(Model.)

J. C. ALBRECHT.

AXLE BOX LID.

No. 301,656. Patented July 8, 1884.

Fig. 1.

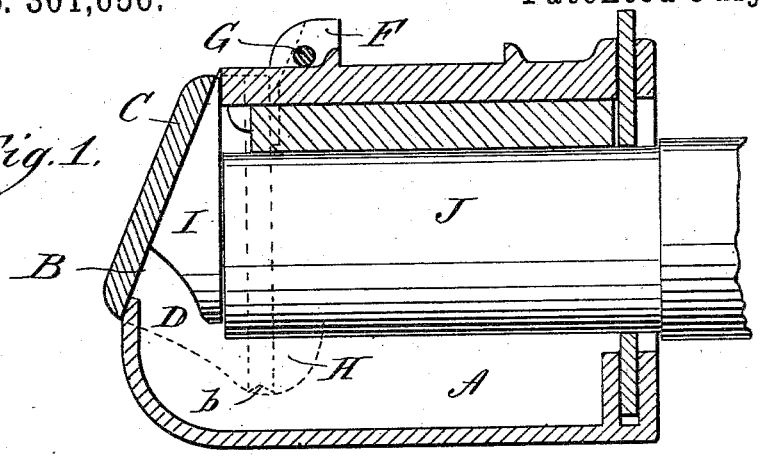


Fig. 2.

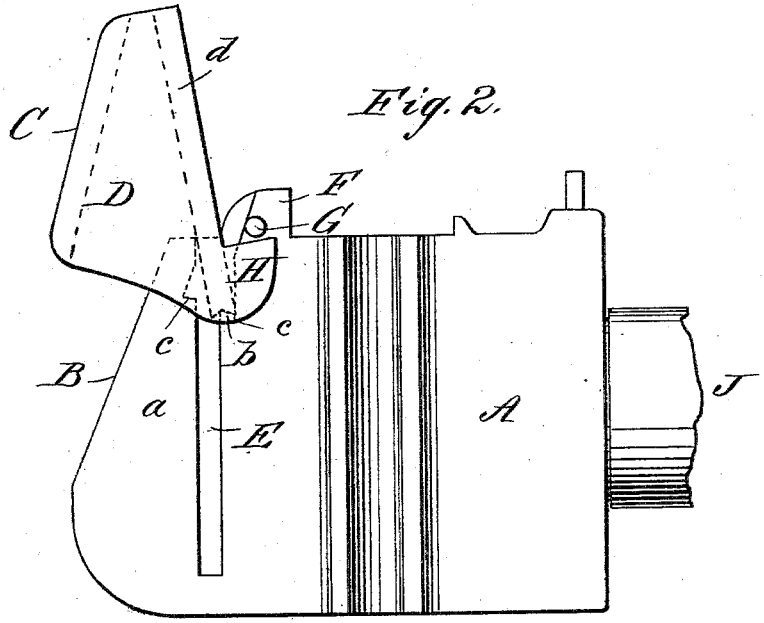
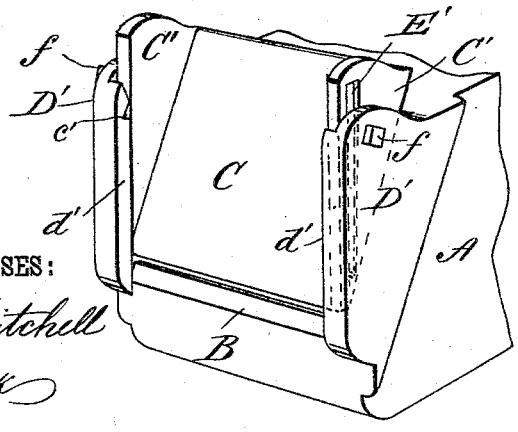


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN C. ALBRECHT, OF COLUMBUS, GEORGIA.

AXLE-BOX LID.

SPECIFICATION forming part of Letters Patent No. 301,656, dated July 8, 1884.

Application filed March 25, 1884. (Model.)

To all whom it may concern:

Be it known that I, JOHN C. ALBRECHT, of Columbus, in the county of Muscogee and State of Georgia, have invented a new and Improved Axle-Box Lid, of which the following is a full, clear, and exact description.

The object of this invention is to provide an axle-box lid which will always be oil-tight when closed, and which can be easily opened and locked in the open position.

This invention consists in the construction and arrangement of parts, as will be hereinafter fully described, and specifically set forth in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of an axle-box provided with my improved lid, and shown in place upon the journal of a car-axle. Fig. 2 is a side view of the same, the lid being shown raised; and Fig. 3 is a perspective view of the outer end of an axle-box, and showing a modification of my axle-box lid.

A indicates the journal and oil-box of a car-axle, which, being the same in general construction as the ordinary axle-boxes in use, need not here be more particularly described. Upon the beveled end opening, B, of the box is fitted a lid, C, which lid is provided with end flanges, D, fitting over upon the side faces of the box A, these flanges being wider at the bottom than at the top. On the inner edge of each flange an inwardly-projecting rib, *d*, is formed, which ribs are adapted to fit and slide in vertical grooves E, formed in the side faces of the box A, a short distance from its outer end, by which groove wedge-shaped parts *a* are formed, which fit into corresponding wedge-shaped spaces of the flanges between the ribs *d* and the inner face of the lid, and by which, when the lid is closed down, the lid is held tightly over the opening B. In the lower ends of the ribs *d* notches *b* are formed, which notches are adapted to engage, when the lid is raised, with notches or shoulders *c*, formed at the upper ends of the grooves E, which notches are formed at each side of the grooves E, so that the lid may be inclined either way, as most convenient. Upon the upper face of the box, at the edges and near the front end, lugs or ears F are formed, which ears are apertured, and through which ears a rod, G, or a spring-colter, is passed, its ends projecting to be flush with the outer surfaces of the flanges D, which rod can be held in place by nicking it at the ears F. From the lower or wider ends of the flanges D lugs H project parallel with the sides of the box, which lugs come against the ends of the spring colter or rod G when the lid is raised, and prevent raising the ribs *d* entirely out of the grooves E. Upon the inner face of the lid C a lug, I, may be formed, adapted to bear upon the end of the axle J.

In the modification shown in Fig. 3 flanges D′ are formed upon the end of the box A, which flanges have inwardly-projecting ribs *d*′, in the wedge-shaped spaces between which ribs and the end of the box A wedge-shaped flanges C′ of the lid C are adapted to fit. Grooves E′ are formed in the outer faces of the flanges C′, into which the ends of screws *f*, screwed through the flanges D′, project, for guiding the lid C and preventing it from being entirely withdrawn. Notches *c*′ are formed in the ribs *d*′, to engage the lower edge of the lid and hold it in the raised position. In either case the lid C is held oil-tight against the edges of the opening B by the inclined face of the lid being held to close vertically upon said opening, being guided by vertical grooves, and any wear upon the lid will tend to cause it to have a closer fit, the lid being ground to a seat in closing. There are no bolts to get loose or to unscrew to pack the box, all that is necessary being to raise the lid and rest the notches *b* on either the front or rear shoulder *c*.

The object of the lug I is to make a bearing for the ends of the axle to thrust against, and in case of a collarless journal, if the axle should project through the box so that the lid could not go down, the lid, by its lug I, can rest on the end of the journal, and as soon as the car moves the lid drops automatically into its place.

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

1. The combination, with the axle-box A, having beveled end and vertical side grooves, E, of the inclined lid C, having side flanges, D, projecting at right angles along its entire edge, and formed with the inward-projecting vertical ribs *d*, and stops for preventing the said lid from being entirely withdrawn from the slots E, substantially as set forth.

2. The lid C, having flanges D and ribs *d*, and the said flanges having lugs H projecting from their lower edges, in combination with the box A, having grooves E and shoulders *c*, and also having the apertured lugs F, and with the rod G or equivalent device, substantially as shown and described, and for the purposes set forth.

JOHN C. ALBRECHT.

Witnesses:
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