

(No Model.)

A. O. BUCKIUS.  
LID FOR CAR AXLE BOXES.

No. 570,374.

Patented Oct. 27, 1896.

Fig. 1

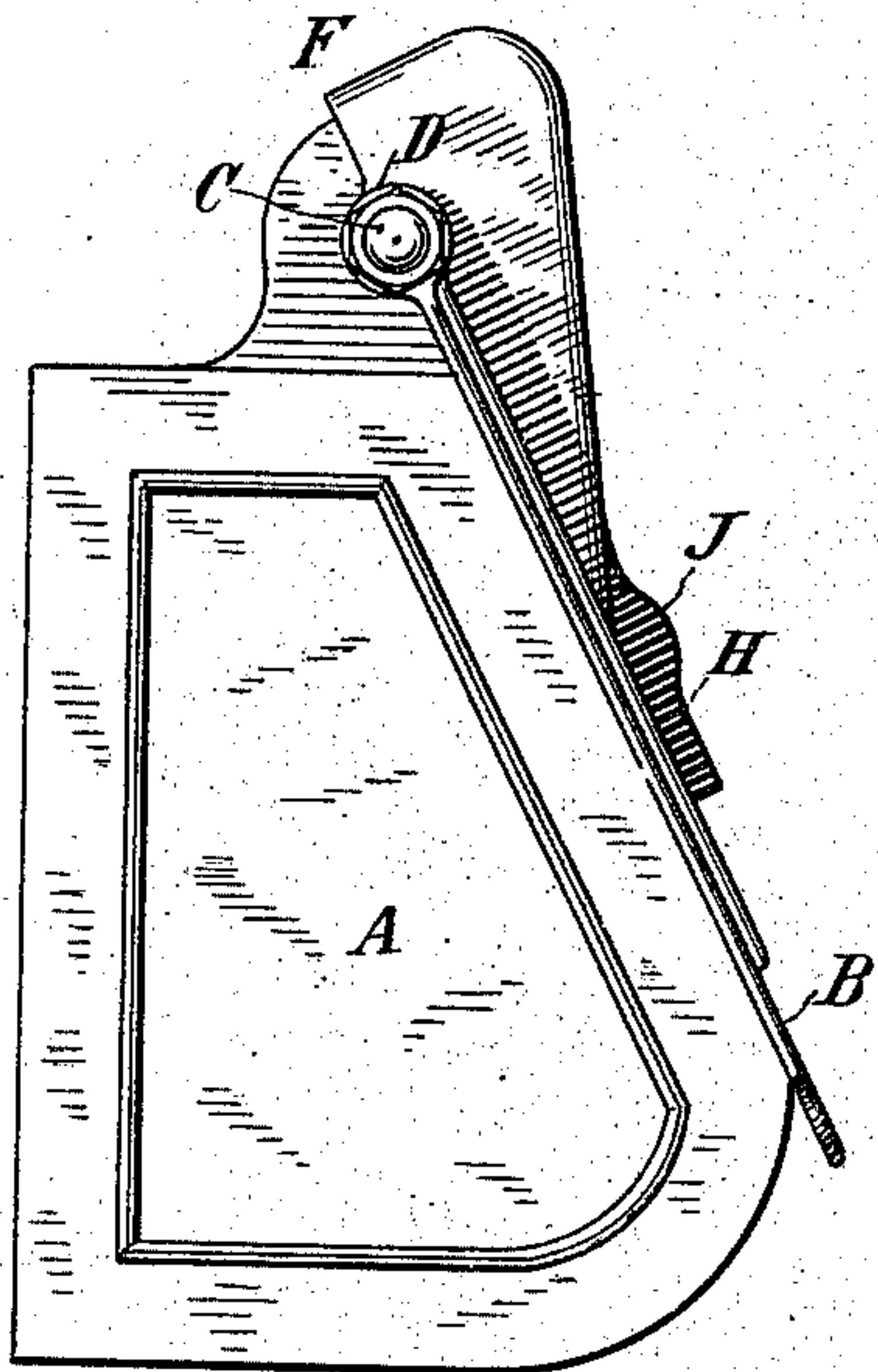


Fig. 2

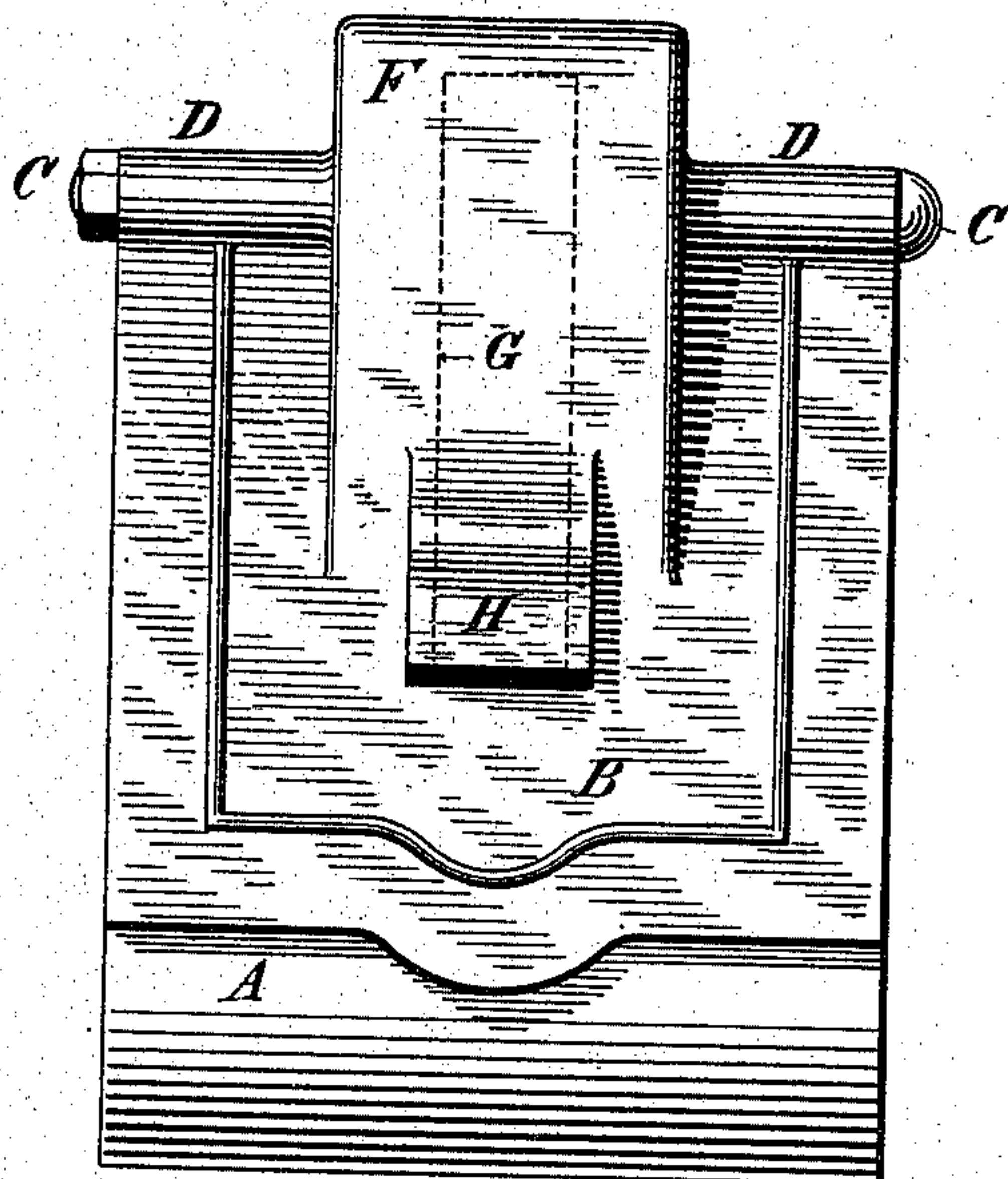
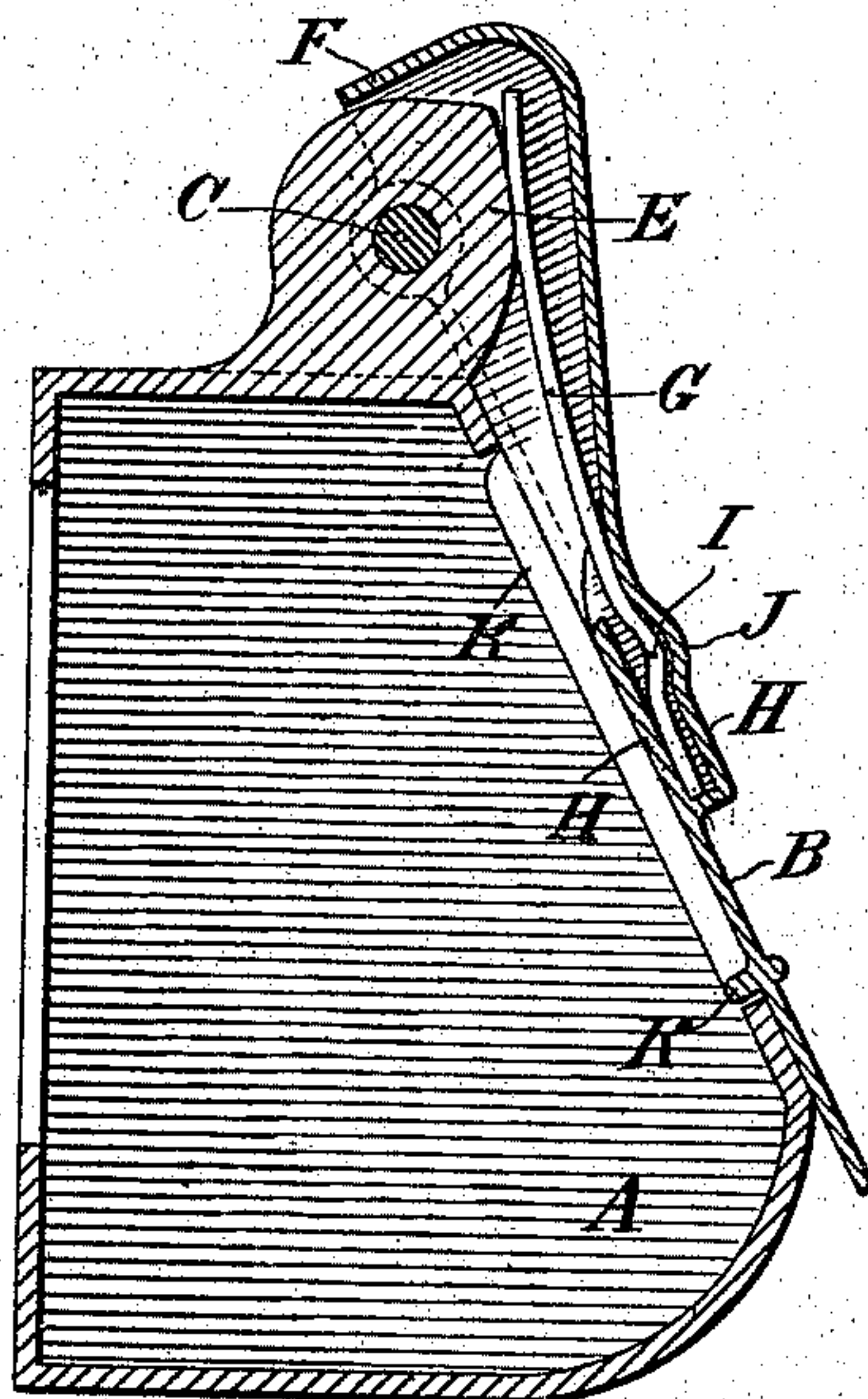


Fig. 3



Witnesses:

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# UNITED STATES PATENT OFFICE.

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## LID FOR CAR-AXLE BOXES.

SPECIFICATION forming part of Letters Patent No. 570,374, dated October 27, 1896.

Application filed August 14, 1895. Serial No. 559,239. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT O. BUCKIUS, a citizen of the United States, residing at Chicago, county of Cook, in the State of Illinois, have invented certain new and useful Improvements in Lids for Car-Axle Boxes, of which the following is a specification, reference being had to the accompanying drawings, forming a part of the same.

10 This invention relates to lids for the boxes of car-axles.

The object of the invention is to produce an axle-box lid having means for operatively supporting a removable lid-closing spring upon the inner face of the lid, and in such manner that the lid is not pierced or constructed with an opening through the same.

15 An essential fault of axle-box lids as heretofore made and used is that they have been pierced to afford bearings or passages for the lid-closing springs, and hence dirt, sand, and other foreign material could enter the boxes to the injury of the axles. Another fault lies in locating the lid-spring in part or whole on the outside of the lid; another in poorly protecting the spring against breakage or dislocation and loss, and when the spring has been supported wholly on the inner face of a lid this has been accomplished by means inefficient to properly support the spring, or such that the spring could not be readily removed and reinserted or duplicated.

20 The invention consists of an axle-box lid having a pocket or bridge formed therein and on the inner face thereof for receiving and holding a lid-closing spring, said spring-carrying pocket not having a passage through the lid and having an opening only on the inner side of the lid, through which the spring can be easily inserted into the pocket and removed from the same, said spring interfitting laterally with the lid by a projection on one fitting a groove or recess on the other, by which the spring is held from moving lengthwise toward the pivot of the lid, said recess and projection being opposite to the pocket or bridge and acting therewith to hold the spring in place.

25 In the drawings, Figure 1 is a side-elevation view of an axle-box the lid of which is constructed according to my invention. Fig.

2 is an end view of the same. Fig. 3 is a central vertical section of the same.

A represents the axle-box, which may be of any suitable construction or form.

30 B is the lid of the box, and C is the bolt by which the hinges D D of the lid are pivoted to the journal cam-shoulder E, of common form, on the axle-box.

35 F is the lid-apron, which closely incloses the cam-shoulder and holds the box closed at the lid-pivot, and also forms a space for the free action of the lid-spring G. This spring bears by its free upper end on the cam-shoulder, it being held by its lower end in the pocket or bridge H, which is cast or otherwise formed integral with the lid, and the opening from which is on the under side or under face of the lid, the pocket being otherwise wholly closed from direct communication with the exterior of the lid. This spring is loosely carried in the pocket, as shown in Fig. 3. The spring is formed with a cross corrugation or projection I, adapted to engage a correspondingly-shaped recess J in the outer walls of the lid opposite to the bridge or pocket. The projection and recess serve to prevent motion of the spring upward toward the pivot portion of the lid, and the bridge or pocket serves to keep the recess and projection in engagement. Together these parts therefore constitute an efficient lock for the spring, enabling it to be put in place easily, holding it with great security, and putting upon the body of the lid at the engagement of the projection with the recess the work of holding the spring from upward longitudinal displacement. Otherwise the walls of the pocket are without special form, so long as they are adapted to receive and hold the spring.

40 K is an inwardly-projecting flange that fits to the edges of the walls of the opening of the box to insure the tight closure of the latter when the lid is down.

45 With this form of lid and spring-supporting pocket the lid under the stress of its spring holds the box tightly closed and without possibility of ingress of sand or dust, and the spring is removably yet securely held in place.

What is claimed as new is—

The combination of the car-axle-box lid, a leaf-spring having at one end a bearing at the pivot part of the lid, and at the other end connected with the inner side of the lid by a  
5 recess on the one and a projection on the other; said recess and projection interfitting with each other and preventing the spring from moving lengthwise toward the said pivot, the lid being imperforate at the place of in-

terfitting, and having on the interior a bridge 10 fitting over the end of the spring opposite to the recess and coacting therewith to hold the spring in place; substantially as described.

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Witnesses:

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