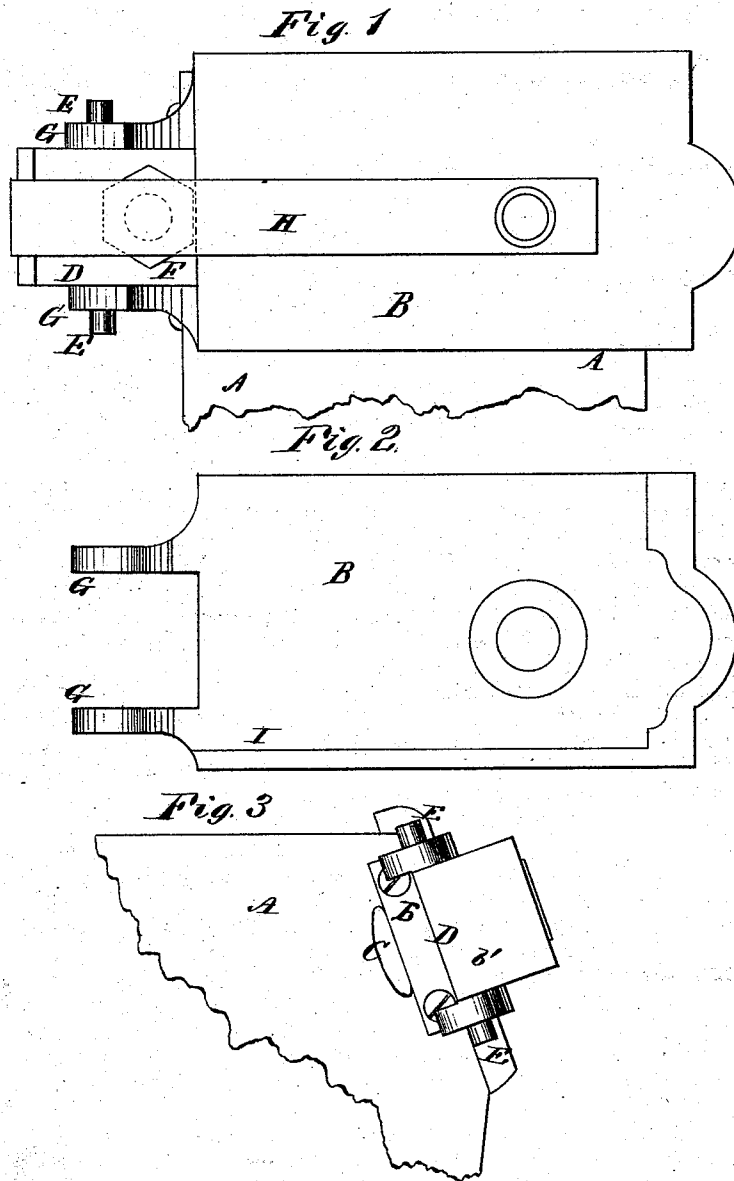


J. CONNER.
Lids for Car-Axle Boxes.

No. 155,712.

Patented Oct. 6, 1874.



Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH CONNER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO J. K. DAVIS, OF SAME PLACE.

IMPROVEMENT IN LIDS FOR CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **155,712**, dated October 6, 1874; application filed September 5, 1874.

To all whom it may concern:

Be it known that I, JOSEPH CONNER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements on Lids for Car-Axle Boxes; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a front view of my invention. Fig. 2 is a detail view, and Fig. 3 a side view.

This invention has relation to certain improvements on hinged lids for car-axle boxes; and it consists in the novel construction and combination of parts, having reference to, first, the hinging of the lid to the side of the axle-box instead of above or below the opening; secondly, the employment of a spring for holding the lid closed, in combination with a fulcrum, consisting of a bent plate, projecting from the side of the box, and provided with laterally-projecting arms, which constitute the pintles of the hinge; thirdly, the combination, with the pintle-plate and lid, of open hinge-hooks, adapting the lid to ready attachment to and detachment from the box; and, fourthly, the provision of a flange, extending partly around the edge of the lid, for the purpose of excluding the dust, all as hereinafter described in detail.

The principal object of the improvements referred to is to produce a hinged lid which will be capable of ready application to the axle-boxes already in use.

Referring to the accompanying drawings, A designates a car-axle box of ordinary construction, having the usual opening A' in front, which, in the present instance, and for the purposes of this invention, is closed by means of a hinged lid, B. As an essential feature of this invention the hinge is located at one side of the box, and connected to one end of the lid, the other end of the latter being free to move. By adopting this arrangement of the hinge the lid may be readily applied to the axle-boxes already in use, the bolt securing the hinge to the box pass-

ing through one of the lugs *b*, formed originally on the box for the reception of one of the bolts for securing the ordinary lid. C represents the hinge-bolt, passing through said lug *b*, and through a plate, D, which is bent forward at *b'* to provide a fulcrum for the spring, and is formed with laterally-projecting arms or pintles E. F designates a nut upon said bolt, holding it in place, and securing the plate D. When the lid is closed, one end abuts against the side of said nut, preventing it from turning and becoming loose. G G are hinge-hooks projecting from the lid, and embracing the pintles E. Hooks, instead of hinge-eyes, are used, so that the lid may be easily applied to and detached from the box. H designates a spring to hold the lid closed, and obviate the necessity of using a second bolt. Said spring is riveted to the lid, and rests, as shown, upon the fulcrum *b'*, over which it slides when the lid is moved.

The spring should be of a quality to keep the lid closed under ordinary circumstances, while allowing it to be opened easily for access to the interior of the box, or to yield from pressure against its inner surface.

I is a flange extending along the upper edge and swinging end of the lid, and adapted to embrace the corresponding edges of the axle-box when the lid is closed in such a manner as to effectually exclude dust.

I am well aware that lids were pivoted to the sides of axle-boxes prior to the date of my invention. I therefore do not, broadly, claim this arrangement, and I specially disclaim the features shown in Patent No. 91,115, granted June 8, 1869.

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

1. A car-axle-box lid combined and hinged to the box at one side of the front opening, so as to open outwardly, substantially as described and shown.

2. In combination with the lid B, hinged to the side of the axle-box, the spring H and bent plate D, provided with pintles E, for the reception of the hinge-hooks, substantially as described.

3. The combination, with the axle-box A, having the lateral lug *b*, of bolt C, nut F, and laterally-swinging hinged lid B, substantially as described and shown.

4. The laterally-swinging hinged lid, having the flange I, embracing, when the lid is closed, the corresponding edges of the axle-box, as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of August, 1874.

JOSEPH CONNER.

Witnesses:

CHAS. H. LUNGREN,
WILLIAM DUNLEVY.