

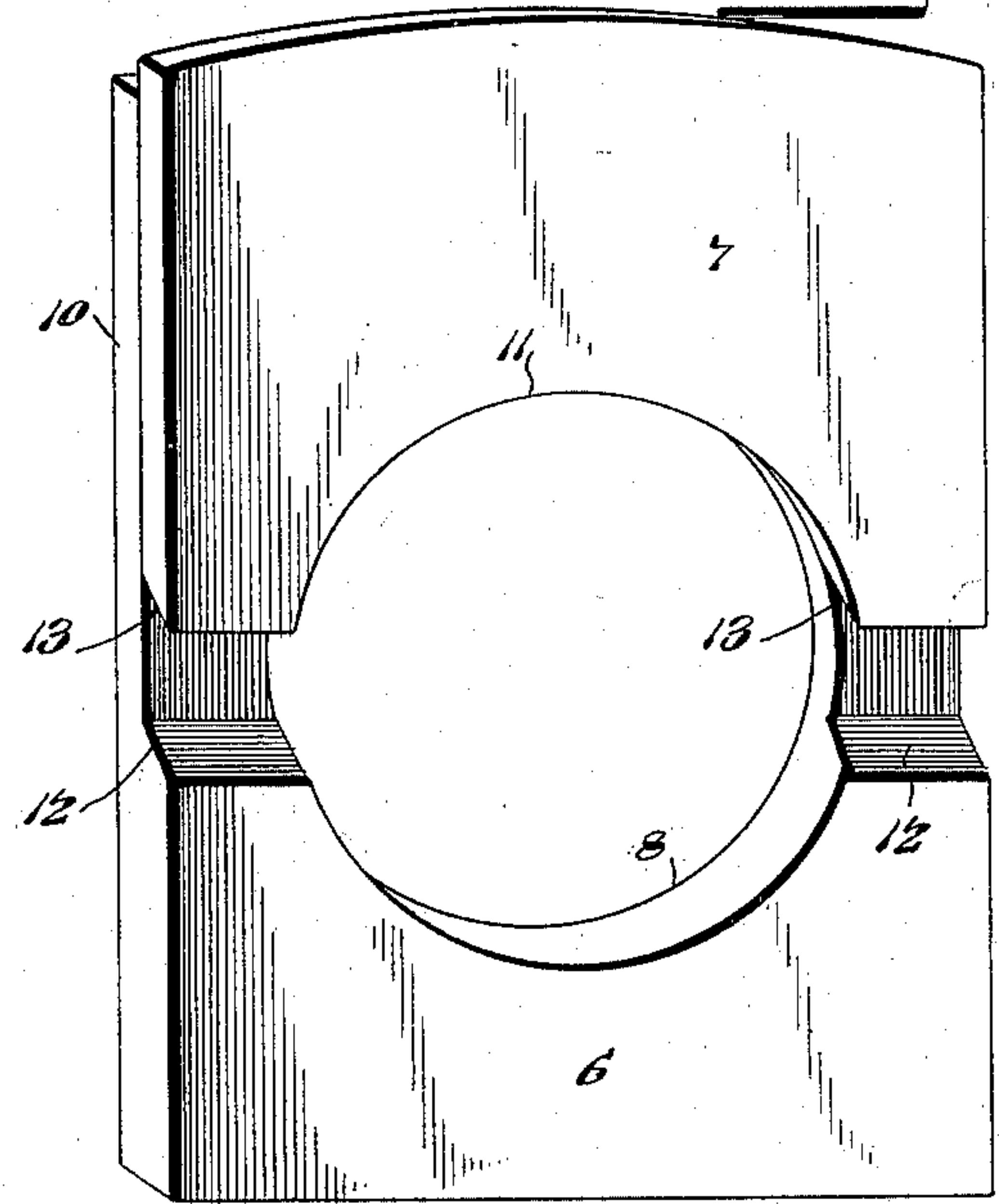
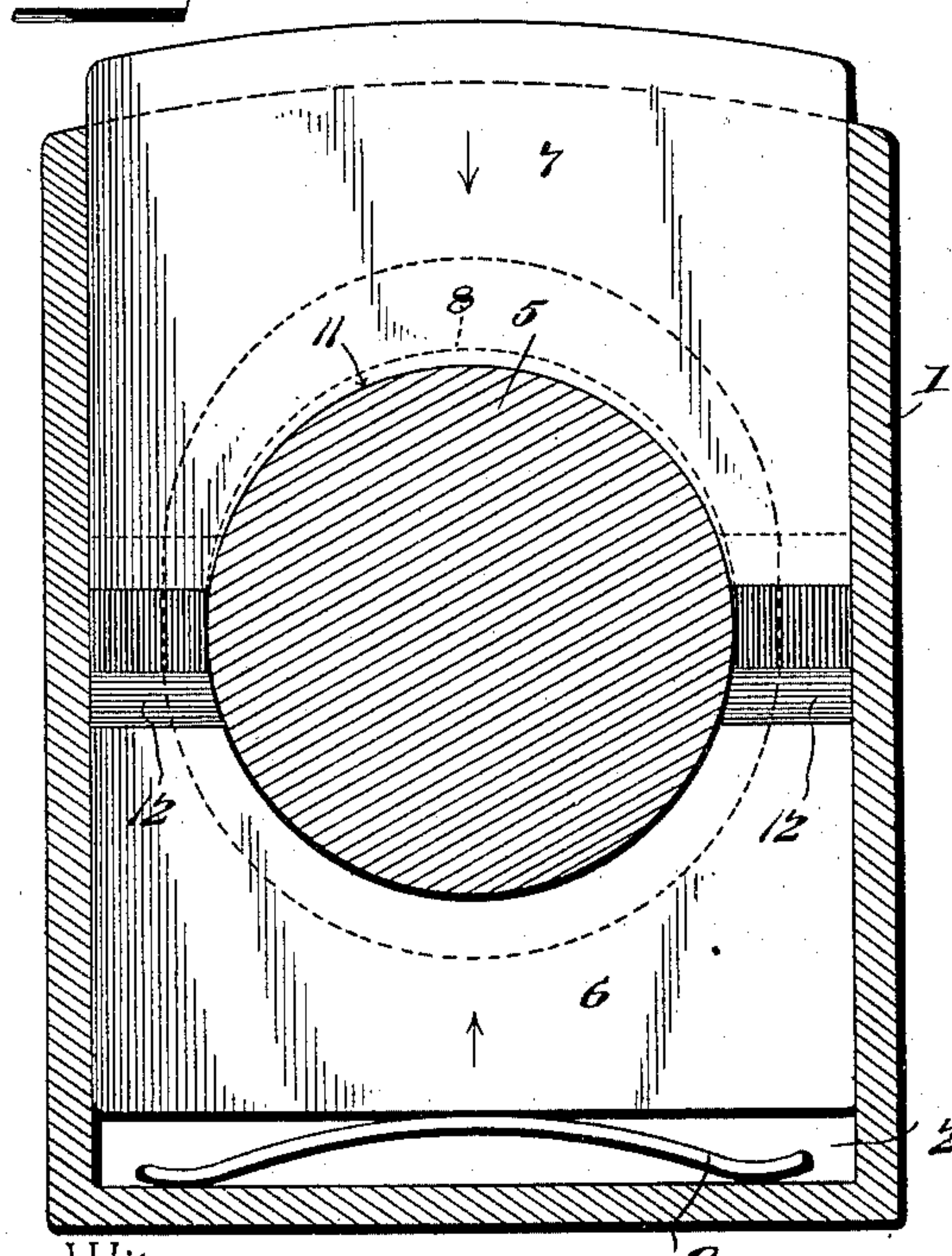
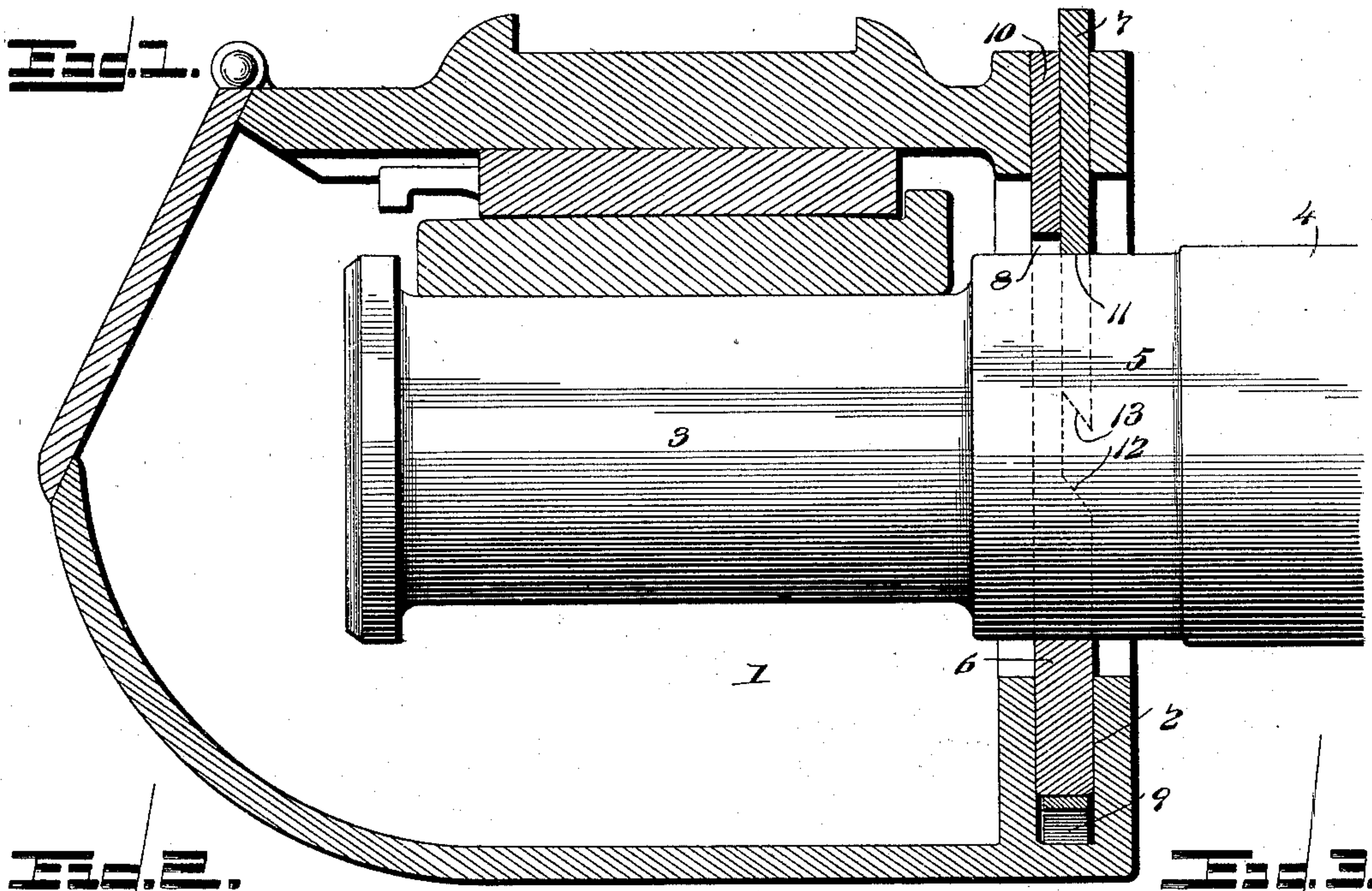
No. 609,121.

Patented Aug. 16, 1898.

C. G. POTTER.
DUST GUARD FOR CAR AXLE BOXES.

(Application filed June 30, 1898.)

(No Model.)



Witnesses

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UNITED STATES PATENT OFFICE.

CLARK G. POTTER, OF PADUCAH, KENTUCKY.

DUST-GUARD FOR CAR-AXLE BOXES.

SPECIFICATION forming part of Letters Patent No. 609,121, dated August 16, 1898.

Application filed June 30, 1898. Serial No. 684,810. (No model.)

To all whom it may concern:

Be it known that I, CLARK G. POTTER, a citizen of the United States, residing at Paducah, in the county of McCracken and State of Kentucky, have invented a new and useful Dust-Guard for Car-Axle Boxes, of which the following is a specification.

The invention relates to improvements in dust-guards for car-axle boxes.

The object of the present invention is to improve the construction of dust-guards for car-axle boxes and to provide a simple and comparatively inexpensive one adapted to automatically adjust itself to an axle and capable of effectually excluding dust at the back of an axle-box and of preventing the escape of oil.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of a car-axle box provided with a dust-guard constructed in accordance with this invention. Fig. 2 is a transverse sectional view. Fig. 3 is a detail view of the dust-guard.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an axle-box provided at its back with a dust-guard chamber 2 and receiving the journal 3 of an axle 4, which has its dust-guard bearing 5 arranged in the opening at the back of the axle-box in the usual manner. The dust-guard chamber receives the dust-guard, which is composed of plates 6 and 7, designed to be constructed of metal or any other suitable material and bearing against the axle 4 at the top and bottom of the same, as clearly illustrated in Figs. 1 and 2 of the accompanying drawings.

The plate 6, which is provided with a circular opening 8 for the reception of the axle, extends from the top to the bottom of the axle-box and is supported upon a transverse spring 9, arranged upon the bottom of the dust-guard chamber, as clearly shown in Fig. 2 of the drawings. The spring 9, which is slightly bowed, supports the weight of the plate 6 and holds the same in contact with the bottom portion of the dust-guard bearing

5 of the axle, so that any opening produced by wear of the plate 6 will occur at the top of the axle, as illustrated by dotted lines in Fig. 2 of the drawings, and will be closed by the plate 7.

The upper portion 10 of the plate 6 is reduced, as shown, to form a recess for the reception of the upper gravity-plate 7, which extends from the top of the axle-box to about the center of the same. The plate 7, which has its rear face flush with the rear portion of the plate 6, is provided at its lower edge with a recess, forming a curved edge 11 to engage the upper portion of the dust-guard bearing of the axle. The plate 7 is maintained in engagement with the axle by gravity, and it automatically adjusts itself to the same, and thereby preserves the proper contact.

The shoulders 12, formed by the reduction of the upper portion of the plate 6, are beveled, as clearly illustrated in Fig. 3 of the accompanying drawings, and the lower edge of the gravity-plate 7 is beveled at 13 at opposite sides of the recess which forms the curved edge 11. The beveled edges 13, which are adapted as the said plate 7 becomes worn to overlap the beveled shoulders 12, and by this construction the adjustment of the plate 7 to take up the wear is greatly increased without correspondingly decreasing the curved bearing edge 11. Should the plate 7 become worn sufficiently to bring the beveled edges in contact with one another, it may be readily removed, and by cutting off the lower beveled edges 13 the plate will be again ready for use.

The invention has the following advantages: The dust-guard, which is automatic in its operation, excludes dust from the back of the axle-box and prevents waste of lubricant and the packing. It is simple and inexpensive in construction and practically indestructible, and should the upper plate wear to such an extent that the beveled edges are brought together it may be readily removed and cut down, and after being trimmed it may be replaced and does not have to be discarded. The beveled portions are located at the outer face of the plate 6, so that there is no liability of packing from the axle-box getting between them and interfering with the

operation of the dust-guard. The inner and outer faces of the dust-guard fit against the corresponding walls of an ordinary dust-guard chamber, and the dust-guard is applicable to the ordinary car-axle boxes and does not necessitate any alteration in the construction thereof.

What I claim is—

1. In a device of the class described, the combination with an axle-box having a dust-guard chamber, and a spring arranged at the bottom thereof, of a dust-guard comprising a plate supported by the spring and extending from the same to the top of the axle-box and provided with an opening to receive an axle, said plate having its upper portion reduced and having the shoulders, formed by such reduction, beveled, and a gravity-plate arranged in the upper portion of the dust-guard chamber, fitting against the upper portion of the said plate and provided at its bottom with a curved bearing edge to engage the upper portion of an axle, the lower edges of the grav-

ity-plate being beveled at opposite sides of the curved edge, substantially as and for the purpose described.

2. In a device of the class described, a dust-guard having an axle-opening and comprising the plate 6 designed to extend from the top to the bottom of an axle-box and having its upper portion reduced, the shoulders formed by such reduction being beveled, and the upper gravity-plate arranged on the reduced portion of the plate 6 and provided at its bottom with a curved bearing edge 11 and having its lower edges 13 beveled to conform to the beveled shoulders, substantially as described.

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

CLARK G. POTTER.

Witnesses:

JAS. C. UTTERBACK,
S. B. HUGHES.