W. WERTS.

Car-Axle Cap.

No. 78,776. Patented June 9, 1868.

Fig: 1.

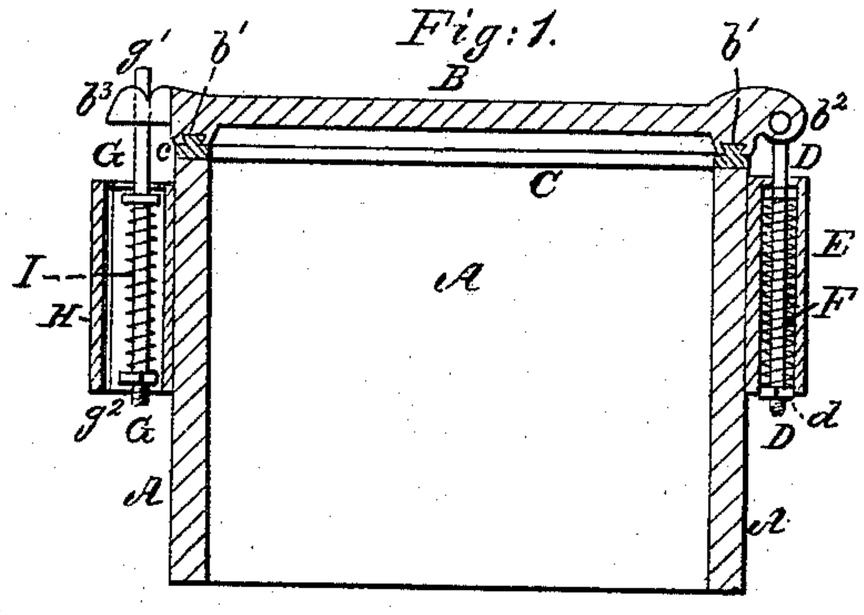
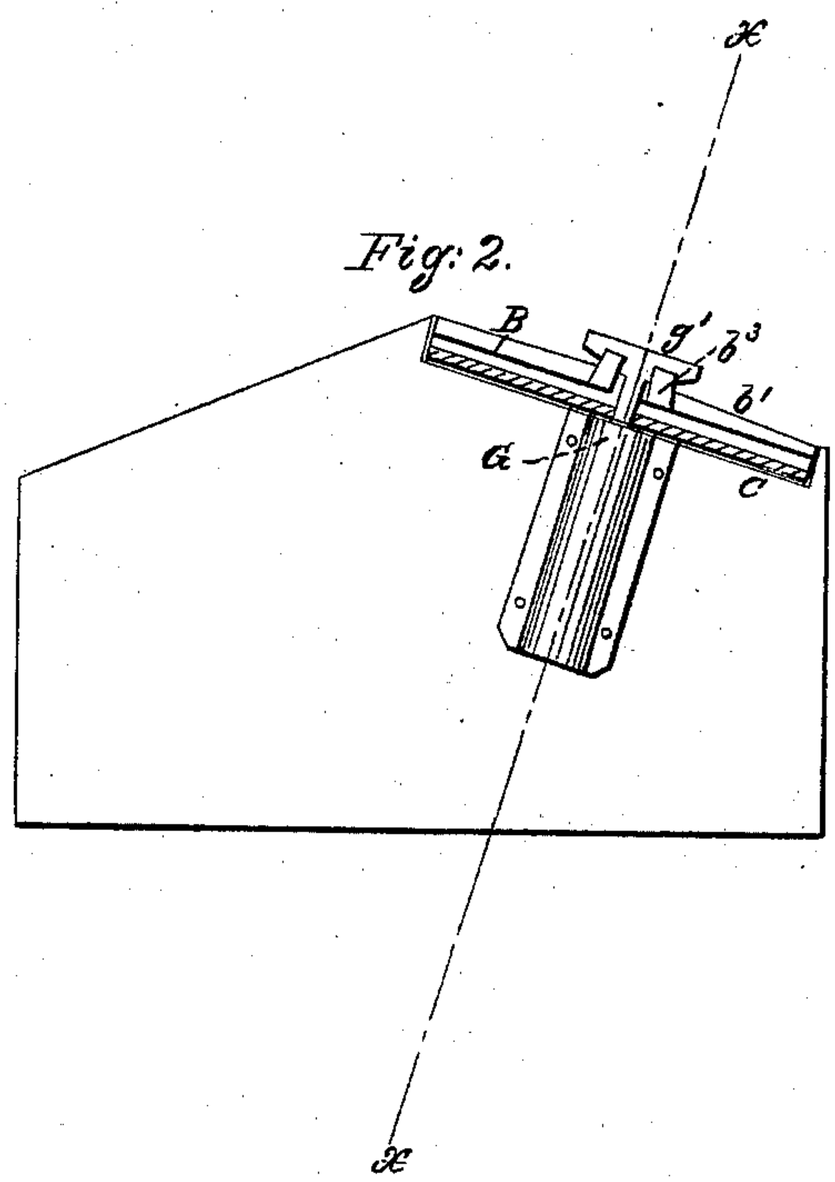


Fig: 2.



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WILLIAM WERTS, OF PANA, ILLINOIS.

Letters Patent No. 78,776, *dated June* 9, 1868.

IMPROVED CAR-AXLE CAP.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM WERTS, of Pana, in the county of Christian, and State of Illinois, have invented a new and useful Improvement in Car-Axle Cap; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a detail sectional view of my improved car-axle cap, taken through the line $x\,x$, fig. 2.

Figure 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved cap for car-axles, which shall be simple in construction, effective in operation, and easily opened and closed.

And it consists in the construction of the door, and in the manner of hinging and securing it, as hereinafter more fully described.

A is the body or box of the cap, about the construction of which there is nothing new.

Upon the under side of the door B of the cap A is formed a dove-tailed groove, b^1, as shown in fig. 1.

This groove b^1 extends all around the side and end edges of the door B, and is either formed in the solid body of said door B, or is formed in a separate piece or pieces, and riveted or otherwise securely attached to the inner side of said door.

C is a rubber packing, the upper side of which enters the dove-tailed groove b^1 of the door B, so that it may always be in connection with and in proper position upon said door.

When the door B is closed the lower side of the rubber packing rests upon the seat of the said door, so as to make the joint between the door B and box or cap A entirely close, and thus effectually guard against the ingress of dust or sand.

Upon the rear end of the door B is formed an ear, b^2, to which is pivoted the upper end or eye of the bolt D, which passes down through a hole in the end of the chamber E, formed upon or attached to the side of the box or cap A.

F is a spiral spring, placed upon the bolt D, within the chamber E, and the lower end of which rests against a nut, d', screwed upon the lower end of said bolt D.

The upper end of the spring F rests against the upper end of the chamber E, or against a washer placed upon said bolt, and interposed between the upper end of the spring F and the upper end of the chamber E.

By this construction, by adjusting the position of the nut d', the tension of the spring F may be regulated at pleasure.

Upon the forward end edge of the door B is formed a slotted projection, b^3, the upper side of which is grooved or notched transversely, and the forward end of which is bevelled off or inclined, as shown in figs. 1 and 2.

G is a bolt, which passes down through a slot in the upper end of the chamber H, formed upon or attached to the side of the cap or box A.

Upon the upper end of the bolt G is formed a cross-head, g^1, the lower side of said cross-head being so formed as to fit into the groove or notch formed upon the upper side of the projection b^3, as shown in fig. 1.

I is a spiral spring, placed upon the bolt G, within the chamber H, the lower end of which rests against the nut g^2, screwed upon the lower end of said bolt G.

The upper end of the coiled spring I rests against the upper end of the chamber H, or against a washer placed loosely upon the bolt G, and interposed between the end of the said spring and the end of the said chamber.

By this construction, by adjusting the nut g^2, the tension of the spring may be regulated to hold the door B closed with any desired power.

I claim as new, and desire to secure by Letters Patent—

1. The combination of the eye-bolt D, coiled spring F, and chamber E, with each other, with the door B, and with the cap or box A, substantially as herein shown and described, and for the purpose set forth.

2. The combination of the cross-head bolt G, coiled spring I, and chamber H, with each other, with the notched or grooved slotted projection b^3, formed upon the door B, and with the cap or box A, substantially as herein shown and described, and for the purpose set forth.

WILLIAM WERTS.

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