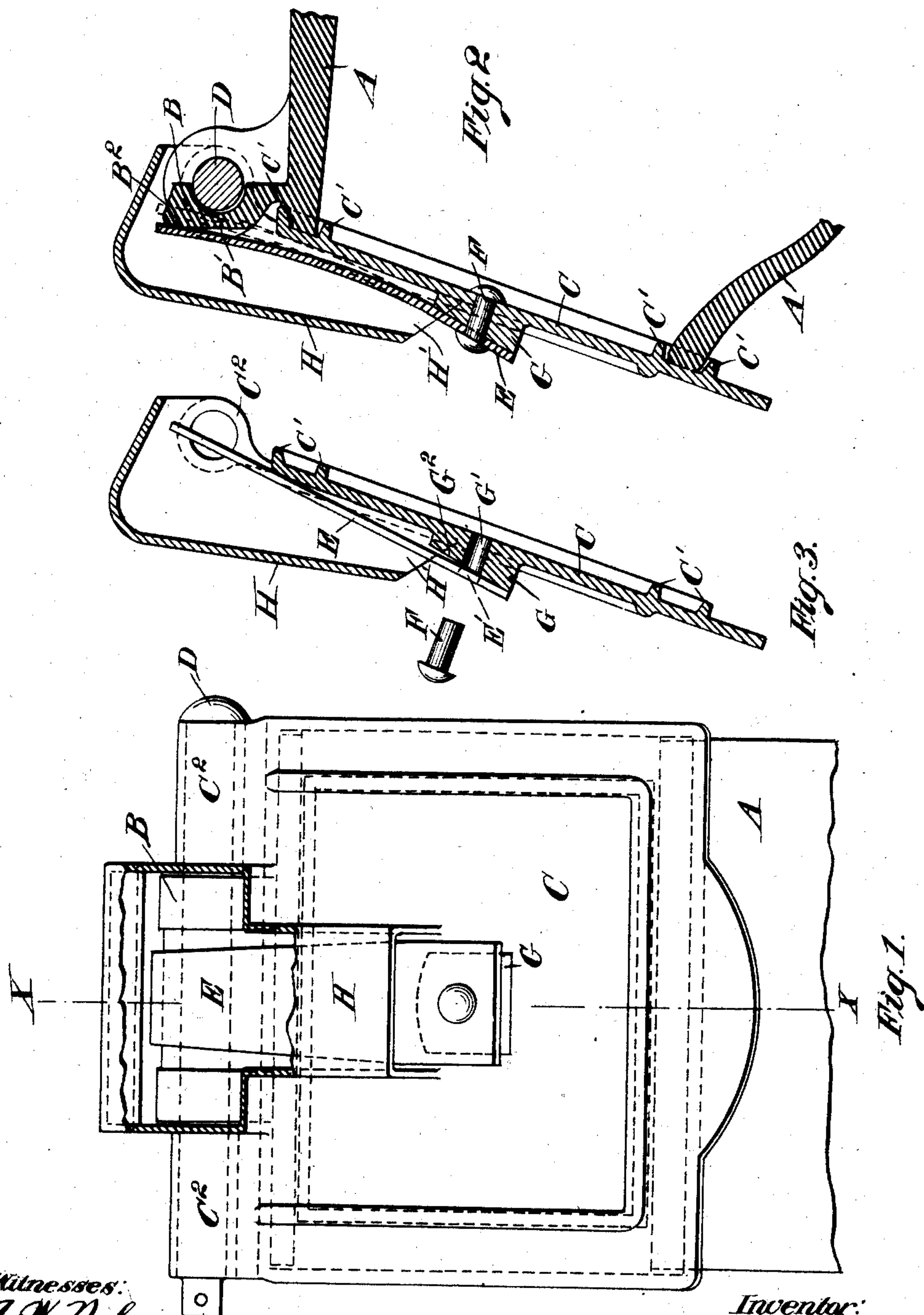


No. 864,738.

PATENTED AUG. 27, 1907.

C. G. HAWLEY,
JOURNAL BOX AND LID.
APPLICATION FILED MAY 16, 1907.



Witnesses:
A. W. Nelson
John R. Leflore.

Inventor:
C. G. Hawley

UNITED STATES PATENT OFFICE.

CHARLES GILBERT HAWLEY, OF CHICAGO, ILLINOIS.

JOURNAL-BOX AND LID.

No. 864,738.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Original application filed October 26, 1906, Serial No. 340,684. Divided and this application filed May 16, 1907. Serial No. 373,899.

To all whom it may concern:

Be it known that I, CHARLES GILBERT HAWLEY, a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have
5 invented certain new and useful Improvements in Journal-Boxes and Lids, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

10 My invention relates to improvements in journal boxes for railway cars, and has special reference to improvements in spring pressed lids for such journal boxes.

This is a divisional application, the subject matter
15 whereof having been first presented in my pending application, Serial Number 340,684, filed October 26, 1906 and entitled Journal box and lid.

The object of my present invention is to provide a journal box with a flat imperforate lid, that shall be
20 adapted to close the opening of the box and which shall be equipped with an external spring capable of firmly seating the lid upon the box and also adapted to hold the lid in raised or opened position.

My invention consists generally in a journal box,
25 preferably of the Master Car Builders' type, having the usual hinge lug and hinge pin at its top, in combination with a flat imperforate lid hinged upon said pin, an initially straight leaf spring having its lower end fixed
30 upon the outer face of said lid and its upper end initially pressed, and pressing, against said hinge lug to hold the lid in closed and opened position; all as hereinafter described and particularly pointed out in the claims.

The invention will be more readily understood by
35 reference to the accompanying drawings, forming a part of this specification and in which;

Figure 1 is an end elevation of a journal box and lid embodying my invention, the upper portion of the hood or spring protector being broken away to disclose
40 the hinge lug on the box and the upper end of the spring; Fig. 2 is a sectional view on the line $x-x$ of Fig. 1; and Fig. 3 is a similar sectional view, showing the lid as it appears when removed from the box and before the spring is fastened upon the lid.

45 As shown in the drawings, A represents a journal box having a hinge lug, B, on its top. This box is identical with the well known boxes denominated as of the Master Car Builders' type and its lug, B, has the characteristic form, presenting flat surfaces, B^1 and B^2 ,
50 upon its outer face and top.

C represents a flat imperforate plate or lid preferably having inner and outer flanges, C' , to fit the rectangular seat on the end of the box. The upper edge of the plate, C, is provided with two hinge lugs, C^2 , and the hinge

lugs B and C^2 are joined by the usual horizontal hinge
55 pin, D. Thus the lid is adapted to be raised and lowered to open and close the journal box. The lid proper, *i. e.*, the plate portion, C, contains no openings, and it is obvious that it will effectually exclude dust
60 from the journal box when closed.

For holding the lid closed and also in opened position, I employ the peculiar spring, E. This is a leaf spring. It is initially straight and its lower end is provided with a hole, E' , to receive a rivet, F. The face of the lid, C, is provided with a boss or projection, G, con-
65 taining a rivet hole, G' . The outer surface, G^2 , of the projection, G, is inclined at a greater angle than that formed by the flat spring, with the latter resting at the lower edge of the projection, G, and upon the upper edge of the lid. Further, when the rivet, F, is placed
70 in the opening and there riveted, the lower end of the spring is drawn down upon the top of the projection, G, in the manner shown in Fig. 2. When it is positioned the spring presses firmly against the upper edge of the lid and is initially and strongly tensioned. It
75 will now be obvious that when the lid, equipped with such a spring, is placed upon the journal box and there secured by means of the hinge pin, D, the spring will be still further tensioned by reason of the further projection of its upper end through contact
80 with the lug, B, in the box.

H represents the hood or spring protector, extending from a point above the free end of the spring to a point adjacent to the projection, G. A large opening, H' , is left at the lower end of the hood for the discharge
85 of dust and cinders that may fall therein. I prefer, also, that the projection, G, shall be narrower than the spring and hood for a similar reason, as shown in Fig. 1.

As various modifications of my invention will readily suggest themselves to one skilled in the art, I
90 do not confine my invention to the specific constructions herein shown and described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A journal box lid, comprising an imperforate plate
95 having hinge lugs on its upper edge, in combination with a single initially straight leaf spring, said plate having a projection or thickness of metal beneath the lower end of said spring and a rivet securing the spring thereon and causing its upper end to press against the upper edge of
100 the lid, substantially as described.

2. A journal box lid comprising an imperforate plate having hinge lugs on its upper edge, in combination with a single, initially straight leaf spring, said plate having a projection or thickness of metal at the lower end of said
105 spring, said projection presenting an upwardly and inwardly inclined surface whereon the lower end of said spring is held, the upper part of the spring pressing against the upper edge of the lid, substantially as described.
110

3. A journal box lid comprising a flat, imperforate plate

having hinge lugs on its upper edge and provided with a projection, G, the latter having its outer surface inclined upwardly and inwardly, an initially straight leaf spring having its lower end riveted upon said projection, said

5 spring presenting a convex side to the lid and pressing against the upper edge thereof, substantially as described.

4. A journal box lid comprising a flat, imperforate plate having hinge lugs on its upper edge and provided with a centrally located projection, G, the latter having a sur-
10 face, G', occupying a plane which intersects the surface of the lid beneath the upper edge thereof, an initially straight leaf spring and a rivet passing through the spring and lid and securing the spring on said projection in such manner
15 against the upper edge thereof, substantially as described.

5. A journal box lid comprising a flat imperforate plate and having hinge lugs on its upper edge, a single, initially straight leaf spring secured upon the outer surface of the plate in a manner to bow the spring toward said plate and press it against the upper edge of the plate and a
20 spring hood covering the upper part of the spring, substantially as described.

In testimony whereof, I have hereunto set my hand, this 30th day of April, 1907, in the presence of two subscribing witnesses.

CHARLES GILBERT HAWLEY.

Witnesses:

M. SIMON,
JOHN R. LEFEVRE.