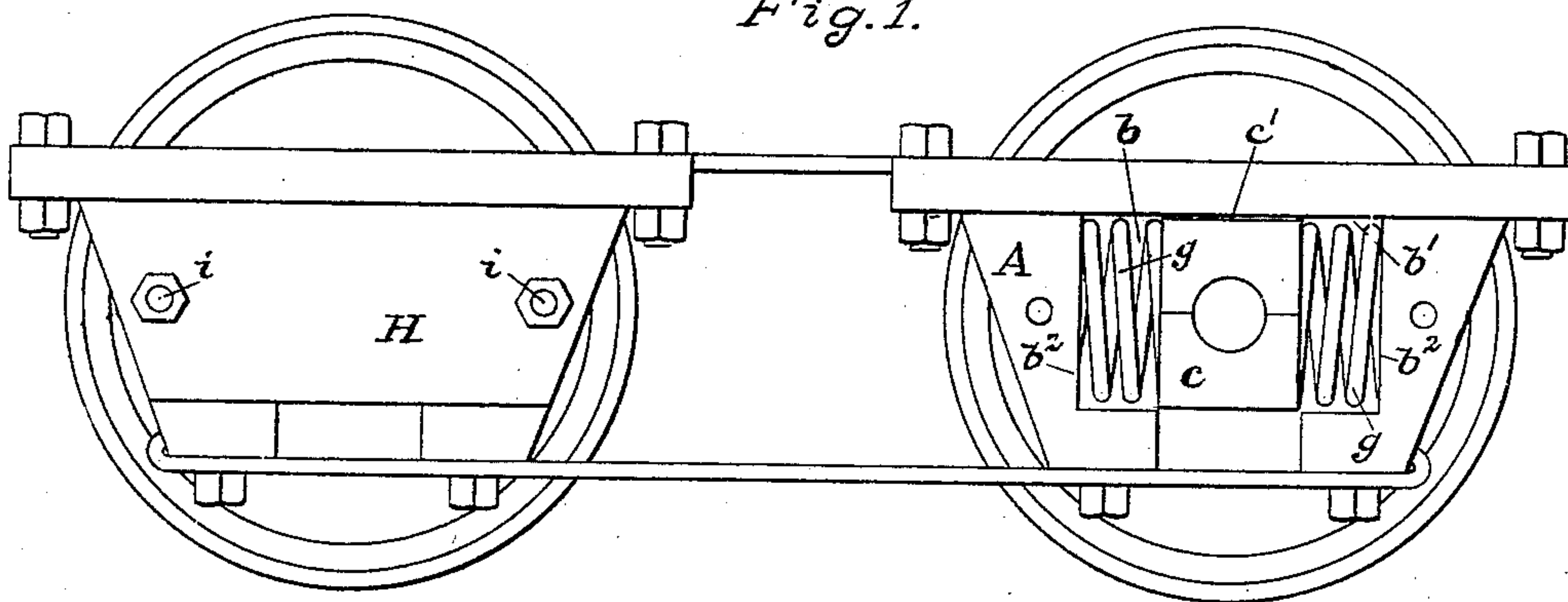


Fig. 2.

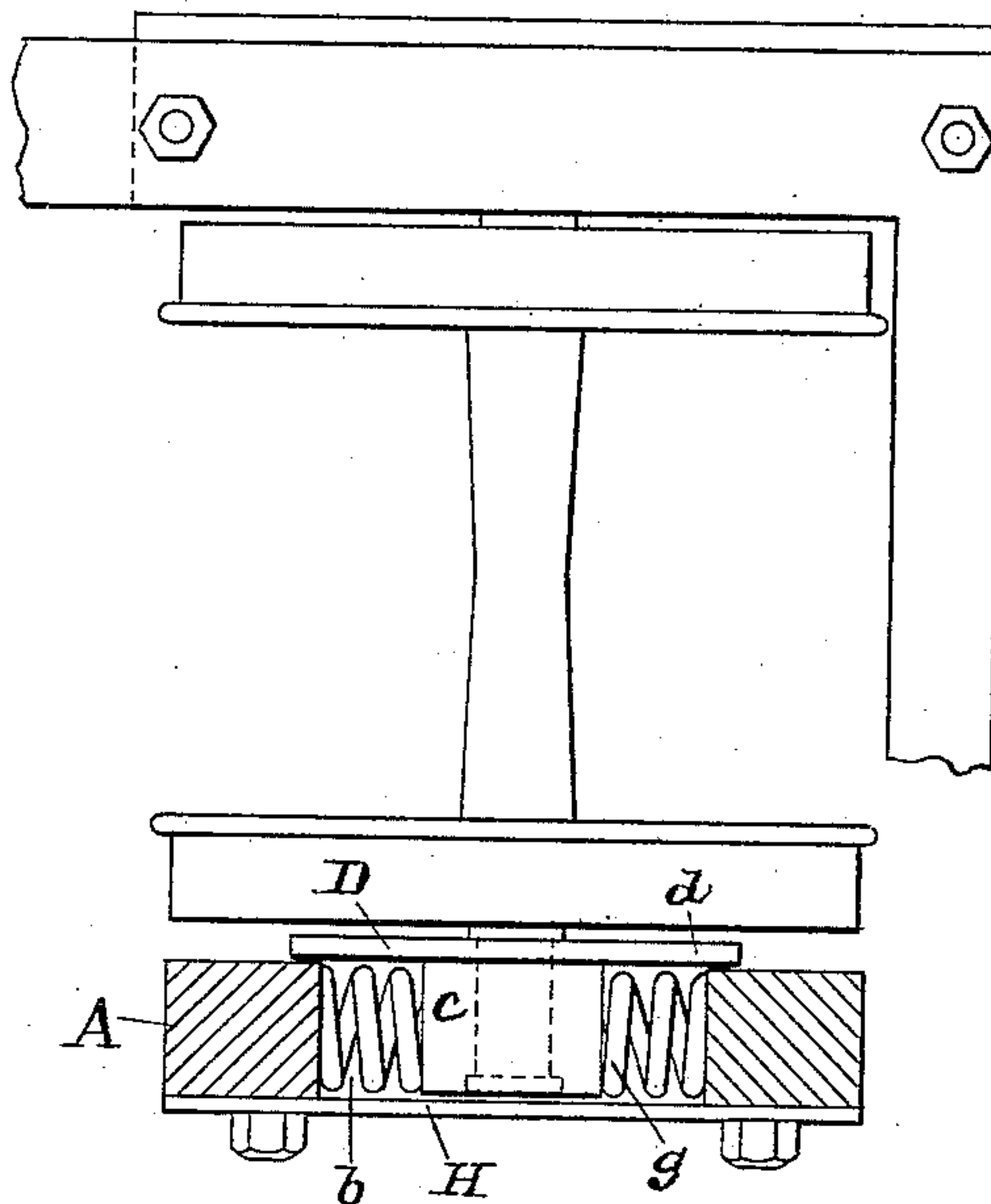


Fig. 3.

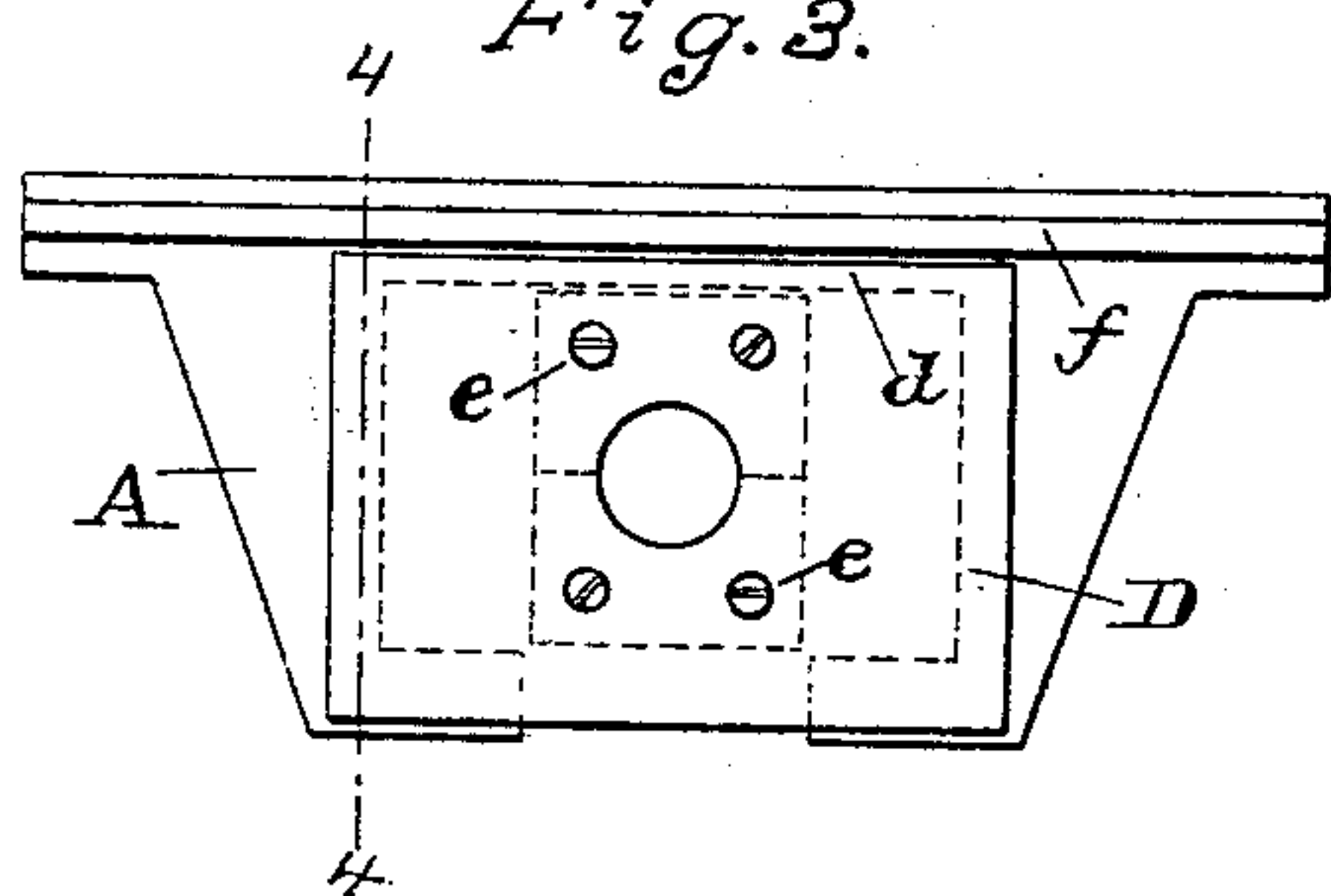
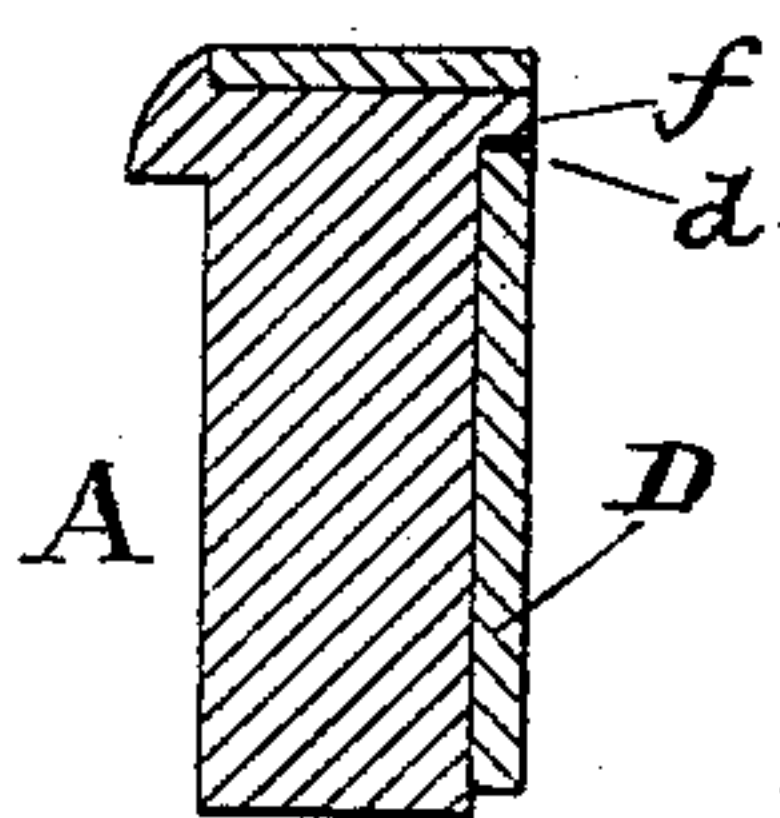


Fig. 4.



Witnesses:
George Koether.
Charles B. Mann Jr.

Inventor:
Joseph L. Bowen
By Chas B. Mann
Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH L. BOWEN, OF BALTIMORE, MARYLAND.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 638,549, dated December 5, 1899.

Application filed May 5, 1899. Serial No. 715,638. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. BOWEN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Car-Trucks, of which the following is a specification.

This invention relates to an improved truck for street-cars.

10 The object of the invention is to improve the construction of the connection of the axle-journals, boxes, and pedestals in such manner as will allow to either end of the axle slight longitudinal movement relative to the
15 track-rails independent of the other end when rounding curves in the track and which will also allow a slight forward movement bodily of one axle independently of the truck or of the other axle when an electric motor is start-
20 ing the car, so as to cushion and obviate the effects of a sudden jerk which commonly attends such starting.

Referring to the drawings, Figure 1 is a side elevation of a car-truck, the box-cover or plate
25 of one axle-box being removed. Fig. 2 is a top plan view of one end of the truck, part of the frame adjacent one wheel being broken away and part of one housing or pedestal being in section. Fig. 3 is a side view, reverse
30 to that seen in Fig. 1, of one housing or pedestal of the truck. Fig. 4 is a vertical section of the pedestal and parts on the line 4 4.

The house or pedestal A has a rectangular cavity or chamber *b*, partly occupied by the
35 journal-box *c*. The upper and interior surface *b'* of this chamber is horizontal, flat, and smooth, and each end *b*² has a vertical wall. The journal-box *c* has a flat horizontal top surface *c'* and is in contact with the upper
40 surface *b'* of the chamber, whereon it may have a slight sliding movement. On the vertical inner side of the pedestal next to the wheel is a flat plate D, which has vertical position and entirely covers the chamber *b*. This
45 plate is attached to the journal-box *c* by bolts *e* and of course has any sliding movement of which the box itself may partake. The slidable plate D laps over beyond the end walls *b*² of the chamber sufficiently to keep the

chamber covered and closed when the plate 50 and journal-box slide forward, as they will at times, as when the car is rounding a curve or when the motor suddenly acts on a wheel and axle at time of starting. On top of the pedestal is a lateral flange *f*, projecting on 55 the inner side, and the upper edge *d* of the said slidable plate takes up under and against said flange, and thereby has a bearing-surface where it may slide.

Within the chamber *b* and at each side of 60 the journal-box *c* is a spring *g*, the springs being interposed tightly between the end walls *b*² and the box.

On the vertical outer side of the pedestal is a cover-plate H, secured over the chamber 65 *b* by bolts *i*. This plate is rigid or immovable in its position.

From this description and the drawings it will be seen that the stated objects of the invention will be accomplished and that the 70 journal-box *c* and the attached plate D are both slidable, the springs yielding to admit such movement, and also that the said plate, although slidable, will keep the chamber containing the box and springs closed. 75

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a car-truck the combination of a pedestal having a rectangular cavity, *b*, provided 80 with an upper interior horizontal sliding surface, *b'*, and a top lateral flange, *f*, projecting on the inner side; a journal-box in said chamber whose top surface bears up under said sliding surface—said box having a slight slid- 85 able movement; a spring, *g*, at each side of the journal-box and within the chamber; a vertical slidable plate, D, covering the chamber on the inner side of the pedestal—said plate being attached to the journal-box; and 90 the journal of an axle extended through the slidable plate and revoluble in the said box.

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

JOSEPH L. BOWEN.

Witnesses:

SAMUEL S. BOGGS,
THOS. E. BOWEN.