

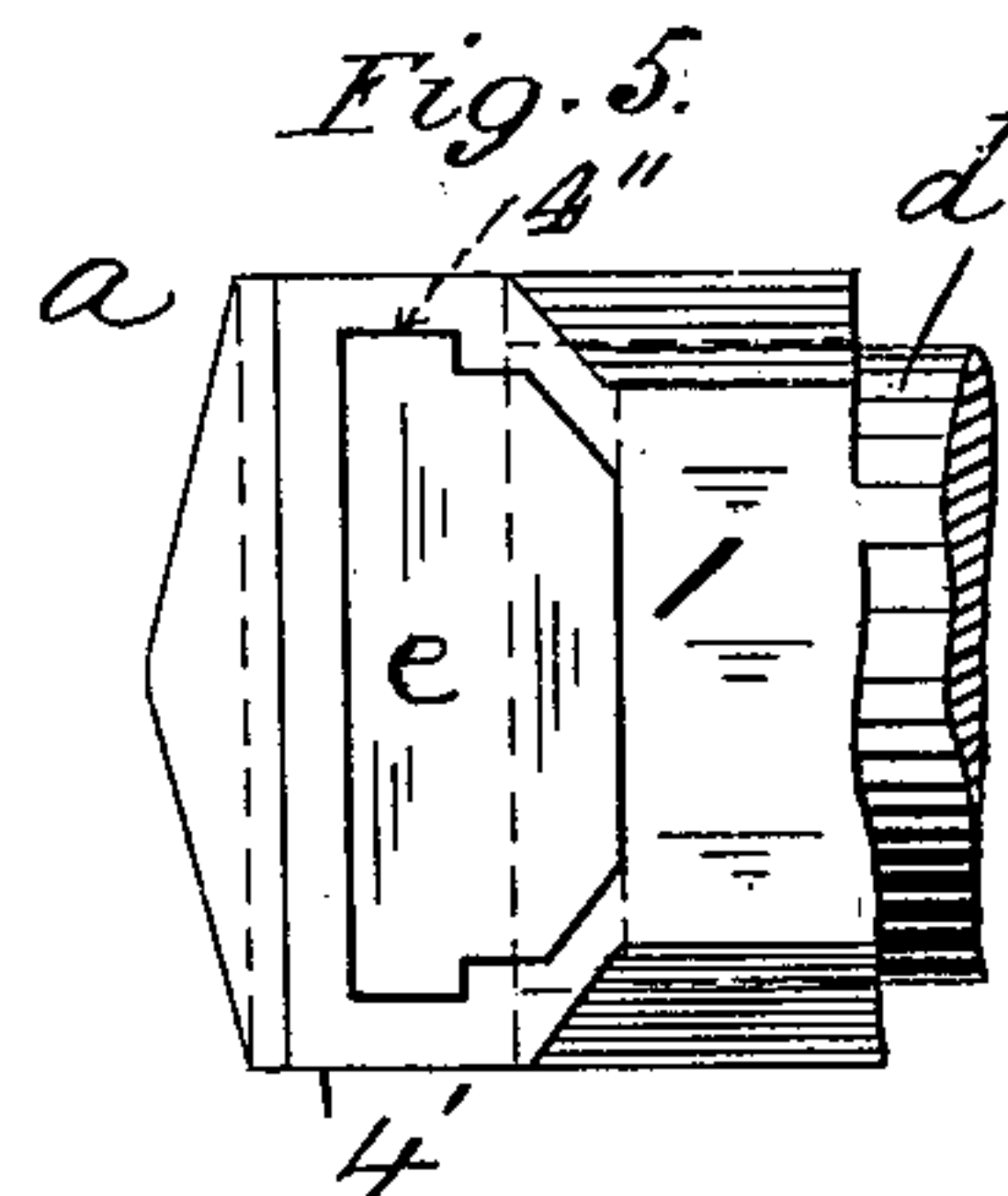
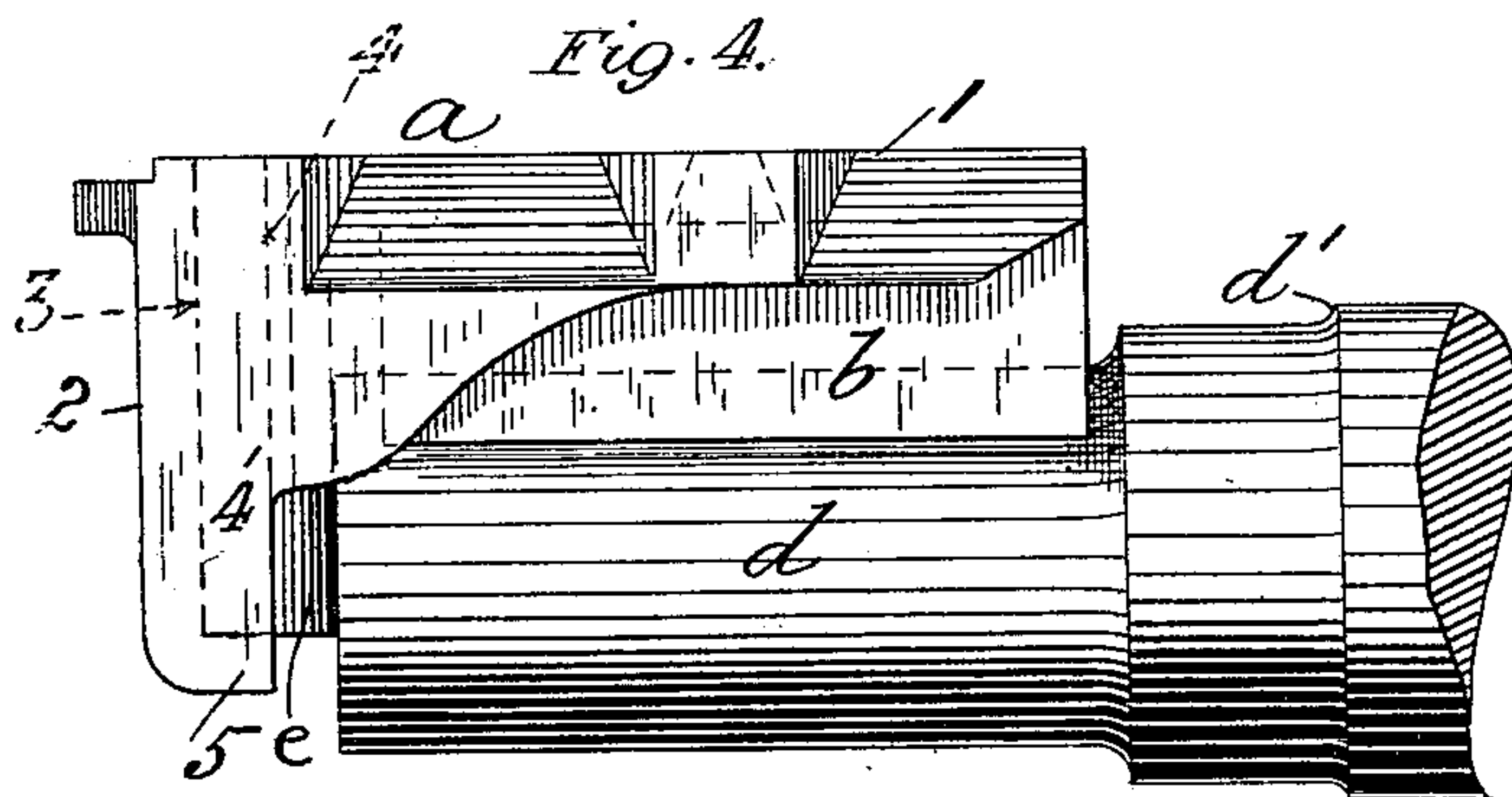
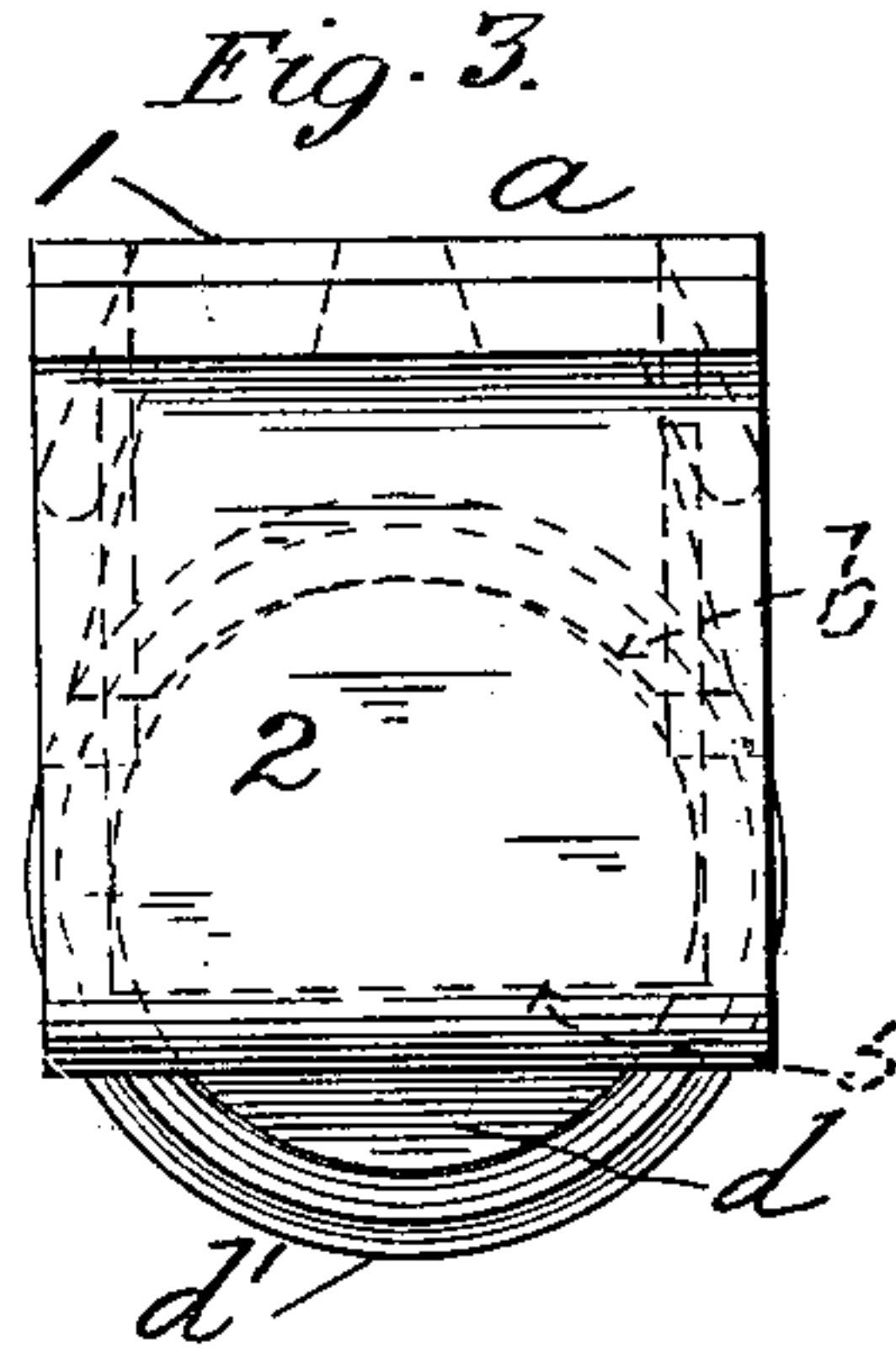
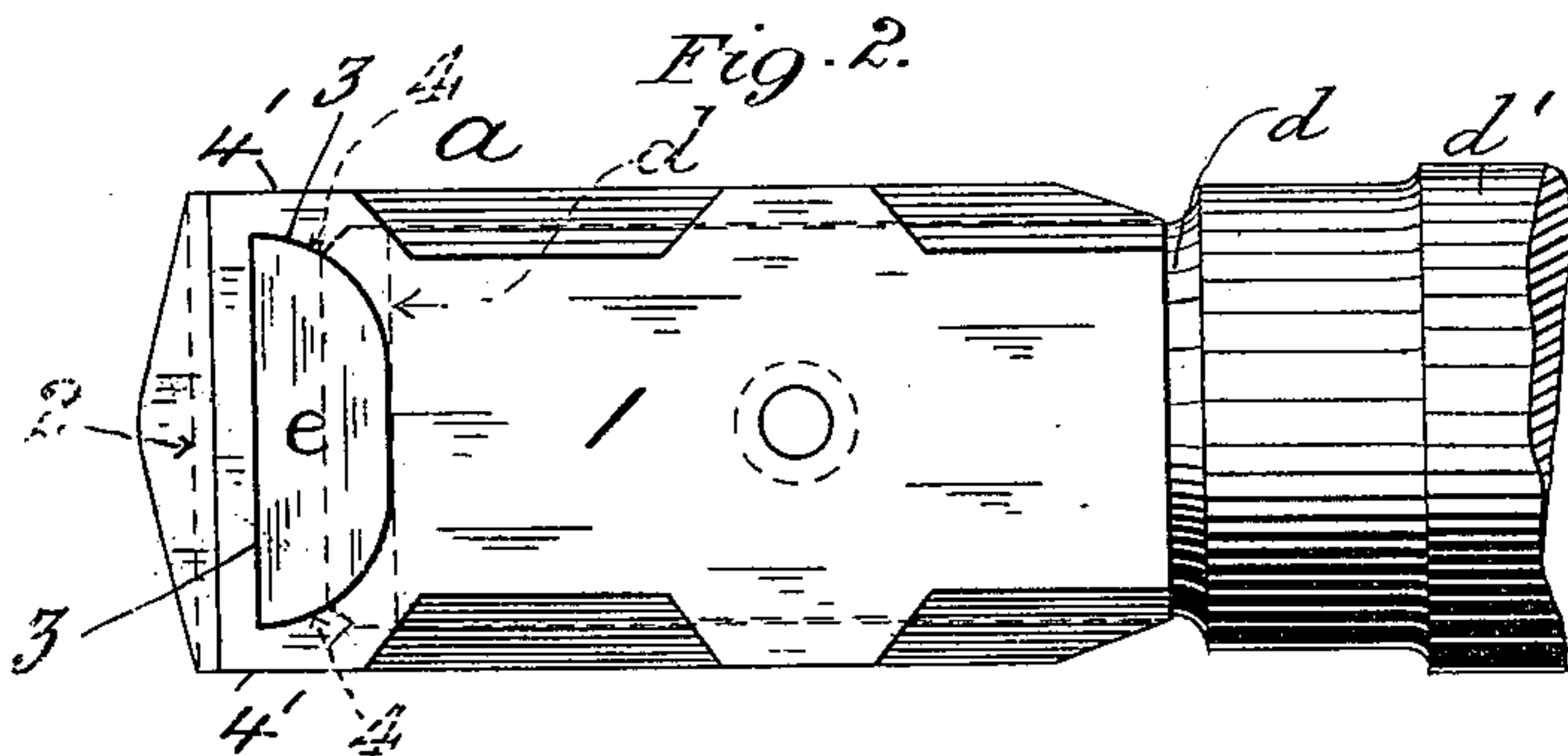
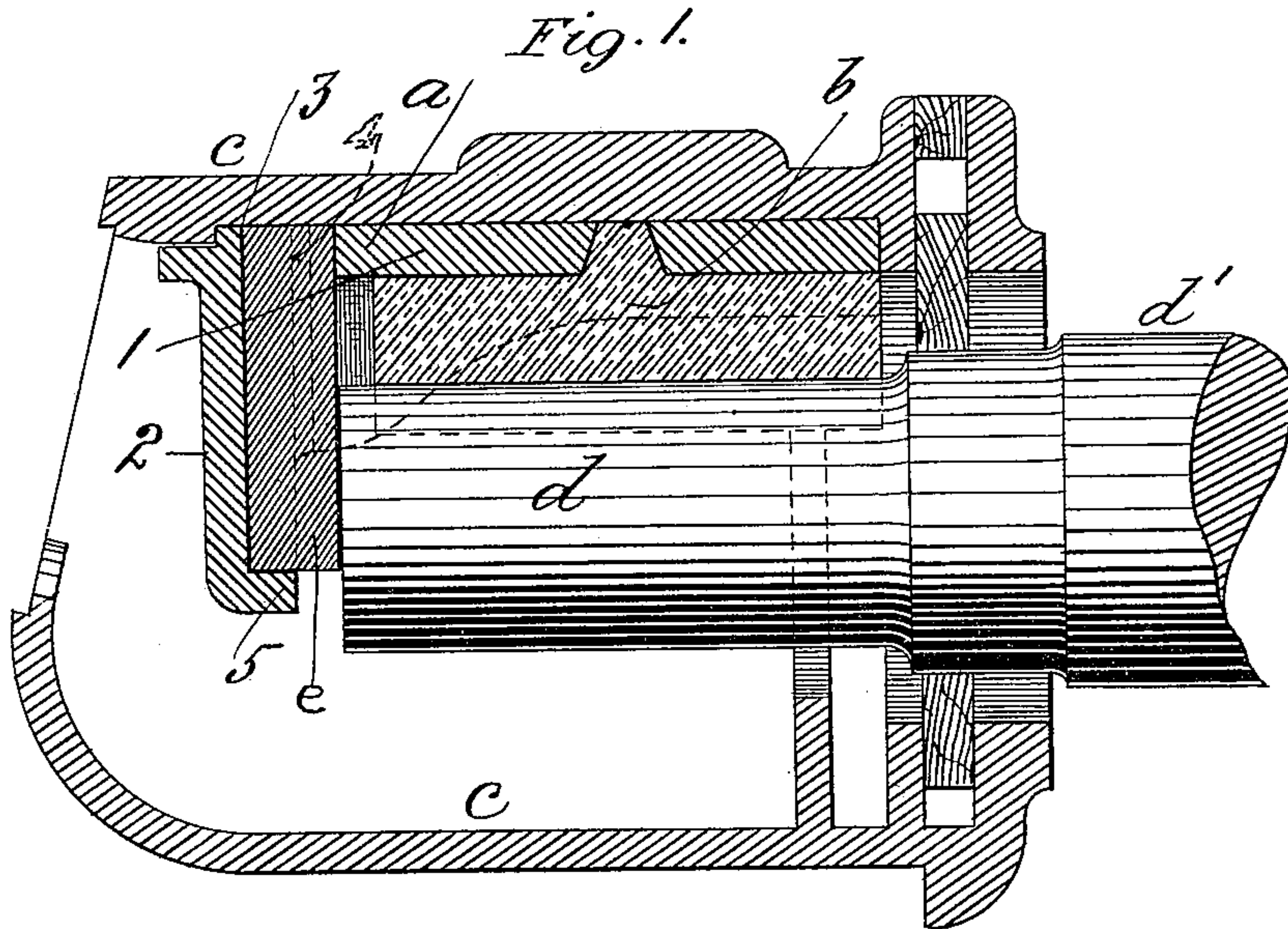
No. 659,232.

Patented Oct. 9, 1900.

C. H. HOWARD.
CAR JOURNAL BEARING STOP KEY.

(Application filed July 30, 1900.)

(No Model.)



WITNESSES
O. T. Ledford
F. R. Purdy.

INVENTOR
Clarence H. Howard
By Edward W. Furell
His atty

UNITED STATES PATENT OFFICE.

CLARENCE H. HOWARD, OF ST. LOUIS, MISSOURI.

CAR-JOURNAL-BEARING STOP-KEY.

SPECIFICATION forming part of Letters Patent No. 659,232, dated October 9, 1900.

Application filed July 30, 1900. Serial No. 25,342. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE H. HOWARD, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented
5 a new and useful Improvement in Car-Journal-Bearing Stop-Keys, of which the following is a specification.

My invention relates to a journal-bearing stop-key for a railroad-car.

10 In an ordinary journal-bearing stop-key the stop-plate, which bears against the outer end of the journal, is made of soft brass and secured to the inside face of the depending outer ear or lug of the stop-key by rivets, which as
15 the stop-plate wears become loosened and render the stop-plate liable to be broken and detached, thereby necessitating its frequent renewal and causing delay and expense.

My invention has for its object to enable
20 the stop-plate to be readily and quickly applied to and removed from the stop-key and securely held thereby without the use of fastenings.

It consists in features of novelty, as hereinafter described and claimed, reference being had to the accompanying drawings, forming part of this specification, whereon—

Figure 1 is a longitudinal vertical section through my improved journal-bearing stop-key in position within the axle-box and applied to the journal, shown in elevation with the axle broken away; Fig. 2, a top plan of the stop-key and journal with the axle-box removed; Figs. 3 and 4, an outer end elevation and side elevation, respectively, of the
35 same; and Fig. 5, a similar view to Fig. 2, with the parts broken away, showing a modification of the device.

Like letters and numerals of reference denote like parts in all the figures.

a represents my improved journal-bearing stop-key, which, with the ordinary journal brass or bearing *b*, is interposed between the top of the axle-box *c* and the journal *d* of the
45 axle *d'* in the usual well-known manner.

Through the horizontal bearing part 1 of the stop-key *a*, adjacent to its outer vertically-dependent lug or ear 2, is formed a hole 3, which may be of any suitable contour, but
50 preferably of a plano flattened convex form, as shown. The straight portion of the edge or perimeter of the hole 3 is vertically alined

to the inside face of the lug 2, while its curved portion for a suitable distance from its junction with the straight portion at each end of
55 the latter is vertically alined to a correspondingly-curved groove 4, formed vertically in the opposite side walls 4' thereat, respectively, of the stop-key *a*.

From the bottom of the lug 2 projects inwardly a flange 5, which unites with the walls 4' and forms therewith and with the inside face of the lug 2 a housing into which a stop-plate *e*, corresponding in size and shape in cross-section to the hole 3 and adapted to fit
65 closely in the grooves 4, is inserted from above the stop-key *a* through the hole 3 until its lower end rests upon the bottom flange 5, in which position the stop-plate *e* is securely held in place by the surrounding edge of the hole
70 3, combined with the inside faces, respectively, of the lug 2 and grooves 4 and with the flange 5 without the use of rivets or other fastenings, the inner flattened convex and vertical face of the stop-plate *e* projecting
75 beyond the grooves 4 and bearing at its flattened portion against the outer end of the journal *d* in a similar manner to an ordinary stop-plate.

The stop-plate *e* may be made of wood—such
80 as lignum-vitæ—metal, rubber, or any other suitable material, or in lieu of making the hole 3 and corresponding stop-plate *e* of a plano-convex form, as above described, they may be made of any suitable rectilinear con-
85 tour, as shown in Fig. 5, in which case the grooves 4' in the side walls 4' will conform thereto, or they may be of any other contour, curved or straight, that will insure the retention of the stop-plate in place against the in-
90 side face of the lug 2 of the stop-key *a* independently of rivets or other fastenings. By my invention the stop-plate *e*, being firmly held against the lug 2 by the grooves 4 and prevented from vertical movement by the
95 flange 5 and axle-box *c*, it cannot become detached from the stop-key *a*, even if broken, and can be readily and quickly removed and renewed through the hole 3 without the necessity of cutting out rivets and reriveting, as
100 in the case of an ordinary stop-plate.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A journal-bearing stop-key having a

bearing portion and a lug or ear projecting therefrom at right angles, and having a hole through the bearing portion, the edge or perimeter of the said hole being partly alined to the inside faces respectively of the lug, and of a groove adjacent thereto in each side of the stop-key, the said lug having a bottom flange, and a stop-plate adapted to fit between the said faces and within the said hole, substantially as described.

2. A journal-bearing stop-key having a bearing portion and a lug or ear projecting

therefrom at right angles, and having a hole through the bearing portion, the edge or perimeter of the said hole being partly alined to the inside face of the lug, the said lug having a bottom flange, and a stop-plate adapted to bear against the said face and flange and to fit within the said hole, substantially as described.

CLARENCE H. HOWARD.

Witnesses:

O. T. LEDFORD,

EDWARD W. FURRELL.