

DAVIS & MACAN.  
Car-Axle Box.

No. 91,919.

Patented June 29, 1869.

Fig: 2.

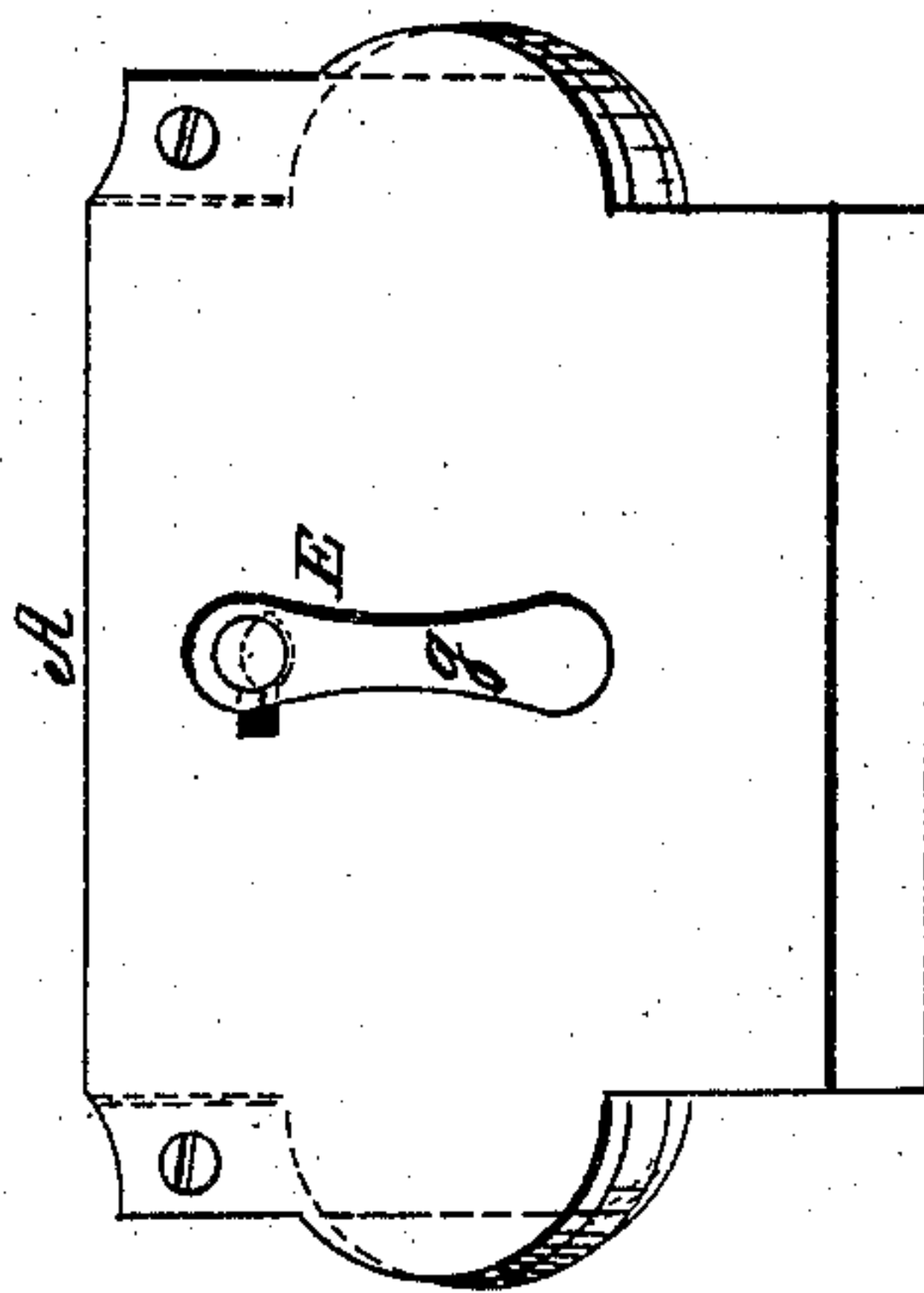


Fig: 3.

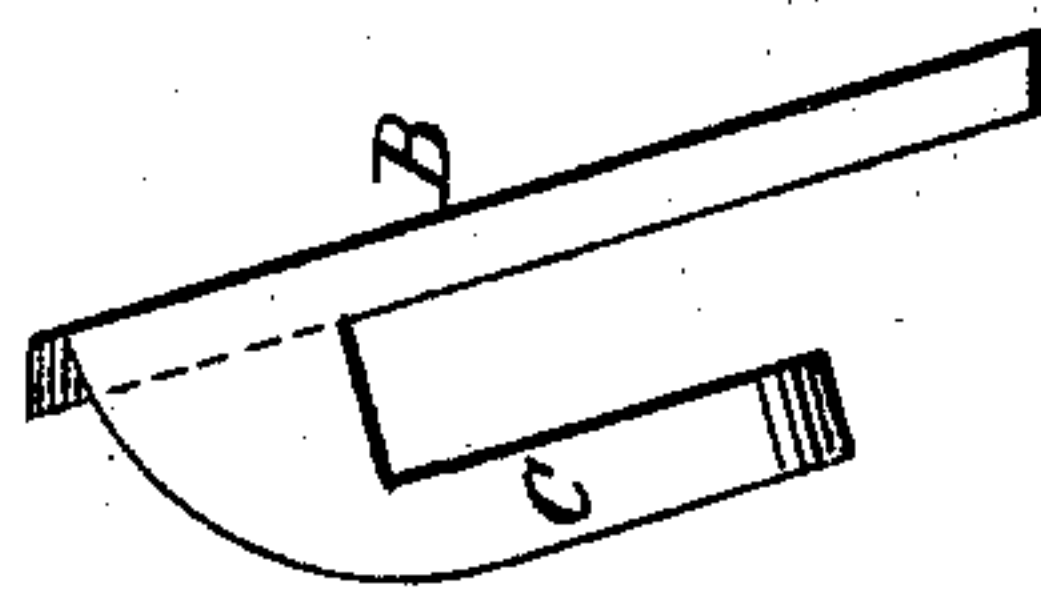
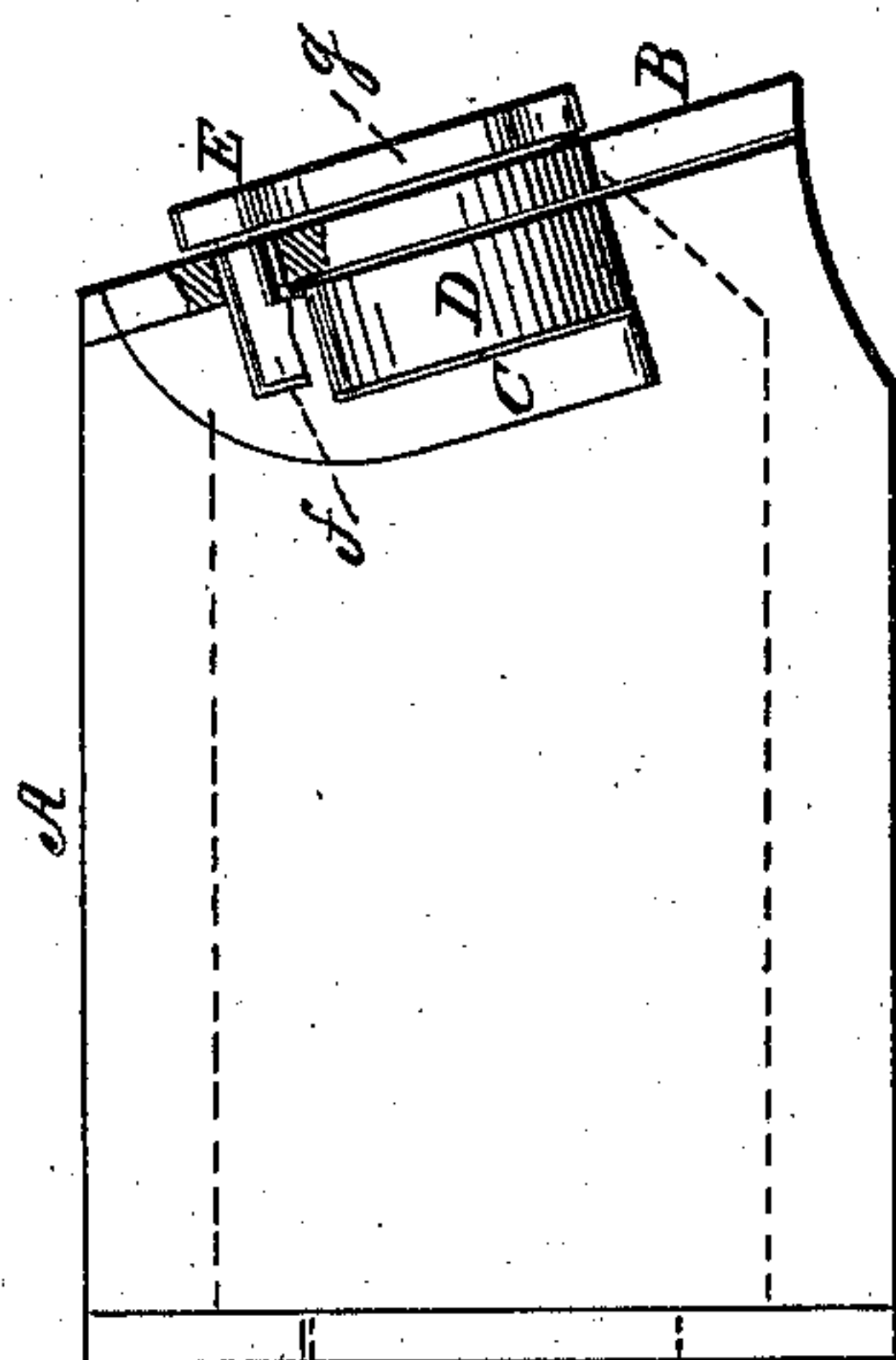


Fig: 1.



Witnesses:

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attys  
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# United States Patent Office.

WILLIS DAVIS, OF ELIZABETHPORT, AND CROWELL MACAN, OF  
RAHWAY, NEW JERSEY.

*Letters Patent No. 91,919, dated June 29, 1869.*

## IMPROVED RAILWAY-CAR-AXLE BOX

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that we, WILLIS DAVIS, of Elizabethport, county of Union, State of New Jersey, and CROWELL MACAN, of Rahway, county of Union, State of New Jersey, have invented a new and useful Improvement in Car-Axle Box; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in car-axle boxes; and consists in the novel method of securing the cap of the box, as will be hereinafter described.

In the accompanying drawings—

Figure 1 is a side view;

Figure 2 is a front view; and

Figure 3 is a view of the cap detached, shown in cross-section.

Similar letters of reference indicate corresponding parts.

A is the box, which is attached to the car or truck-frame in any substantial manner.

This box, as is well known, contains the journal of the axle and its bearing, with "waste," or some absorbent, for holding the lubricating-oil.

For introducing oil to the journal, the cap B has to be removed.

These caps are usually fastened by screw-bolts, and require considerable time, and cause much trouble in their removal; and as the journals have to be examined very frequently much valuable time is lost.

In carrying out our invention we form the cap, as

seen in fig. 3, with fingers C at each side, for slipping over ears on the sides of the box, as seen in fig. 1.

D represents the ears. To prevent the cap from raising by the jarring or vibration of the car, we apply a weighted key, E, as seen in fig. 1.

F is the bit of the key, and G is the weighted handle. A key-hole is made in the cap, and the bit of the key is inserted when the handle or weight G is in a horizontal position. When thus inserted the weight drops, by its own gravity, to an upright position, as seen in the drawing, and the projecting bit prevents the cap from rising.

To remove the cap, all that is required is to raise the weight G and remove the key, when the cap is raised and removed without difficulty.

This is a safe, convenient, and desirable method of securing the cap of the axle-box, and its advantages must be obvious to all concerned in the management of rail-cars.

Having thus described our invention,

We claim as new, and desire to secure by Letters Patent—

1. In combination with a car-axle-box cap, the finger C, substantially as and for the purposes herein shown and described.

2. In combination with a car-axle-box cap, the key E, substantially as and for the purposes specified.

The above specification of our invention signed by us, this 22d day of March, 1869.

WILLIS DAVIS.  
CROWELL MACAN.

Witnesses:

FRANK BLOCKLEY,  
ALEX. F. ROBERTS