J. KINZER.

Car Axle-Boxes.

No. 135,343. Patented Jan. 28, 1873.

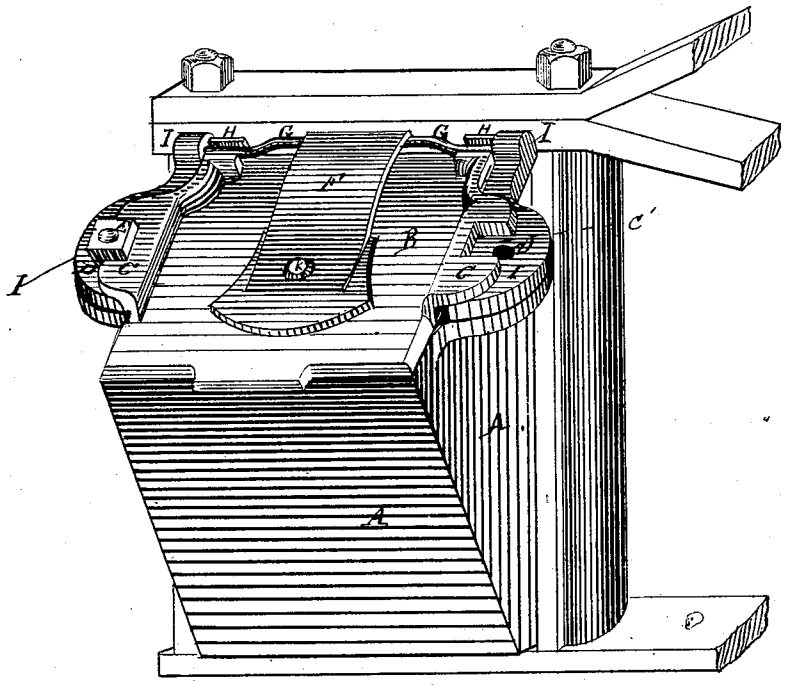

Fig. 1

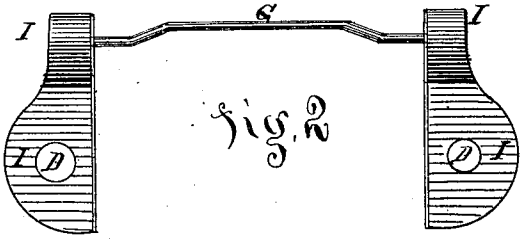

Fig. 2

Witnesses: H. Haseltine, A. S. Nicholas.

Inventor: Jacob Kinzer

UNITED STATES PATENT OFFICE.

JACOB KINZER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. **135,343**, dated January 28, 1873.

To all whom it may concern:

Be it known that I, JACOB KINZER, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented an Improved Independent Lid or Cap for Journal-Boxes, of which the following is a specification:

The journal-boxes now in ordinary use on railroad cars and other places are made with lids or caps, which are fastened to the outer surface of the boxes with bolts and nuts. These lids are constantly being lost by reason of the nuts jarring off when the cars are in motion. They are also frequently broken in the attempt to fasten them to the boxes, the uneven surface of the boxes causing the lids to break if much pressure is put upon them by the screwing down of the nuts; but perhaps the greatest loss arises from the breaking of the lids in taking them off to oil the journals, or to cool them when heated. Either through carelessness or haste the lids are very generally forced off and broken, to avoid the time and labor of unscrewing the nuts which hold them to their places. To obviate these difficulties, and to provide a lid which will give easy and instant access to the journal, is the object of this invention.

The drawing exhibits very clearly the construction and operation of this invention.

A is the journal-box for which the lid is made, and to which it is to be fastened. B is the lid or cap, fitted to and covering the upper part of the box. On either side of the lid are raised projecting arms C C, extending over the lugs I I, and having recessed openings C′ C′, a little larger than the nuts E used to fasten the lugs, but not large enough to allow the nuts to turn. When the lid is closed it is impossible for the nuts to jar off. F is the spring which holds the lid down. Care should be taken to make this spring strong enough to prevent the lid flying up when the car is in motion. One end of it is riveted to the lid B; the other rests upon the connecting-rod G. This connecting-rod G is made of wrought-iron, and serves the triple purpose of connecting the upper ends of the lugs I I, of holding the lid B by the open hinges H H formed on the lid, and of a bearing for the upper end of the spring F. For this latter purpose that part of the rod on which the spring rests is bent upward about half an inch, so as to give sufficient pressure to the spring. I I are lugs which are to be fastened to the journal-box by bolts and nuts through the openings D D, and when thus fastened hold the entire lid to the box.

I make these lugs in preference to a frame or case for the lid, because different boxes vary somewhat in size, and in the distance of the bolt-holes D D from each other; and these lugs, as constructed, can be sprung or adjusted to such variations, which could not be done with a frame or case.

It will be seen that this invention is intended to be applied to journal-boxes now in use, as well as to those constructed with special reference to its application, and the advantages of a lid which simply, by being raised, gives access to the journal will be seen without explanation.

Claims.

I claim as my invention—

1. In an independent hinged lid for journal-boxes, a wrought-iron bar, G, so curved and arranged as to serve the triple purpose of connecting the lugs I I, forming a bearing for the spring F, and supports for the hinges H H of the lid, all as shown and described.

2. A lid for journal-boxes with projecting arms C C and recessed openings C′ C′, operating, when the lid is closed, as a lock device to prevent the turning of the bolts and nuts, substantially as set forth.

3. The combined arrangement of the lid B having arms C C and recesses C′ C′, the spring F, the bent rod G, the lugs I I, forming an independent hinged lid for journal-boxes, substantially as shown and described.

JACOB KINZER.

Witnesses:
J. H. BALDWIN,
A. S. NICHOLSON.