

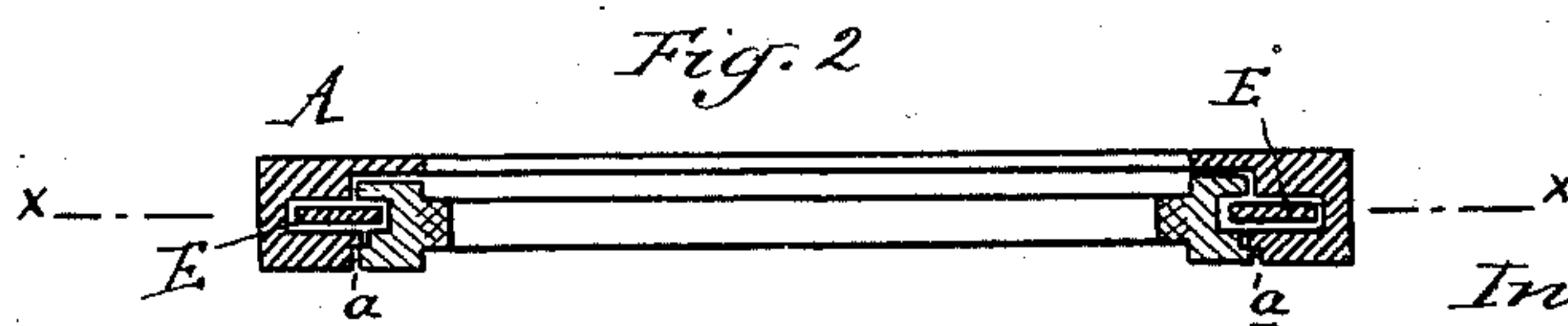
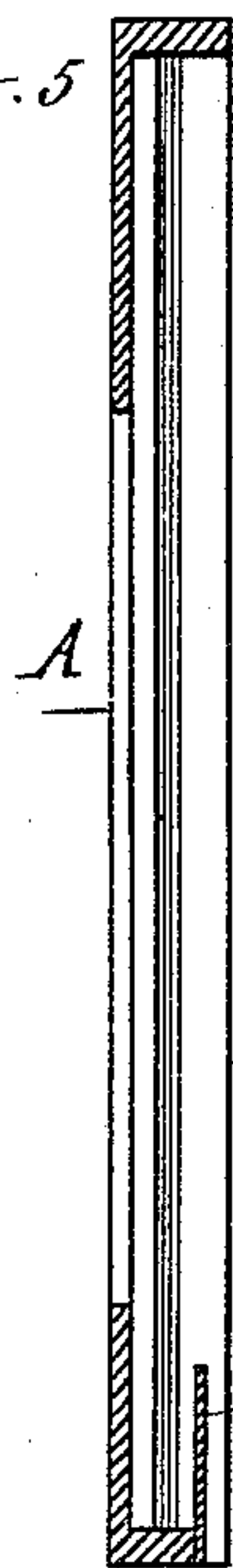
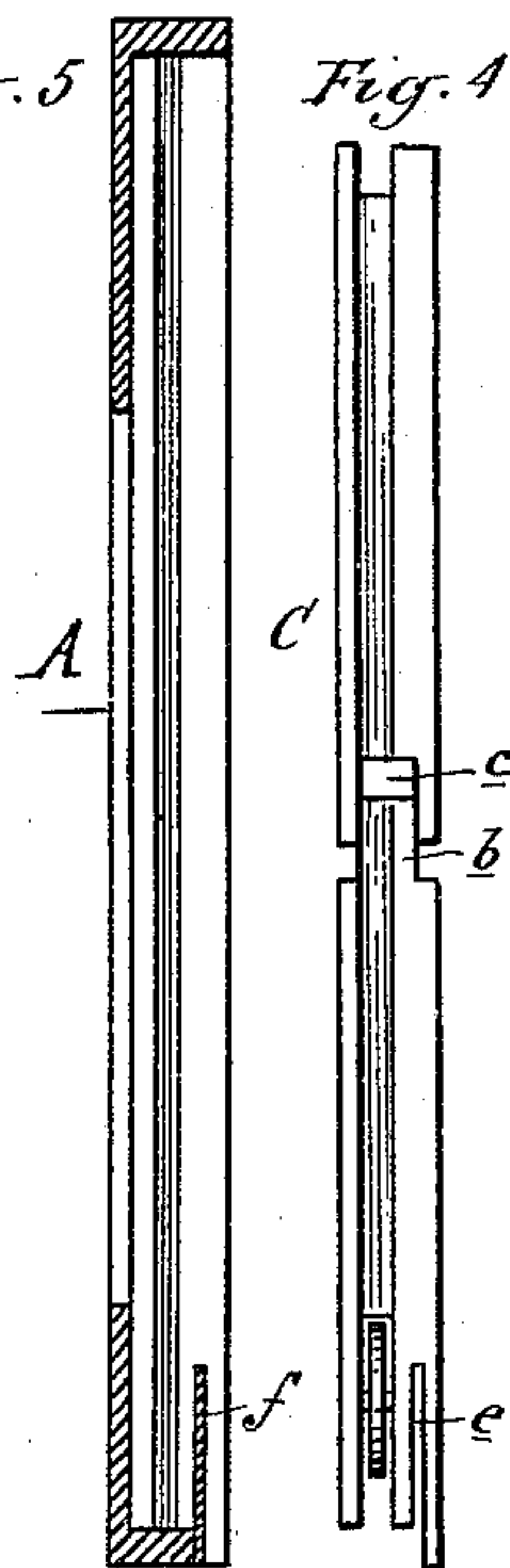
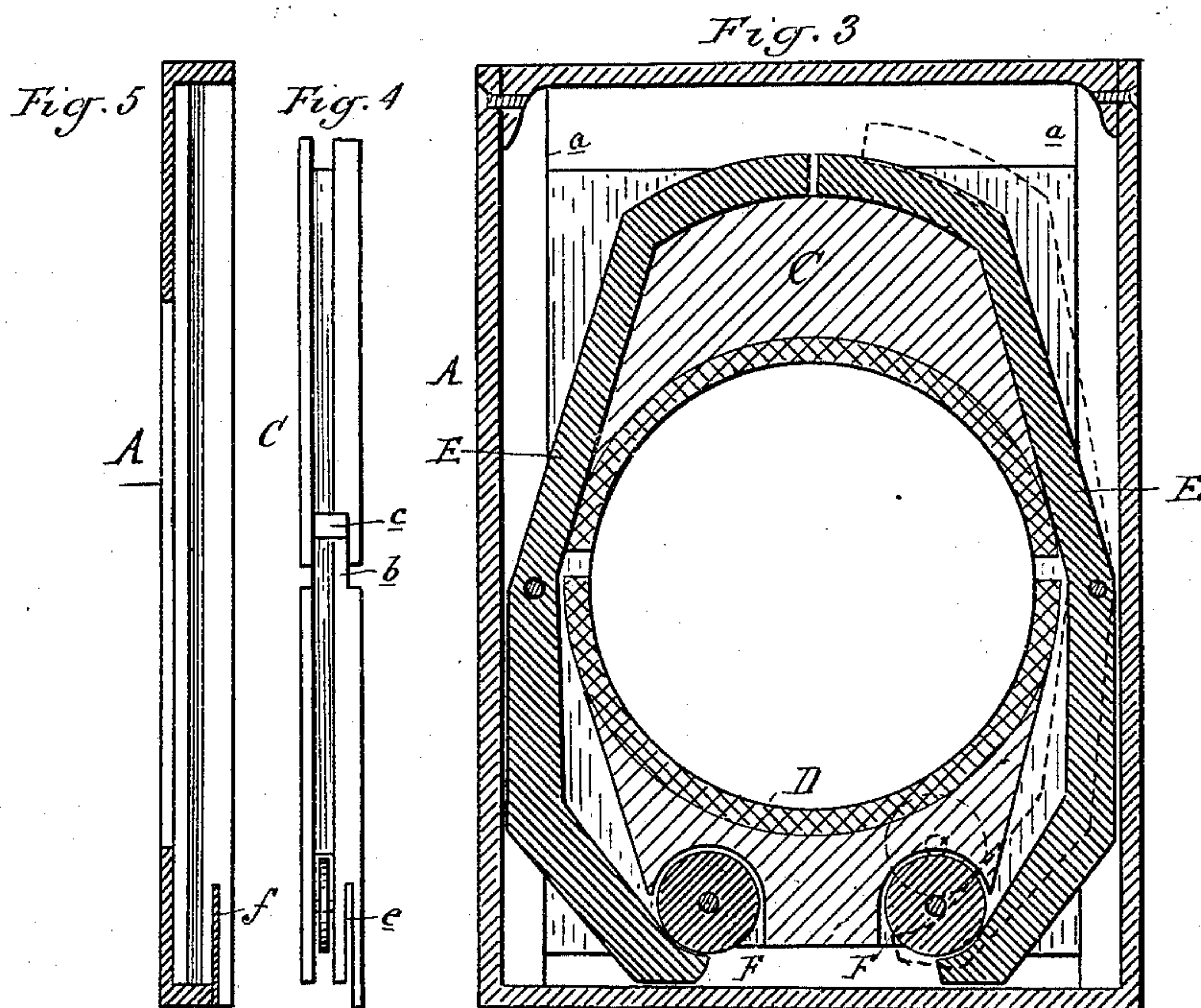
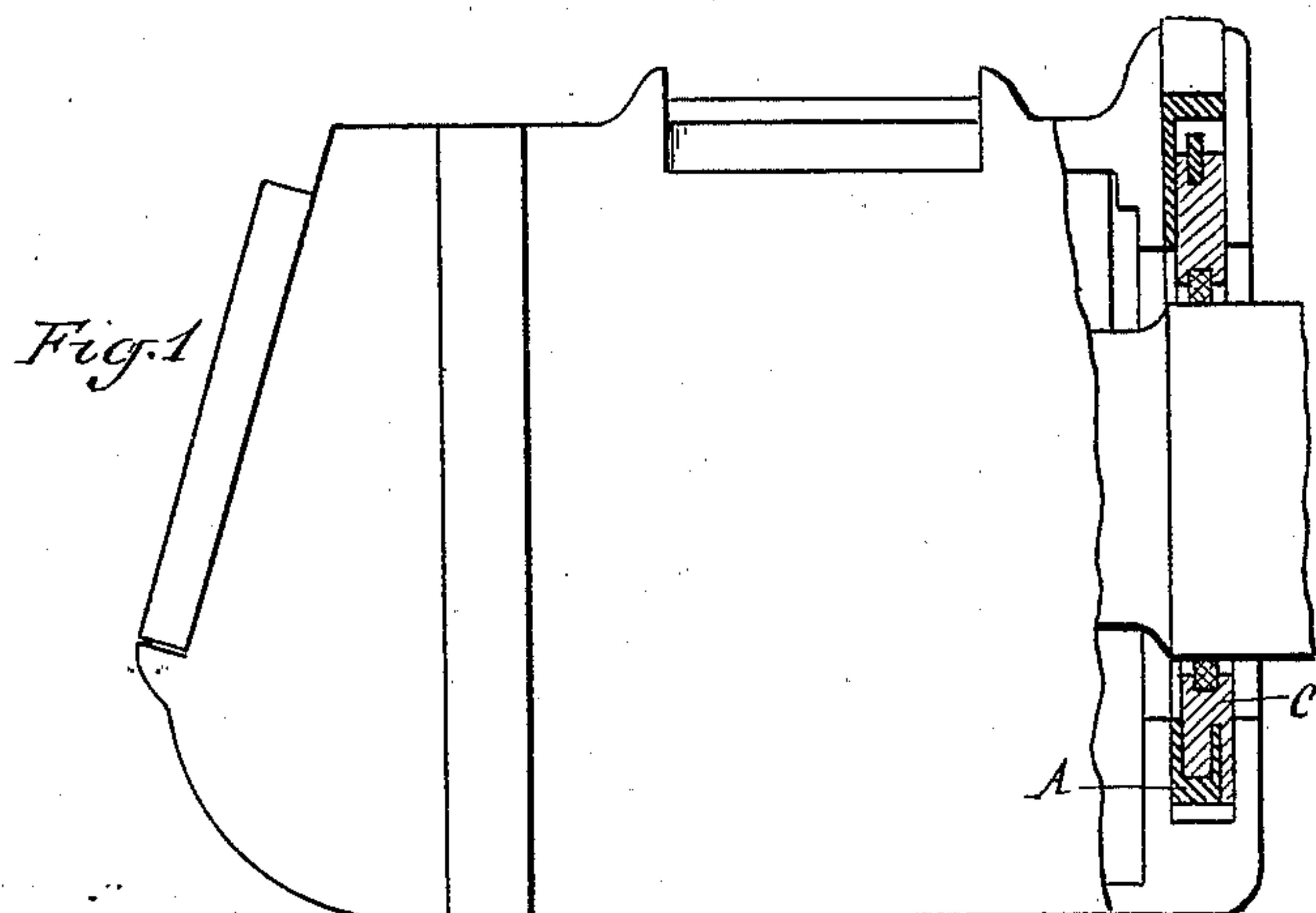
(No Model.)

J. SCHMELTER.

CAR AXLE BOX.

No. 280,087.

Patented June 26, 1883.



Attest:  
A. Barthel  
J. Sprague

Inventor:  
John Schmelter  
by his Atty  
The J. Sprague



# UNITED STATES PATENT OFFICE.

JOHN SCHMELTER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-FOURTH TO  
MATTHEW STOLZ, OF SAME PLACE.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 280,087, dated June 26, 1883.

Application filed January 31, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN SCHMELTER, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Car-Axle Boxes; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in attachments to car-axle boxes, whereby the dust is excluded from the journals running in such boxes.

The invention consists in the peculiar construction of the parts and their various combinations and operation, as more fully hereinafter set forth.

Figure 1 is a side elevation of a railway axle-box, showing my device in position and in section. Fig. 2 is a central cross-section of the dust-excluder. Fig. 3 is a vertical cross-section. Fig. 4 is a side elevation of the duster; Fig. 5, a vertical central section of the duster-frame.

In the accompanying drawings, A represents a stationary frame, designed to be attached or cast integral, as the case may be, with the inner end of the axle-box; and the inner sides of this frame are provided with vertical faces *a*, in which the duster-frame C may have a vertical movement sufficient to compensate for the slight vertical movement of the axle when in operation upon the track. This duster-frame C is divided into two sections, as shown in Figs. 3 and 4, the upper end of one section being provided with a tongue, *b*, which enters into a corresponding groove, *c*, at the abutting end of the other section, so that each of these sections may have a slight vertical motion without interfering with the movement of the other portion and without breaking joint at the point of intersection. The lower of the two sections is provided with a leather or fiber washer or half-gasket, D, and each of the two sections at their abutting edges is cut out, as shown in Fig. 3, to embrace the axle.

In Fig. 3 the device is shown with the outside plate removed.

E E represent a pair of levers of the form

shown in Fig. 3, which are pivoted to the frame A in such a manner as to embrace the sections which form the duster-frame. These levers are for the purpose of compelling each portion of the duster-frame to retain its relative position. For instance, if from vibration or other cause the upper portion of the frame C is raised, which impinges against the upper portions of these levers E and forces them apart, the lower ends of the levers are brought nearer together and impinge against the friction-wheels F, which are secured to the lower half of the duster-frame and compel it to rise and close the aperture around the axle and below the same, which otherwise would be left open to the admission of dirt. When the whole duster-frame is raised it would leave an aperture at the bottom such as is shown in Fig. 3. To close the side of the duster-frame, it is provided with a slot, *e*, in its lower face, which engages with a tongue, *f*, in the main frame, the tongue and groove both being of sufficient depth to keep such aperture closed in all positions of the duster-frame. By the employment of a device of this construction the lever-guard D may be replaced as often as required, and the duster-frame will always so inclose the axle in its various positions, changed as they are, perhaps, every moment when in operation, to the entire exclusion of dust and dirt.

What I claim as my invention is—

1. The combination, with the axle-box and duster-frame, made in two sections, of the pair of levers, whereby one of the sections is compelled to follow the changing of its fellow, substantially as and for the purposes described.

2. The combination, in a car-axle box, of a duster-frame composed of two parts, one of such parts being provided with a tongue upon its upper edge, and its fellow with a corresponding groove upon its lower edge, with the levers E, substantially as and for the purposes specified.

3. The levers E, pivoted to the frame A, and constructed substantially as described, for compelling each section of a duster-frame attachment to a car-axle box to follow the changing position of each portion of said duster-frame, as set forth.

4. In a car-axle duster, the combination of the main frame A, provided with tongue *f*, the duster-frame C, provided with grooves *e*, and the levers E, substantially as and for the purposes described.

5. A car-axle duster consisting of the main frame A, the duster-frame C, the leather gasket D, the levers E, and the friction-wheels F, the parts being constructed, arranged, and op-

erating substantially as and for the purposes so specified.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 14th day of December, 1882.

JOHN SCHMELTER.

Witnesses:

H. S. SPRAGUE,  
E. SCULLY.