

No. 638,500.

Patented Dec. 5, 1899.

N. H. DAVIS.
DUST GUARD FOR CAR AXLE BOXES.

(No Model.)

(Application filed July 15, 1899.)

FIG. 1.

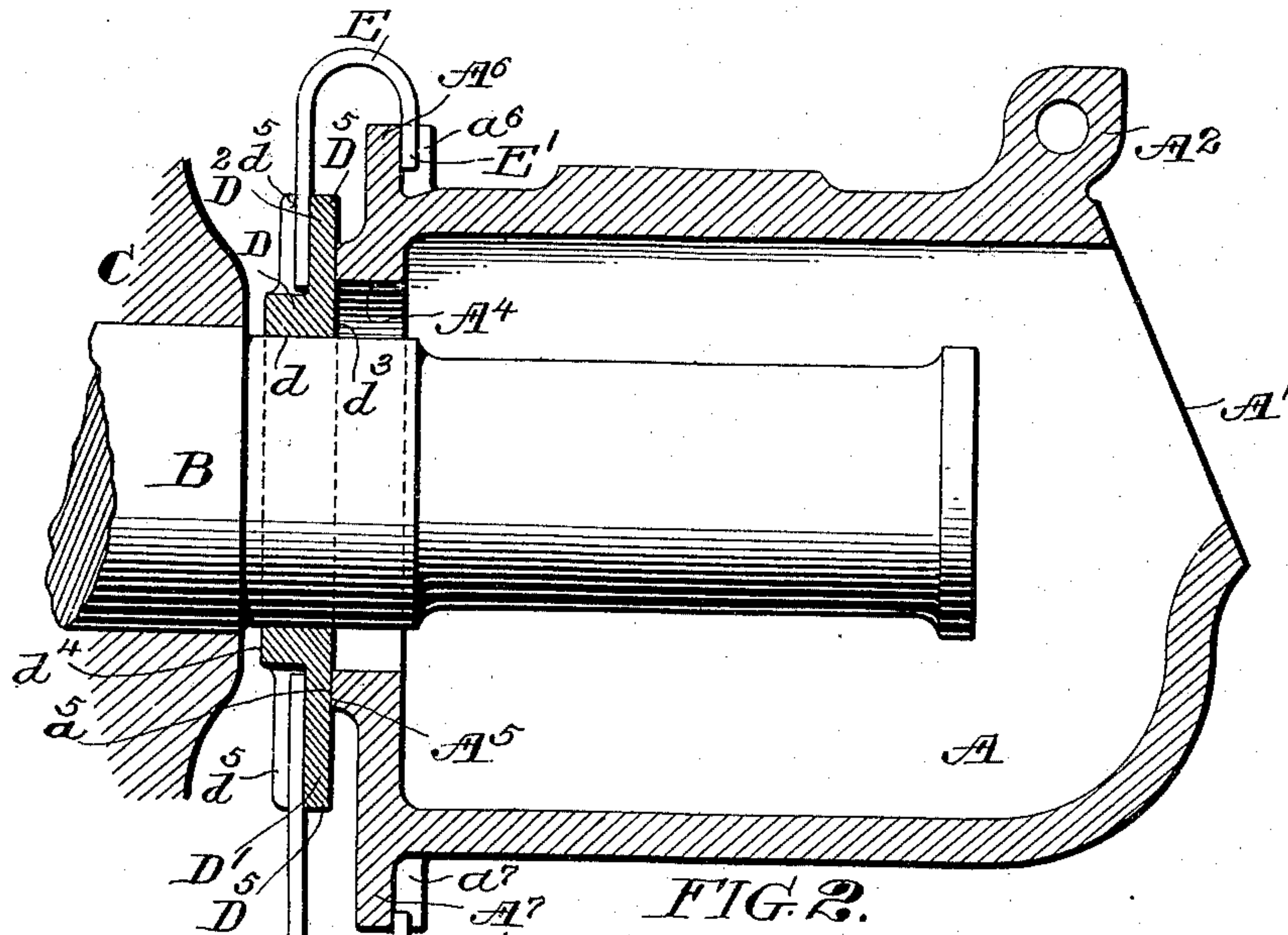


FIG. 2.

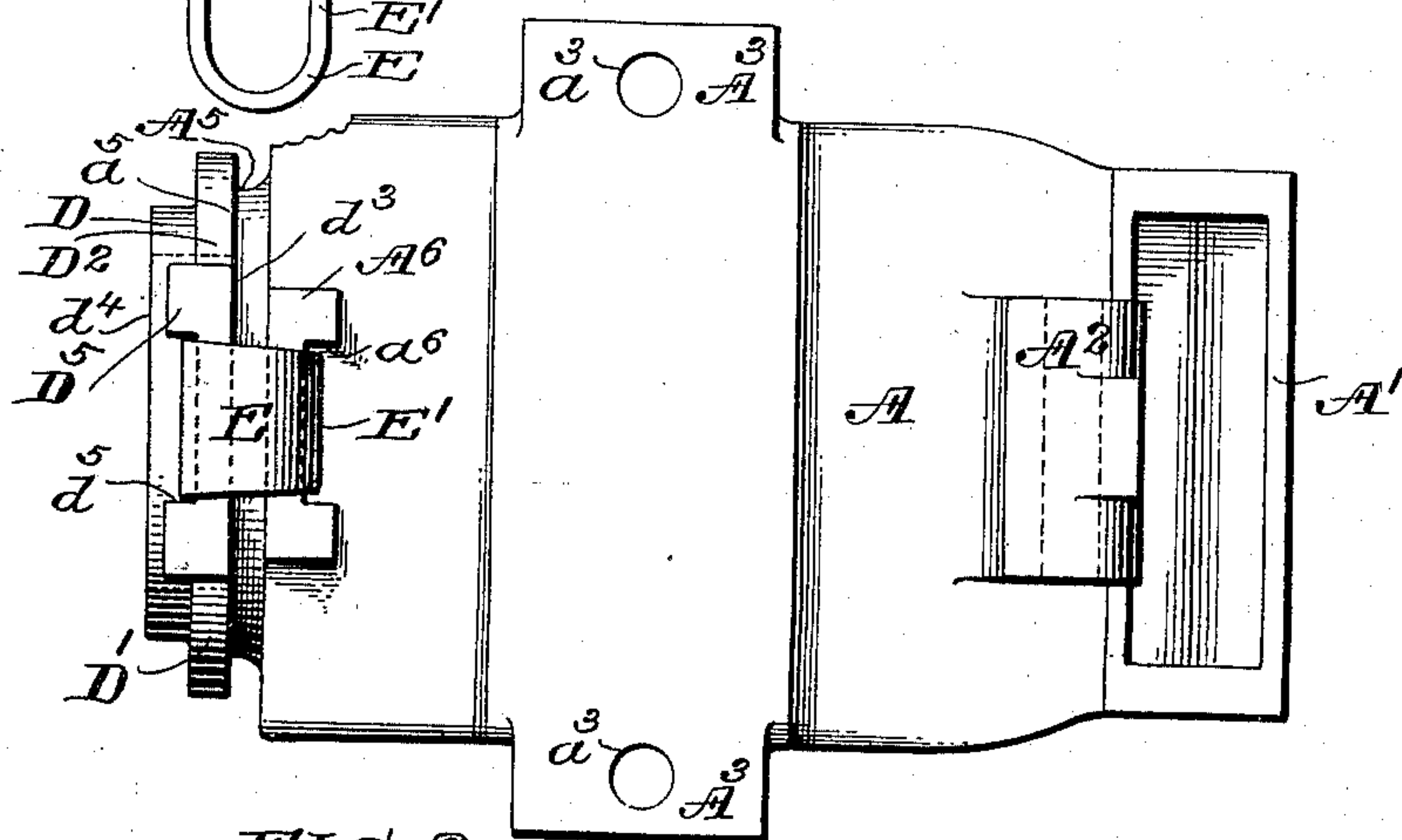
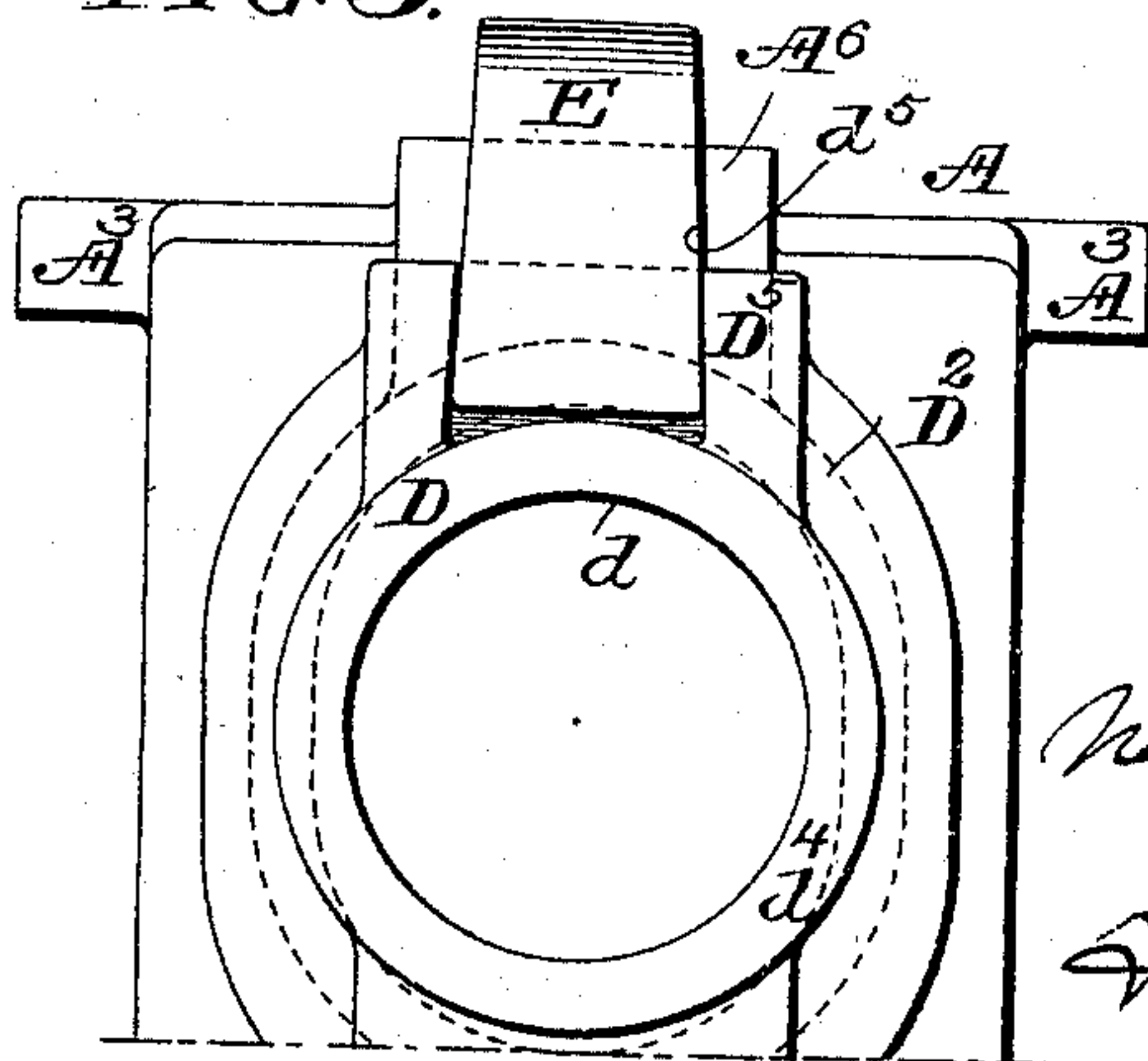


FIG. 3.



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NATHAN H. DAVIS, OF PHILADELPHIA, PENNSYLVANIA.

DUST-GUARD FOR CAR-AXLE BOXES.

SPECIFICATION forming part of Letters Patent No. 638,500, dated December 5, 1899.

Application filed July 15, 1899. Serial No. 723,883. (No model.)

To all whom it may concern:

Be it known that I, NATHAN H. DAVIS, a citizen of the United States of America, residing in the city and county of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Dust-Guards for Car-Axle Boxes, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention relates to dust-guards for car-axle boxes, and especially to car-axle boxes used in connection with certain forms of trucks and in which it is impracticable to have laterally-projecting flanges on the rear of the box.

In another application for Letters Patent filed by me July 15, 1899, Serial No. 723,882, I have shown and described a dust-guard having the general features of my present invention except that it is connected to the box through lateral ear-like flanges at the rear of the box, while my present invention relates to a means of securing the dust-guard to the box without such lateral ears or projections.

The nature of my improvements will be best understood as described in connection with the drawings, in which they are illustrated, and in which—

Figure 1 is a central longitudinal sectional elevation of a car-axle box provided with my improved dust-guard, the axle and a portion of the wheel being also indicated. Fig. 2 is a plan view of the axle-box and dust-guard, and Fig. 3 is a partial rear elevation.

A indicates the axle-box, having an opening A' for the packing material, with a horn A², to which the lid is connected in the usual way. It is also shown as provided with laterally-extending lugs A³ A³, &c., pierced with bolt-holes a³ a³, through which the bolts which secure it to the truck are passed.

A⁴ indicates the opening for the axle at the rear of the box; A⁵, a narrow rearwardly-extending flange or rim around the opening A⁴, formed with a plane face, as indicated at a⁵.

A⁶ and A⁷ are ears or projections extending from the top and bottom of the box A. I prefer to form the upwardly-extending ear A⁶ with a groove, as indicated at a⁶, in its rear face, and such a groove, as indicated at a⁷, may also be formed in the downwardly-pro-

jecting ear A⁷, though it is not necessary in both ears, nor, indeed, is more than a stop-lug to counteract rotation in both directions necessary in either.

B indicates the axle; C, a car-wheel attached to it.

D is the dust-guard, built of cast metal, having a circular opening d formed through it, which fits nicely on the axle, as indicated.

d⁴ is a rearwardly-extending annular flange with a plane face surrounding the opening d. The plate D is preferably of oblong form, with the opening d nearer to the top than to the bottom of the oblong, so that the portion D' extending below is of greater length than the portion D² extending above. The inner face d³ of the plate is smooth and plane, so as to fit closely against the face a⁵ of the rim A⁵.

In all of the particulars above described my dust-guard does not differ from the one forming the subject-matter of my other application; but while in my other application I secure springs to the sides of the other dust-guard plate, in my present construction I form on the top and bottom of the plate lugs (indicated at D⁵ D⁵) slotted on their own front faces, as indicated at d⁵, and secured in these slots the butt-ends of curved springs E E, curving backward and downward, as shown, so that when the dust-guard is in normal position the outer ends E' of the springs extend behind and press against the ears A⁶ A⁷. The dust-guard may be secured in place to receive the axle by first engaging the upper spring E E' with the ear A⁶ while the dust-guard is turned to one side and then turning it downward until the lower spring E E' engages the downwardly-extending ear A⁷, or the distance between the ends E' of the springs may somewhat exceed the distance between the bottom of the upper ear A⁶ and the lowest point of the under ear A⁷, so that by first engaging the upper spring of the ear A⁶ and moving it downward as far as it will go the lower spring will pass under the ear A⁷ when the box is moved up to approximately normal position, leaving both springs engaged with the ears.

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

An axle-box having an opening at its rear for the passage of the axle, said opening be-

ing surrounded by an outwardly-extending narrow plane-faced flange, as $A^5 a^5$, and the top and bottom rear edges of the box being formed with ear-like flanges $A^6 A^7$, in combination with a metal dust-guard, as D, having a plane face, as d^3 , adapted to rest against the plane face a^5 of flange A^5 , and also having a circular passage d adapted to fit nicely on

the axle and springs, as $E E'$, extending from the top and bottom of the guard-plate D over and against the ears $A^6 A^7$.

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Witnesses:

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