

(No Model.)

J. TIMMS.  
CAR AXLE BOX.

No. 366,529.

Patented July 12, 1887.

Fig. 2.

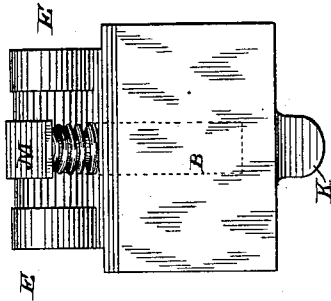


Fig. 3.

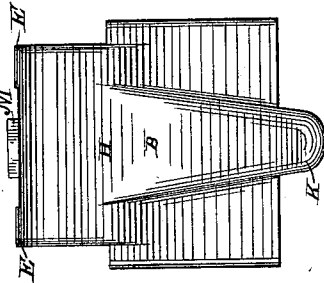
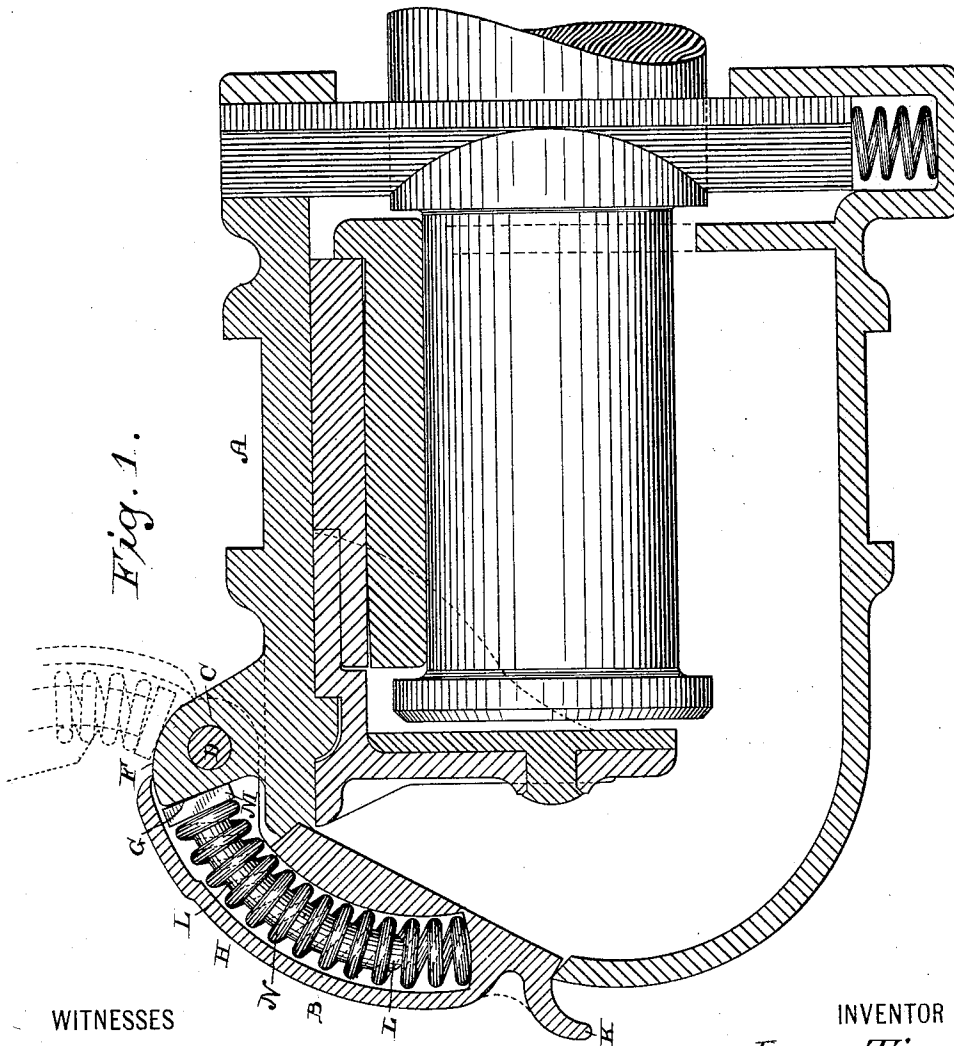


Fig. 1.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES TIMMS, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO R. M. ROWND, OF SAME PLACE.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 366,529, dated July 12, 1887.

Application filed June 13, 1887. Serial No. 241,179. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES TIMMS, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful  
5 Improvements in Car-Axle Boxes, of which the following is a specification, reference being had to the accompanying drawings.

My improvements relate altogether to means for securing a lid of a car-axle box down tightly  
10 in place to close the box by means of spring-power.

I am aware that various applications of springs to lids of car-axle boxes have been made for this purpose; but my object is to present an exceedingly simple, cheap, and effective organization to accomplish the object better than has heretofore been done.

I am aware, for example, of Patent No. 42,037, of 1864, and others relating to the subject, including Patent No. 352,592, of 1886; and it is in view of these that I have made and now proceed to describe my improvements.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of a car-axle box with my invention applied. Fig. 2 is a bottom view of the lid detached, and Fig. 3 is a top view of the same.

Referring to the letters upon the drawings, 30 A designates a car-axle box, and B its lid.

C indicates a projection or hinge-knuckle, having a hole through it for the hinge-pintle D, which also passes through the lugs or knuckles E E of the lid, and thus is formed the hinge-connection between the box and the  
35 lid. The knuckle C operates as a cam, being curved on its upper face at F and substantially plain on its front face, G.

I provide a hollow curved projection, H, on the upper part of the lid, which may be cast integral with it. A continuation of this hollow curved projection forms a handle or thumb

piece, K, for lifting the lid. This construction of the lid, including the knuckles E, forming it all in one piece, makes it very simple, light, 45 and neat in appearance.

L designates a curved rod, which may be provided with a head, M, and around which is a coiled spring, N. This curved rod and spring fit into the curved aperture in the curved projection H of the lid. The spring bears against the bottom of the curved projection, near the thumb-piece of the lid, and against the head M, and the head bears against the cam-surfaces of the hinge-knuckle C. The result is that the spring acts advantageously to press the lid tightly to place when closed, and also to hold it open, so that the lid works like the blade of a jack-knife, being held firmly closed and firmly open by spring-action, and not liable to stop at any intermediate point. The curved line of action of the spring tends directly and very advantageously to hold the lid closed.

Having thus described my invention, what I 65 claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a car-axle box and its lid hinged thereto and provided with a hollow curved projection, H, on its upper 70 part, of a curved rod, L, provided with a head, M, and a coiled spring, N, and the cam-knuckle C, substantially as set forth.

2. An improved lid for car-axle boxes, provided with the hollow curved projection H, 75 a thumb-piece, K, and the knuckles E E, all formed in one piece, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

JAMES TIMMS.

Witnesses:

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C. O. HUNTER.