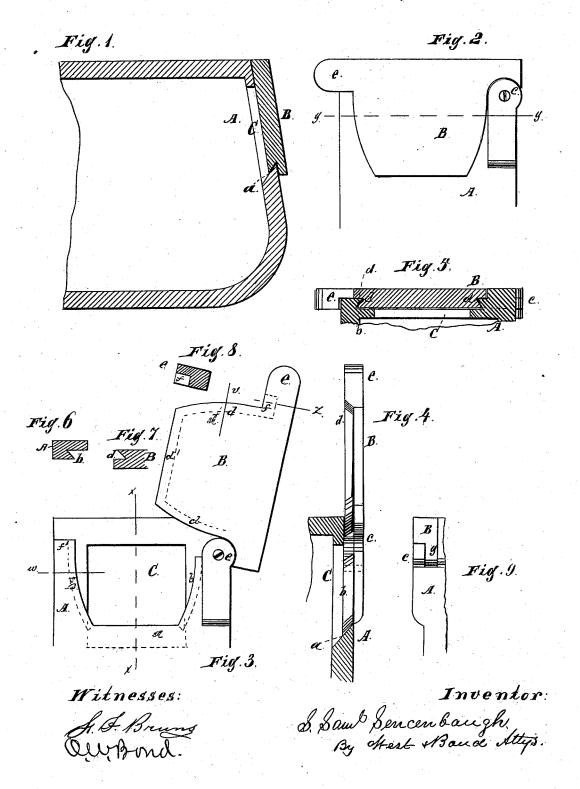
## S. S. SENCENBAUGH. Car-Axle Box-Lid.

No. 215,299.

Patented May 13, 1879.



## UNITED STATES PATENT OFFICE.

S. SAMUEL SENCENBAUGH, OF AURORA, ILLINOIS, ASSIGNOR TO HIMSELF AND DENNIS F. VAN LIEW, OF SAME PLACE.

## IMPROVEMENT IN CAR-AXLE-BOX LIDS.

Specification forming part of Letters Patent No. 215,299, dated May 13, 1879; application filed February 12, 1879.

To all whom it may concern:

Be it known that I, S. Samuel Sencen-Baugh, of Aurora, Kane county, State of Illinois, have invented a new and useful Improvement in Car-Axle Boxes, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section. Fig. 2 is an end elevation with the cover closed. Fig. 3 is an end elevation with the cover open. Fig. 4 is a section at x of Fig. 3. Fig. 5 is a horizontal section at y of Fig. 2. Figs. 6, 7, and 8 are details, Fig. 6 being a section at w of Fig. 3, Fig. 7 being a section at v of Fig. 3, and Fig. 8 being a section at z of Fig. 3. Fig. 9 is a detail, showing how the cover is hinged.

The object of my invention is to provide an improved cover for car-axle boxes, which will securely hold the oil in the box, exclude dust, and can be easily manipulated, which I accomplish as hereinafter more fully described.

In the drawings, A represents the outer end of a car-axle box, and B is the cover. C is the opening in the outer end of the box, through which access is had to the interior. The end of the box is quite thick, and the lower wall of the opening C is beveled, as shown at a. The upper part of the end of the box is thinner than the remaining parts of this end, as shown in the drawings, and the sides of the opening C are partially cut away in front, to furnish a surface over which the cover laps.

bb are recesses, one on each side of the opening C. As shown, the back side of these recesses is flat and the front beveled. These recesses would be directly in the side walls of the opening C if the same were not partly cut away, as above described. They might be directly in these side walls, such cutting away being dispensed with; but I prefer the construction shown.

The cover B is hinged at one corner to the end of the box, as shown at c. The two side

edges and the lower edge of this cover are provided with grooves  $d\,d'$ . The front of these grooves is flat, and the back is beveled corresponding with the bevel of the recesses or grooves b.

e is a projection at the upper left-hand corner of the cover, for convenience in manipulating, in which is a recess, f, to receive the part f' when the cover is closed. f' might be cut away, and then the recess f would not be needed. The edges of the cover, on each side, are curved, as shown, and the grooves b are correspondingly curved.

When the cover is closed the groove d' in the lower edge fits over the upper part of the beveled wall a, as shown in Fig. 1, and the grooves d in the side edges of the cover engage with and receive the front wall of the grooves or recesses b b. As shown, the cover is hinged to A by means of a lip, g, and a bolt, on which the cover turns.

If by the motion of the car any oil is thrown against the inside of the cover, such oil cannot escape either beneath the lower edge or at the sides of the cover; and if any oil should find its way into the grooves  $b\ b$ , it would be returned down these grooves and over the incline a into the box.

A suitable fastening might be provided at e to hold the cover when closed; but I do not think it necessary.

What I claim as new, and desire to secure by Letters Patent, is as follows:

In a car-axle box, the end piece, A, provided with an opening, C, having its lower wall beveled, as shown at a, and provided with the recesses or grooves b b, in combination with the side hinged cover B, provided with the grooves d d', substantially as and for the purposes specified.

## S. SAMUEL SENCENBAUGH.

Witnesses:

JNO. W. KENDALL, C. H. WHITE.