

(No Model.)

C. C. JENKINS.

CAR AXLE BOX.

No. 328,312.

Patented Oct. 13, 1885.

FIG. 1.

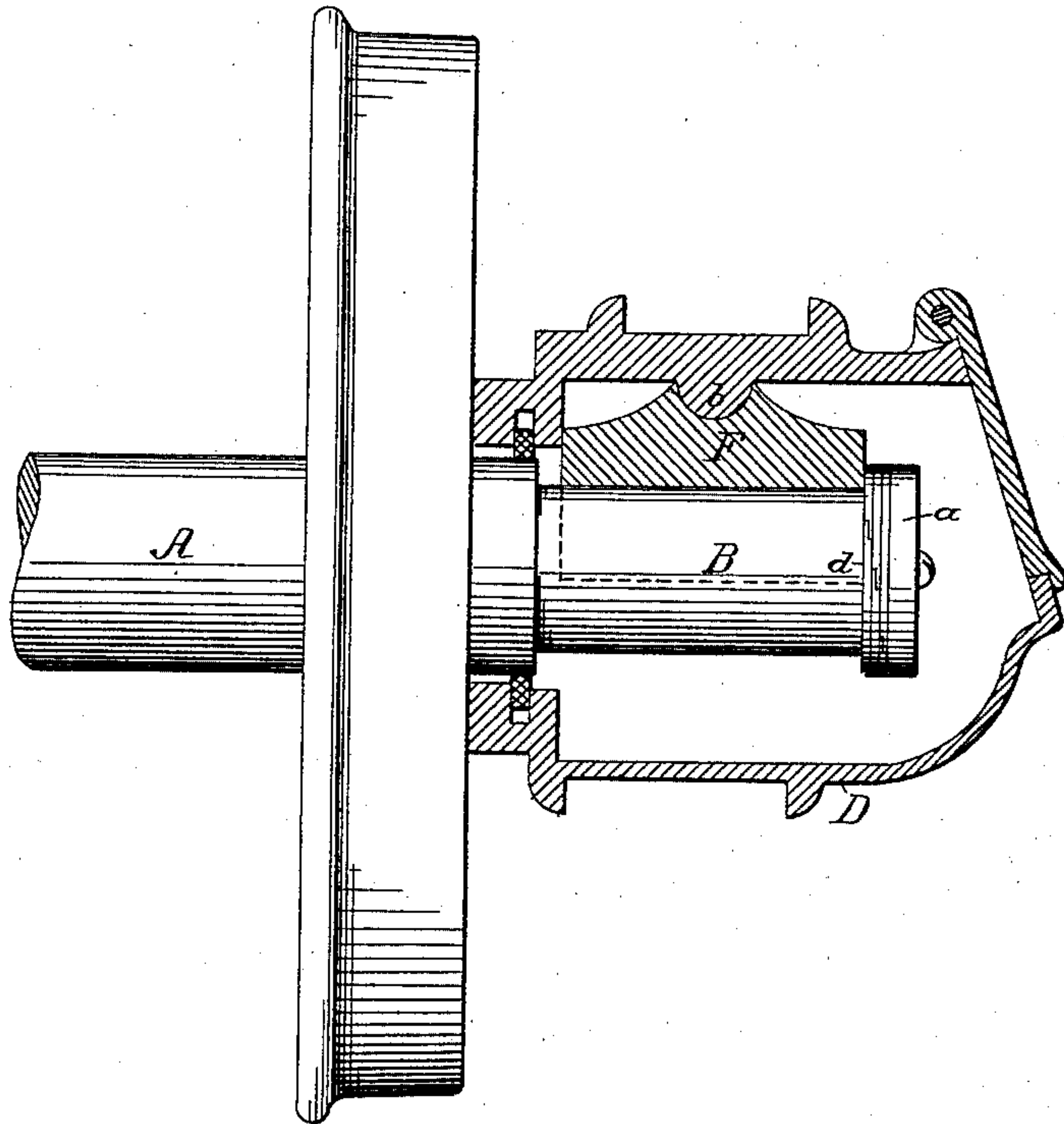


FIG. 3.

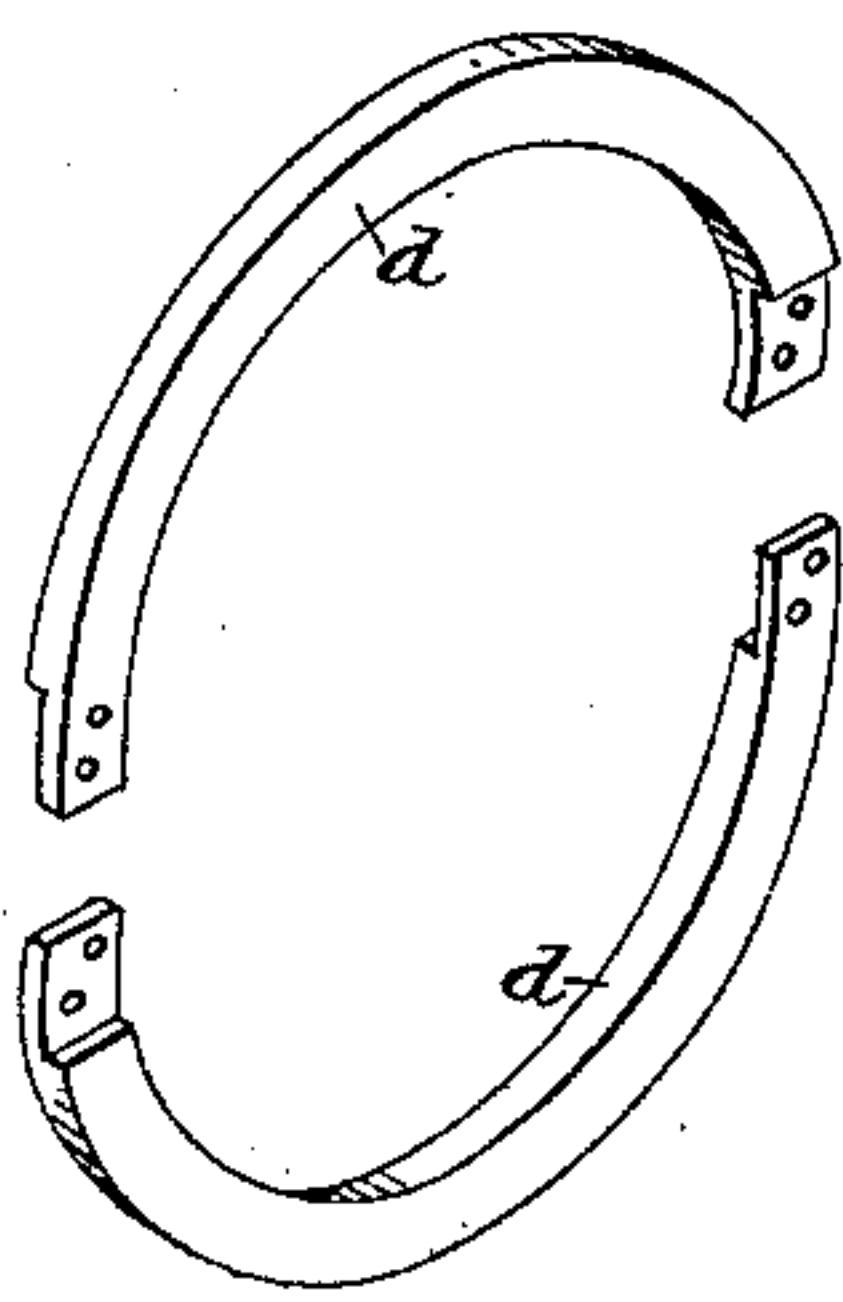
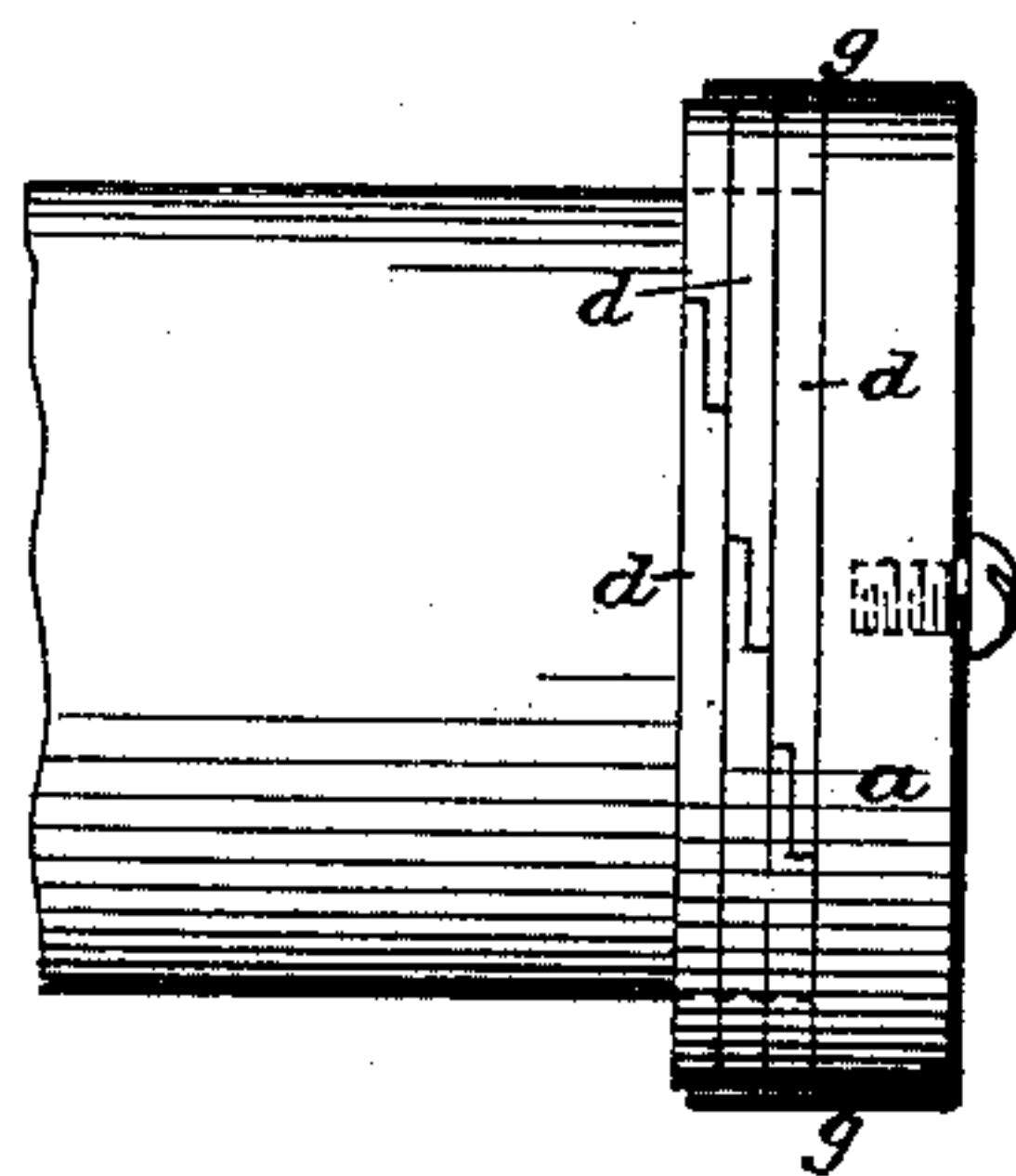


FIG. 2.



Witnesses:  
David Williams.  
Harry Drury.

Inventor:  
C. C. Jenkins  
by his attys.  
Howson & Sons

# UNITED STATES PATENT OFFICE.

CALDWELL C. JENKINS, OF PHILADELPHIA, PENNSYLVANIA.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 328,312, dated October 13, 1885.

Application filed July 27, 1885. Serial No. 172,741. (No model.)

*To all whom it may concern:*

Be it known that I, CALDWELL C. JENKINS, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Journal-Boxes, of which the following is a specification.

The object of my invention is to prevent heating and wear of the journal of an axle or its bearing-block by friction between said block and the collar at the end of the axle. This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of an axle-box and its bearing; part of the axle, with its wheel and journal, being shown in elevation; Fig. 2, an enlarged view of the end portion of the journal, and Fig. 3 a perspective view showing the construction of the anti-friction washers.

A is part of a railroad-car axle, B the journal of the same, and *a* the usual collar at the end of the journal, D being the axle-box, to a semicircular projection, *b*, at the top of which is fitted a block, F, forming a bearing for the journal B, as usual. Between the outer end of this bearing-block F and the collar *a* at the end of the journal I interpose a number of washers, *d*, three being shown in the present instance, although more or less than this may be used, if desired. These washers are free to turn independently of each other on the journal, and thus serve to prevent friction between the end of the stationary block and the collar on the rotating journal, the heating of the journal or bearing-block or the rapid wear of the same due to this friction being thereby overcome.

In order to prevent the cotton-waste with which the box is usually packed from being caught between the washers and carried up by the same, so as to be wrapped around the journal, I secure to the outer face of the collar *a* a cover or hood, *g*, which projects inward over the washers, and serves to prevent the access of the waste to the joints between said washers.

Each of the washers *d* is made in segments, and the ends of said segments are reduced in

thickness for adaptation to each other, as shown in Fig. 3, the overlapping ends of the segments being secured together by transverse pins or rivets. By this means I am enabled to make the washers extremely thin, and can thus employ in the limited space available a greater number of washers than would be possible if said washers were reduced in width at the ends and the overlapping portions secured together by radial pins or rivets, this latter plan being available only when the washers are of considerable thickness.

I am aware that washers have been interposed between a central pillow-block and collars at the opposite ends of a shaft, the shaft in this case being confined longitudinally to the pillow-block; but it will be observed that in my improved journal-box the length of the bearing-block is considerably less than the length of the journal, so that a certain longitudinal play of the bearing-block is permitted, the washers not being jammed between the collar *a* and the outer end of the bearing-block during the ordinary running of the car, but serving to prevent friction whenever there is any undue outward movement of the bearing-block—such, for instance, as is caused when the car is turning a curve.

I claim as my invention—

1. The combination of the journal and its collar, the bearing-block, the washer or washers interposed between the said bearing-block and the collar, and the shield or cover *g*, as specified.

2. The combination of the journal and its collar, the bearing-block, and a series of washers, *d*, each composed of segments reduced in thickness at the ends for adaptation to each other, and having the overlapping portions secured by transverse rivets or pins, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CALDWELL C. JENKINS.

Witnesses:

MARY G. JENKINS,  
HARRY SMITH.