

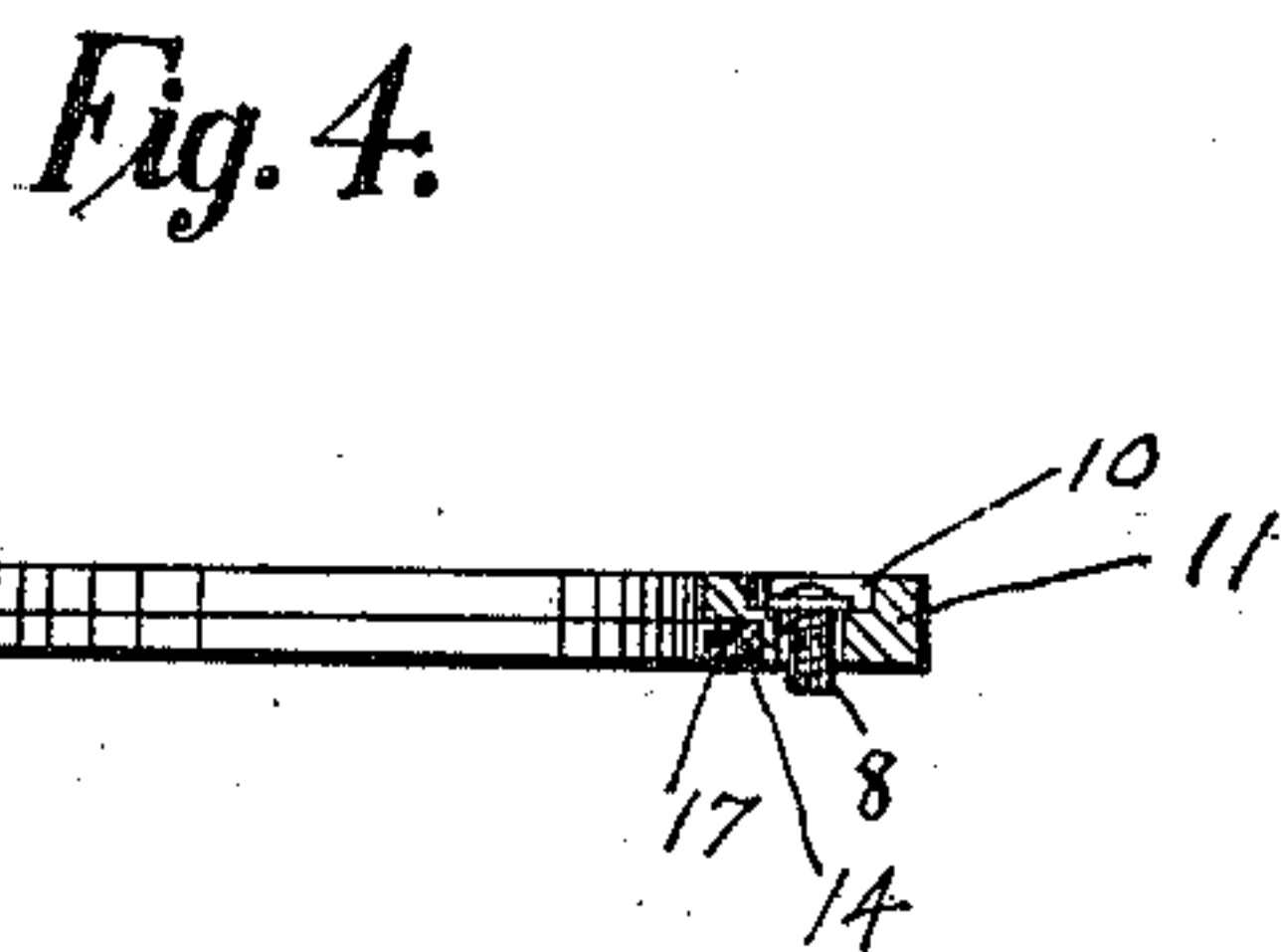
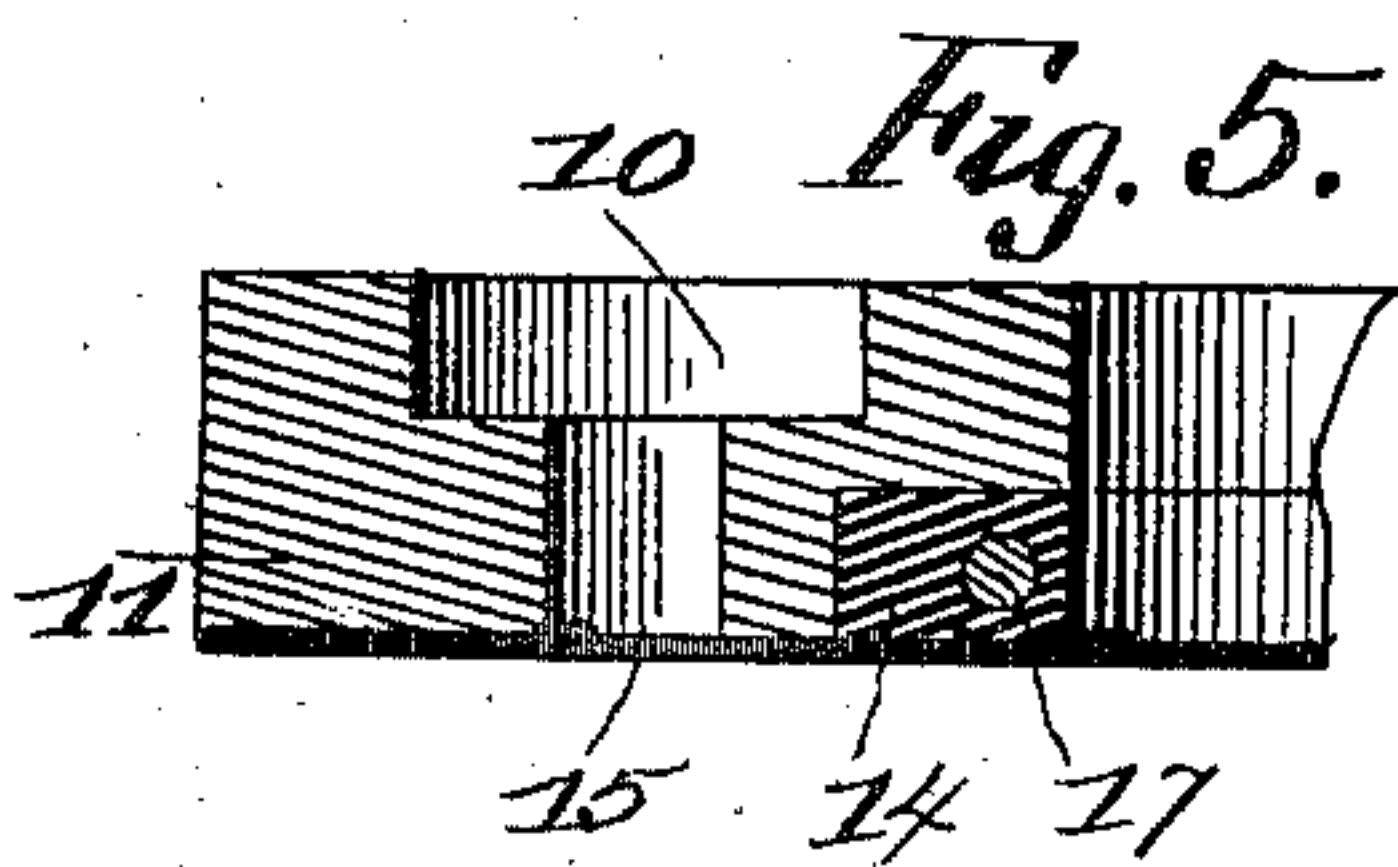
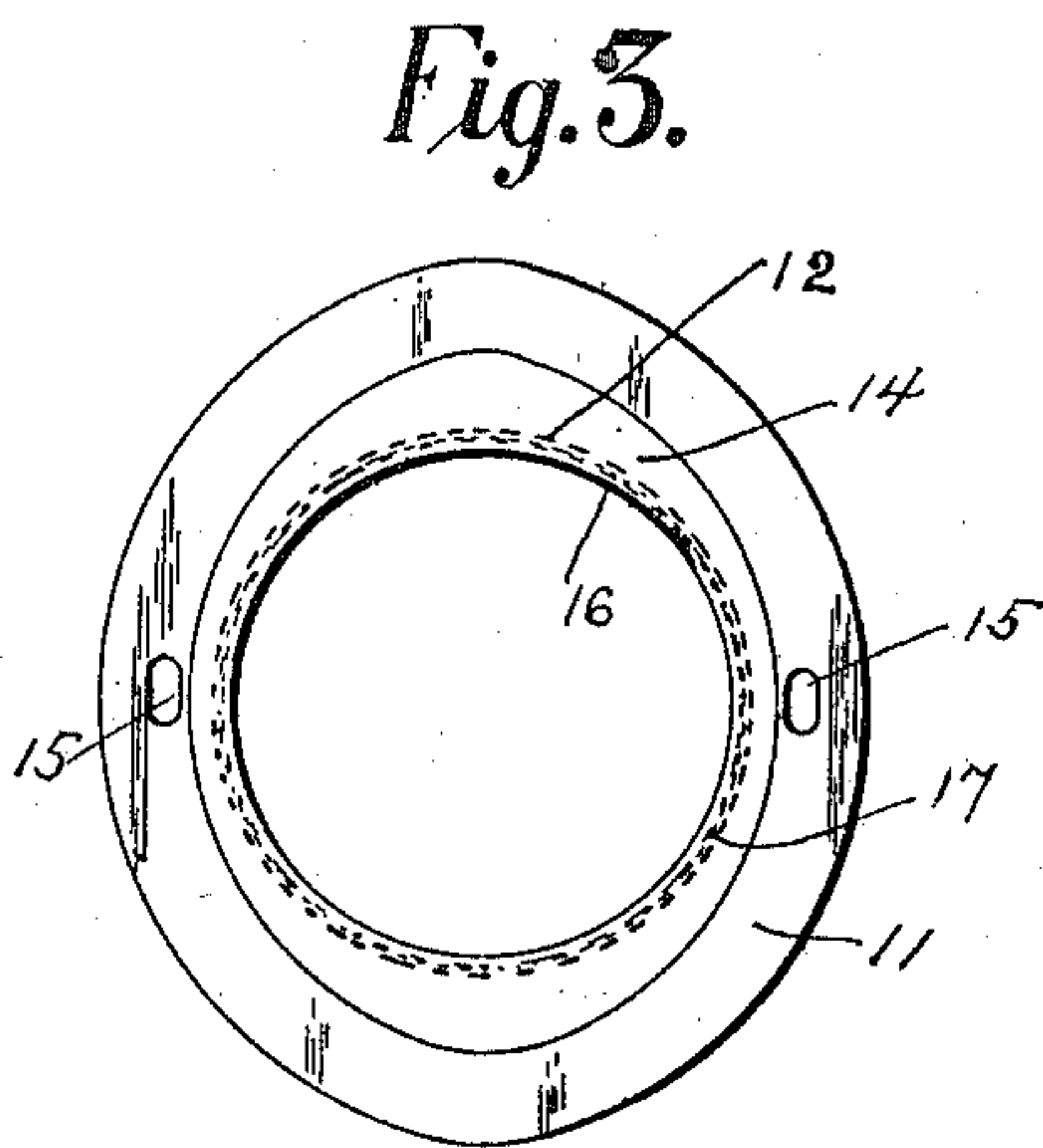
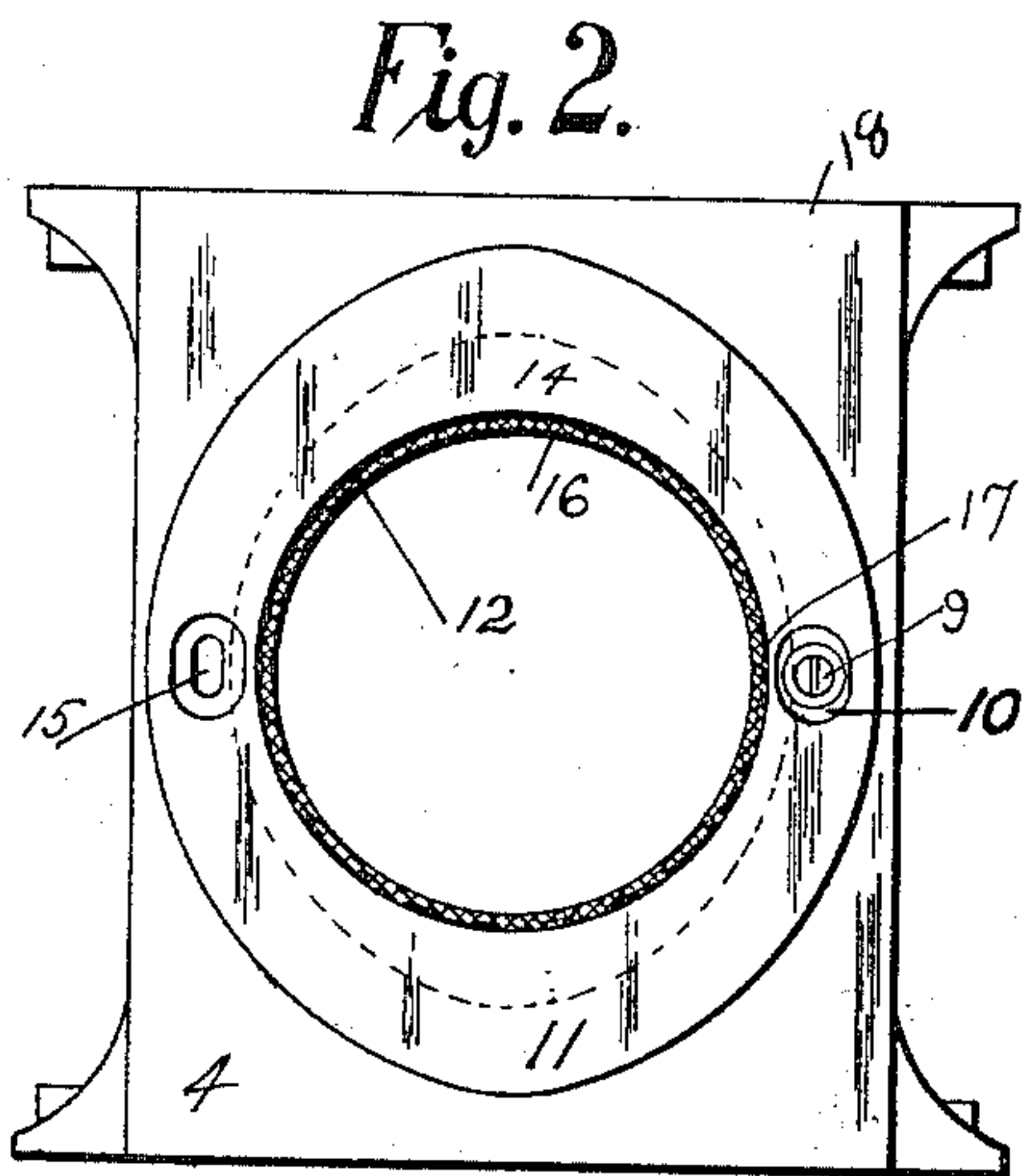
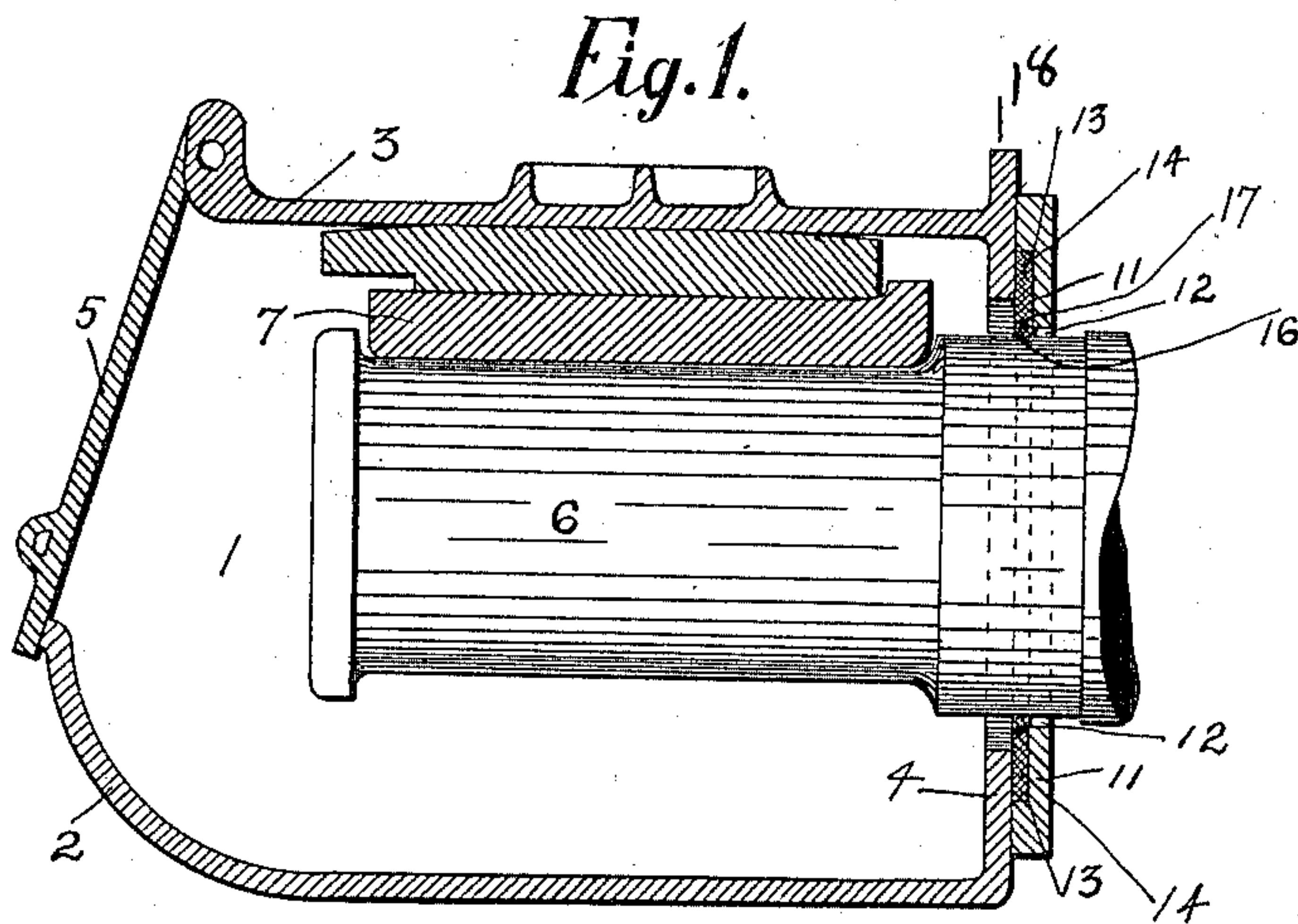
No. 719,445.

PATENTED FEB. 3, 1903.

M. H. DE VORE.  
JOURNAL BOX.

APPLICATION FILED DEC. 18, 1901.

NO MODEL.



WITNESSES:

*A. F. Richards.*  
*Fay Chamberlain.*

INVENTOR:

*Morris H. DeVore*  
BY *Hugh V. Wagner,*  
His ATTORNEY



# UNITED STATES PATENT OFFICE.

MORRIS H. DE VORE, OF ST. LOUIS, MISSOURI.

## JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 719,445, dated February 3, 1903.

Application filed December 18, 1901. Serial No. 86,338. (No model.)

*To all whom it may concern:*

Be it known that I, MORRIS H. DE VORE, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in Journal-Boxes, of which the following is a full, clear, and exact specification, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my present invention is to provide a satisfactory dust-guard for the inner or rear end of journal-boxes of railway-cars and analogous structures and one which is removable from the end of the journal-box, thus affording easy means of access to the interior of the journal-box either for the purpose of cleaning or renewing the parts. With these objects in view I have illustrated my preferred form of construction in the accompanying drawings, forming part of this specification, in which like numerals of reference refer to like parts wherever they occur, and in which—

Figure 1 is a sectional view of the ordinary form of railway journal-box, showing my device in section attached to the right-hand or inner end of same. Fig. 2 is a rear elevation of a journal-box with my invention attached thereto, the latter appearing in full face view. Fig. 3 is a reversed view of my device, showing the same at the side located adjacent to the end of the journal-box; and Fig. 4 is a sectional view of my device. Fig. 5 is an enlarged fragmentary sectional view of my device.

Referring now to the drawings by numerals of reference, 1 indicates the chamber of a journal-box of any ordinary or desired construction; 2, its bottom; 3, its top, which is provided at its rear end with an upwardly-projecting flange; and 4, its rear end wall. 5 indicates the lid or door to the same, which may also be of any chosen form of construction.

6 is the axle, and 7 one of the brasses.

My device is attached to the rear end wall 4 of the journal-box, exterior to the same, by means of the bolts 8, their heads 9 being countersunk in recesses 10 in the main body of said device, as shown in Fig. 4. The main body of said device consists of the plate or casting 11, which may be of any desired shape,

either square, circular, or elliptical, in which latter form I have illustrated it in the drawings, although its edges might be scalloped in order to reduce the weight of metal in said plate or casting. An opening 12 through approximately the center of said plate or casting 11 allows the passage of the axle 6 therethrough into the chamber of the journal-box, and this opening I have shown as circular in form to make it correspond to the shape of the axle. A countersink 13 is formed on the side of the plate or casting 11, which adjoins the end wall 4 of the journal-box and accommodates a washer 14, of felt, cloth, rubber, or any other desired or suitable material, having an opening 15 therein corresponding with the opening 12 in the plate or casting 11, but slightly smaller, so that the axle 6 passes not only through the plate 11, but also through the washer 14. This washer 14 closely encircles the axle 6 and prevents the ingress of dust into the journal-box chamber, with the result that dust is prevented from settling upon the axle and being ground between the axle 6 and the brasses 7, by which means the abrasion of these two bodies is materially reduced and the life of the brasses increased by at least one-half over what is now usual.

As the axle 6 rises and falls, it is evident that the utility of my device depends upon its ability to adjust itself to the relative change of location of the axle, and this I accomplish by providing elongated holes 15 for the bolts 8, the plate 11 being movably attached thereby to the rear end wall 4 of the journal-box.

While the end wall 4 of the journal-box may be countersunk, so as to receive all the parts of my device, I prefer to attach same to the end of the journal-box in the manner above described, and it will be observed that it is readily removable from its position when it is desired to do so.

The washer 14 is provided with a spring 17. This spring is located within or attached to said washer in such way that it will tend to keep the inner edges of the opening 16 therein in contact with the axle 6, leaving no space through which dust may enter the chamber 1.

The end wall 4 has at its top an upwardly-projecting flange 18, which provides a bearing-surface for the upper end of the plate 11 as it is moved upwardly to its greatest extent.



The said plate is approximately elliptical in shape and has a circular opening, and a broad bearing-surface is provided at the opposite ends of the same.

5 I am aware that many minor changes in the form and arrangement of the parts of my device may be made without departing from the nature and spirit of my invention.

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

15 In a device of the character described the combination with a journal-box provided with an opening at its rear end and an upwardly-projecting flange on its upper side; of a dust-guard comprising an elliptical plate formed with a centrally-arranged annular opening of smaller diameter than the opening in the rear end of the said journal-box, and provided

on its inner face with an elliptical groove, 20 said plate provided adjacent its sides with elongated bolt-openings, a washer arranged in said groove and having its inner edge normally projecting beyond the edge of the said annular opening, a circular spring arranged 25 in said washer, and a bolt arranged in each of the said elongated openings of the said plate and adapted to permit the plate to automatically adjust itself vertically in relation to the car-wheel axle.

30 In testimony whereof I have hereunto attached my signature, in the presence of two witnesses, this 16th day of December, 1901.

MORRIS H. DE VORE.

Witnesses:

HUGH K. WAGNER,  
FAY CHAMBERLAIN.