T. HIBBERT.

Car Axle Box Lid.

No. 201,671. Patented March 26, 1878.

FIG. 1.

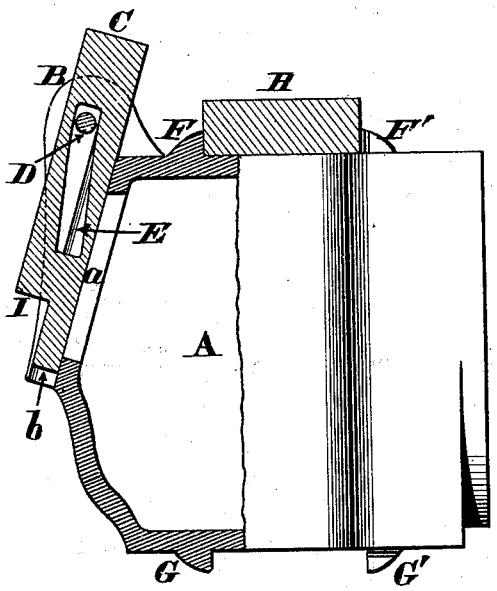


FIG. 2.

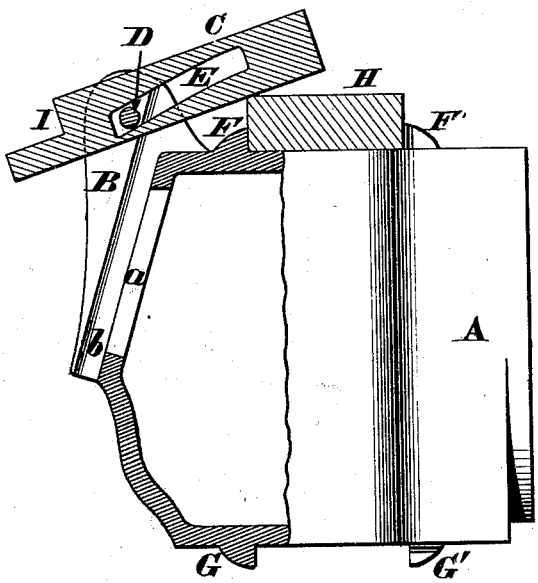


FIG. 4.

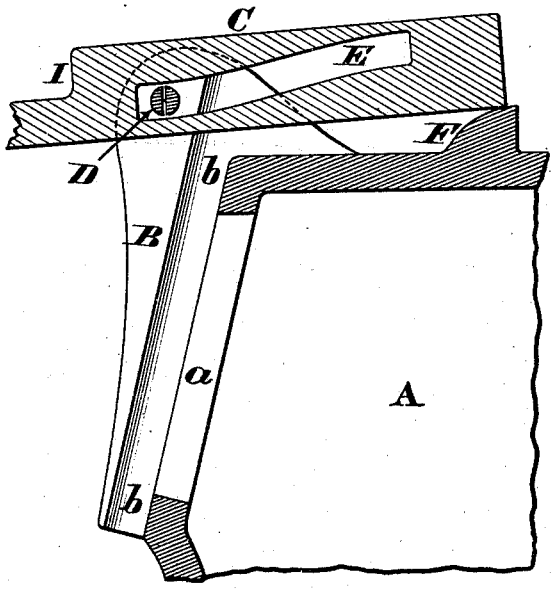
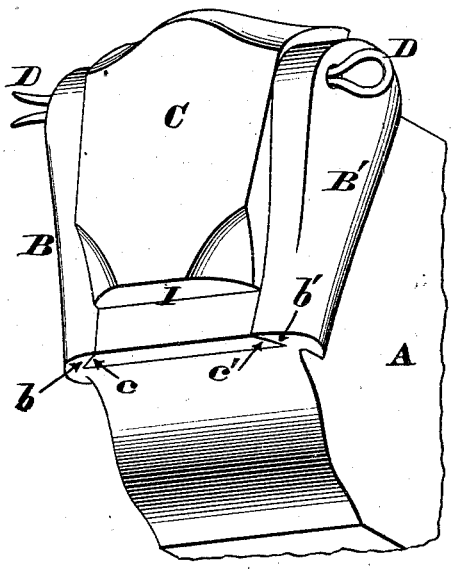


FIG. 3.



Attest.

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UNITED STATES PATENT OFFICE.

THOMAS HIBBERT, OF COCHRAN, INDIANA.

IMPROVEMENT IN CAR-AXLE-BOX LIDS.

Specification forming part of Letters Patent No. **201,671**, dated March 26, 1878; application filed February 25, 1878.

To all whom it may concern:

Be it known that I, THOMAS HIBBERT, of Cochran, Dearborn county, Indiana, have invented certain new and useful Improvements in Railway-Axle-Box Lids, of which the following is a specification:

This invention relates to that class of sliding lids or covers which are employed for closing the feed-openings in axle-boxes of railroad-cars.

My improvement consists in providing such lids with a longitudinal slot to receive a spring pin or bolt or other similar device, wherewith the lids are coupled to the axle boxes or housings. By this arrangement the lid can be slid up and then turned back, so as to afford convenient access to the feed-opening, while, by simply withdrawing the spring-pin or other coupling, the lid can be immediately detached from the axle-box, and without removing the latter from the car-truck.

In the annexed drawings, Figure 1 is a vertical section of an axle-box provided with my improved form of lid, which latter is shown in its closed condition. Fig. 2 is a similar section, but showing the lid elevated and swung back, so as to expose the feed-opening of the box. Fig. 3 is a perspective view of the closed box, and Fig. 4 represents a modification of the invention.

A represents an axle or journal box, of any approved construction, and *a* is the feed-opening in the outer end of the same. Cast with this box, or rigidly fitted thereto, are two flanges or cheeks, B B′, whose opposing faces are provided, respectively, with undercut grooves or guides, *b b′*, as clearly shown in Fig. 3. These cheeks B B′ converge toward their lower ends, in order that their undercut grooves may receive the downwardly-tapering sliding lid or cover C, whose edges are beveled off at *c c′*, so as to play freely within said guides *b b′*. Furthermore, said cheeks B B′ are pierced near their upper ends to receive a spring-pin, D, or a bolt, or any other retaining device that can be readily and securely applied to the axle-box.

The lid, cover, or cap C is pierced with an oblique slot, E, that extends from side to side of said lid, and through this slot the retaining device D is inserted when the lid is coupled to the box. (See Fig. 3.)

F F′ and G G′ are the customary flanges that retain the truck-irons to the box, of which irons one is shown at H.

When lid C is closed, its weight causes it to seat snugly within the undercut grooves *b b′*, and these grooves serve to maintain the lid securely against the outer end of the box A, and thereby conceal the feed-opening *a*, as seen in Fig. 1. In this closed condition of the lid no strain is exerted upon the pin D, and consequently there is no danger of the latter being sprung or broken.

When it is desired to obtain access to the interior of box A, the projection I of the lid is first tapped with a hammer, so as to start said lid, and the latter is then slid up within the guides *b b′*. As soon as sufficient clearance is afforded between cheeks B B′ for the lower or narrower end of lid C to swing outwardly, the latter is then turned on its pivot D and brought to the position shown in Fig. 2, thus exposing the feed-opening *a*.

If at any time it should be desired to remove the lid, it can be accomplished in a few moments by simply withdrawing pin D and then sliding said lid out of the grooves *b b′*, which operations can be effected without disturbing the connections between the box and car-truck.

In the modification of the invention, as shown in Fig. 4, the distance from the upper and outer angle of box A to the rib F has been increased, for the purpose of illustrating how the lid may be swung over to an almost horizontal position when opened; but in some cases the lid may be arranged to slide directly up within the cheeks, and have only a very slight pitch inwardly toward said rib.

Finally, longitudinal tongues may be substituted for the beveled edges *c c′* of the lid, in which case the undercut grooves *b b′* will be dispensed with, and other suitable grooves will be provided in the cheeks of the box for the reception of the aforesaid tongues.

I claim as my invention—

1. In combination with axle-box A *a*, guiding-cheeks B B′, and slotted sliding lid C E, the readily-detachable retaining device D, as herein described, and for the purpose set forth.

2. The combination of axle-box A *a*, undercut guiding-cheeks B *b* B′ *b*′, slotted sliding cover C *c c*′ E, and retaining device D, as herein described, and for the purpose set forth.

3. The combination of axle-box A *a*, downwardly-converging undercut guiding-cheeks B *b* B′ *b*′, tapering and slotted sliding lid C *c c*′ E, and retaining device D, as herein described, and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

THOMAS HIBBERT.

Witnesses:
JAMES H. LAYMAN,
L. H. BOND.