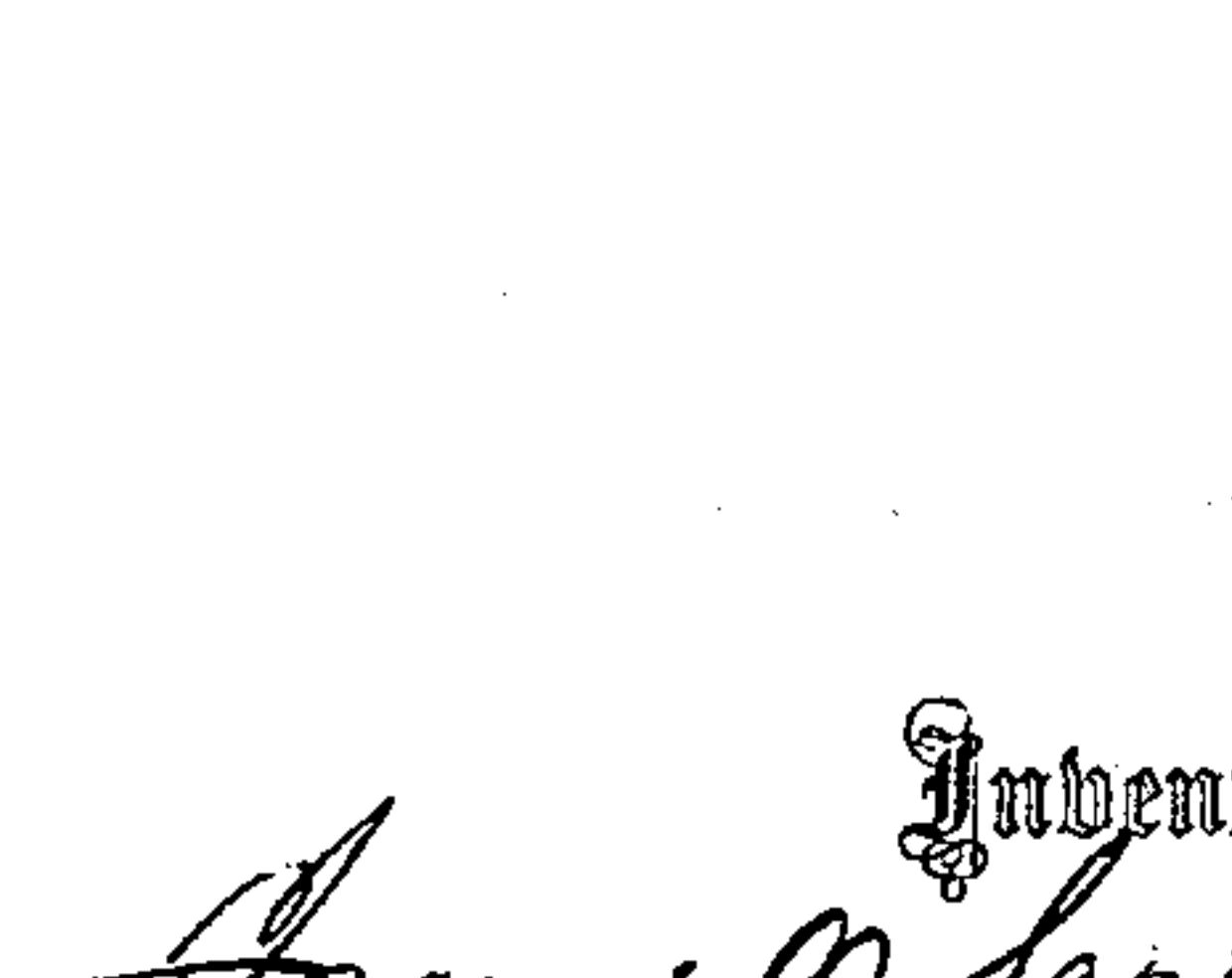
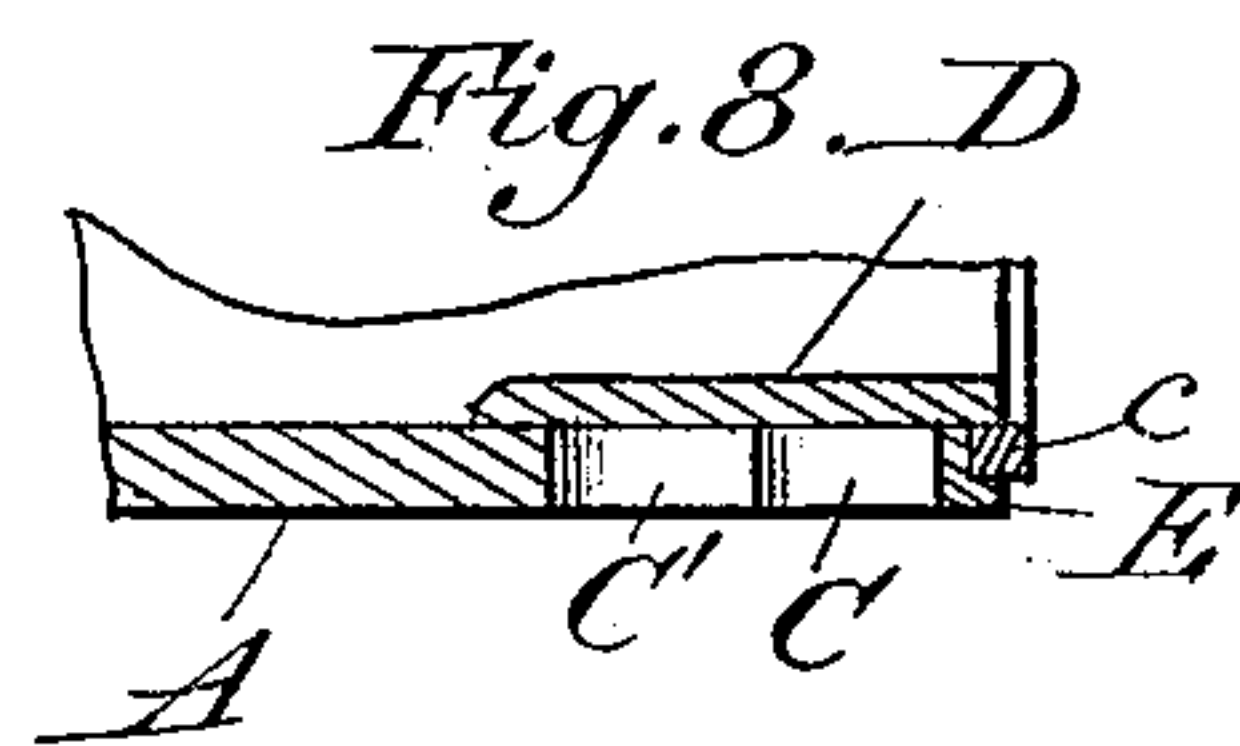
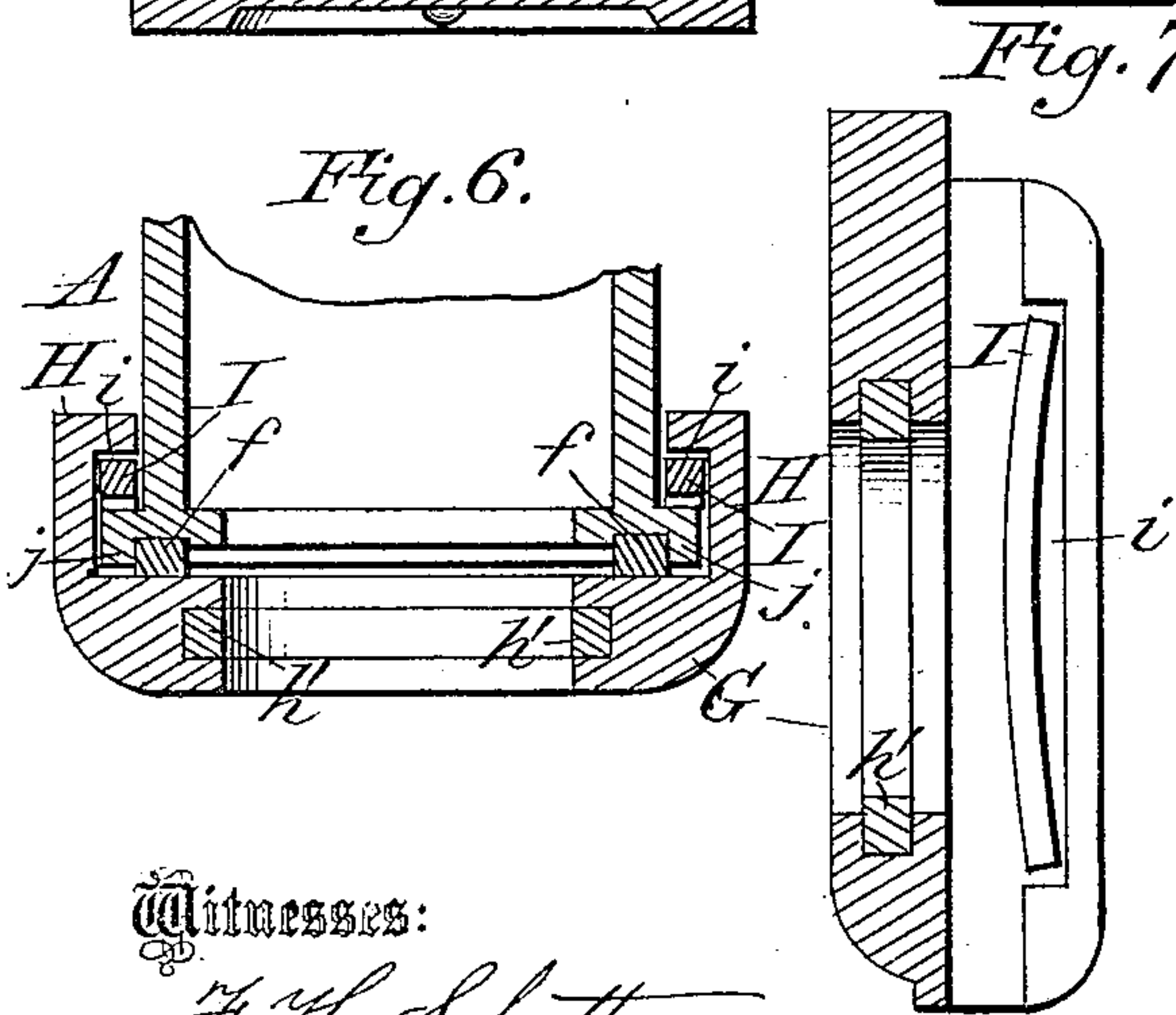
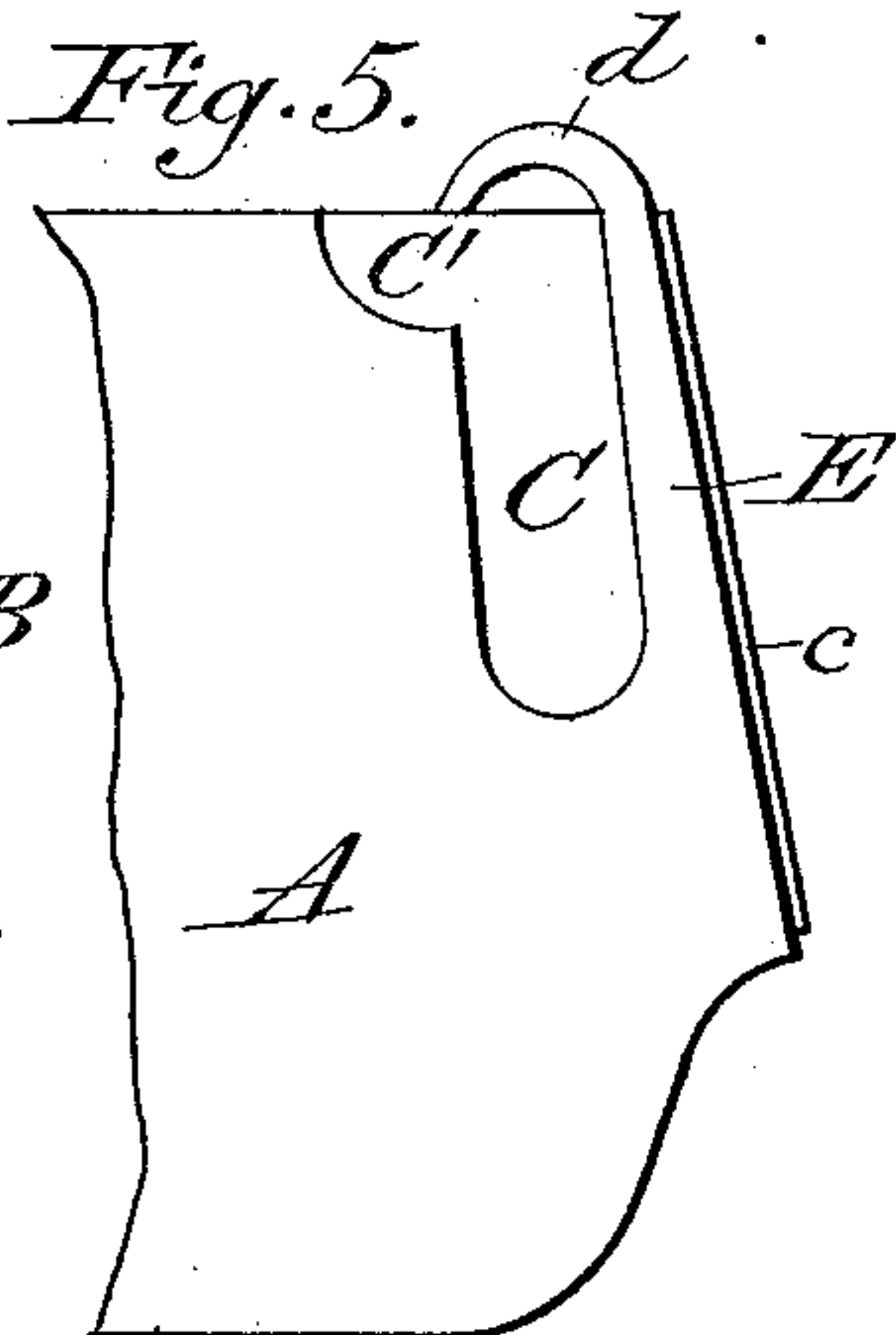
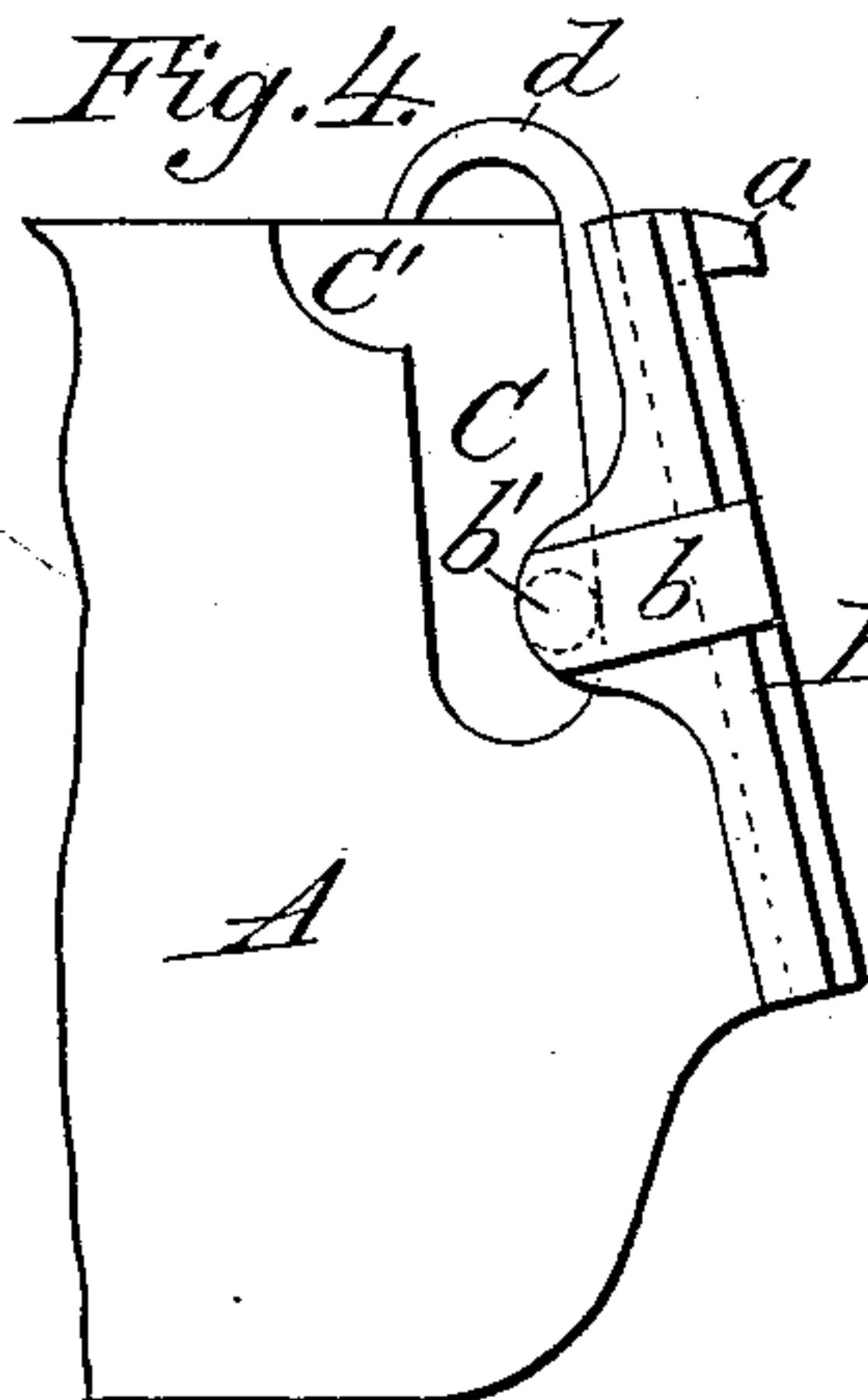
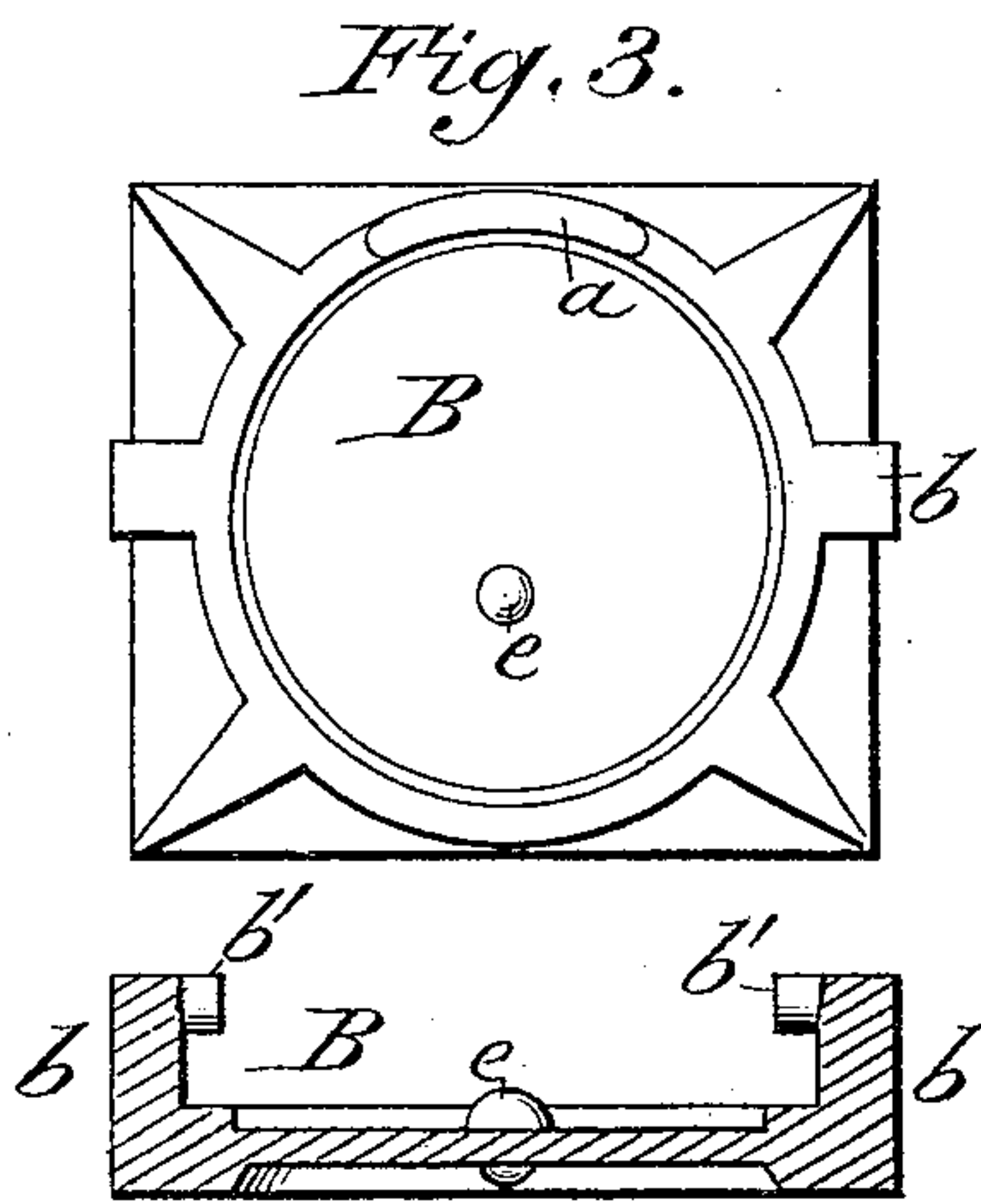
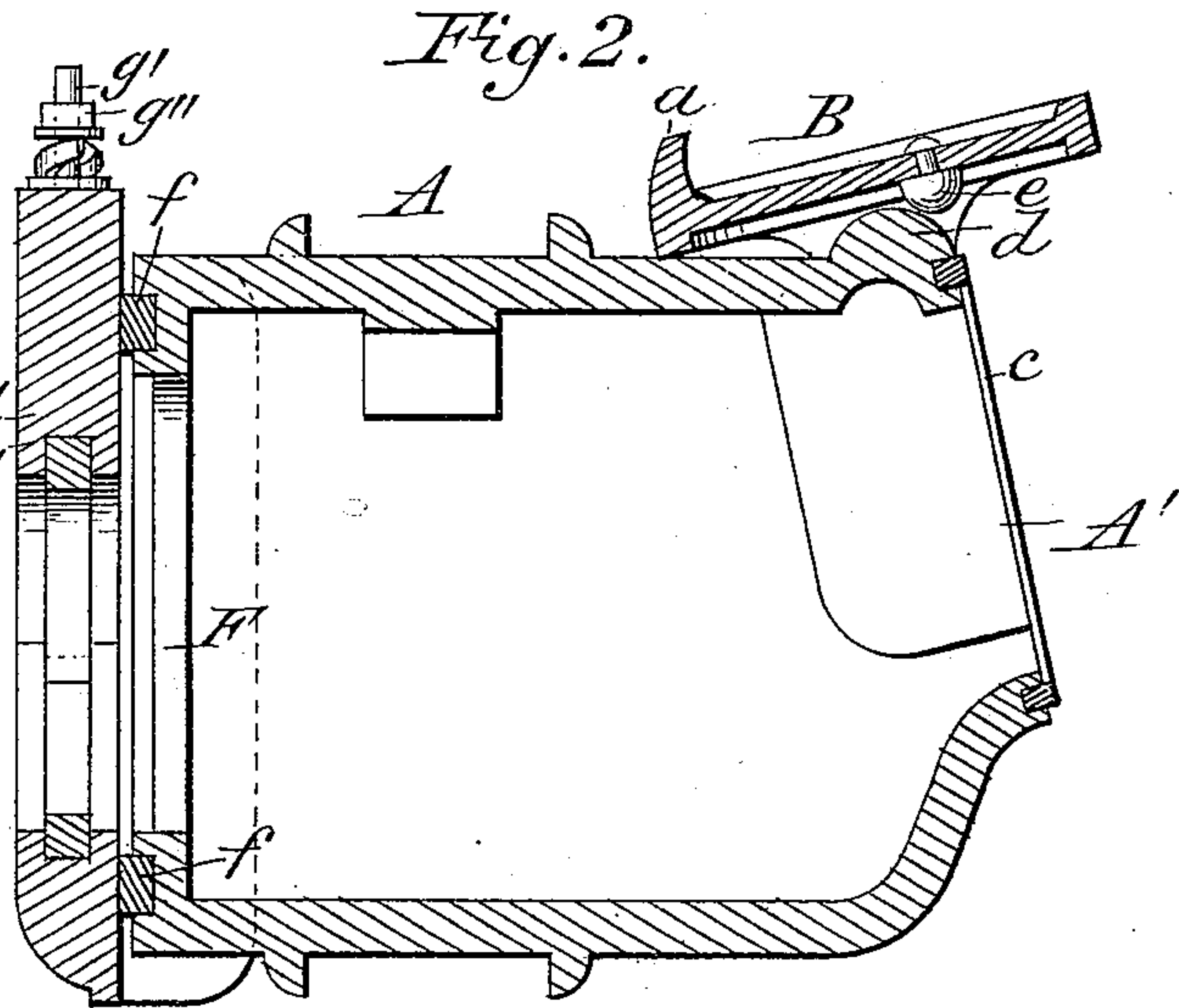
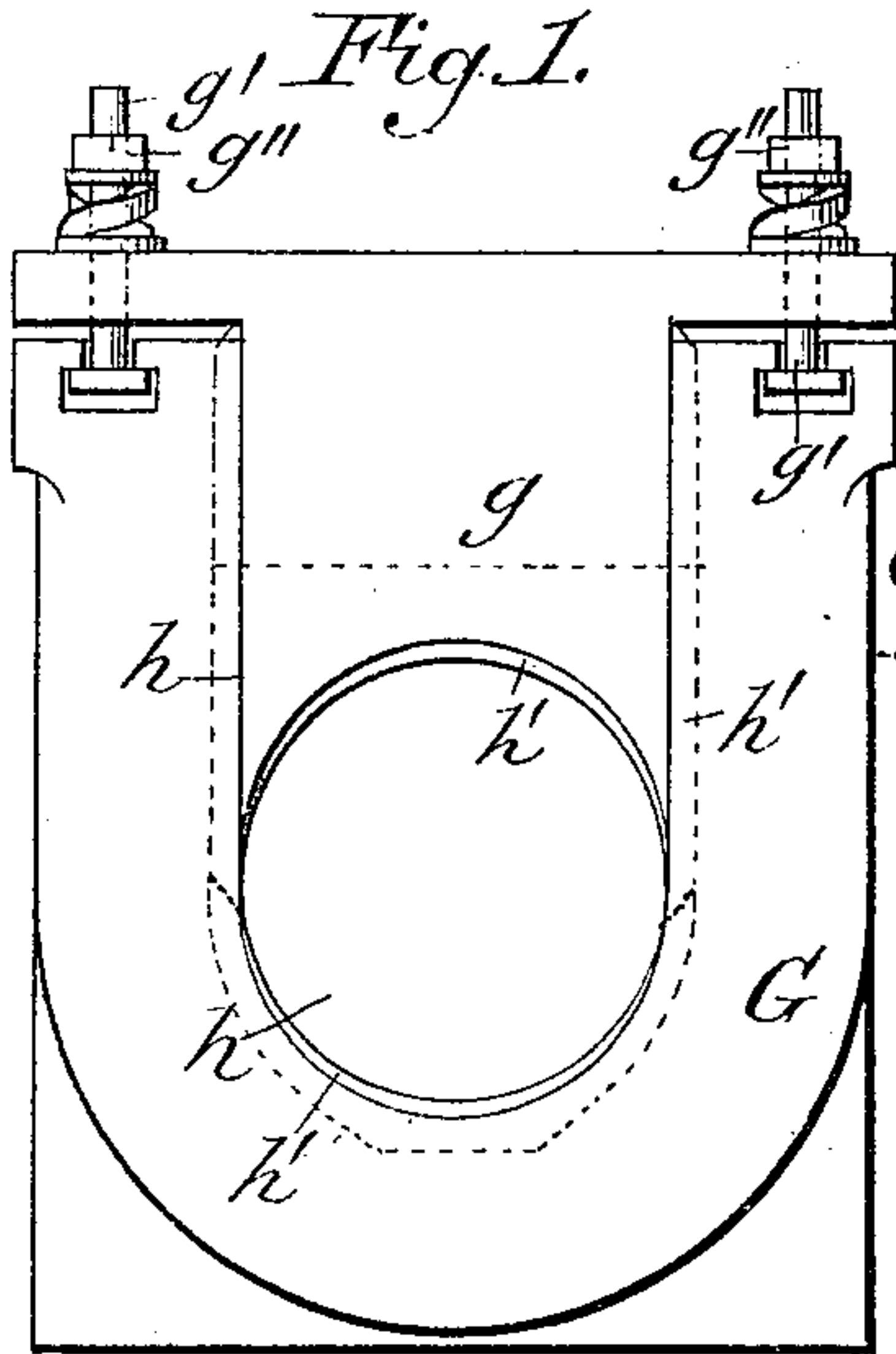


(No Model.)

J. O. SCOTT.
CAR AXLE BOX.

No. 258,813.

Patented May 30, 1882.



Witnesses:

J. H. Schott

J. A. Stockman

Per

Inventor
James O. Scott
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UNITED STATES PATENT OFFICE.

JAMES O. SCOTT, OF TYLER, TEXAS.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 258,813, dated May 30, 1882.

Application filed March 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES O. SCOTT, of Tyler, in the county of Smith and State of Texas, have invented certain new and useful
5 Improvements in Axle-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference
10 being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-axle boxes; and it consists in an improved
15 cap for the box, a dust guard or plate, and packing for the same, the object being to render the axle-box dust and oil tight, as will be hereinafter more fully described.

In the annexed drawings, Figure 1 is an end
20 view of the box, showing the dust-plate. Fig. 2 is a central longitudinal section of the box with the cap elevated; Fig. 3, a plan and section of the cap. Fig. 4 is a side view of part of the box, showing the lid down; Fig. 5, a
25 similar view, but with the cap or lid removed to show the grooves in which the cap slides. Fig. 6 is a horizontal cross-section of Fig. 1; Fig. 7, a vertical section of the dust-plate, and Fig. 8 is a detail view.

30 A represents the axle or oil box, of the usual construction, for containing the oil and packing, and in which the axle revolves.

A' is the usual opening in the front of the box for the insertion of oil and packing.

35 B is the cap or lid for covering the opening A'. It is made of suitable material, and is a rectangular plate having at one end a lug, *a*, which serves as a handle to raise the cap, when desired.

40 At each end of the cap B is an arm, *b*, provided with a pin, *b'*, at right angles thereto, as shown in Figs. 3 and 4. The pins *b'* slide in grooves C on each side of the box A, near its front end. These grooves C are a little
45 wider than the pins *b'*, and extend down the side of the box a sufficient distance, so that when the pins rest in the bottom thereof the cap B will cover the opening A'. The grooves are cut into the sides of the box a depth equal
50 to the length of the pins.

D is a wall or strengthening-piece, forming a backing for the grooves. (See Fig. 8.) Be-

tween the groove and the front end of the box is a strip or projection, E, of the box, into which is fitted the necessary packing *e*, extend- 55
ing around the four sides of the opening A', and on which packing rests the cap B. The packing *e* can be made of any material that will accommodate itself to an uneven surface, as leather or rubber. By this means the open- 60
ing A' is made dust and oil tight.

Across the front end of the box, at its top, is a ridge, *d*, against which the knob or rivet *e* in the cap B strikes and prevents the cap from being drawn farther back and out of the 65
grooves C. A lip or extension, C', of the groove C, at the top of the box, clearing the ridge *d*, permits of the withdrawal of the pins and removal of the cap B from the box, when the rivet *e* is detached from the cap. 70

F is the usual enlarged opening in the rear face of the box, through which the axle or shaft passes. Suitable packing, *f*, is placed around the four sides of this opening, on which rests the dust guard or plate G. This plate is 75
rectangular in shape, and has a long slot, *h*, cut in its face, along its center line, the slot being semicircular at the bottom and of a width equal to the diameter of the axle. In this slot *h* slides snugly a tongue or plate, *g*, 80
cut away in a semicircular manner at its end to fit over the axle. The tongue, at its top, is wider than the slot *h*, and extends over the dust-plate, and is connected to the same by means of the bolts *g'*, one on each side, which 85
pass through the tongue and are secured in recesses in the dust-plate G, as seen in Fig. 1. Around the bolts *g'* are placed washers and split spring-washers, and nuts *g''* on the washers. By screwing down the nuts *g''* the tongue 90
g is delicately and yieldingly adjusted upon the axle and the wear of the packing about the axle taken up.

The packing *h'*, of wood or other suitable material, is placed in grooves around the dust- 95
plate and projects slightly beyond the plate and tongue, as seen in Fig. 1. The object of this packing is that as it wears away the axle and plate gradually come in contact with each other, and a perfect fit around the axle is ob- 100
tained, and the expense of boring out the plate is saved.

At the back of the plate G are two strips or projections, H, provided with recesses *i*, in

which are placed the segmental-shaped springs I, which bear against the backs of their own recesses and against two ribs, *j*, on the front of the box, as shown in Fig. 6. By this means
 5 the dust-plate is held tightly against the packing *f* in the front of the box, the wear taken up, and the plate allowed to vibrate with the axle. Thus it will be seen that I obtain a substantial, cheap, and dust and oil tight axle-
 10 box.

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

1. In an axle-box, the combination, with the
 15 box A, having ridge *d*, and opening *A'*, provided with packing *c* around its edges, grooves C, with extensions *C'*, wall D, and projection E, with recess for packing *c*, of the cap B, having arms *b*, provided with pins *b'*, knob *e*, and handle
 20 *a*, substantially as shown, and for the purposes set forth.

2. The combination, in an axle-box, of the

box A, having opening F, with packing *f* around its edges, and ribs *j*, with the dust-plate G, having strips H, provided with recesses *i*, segmental springs I, and tongue *g*, packing *h'*, bolts *g'*, and nuts *g''*, all arranged, constructed, and operating in the manner and for the purposes substantially as shown and described.

3. An axle-box consisting of box A, having
 30 ridge *d*, opening *A'*, packing *c*, grooves C, with extensions *C'*, cap B, having arms *b*, provided with pins *b'*, knob *e*, and handle *a*, dust-plate G, having slot *h*, strips H, provided with recesses *i*, segmental springs I, and tongue *g*,
 35 bolts *g'*, nuts *g''*, and packing *h'*, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES O. SCOTT.

Witnesses:

J. B. RAMSOUR,
 GEO. PANBRON.