

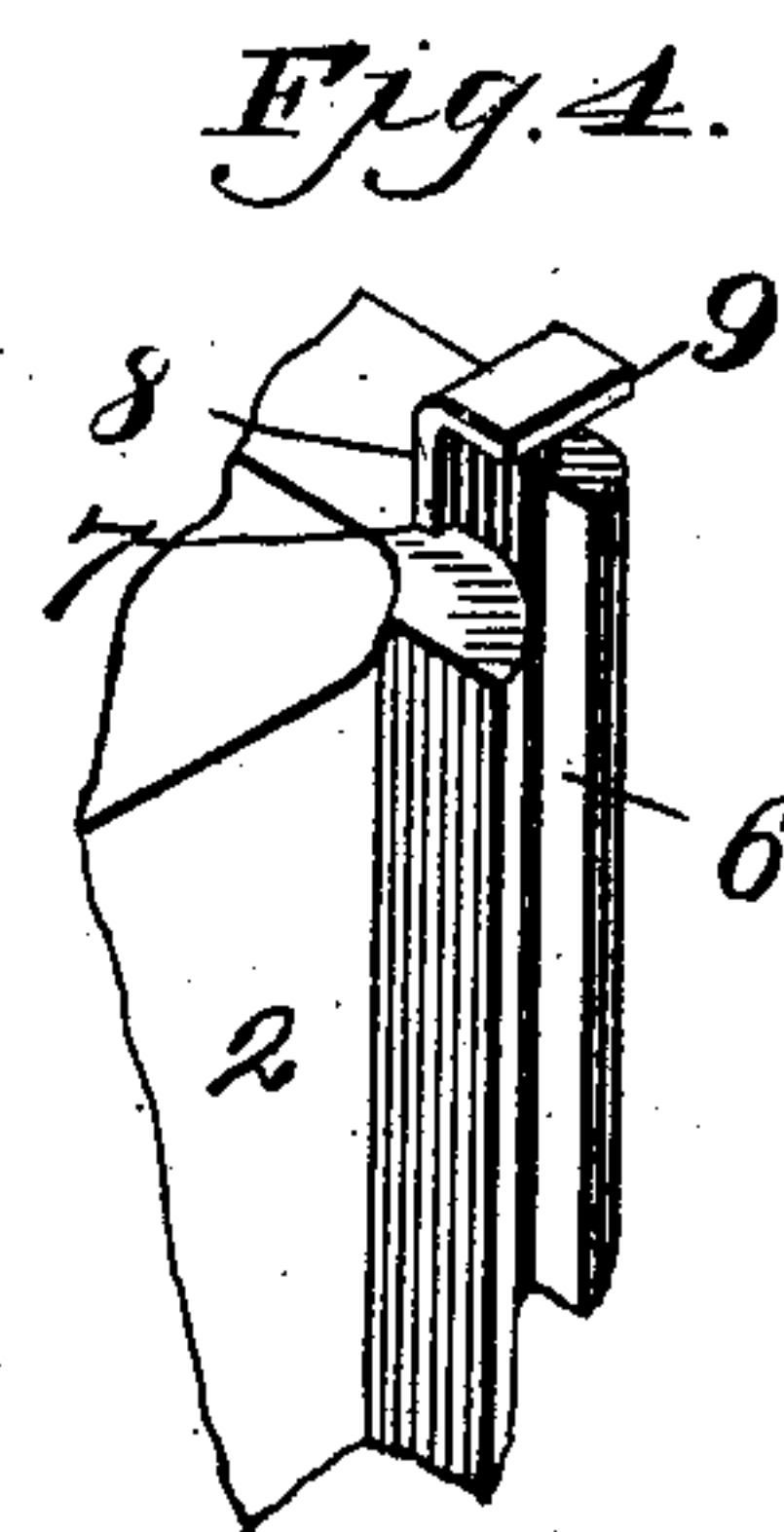
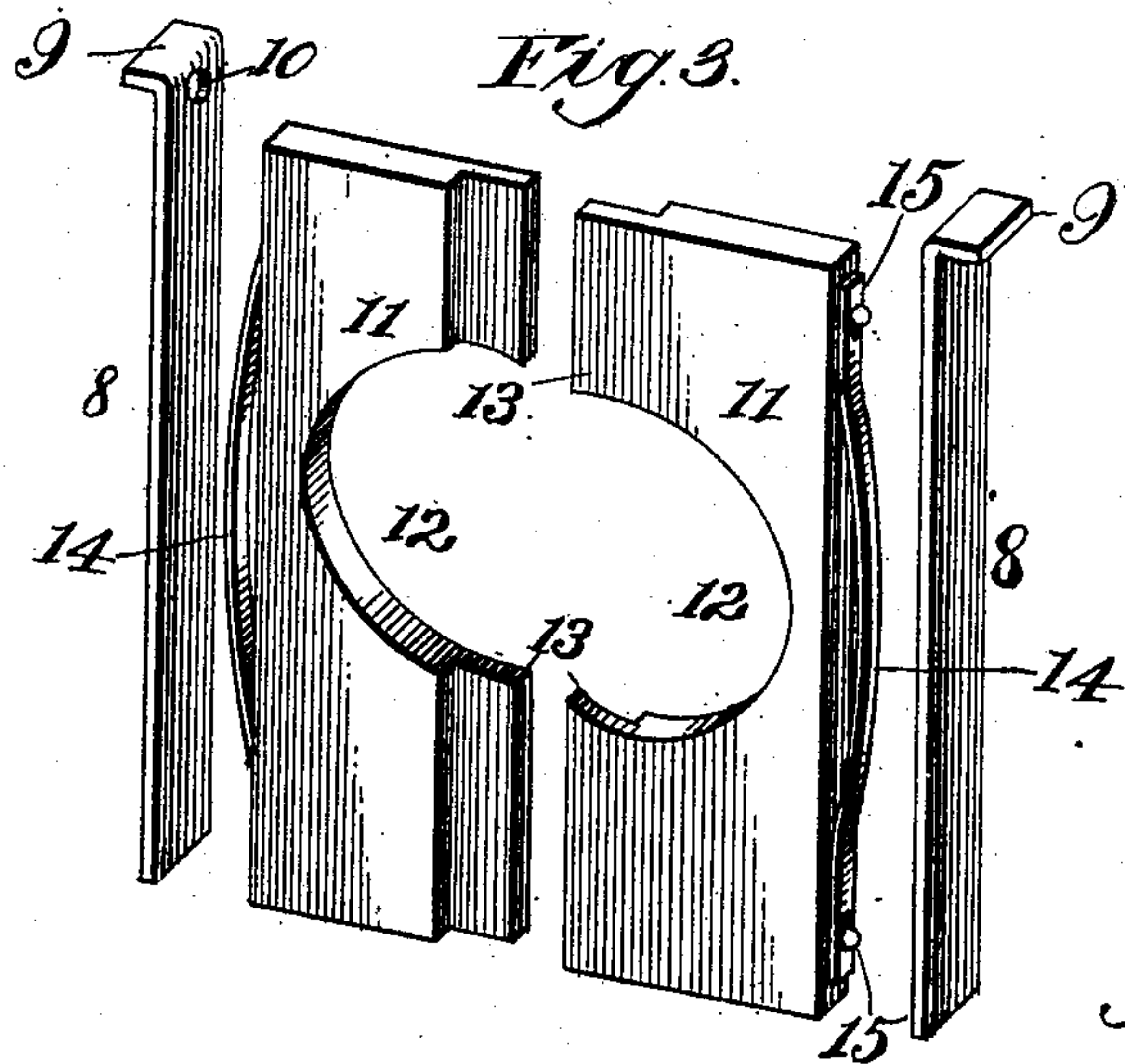
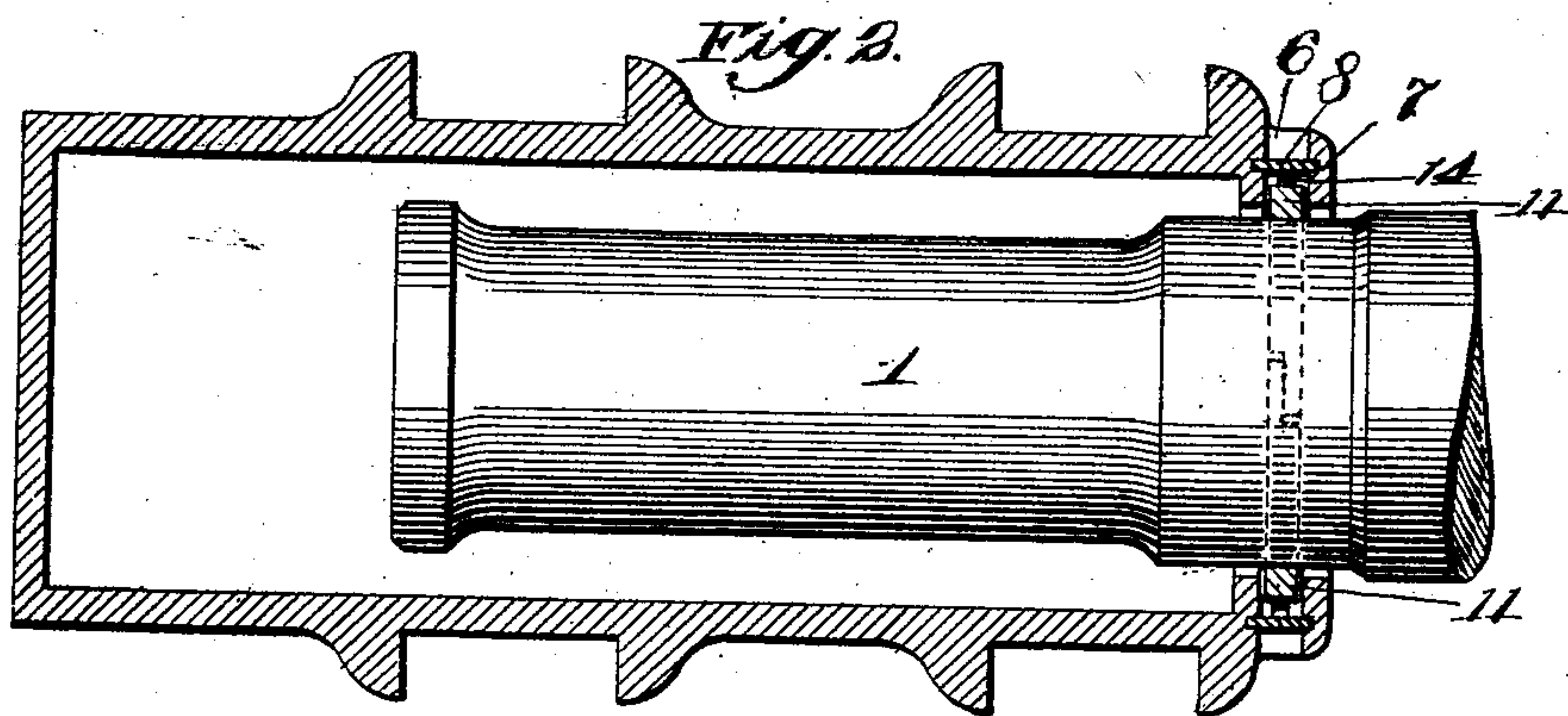
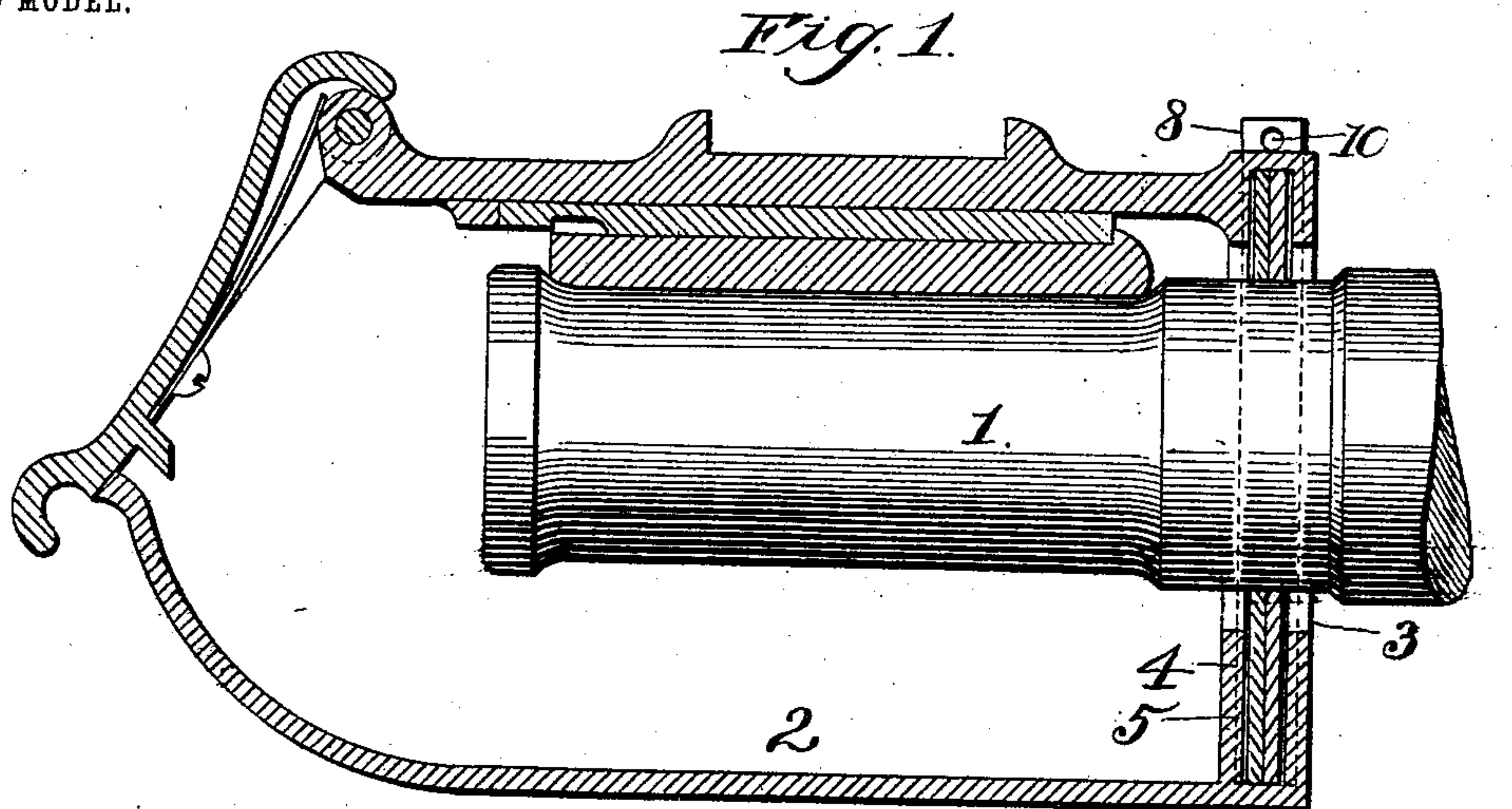
No. 721,836.

PATENTED MAR. 3, 1903.

J. ROGERS.
DUST PROOF JOURNAL BOX FOR CARS.

APPLICATION FILED MAR. 10, 1902.

NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOHN ROGERS, OF KANSAS CITY, KANSAS.

DUST-PROOF JOURNAL-BOX FOR CARS.

SPECIFICATION forming part of Letters Patent No. 721,836, dated March 3, 1903.

Application filed March 10, 1902. Serial No. 97,404. (No model.)

To all whom it may concern:

Be it known that I, JOHN ROGERS, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Dust-Proof Journal-Boxes for Cars, of which the following is a specification.

My invention relates to dust-proof journal-boxes for cars; and my object is to produce a device of this character having a dust-guard at its rear end which may be removed and replaced without necessitating the removal of the box from the journal, and therefore without requiring the car to be jacked up, as is now customary.

A further object is to produce a sectional dust-guard for the box and press said sections yieldingly together and against the journal, and thereby effect a snug fit upon the latter as long as the guard is in service.

The invention consists, essentially, in a journal-box of any suitable or preferred type having the usual dust-guard chamber, but having said chamber open at its sides instead of at its upper end, as is now the case, a pair of sliding plates normally closing said side openings, a dust-guard split vertically to provide sections engaging the journal from opposite sides, and a pair of springs interposed between the outer edges of the dust-guard sections and said slide-plates and holding said sections pressed yieldingly toward and against the journal.

The invention further consists in certain novel and peculiar features of construction and combinations of parts, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section of a dust-proof journal-box embodying my invention. Fig. 2 is a horizontal section of the same. Fig. 3 is a perspective view detached of the dust-guard proper, the plates for closing the side openings of the box, and the springs for pressing the dust-guard sections yieldingly together. Fig. 4 is a perspective view showing one of the rear corners of the box.

In the said drawings, 1 designates the car-journal, and 2 the box thereon, the same being provided with the usual opening 3 at its rear end and with an internal flange 4, corre-

sponding in form to the rear end of the box and disposed therefrom a suitable distance to provide the usual dust-guard chamber 5. Said box is different from the usual journal-box in that instead of having an opening in its upper side registering with the dust-guard chamber it is provided with side openings or slots 6, registering with and corresponding approximately in length and width to the dust-guard chamber 5, the walls of said openings or slots being provided with vertical oppositely-disposed grooves 7 to receive the slide-plates 8. The slide-plates 8 are adapted to fit in said grooves so tightly that it is impracticable to either place them in or remove them from position without the use of a hammer or equivalent tool, and to facilitate their removal they are provided at their upper ends with outwardly-projecting arms 9 to receive the blows or sharp taps of the tool, or they may be provided with holes 10 above the top of the box, into which a pointed tool or chisel may be inserted and then struck by a rock or hammer.

The guard proper, which fits in the dust-guard chamber, is ordinarily simply of wood with a hole in it to receive the journal and obviously, therefore, will fit the latter snugly only for a short time.

My improved dust-guard, while composed of wood or equivalent material, is made in sections or halves 11, provided with semicircular holes 12 and with vertical tongues 13 at their inner edges, said tongues being conjointly equal in thickness to the guard and so disposed that they overlap each other slightly when the guard is first placed in the box and gradually more and more as the semicircular holes 12 are worn deeper by the frictional engagement with the journal. The guard-sections, which obviously must be introduced into the dust-guard chamber from opposite sides of the journal, are pressed yieldingly together by means of semi-elliptic springs 14, having a pin-and-slot connection, as at 15, with the outer edges of said sections and bearing at their middle against the slide-plates 8, the latter, of course, being driven to position after the guard-sections are properly disposed in the chamber.

It is obvious that a dust-guard constructed as described will prevent the access of dust and sand to the journal-box as long as it is in

service, because its sectional construction permits it to be maintained by the springs in a close frictional relationship with the journal. It is also obvious that it possesses the
5 other advantages enumerated in the statement of invention and that its cost, taking into consideration the fact that it can be secured in or removed from position without jacking up the car and removing the journal-
10 box, will be materially less than the ordinary type of journal-box. It is also apparent that my improved journal-box for cars possesses the desirable features of simplicity, strength, and durability and that its use will result in
15 the elimination of a great deal of unnecessary wear upon the bearings and in the saving of considerable oil and lubricating-waste.

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

The combination of a journal-box having in its sides vertical openings or slots registering with its dust-guard chamber, with the walls of such openings or slots vertically grooved,
25 a dust-guard occupying said chamber, con-

sisting of two vertical sections having substantially semicircular holes in their inner edges and having above and below said holes overlapping tongues, which conjointly equal the thickness of the dust-guard sections, the
30 width of such tongues being such that when such semicircular holes fit snugly upon the axle, the tongues overlap for only a part of their width so as to permit the sections to move inward or toward each other as the
35 holes thereof increase in depth by frictional engagement with the revolving axle, a pair of vertical plates fitting slidably in said grooves and closing the slots or openings of the box, and springs interposed between said
40 plates and the dust-guard sections so as to force the latter inward as said holes increase in size.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN ROGERS.

Witnesses:

H. C. RODGERS,
G. Y. THORPE.