

No. 638,682.

W. H. PRENDERGAST.
METALLIC PACKING.

Patented Dec. 5, 1899.

(Application filed Aug. 3, 1898.)

(No Model.)

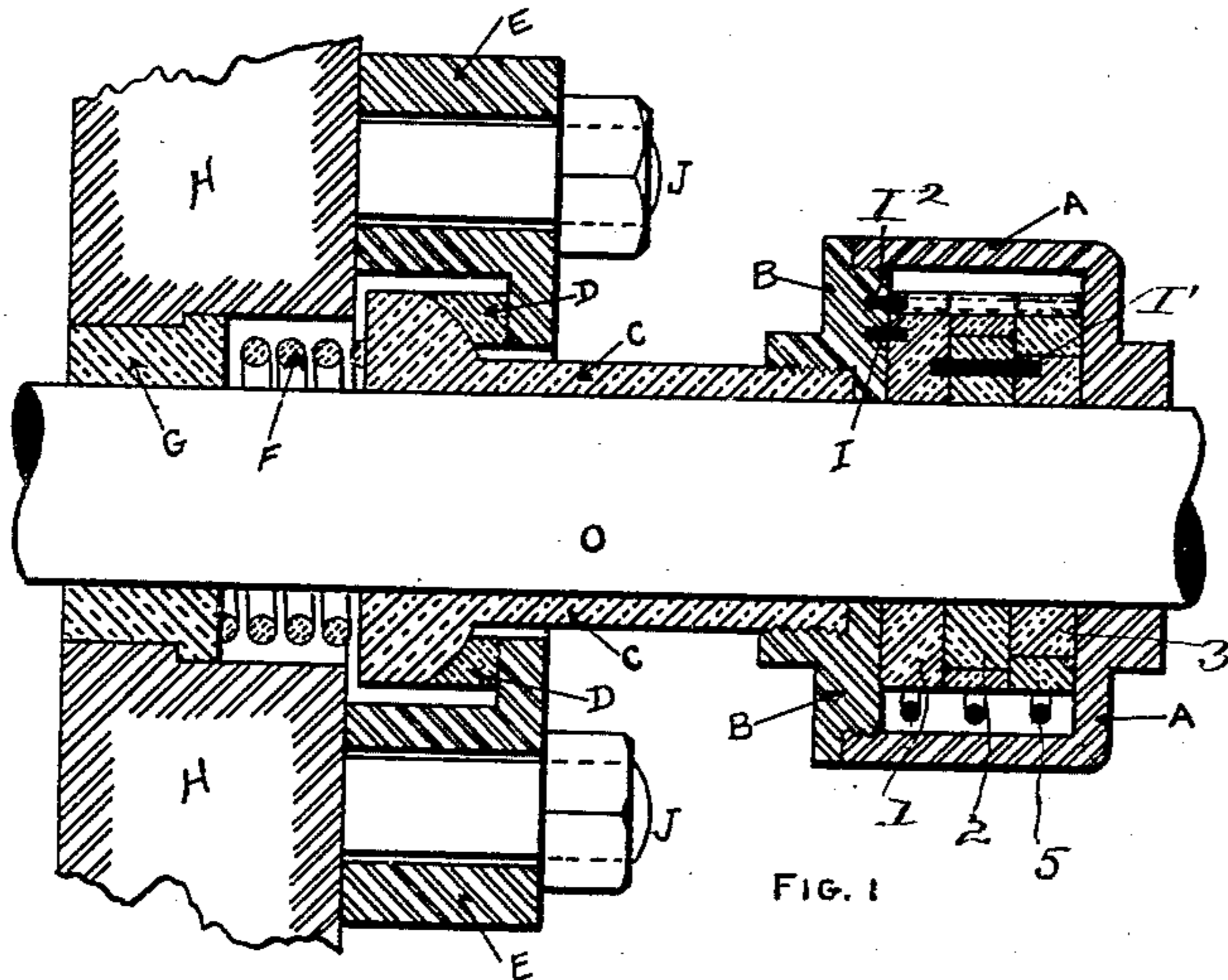


FIG. 1

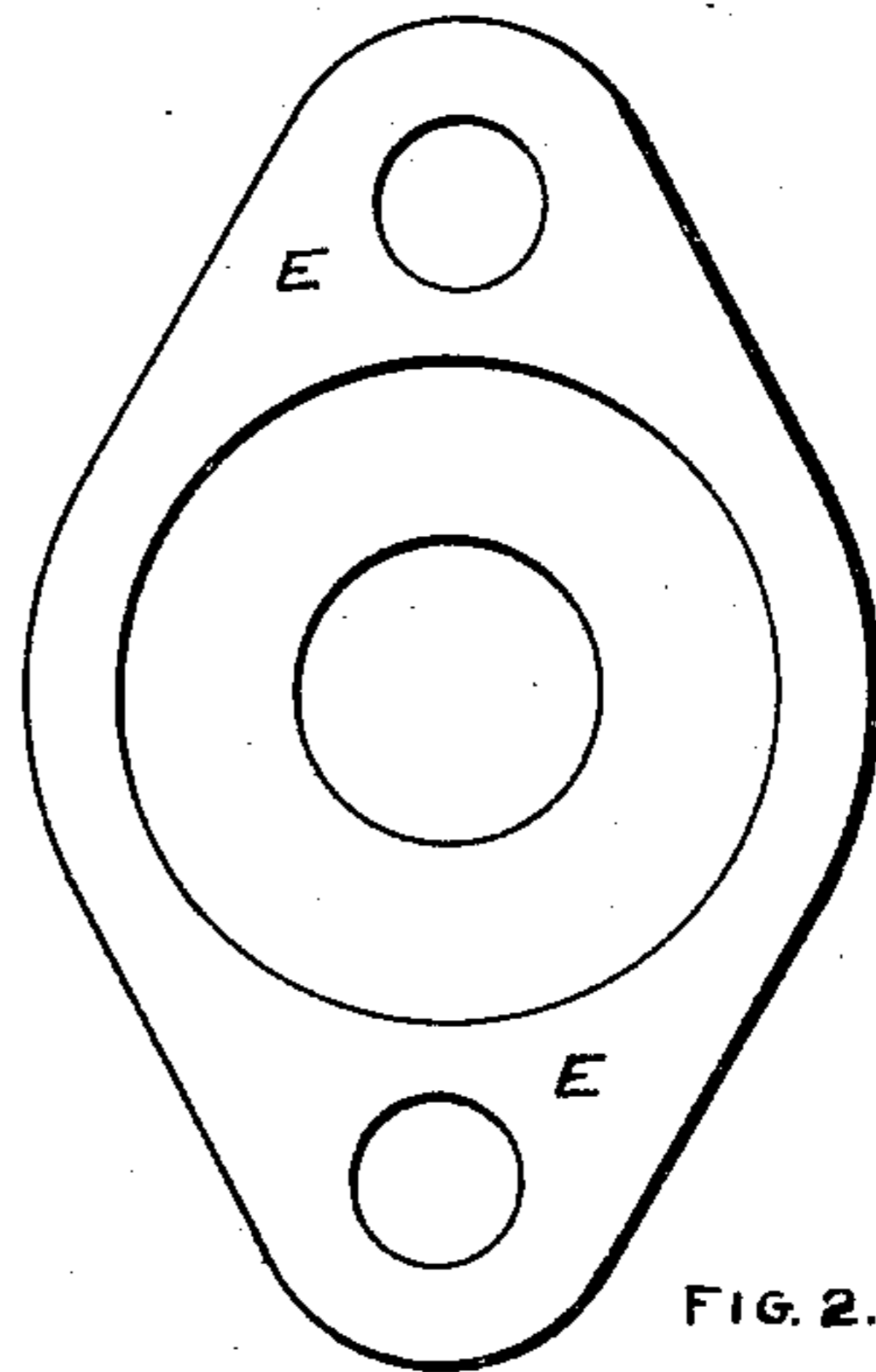


FIG. 2.

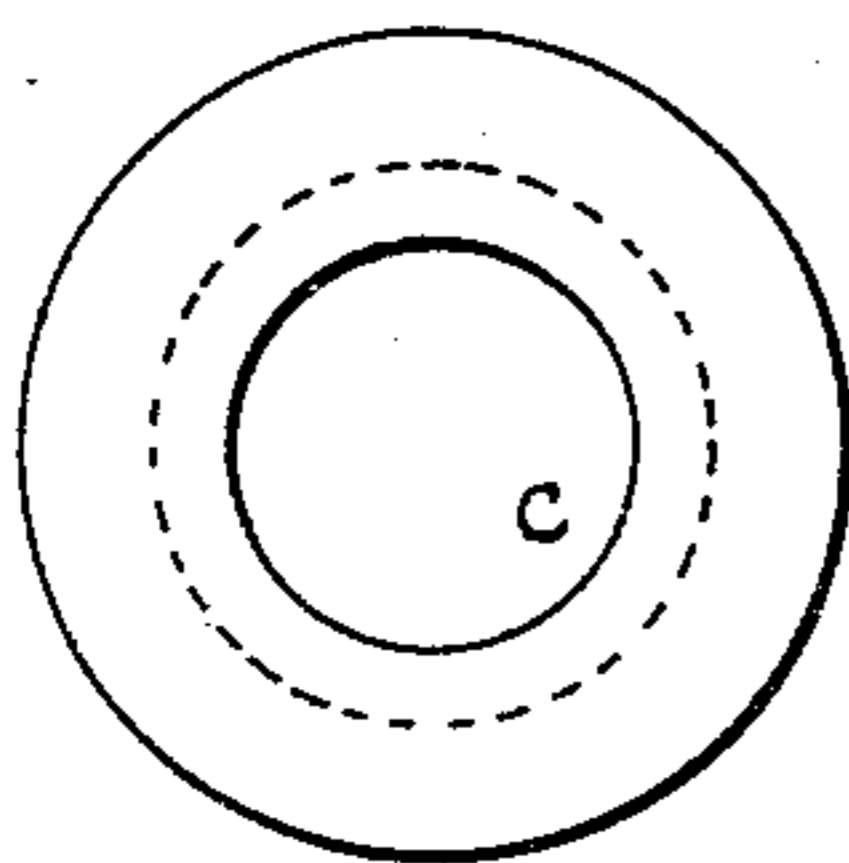


FIG. 3.

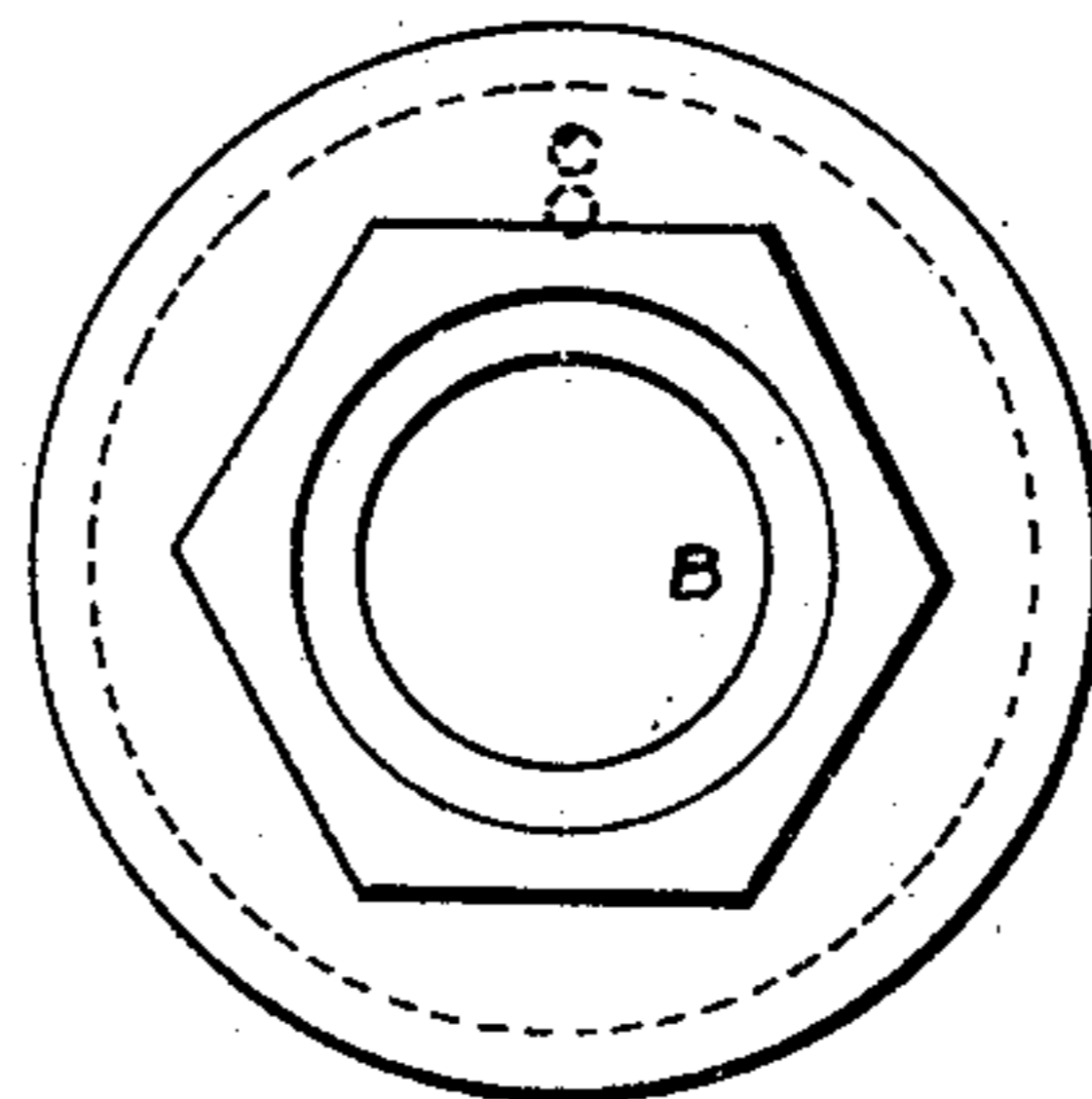
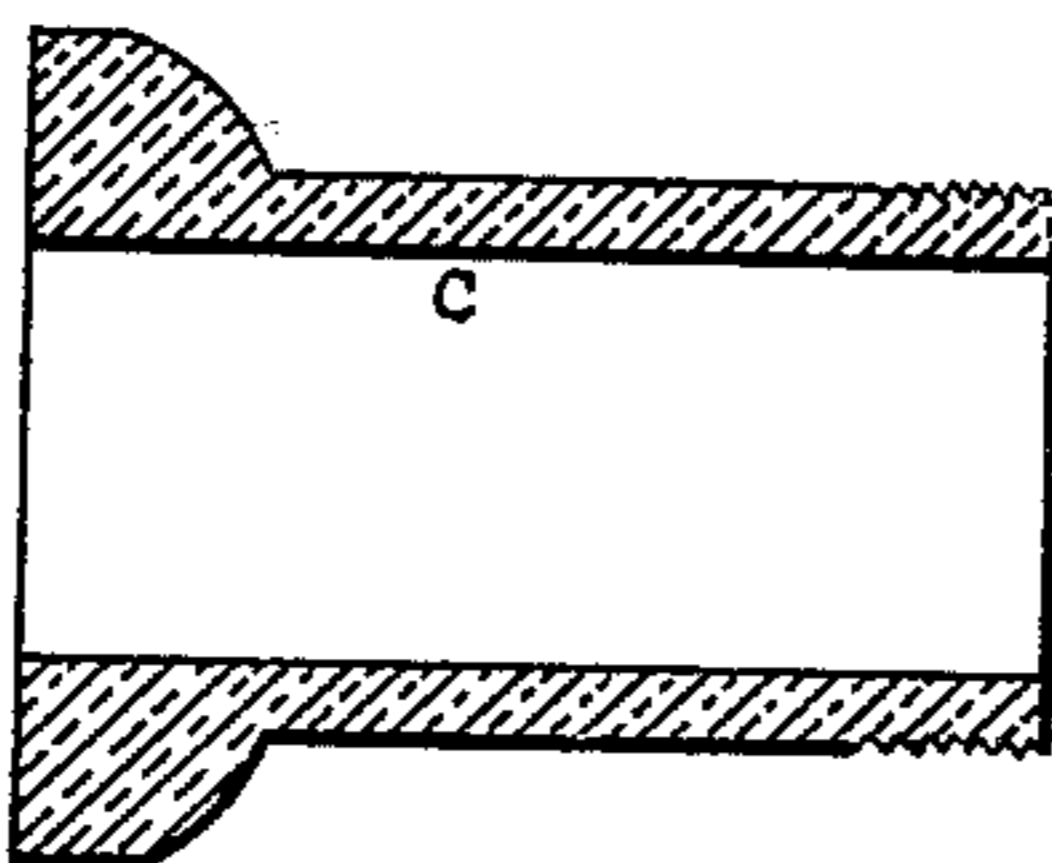


FIG. 4.

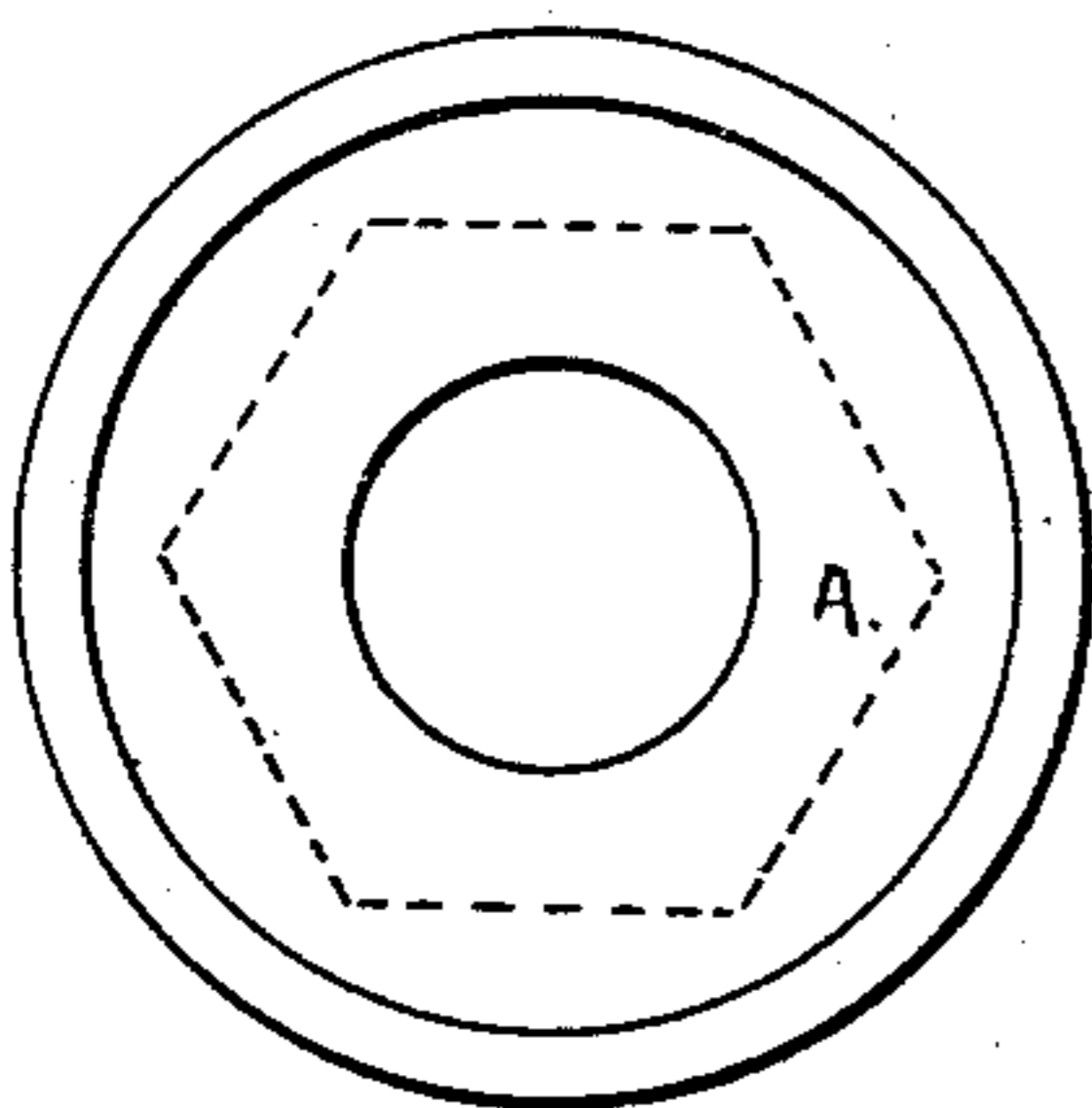
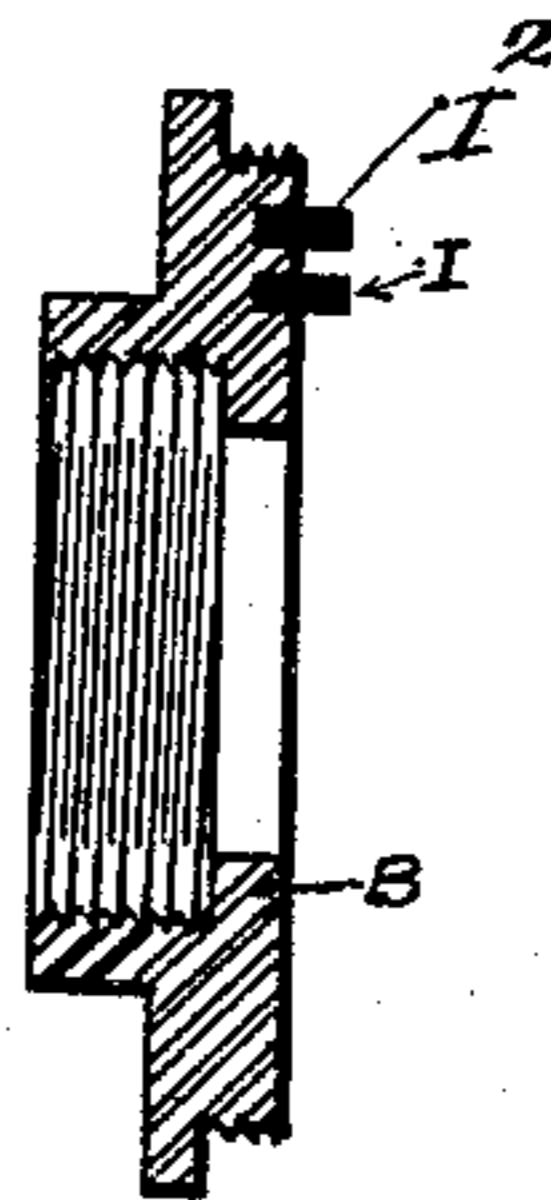


FIG. 5.

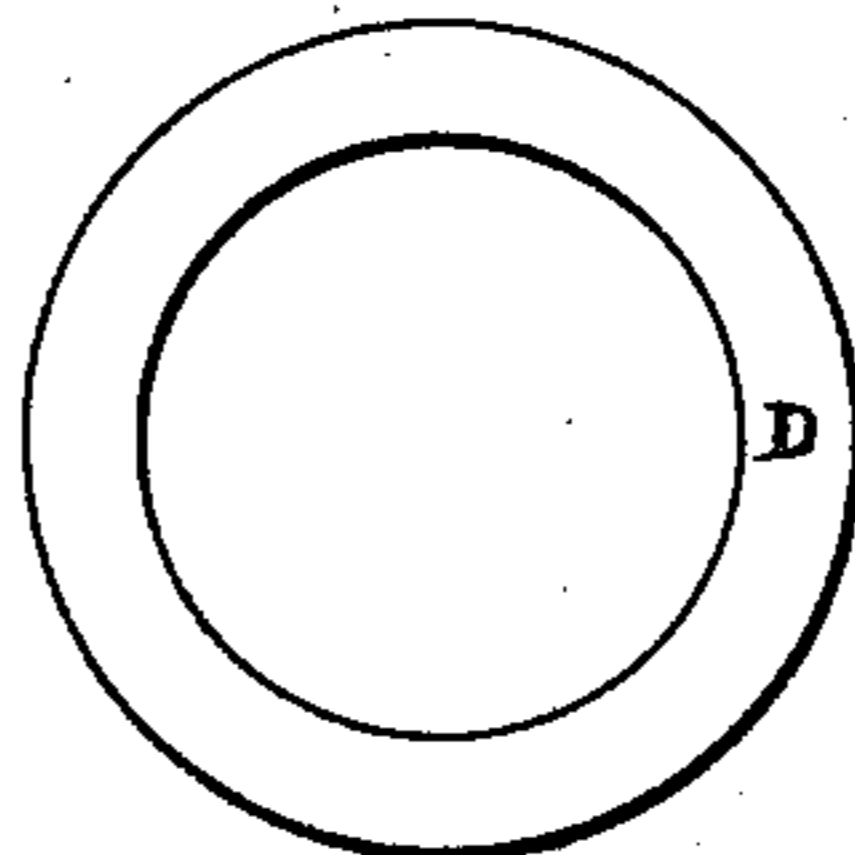
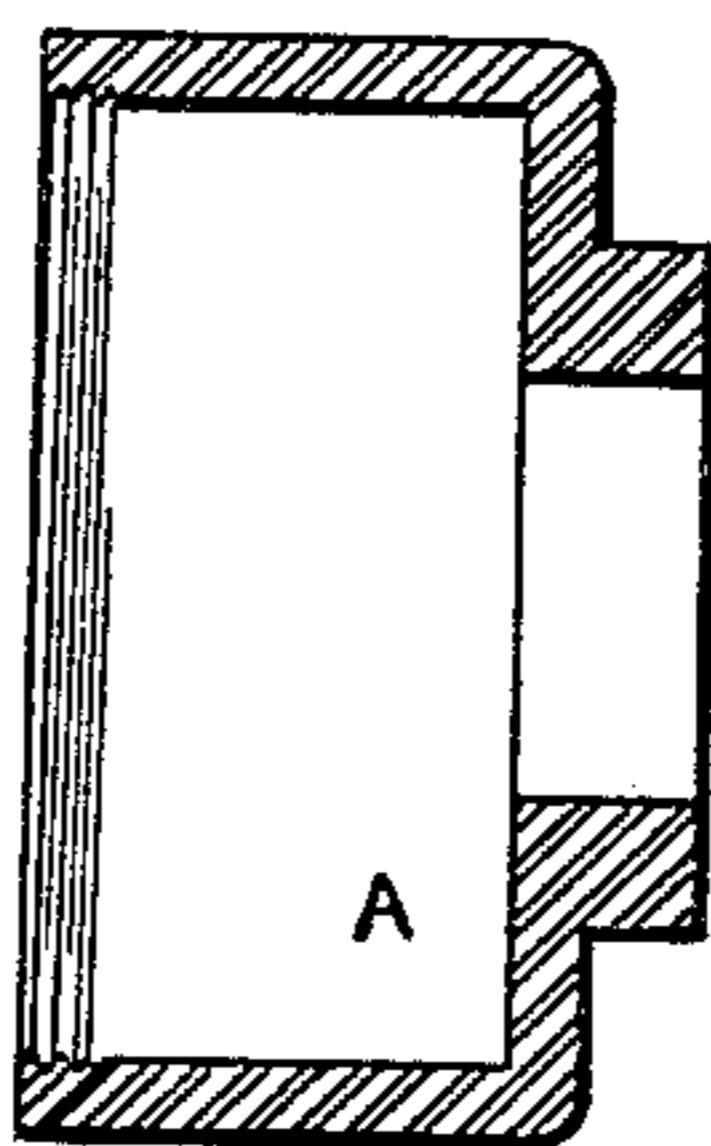
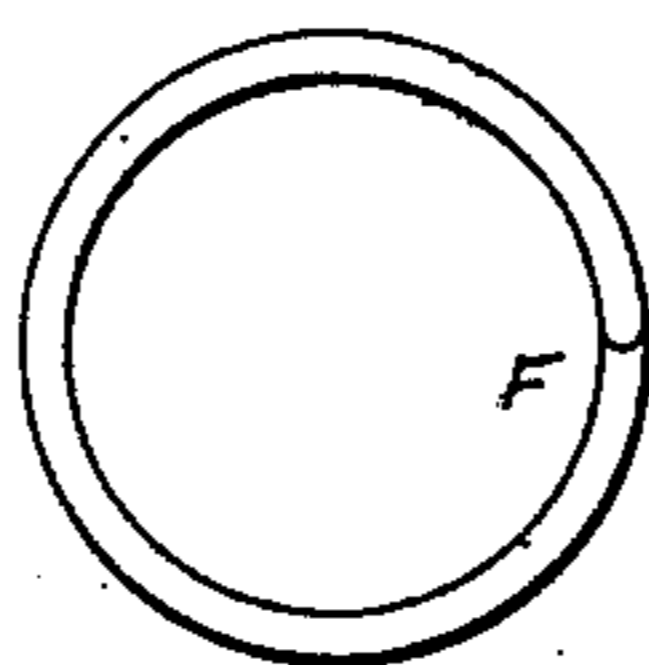


FIG. 6.



FIG. 7.



W. H. Prendergast INVENTOR

WITNESSES:

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WILLIAM H. PRENDERGAST, OF SAVANNAH, GEORGIA, ASSIGNOR OF ONE-HALF TO CHARLES D. KLINE, OF SAME PLACE.

METALLIC PACKING.

SPECIFICATION forming part of Letters Patent No. 638,682, dated December 5, 1899.

Application filed August 3, 1898. Serial No. 687,663. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PRENDERGAST, a citizen of the United States of America, residing at Savannah, Chatham county, State of Georgia, have invented certain Improvements in Metallic Packing, of which the following is a full, clear, and precise description, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents the vertical section of the packing-case. Fig. 2 represents the plan of the box. Fig. 3 represents the plan and vertical section of the ball-joint sleeve. Fig. 4 represents the plan and vertical section of the bottom of the packing-case. Fig. 5 represents the plan and the vertical section of the cap of the case. Fig. 6 represents the plan and vertical section of the ball-joint ring. Fig. 7 represents the elevation and the plan of the spring.

Similar letters and figures of reference indicate corresponding parts.

The invention relates to a metallic packing-case for piston-rods, the same being used in connection with a packing having a ball-joint or spherical bearing-surface whereby it is adapted to rock to compensate for vibration or displacement of the piston-rods.

In the drawings, H indicates a portion of a steam-chest; O, a piston-rod; G, a bushing having a flange seated upon a shoulder or ledge of the steam-chest, and F a coil-spring which is arranged within the cavity partly filled by said bushing and between and in contact with the latter and the conical base of a so-called "neck-bushing" C of the piston-rod. The latter fits somewhat loosely in said bushing. The conical side of the bushing is held by spring F in close contact with ring D. The latter is held fixed in place by means of a flanged box E, which is secured by screw-bolts J to the wall of the steam-chest.

The packing-case is detachably connected with the elongated bushing or sleeve C by a screw-joint, the latter being screwed into a flanged socket in the bottom or inner head B of the casing. The body and opposite end of the casing are formed of the cup-like part A, through which the rod O passes and which screws on the threaded peripheral shoulder of head B. Within this casing is the packing proper, consisting of a series of radially-divided rings 1 2 3 and springs 5, encircling them, as shown. The upper ends of the springs are broadened and provided with eyes, through which a stout wire is inserted, as indicated by dotted lines, Fig. 1, for the purpose of holding them in alinement. A stud I is inserted in head B and enters the packing-ring 1. Another pin I' similarly connects ring 1 with rings 2 and 3. A third pin I² projects from head B between the separated ends of the adjacent spring for the purpose of preventing the springs sliding or moving around the packing proper, 1 2 3. Thus all the parts inclosed by the casing proper composed of parts A and B are held from moving circumferentially without hindrance to their radial movement or expansion.

What I claim is—

The combination with the rod O, the box E, having a shoulder, the concave-faced ring D, the sleeve C, closely fitting the rod, and having a base formed on spherical lines, and a spring arranged as shown, of the packing composed of a casing having a head B and body portion detachably connected, and the packing proper comprising a series of sectional packing-rings, and springs nearly encircling said rings and pins connecting the ring-sections with the part B, as shown and described.

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Witnesses:

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