

(No Model.)

R. M. LAWLESS.
CAR AXLE DUST GUARD.

No. 483,385.

Patented Sept. 27, 1892.

Fig. 1.

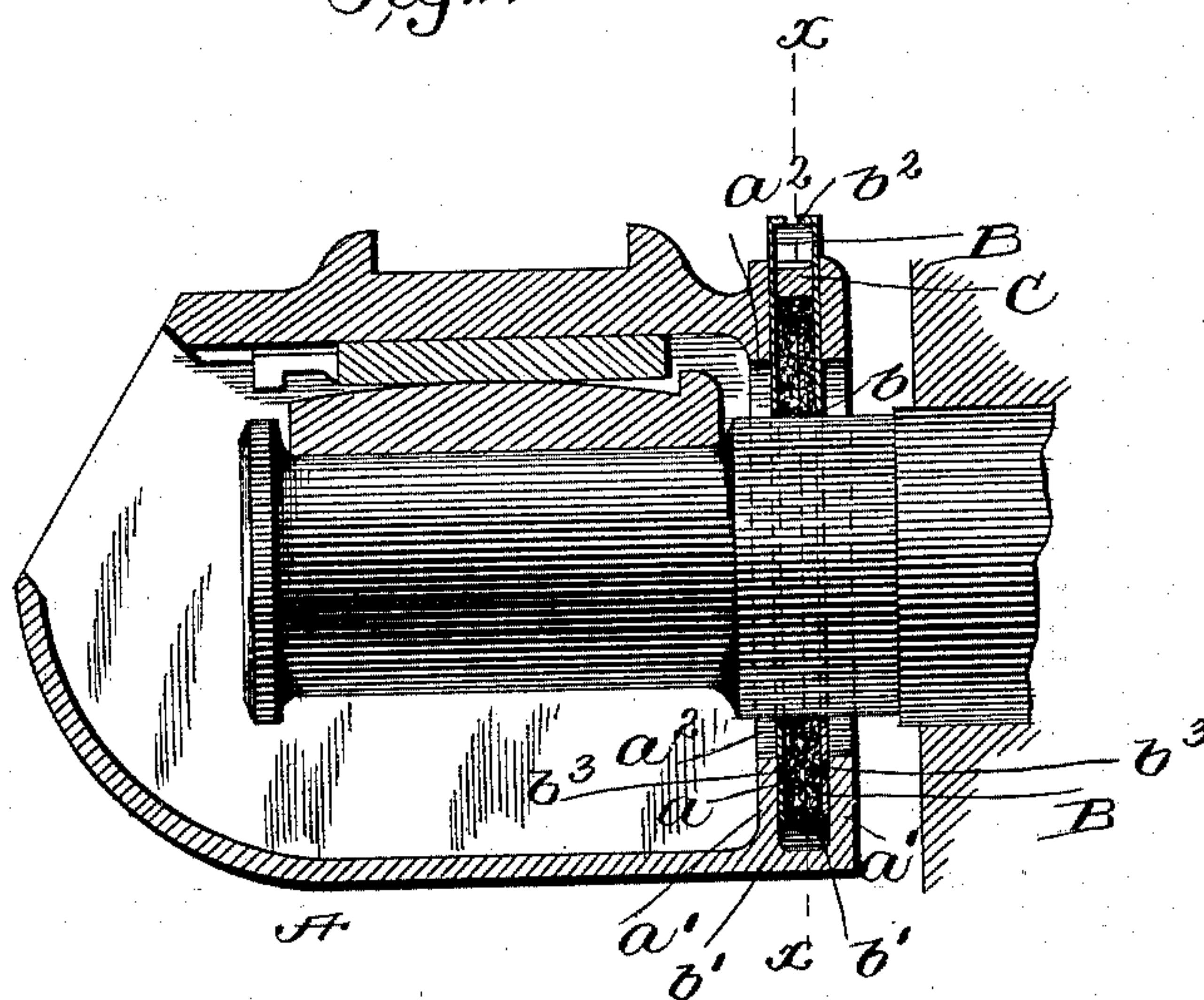


Fig. 2.

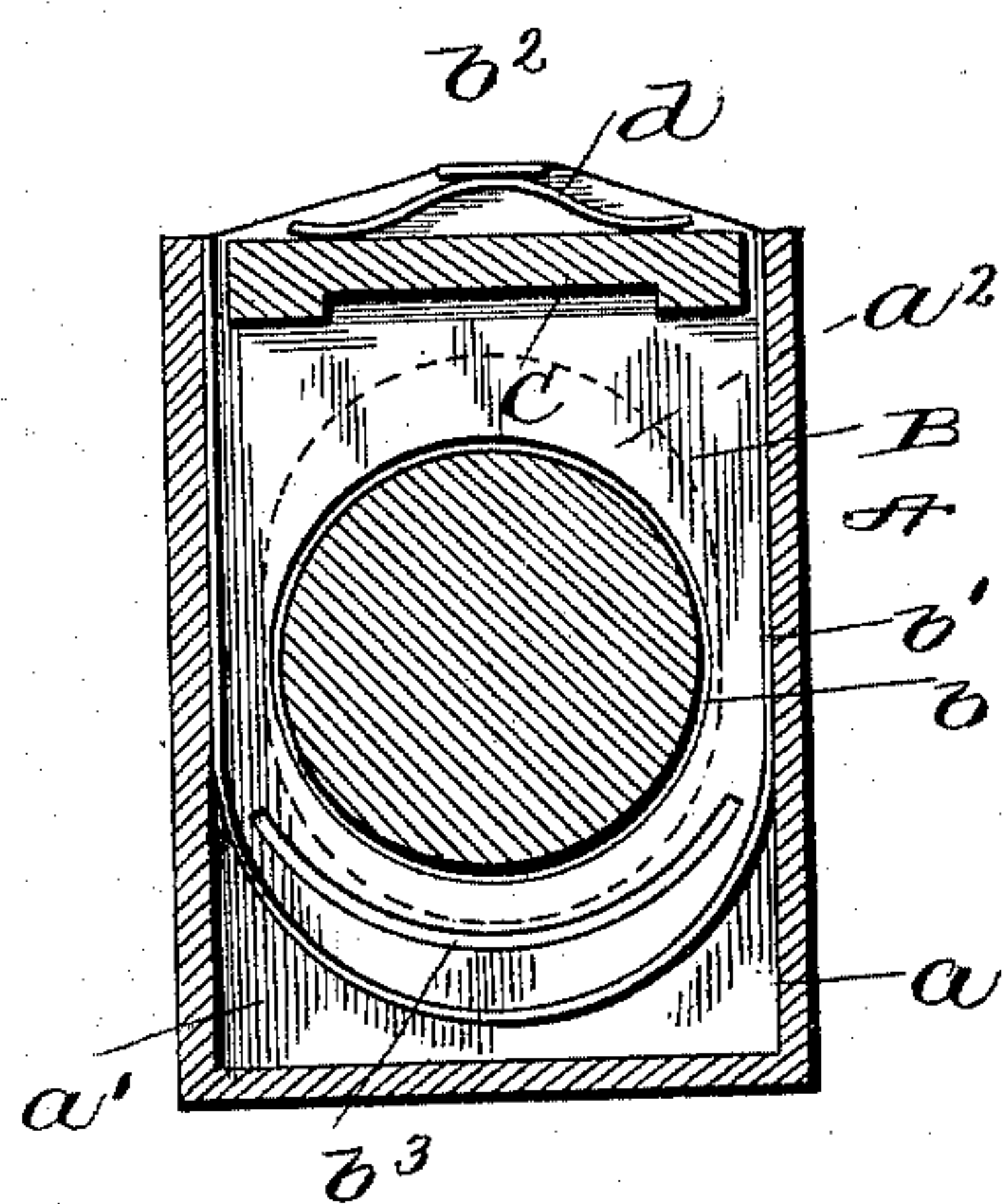
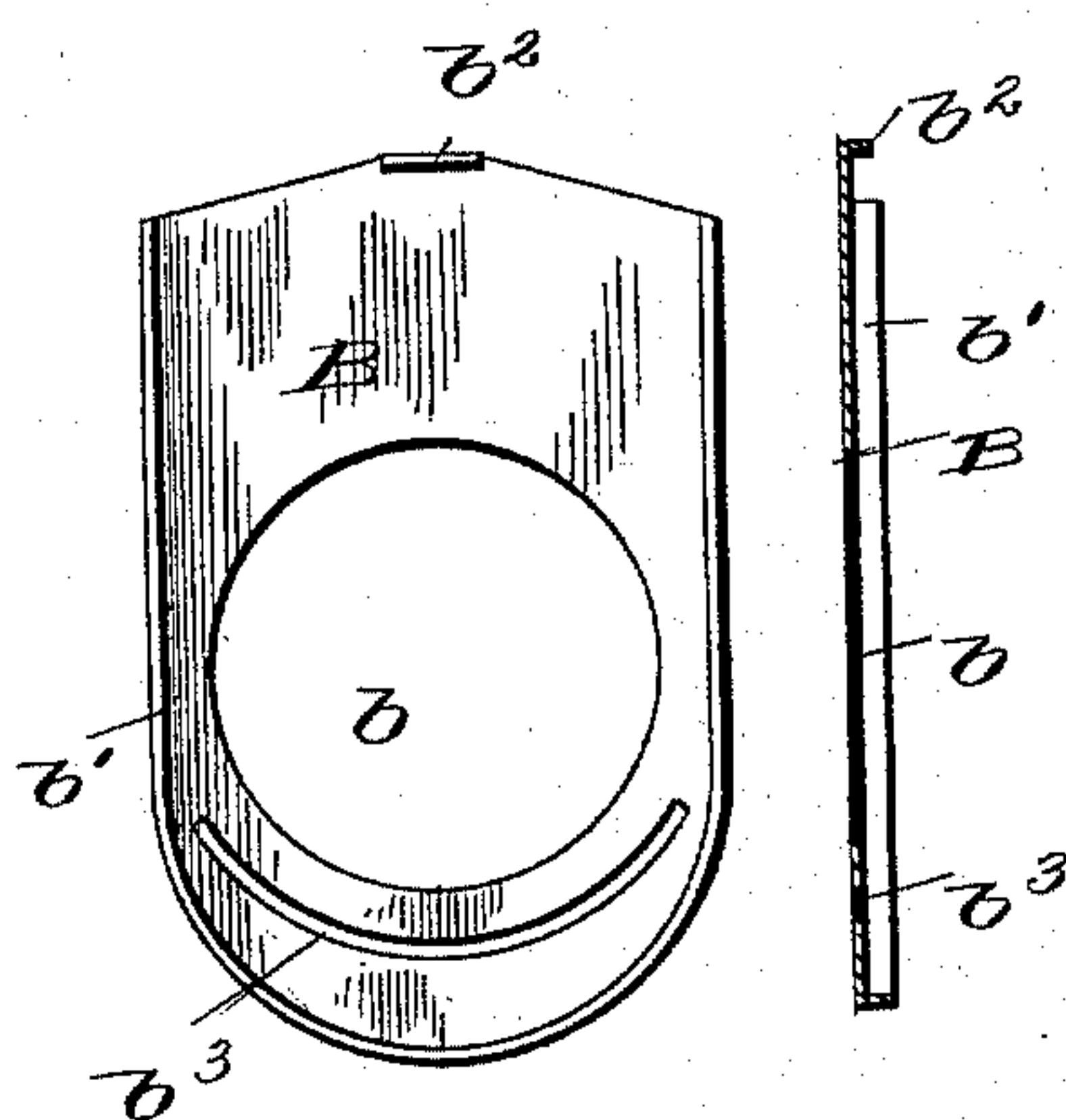


Fig. 3.



Witnesses

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CAR-AXLE DUST-GUARD.

SPECIFICATION forming part of Letters Patent No. 483,385, dated September 27, 1892.

Application filed April 20, 1892. Serial No. 429,929. (No model.)

To all whom it may concern:

Be it known that I, RICHARD MICHAEL LAWLESS, of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Dust-Guards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a new and improved dust-guard and oil-retainer for journal boxes or bearings; and it has for its object the production of cheap, simple, and highly-efficient means whereby the oil or lubricant of a journal-box is prevented from running out at the back of said box and the dust is kept from entering the same.

The invention comprises a journal box or bearing having an opening in its rear and guard-plates on the axle or journal, covering said opening, suitable waste or packing being between said plates entirely around said axle or journal and held under pressure, making the back of the box or bearing practically tight against the escape of oil and entrance of dust.

The invention further comprises the detail construction, combination, and arrangement of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical longitudinal sectional view illustrative of my invention. Fig. 2 is a transverse sectional view on the line $x x$, Fig. 1. Fig. 3 shows face and end views of one of the guard-plates.

Referring to the drawings, A designates a journal-box, and a a chamber between parallel walls a' , in which are coincident oblong openings a^2 for the axle or journal to project through into the box.

B B designate two corresponding guard-plates, each of which has a circular hole or opening b , slightly larger than the axle or journal which is projected therethrough. Each plate has straight or vertical sides and a curved lower end, from the edges of which portions projects a continuous flange b' . The upper end of each plate is inclined, save at its center, from which latter point projects an in-

wardly-extending flange b^2 . In each plate is a curved slot or opening b^3 . These plates fit within the chamber a between walls a' , and the opposite edges of their flanges are in contact, forming a narrow space between the inner faces of the plates, into which waste or other suitable material is packed, entirely encircling the axle or journal, some of said waste projecting through the curved slots b^3 in the guard-plates and pressing against the walls a' , making a tight joint and absorbing what oil might otherwise run out.

C is a block for holding the waste or packing firmly in place. It is approximately oblong and has thickened ends, while to its upper edge are secured the ends of a curved or bow spring d , which bears against the flanges b^2 of the guard-plates. This block bears upon the waste, and the spring, being under tension, serves to hold the waste or packing tight around the axle and to cause portions to protrude through the slots in said plates, as above stated.

The advantages of my invention are apparent to those skilled in the art to which it appertains, and it will be specially observed that the guard-plates permit of all necessary movement of the axle or journal, and, being constantly in contact therewith, serve to continuously prevent the ingress of dust and the escape of lubricant through the rear portion of the journal-box. It will also be observed that the device is extremely simple, inexpensive, and is not liable to readily get out of order or any of the parts separated.

I claim as my invention—

1. The herein-described improved dust-guard, comprising the journal-box having a chamber in its rear and an opening extending therethrough for the axle or journal, two corresponding guard-plates located in said chamber and having slots therein, and interposed packing encircling the axle or journal and projecting through said slots in contact with the walls of said chamber, substantially as set forth.

2. The herein-described improved dust-guard, comprising the journal-box having two rear walls forming an intermediate chamber, coincident openings being formed in said walls, the guard-plates having abutting flanges along their edges, packing being interposed

between said guard-plates, and a spring-pressed block bearing on said packing, substantially as set forth.

3. The combination, with a journal-box
5 having two rear walls with openings for the axle or journal, of two corresponding guard-plates having abutting flanges and slots and upper inwardly-projecting flanges, and a block bearing on packing between said guard-plates
10 and having a spring connected thereto in con-

tact with said flanges, substantially as set forth.

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

RICHARD MICHAEL LAWLESS.

Witnesses:

W. C. FAIRBROTHER,

W. R. MATHIS.