

F. KEISER.  
Axle-Boxes.

No. 163,783.

Patented May 25, 1875.

Fig. 2.

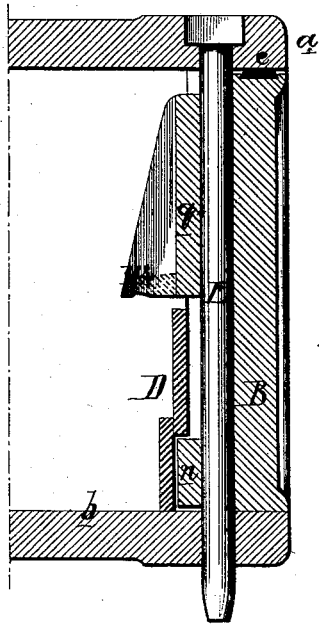


Fig. 3.

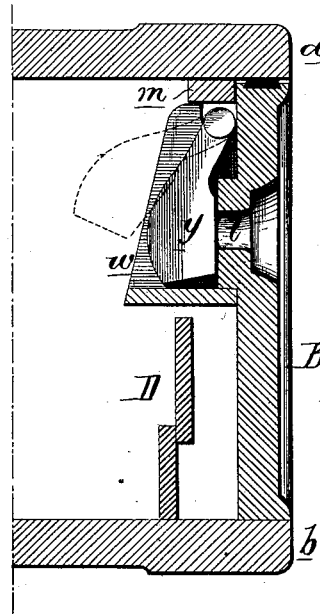


Fig. 5.

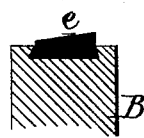


Fig. 4.

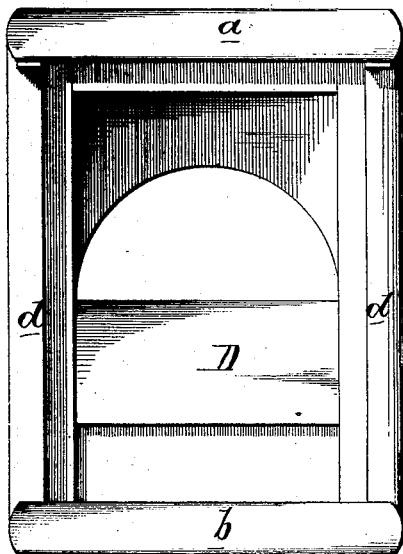
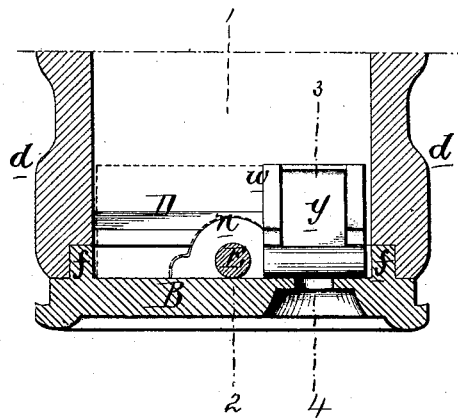


Fig. 1.



Witnesses, *Henry Smith*  
*Hubert Howson*

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*Howson and Son*

# UNITED STATES PATENT OFFICE.

FLORENZ KEISER, OF POTTSTOWN, PENNSYLVANIA.

## IMPROVEMENT IN AXLE-BOXES.

Specification forming part of Letters Patent No. **163,783**, dated May 25, 1875; application filed April 24, 1875.

*To all whom it may concern:*

Be it known that I, FLORENZ KEISER, of Pottstown, Montgomery county, Pennsylvania, have invented certain Improvements in Axle-Boxes, of which the following is a specification:

The object of my invention is to construct an axle-box to which a cover can be economically and accurately fitted, and which will permit the ready introduction and effectual retention of oil, and insure the exclusion of dust.

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 plan view of the front end of an axle-box made according to my improvements; Fig. 2, a vertical section on the line 1 2; Fig. 3, a vertical section on the line 3 4; and Fig. 4, a front view of the box with the cover removed.

As regards the rear portion of the axle-box, it is similar to those in common use, my invention being restricted to improvements in the front end of box, which is open from the top *a* to the bottom *b*, and from one side, *d*, to the opposite side, *d'*, for the reception of the cover B into a dovetailed recess, in the upper edge of which is compressed the lower portion of a packing-strip, *e*, of leather, as shown in the enlarged view, Fig. 5. The opposite sides *d* and *d'* of the box are recessed for the reception of the ribs *f f* of the cover, as shown in Fig. 1, these ribs fitting so snugly into the said recesses as to effectually exclude the dust, and the leather packing *e* being such that a slight effort is required to force the cover to its place; hence, the packing must effectually bar the entrance of the dust at the junction of the upper edge of the cover with the top *a* of the box. The position of the cover within the front end of the box is determined partly by a projection, *m*, under the top, and partly by a partition, D, which extends across the interior of the box, and with which a lug, *n*, on the cover comes in contact. After the cover has been thus introduced into its place, a pin, E, is passed through the box and through the projecting portion *q* and lug *n* of the cover, which is thus effectually confined to its place, the pin being retained by a transverse split pin, or

other suitable device. From the inside of the cover B, and beyond the partition D, projects a pocket, *w*, containing a valve, *y*, so suspended to the upper edge of the pocket, and so formed, that it will be self-closing against its seat on the cover, in which seat there is an opening, *t*, for the introduction of the spout of an oil-can, the end of the spout forcing the valve to the position shown by dotted lines in Fig. 3, and the oil falling over the partition D, by which it is effectually retained.

When it is desired to prevent the cotton-waste in the box from rising above the level of the bottom of the pocket *w*, I extend the said bottom completely across the box, as shown in dotted lines in Fig. 1, this extension, in connection with the partition D, effectually retaining the cotton within proper limits.

One of the prominent advantages of my improved axle-box is the facility with which it can be cast, owing to the front end being entirely open in the absence of the cover.

Another advantage is that no costly fitting is required to adapt the cover to the box, the simple cleaning of the castings being all that is necessary to insure a proper fit.

I claim as my invention—

1. The combination of the cover B, its packing-strip *e*, and ribs *f f*, with the open front end of the axle-box adapted to the said cover, all substantially as set forth.

2. The combination of the cover B and the front end of the axle-box, with the retaining-pin E, passing through the box and through projections on the cover, substantially as set forth.

3. The combination of the cover B, having opening *t*, with the pocket *w* and self-closing valve *y*, all substantially as and for the purpose set forth.

4. The combination of the pocket *w* on the cover and its self-closing valve, with the partition D, substantially as and for the purpose set forth.

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

FLORENZ KEISER.

Witnesses:

HUBERT HOWSON,  
HARRY SMITH.