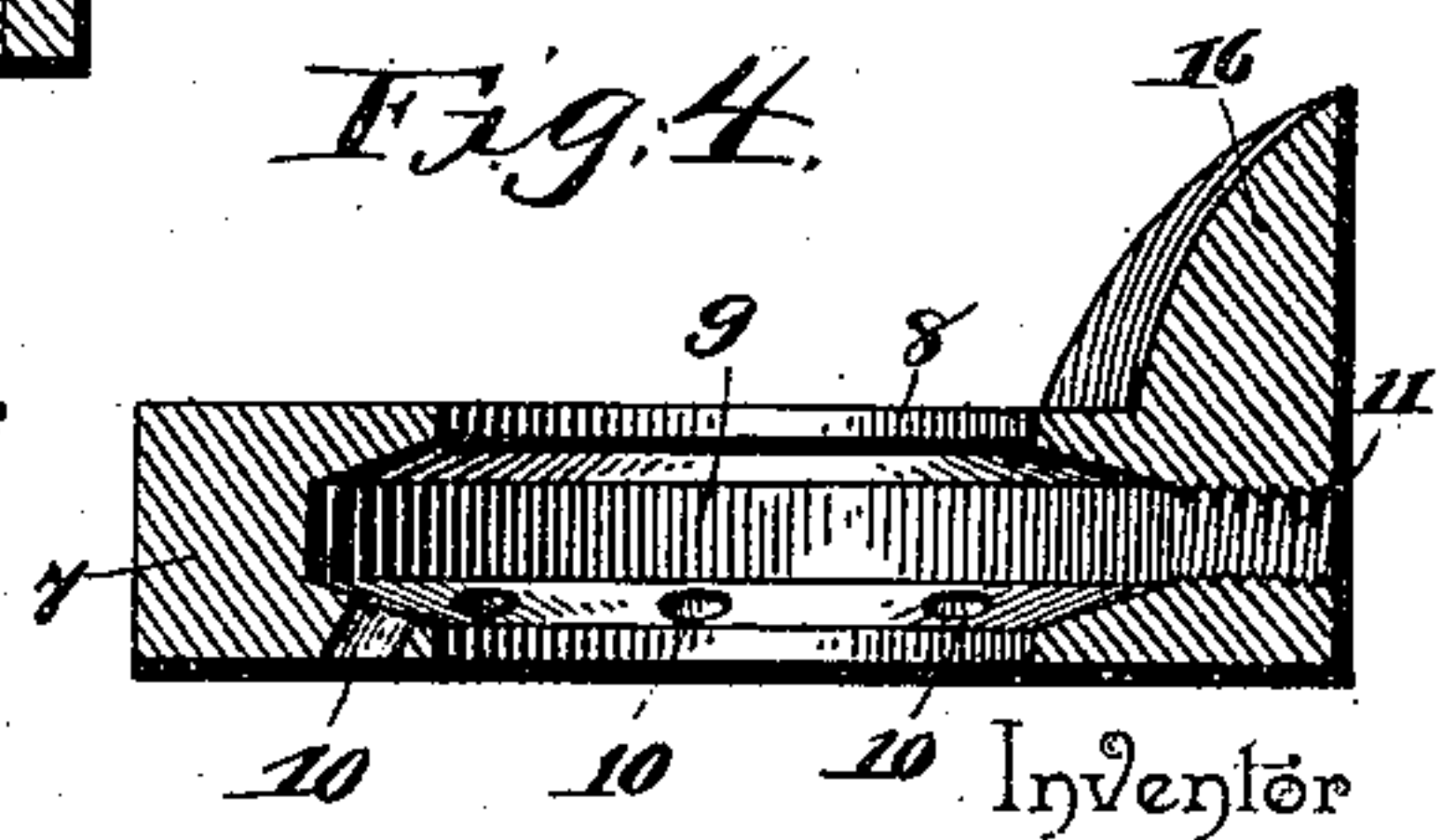
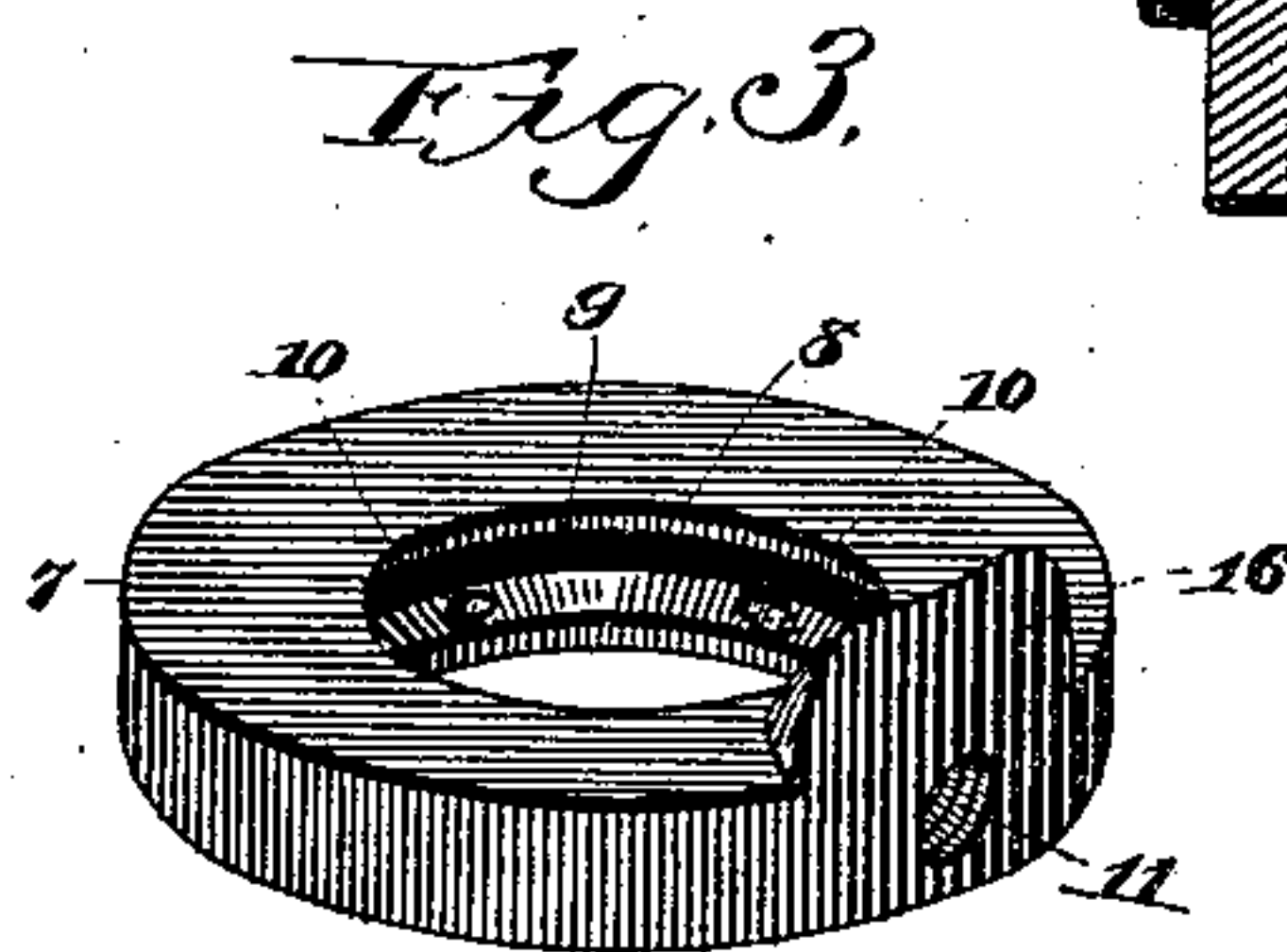
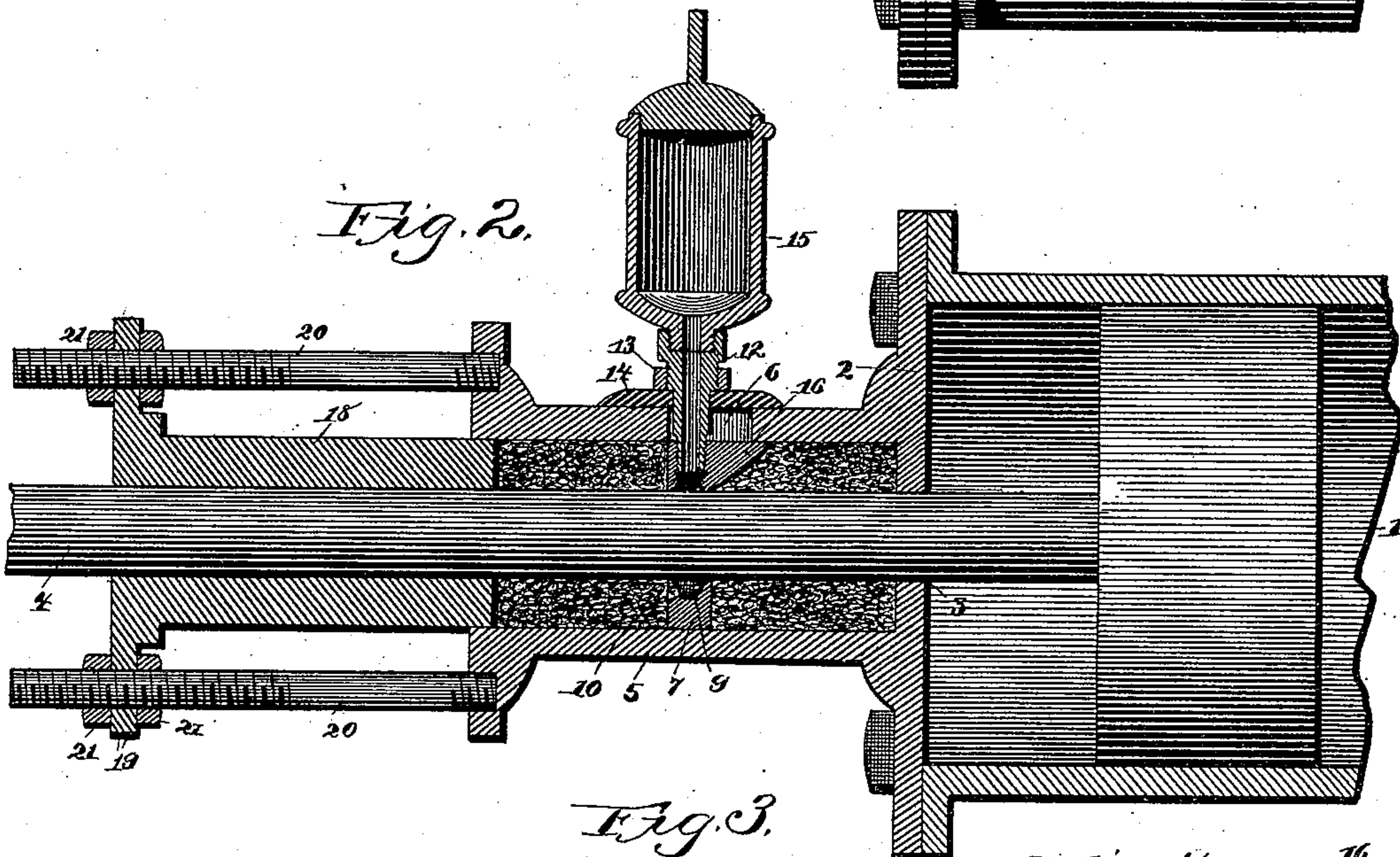
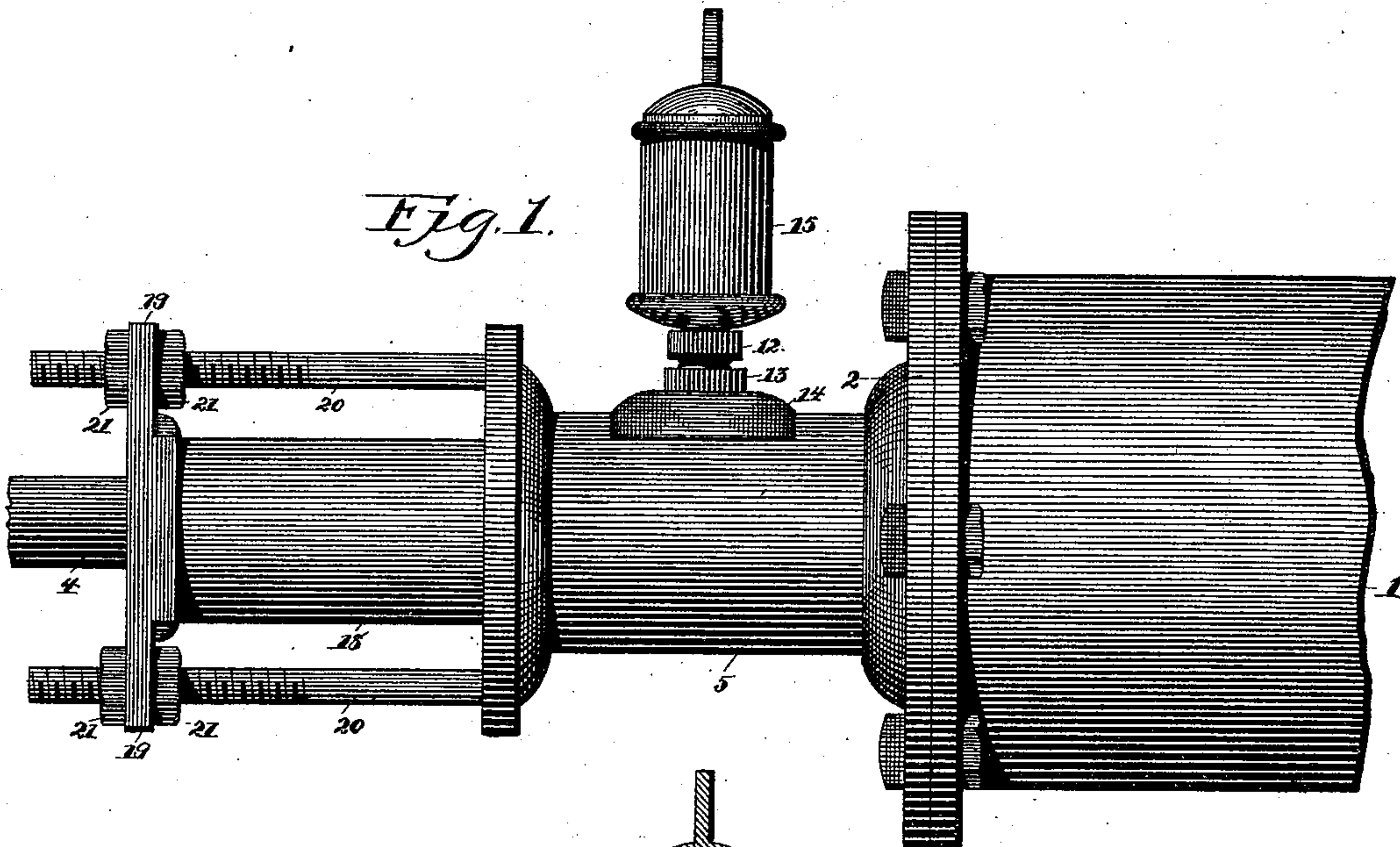


(No Model.)

J. F. SNYDER.
STUFFING BOX FOR PISTON RODS.

No. 429,656.

Patented June 10, 1890.



Witnesses:

E. W. Ludeman
W. L. Swall

By his Attorneys,

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UNITED STATES PATENT OFFICE.

JOHN FILLMORE SNYDER, OF ROANOKE, ILLINOIS.

STUFFING-BOX FOR PISTON-RODS.

SPECIFICATION forming part of Letters Patent No. 429,656, dated June 10, 1890.

Application filed September 26, 1889. Serial No. 325,140. (No model.)

To all whom it may concern:

Be it known that I, JOHN FILLMORE SNYDER, a citizen of the United States, residing at Roanoke, in the county of Woodford and State of Illinois, have invented a new and useful Means for Lubricating Stuffing-Boxes of Piston-Rods, of which the following is a specification.

This invention has relation to stuffing-boxes for piston-rods in steam and other cylinders, and among the objects in view are to form and maintain a thoroughly steam-tight joint between the piston and cylinder-head and to provide for a thorough, constant, and even lubrication of the piston.

With these general objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of the upper portion of a steam-cylinder, piston, and stuffing-box, the latter being constructed in accordance with my invention. Fig. 2 is a longitudinal central section of the same. Fig. 3 is a detail of the lubricating-ring. Fig. 4 is a detail section through the oil-distributing ring.

Like numerals of reference indicate like parts in all the figures.

1 represents the cylinder, and 2 the head, having an opening 3, in which reciprocates in the usual manner the piston-rod 4.

Surrounding the opening in the head and the rod is the gland 5, which is of the usual construction, and is provided with an opening 6 at one side, and at its center said opening being somewhat elongated.

7 represents a lubricating-ring of a size exteriorly to fit snugly within the bore of the gland and having internal opening 8, through which passes the piston-rod.

9 represents an annular internal groove formed in the ring, and 10 a series of ports or oil-ducts communicating with the oil-passage or groove and with the inner side or half of the gland. A threaded opening 11 is formed in the ring, and in the same is threaded a hollow nipple 12, which extends through the elongated opening formed in the gland, and provided with a set-nut 13, which im-

pinges upon a washer 14. In the upper end of the nipple is threaded the usual oil-cup 15. At one side of the threaded opening formed in the lubricating-ring there is located a flange 16, which takes over and covers the remaining portion of the elongated nipple-receiving opening formed in the gland, so that the packing cannot be forced through the opening in the gland by the pressure of the follower 18.

In applying my invention a layer of suitable packing is first placed in the bottom of the gland and then my lubricating ring mounted in position, after which a second layer is placed upon the opposite side of the ring.

18 represents the usual follower, which is provided at its upper end with the transverse flange 19, perforated for the reception of bolts 20, extending from the upper end of the gland and bound in position by nuts 21, said nuts serving to force the follower into close contact with the stuffing.

By the construction described it will be apparent that oil will be automatically fed from the oil-cup into the oil-distributing ring and from thence in an even manner to the piston rod or stem, whereby the same is thoroughly lubricated by the oil therein.

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

1. The combination, with the gland, a cylinder-head, and piston-rod, of an oil-distributing ring mounted in the gland and provided with an oil-groove having ports through one of the side walls of the same communicating with the gland, substantially as specified.

2. The combination, with the gland, of the oil-supply ring closely fitting the same and having a central opening, an internal groove, and oil-distributing ports at one side thereof, a nipple threaded in the ring and extending through an opening in the gland, an oil-cup mounted on the nipple, a piston-rod passing through the gland and ring, and packing located at each side of the ring, substantially as specified.

3. The combination, with the gland hav-

ing the elongated opening in its wall, of the
oil-distributing ring mounted in the gland
and having a laterally-projecting flange for
the opening in said gland, a threaded nipple
5 passing through the opening and mounted in
said ring, and an oil-cup mounted in the up-
per end of the nipple, substantially as speci-
fied.

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

JOHN FILLMORE SNYDER.

Witnesses:

JOHN E. CLAUDIN,
I. C. UPTON.