

JOHN STEPHENSON.

Improvement in Axle-Boxes for Street-Cars.

No. 127,524.

Patented June 4, 1872.

Fig. 1.

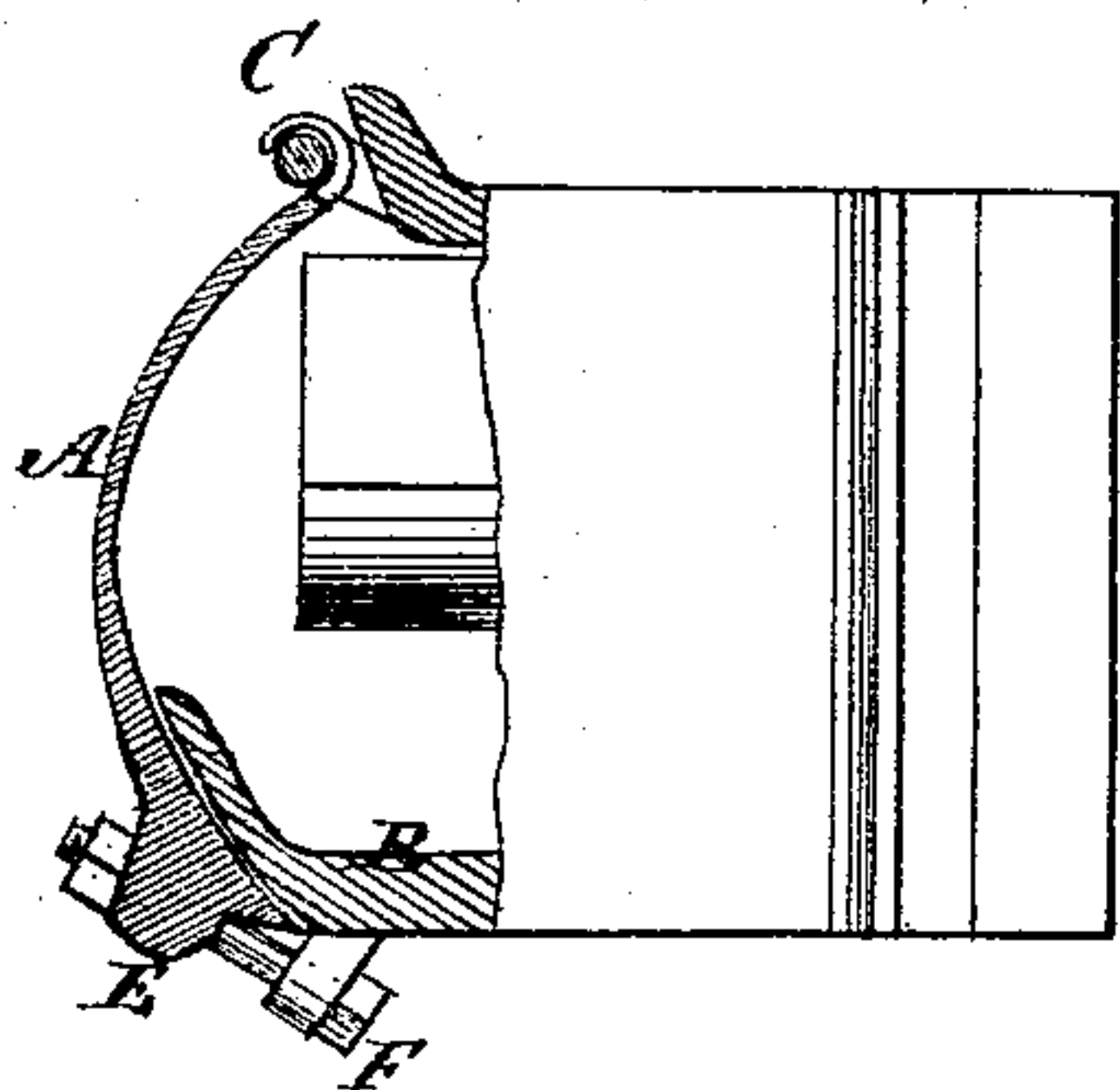


Fig. 2.

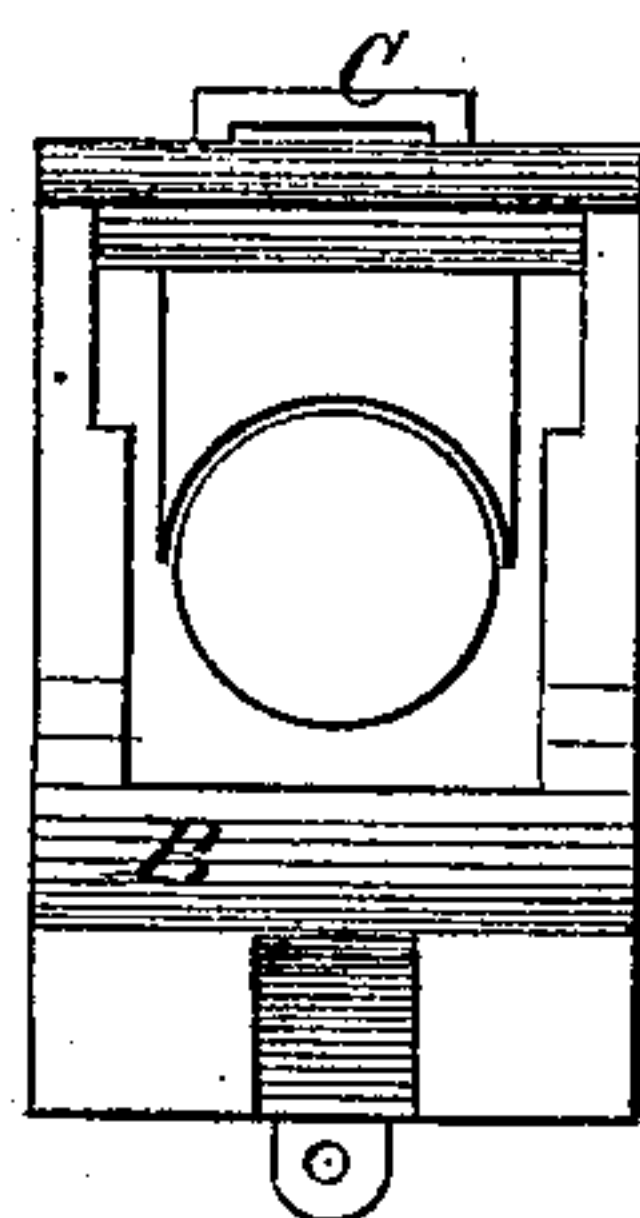


Fig. 3.

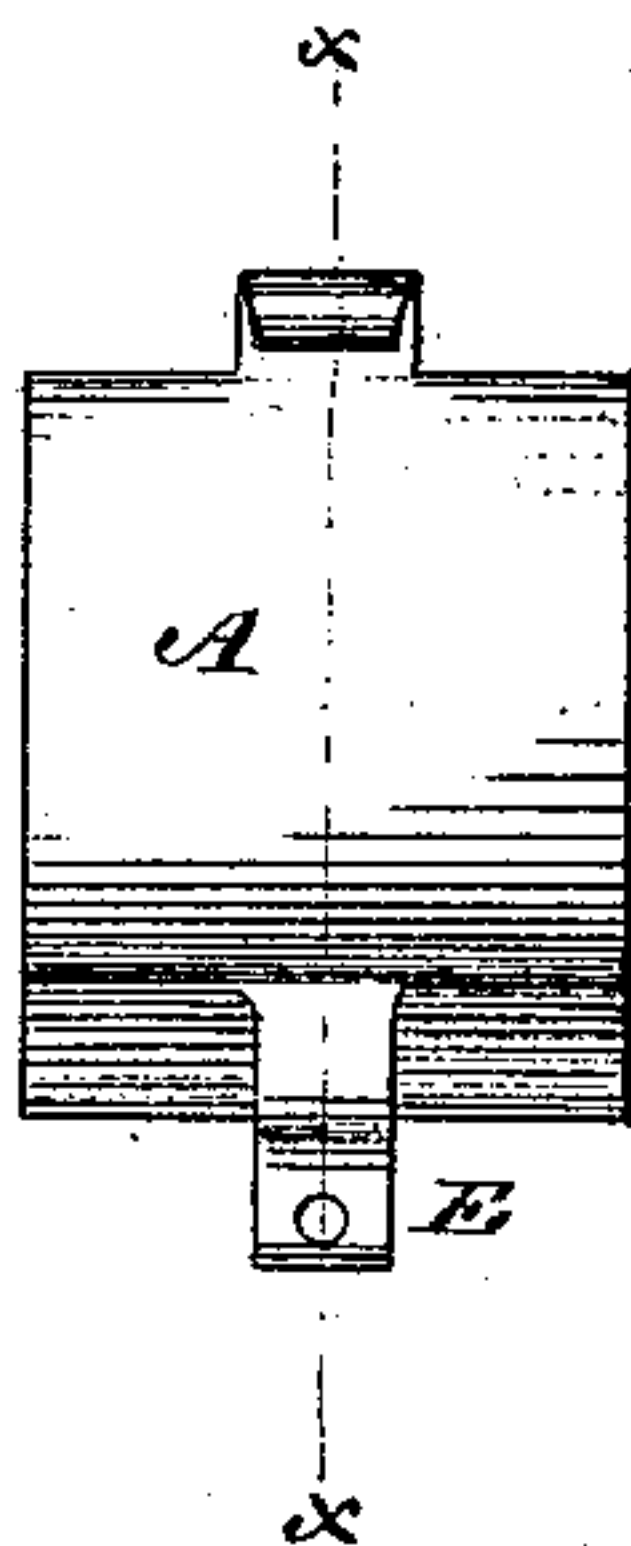
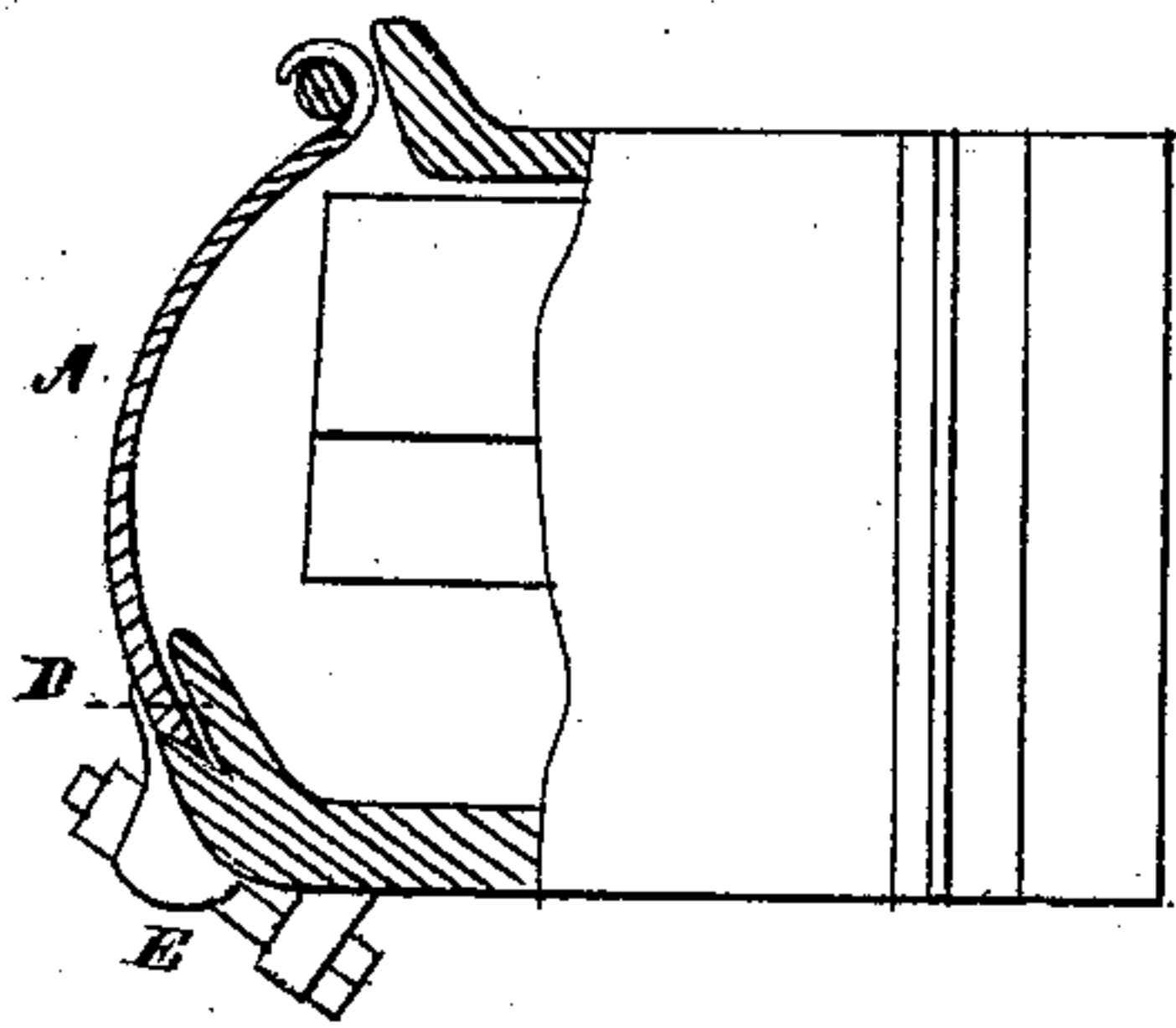


Fig. 4.



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JOHN STEPHENSON, OF NEW YORK, N. Y.

IMPROVEMENT IN AXLE-BOXES FOR STREET-CARS.

Specification forming part of Letters Patent No. 127,524, dated June 4, 1872.

Specification describing a new and useful Improvement in Street-Car Axle-Box Cap, invented by JOHN STEPHENSON, of the city, county, and State of New York.

The object of this invention is to provide means for securely holding and fastening the caps of car-axle journal-boxes; and it consists in the construction and arrangement of the cap in relation to the axle-box, as hereinafter described.

In the accompanying drawing, Figure 1 is a vertical section of the box and cap taken on the line *x x* of Fig. 2, giving an edge view. Fig. 2 represents the box with the cap and spring-catch removed. Fig. 3 is a view of the cap detached. Fig. 4 represents a modification of device shown in Fig. 1.

Similar letters of reference indicate corresponding parts.

Various devices have been used for securing the cap or cover to the axle-box, but all have been more or less unsatisfactory. Bolt-fastenings are unreliable, because, liable to loosen; the bolts will turn out; or, if cast in, they are apt to break off in the casting, causing loss of the cap and exposing the axle-journal to dust and mud. Caps hinged to the box at the top, with a bolt or wedge at the bottom, though not liable to loose, are noisy, and cause trouble in packing the box.

A represents the cap. B is the axle-box. C is the open hinge-joint, which allows it to be detached without difficulty. I also make the cap of elastic material and fit its lower edge into a groove, D. On the center of the lower edge I form a lug, E. When the upper edge is attached by the hinge, the lower edge is

forced into the groove by a blow on the lug. The elasticity of the cap will allow of this, and also of its removal by the same means. As another method of fastening the cap, I extend the lug downward, and make it of such a form that a screw, or bolt, or latch, F, may connect it with the lower part of the box. By this last mode the cap is secured to the box, either with or without the groove, and also with or without the use of the elastic metal in the cap. This last method is clearly shown in Fig. 1, which I regard as a modification of that exhibited in Fig. 4 of drawing. In this figure the lug E forms a part of cap A, and consequently there is no notch like that marked D in Fig. 4; but the bolt F still holds the cap firmly up to the axle-box B.

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

1. The open joint C, by which the lid is detachably connected to the box and at the same time secured against loss, as set forth.

2. The elastic cap, in combination with the grooved box, the parts being adapted to operate as set forth.

3. The cap, made with open joint C and provided with the lug E, and held by bolt and nut, or equivalent means, to lug F on the box, the construction being such that the fastening devices may draw on the cap and prevent rattling, as set forth.

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