

T. R. STANLEY.
VALVE.
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995,193.

Patented June 13, 1911.

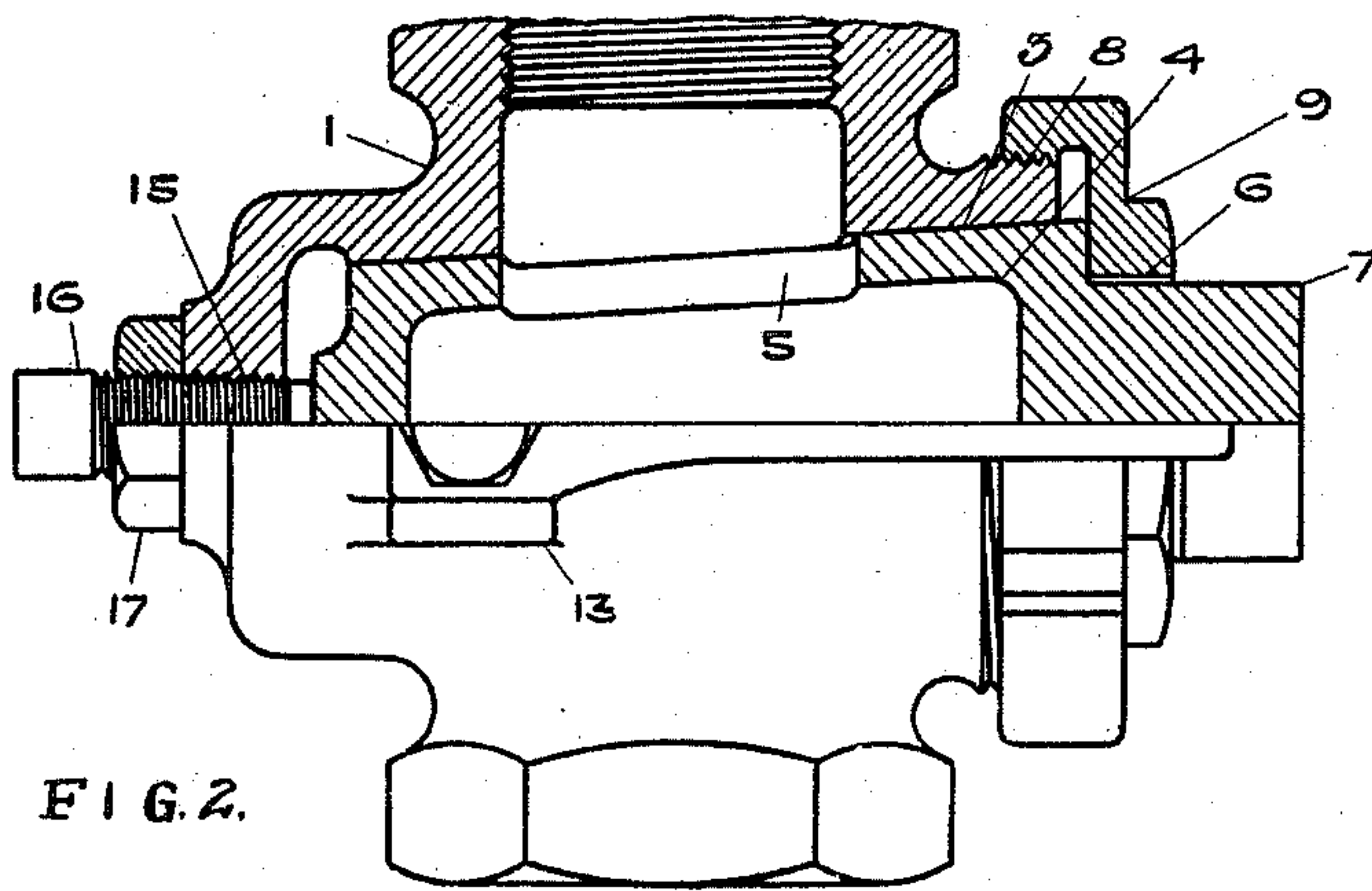


FIG. 2.

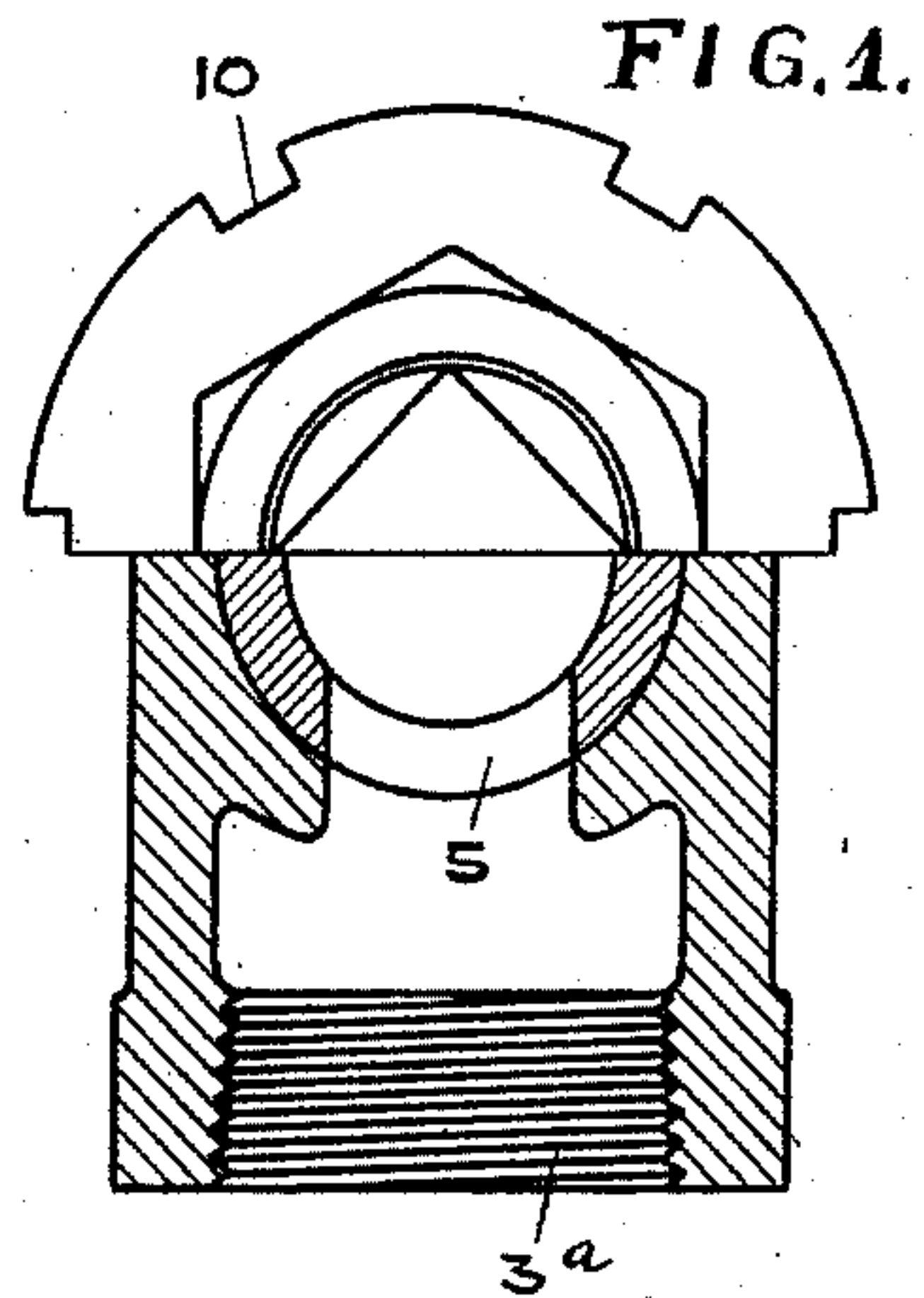


FIG. 1.

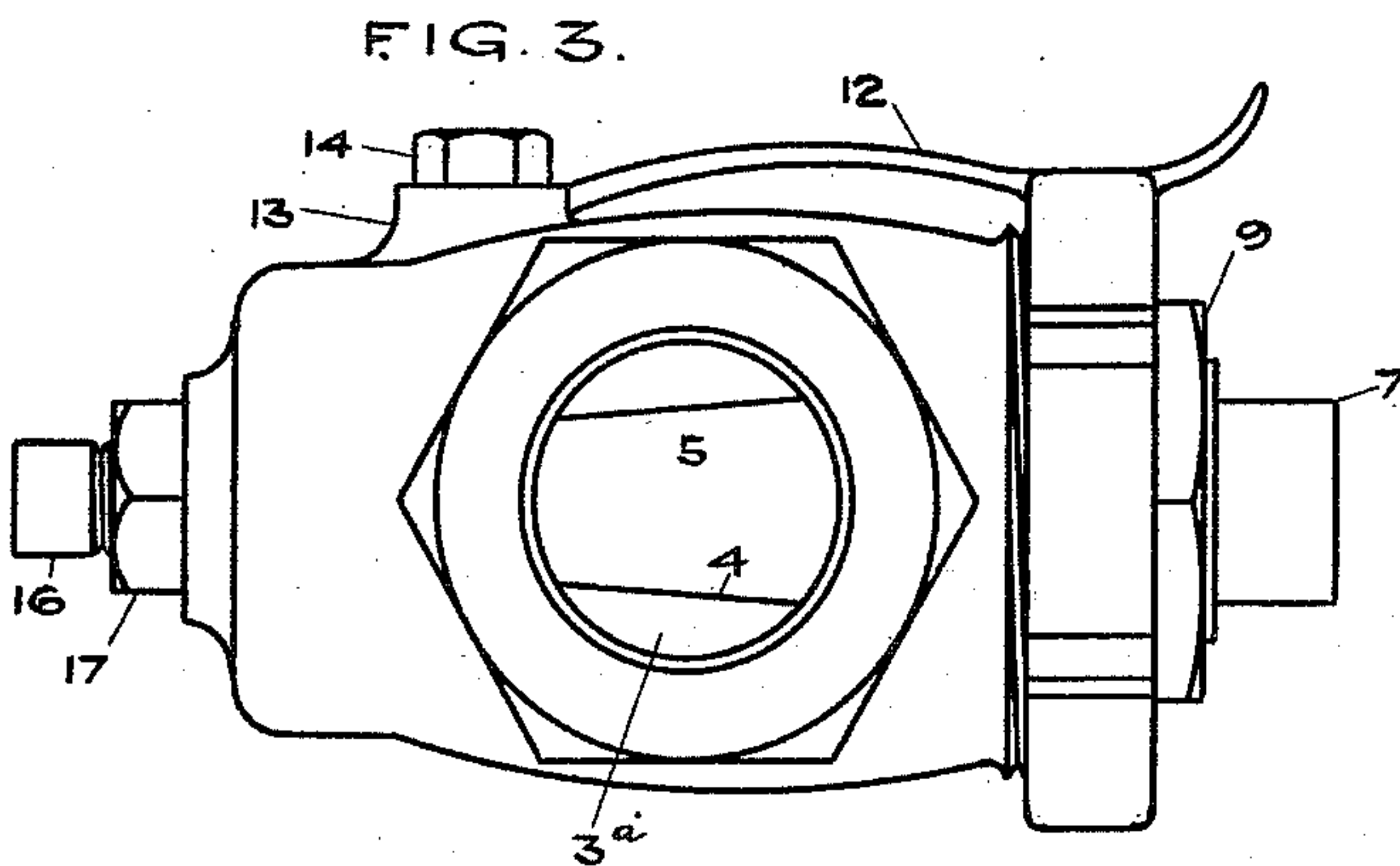


FIG. 3.

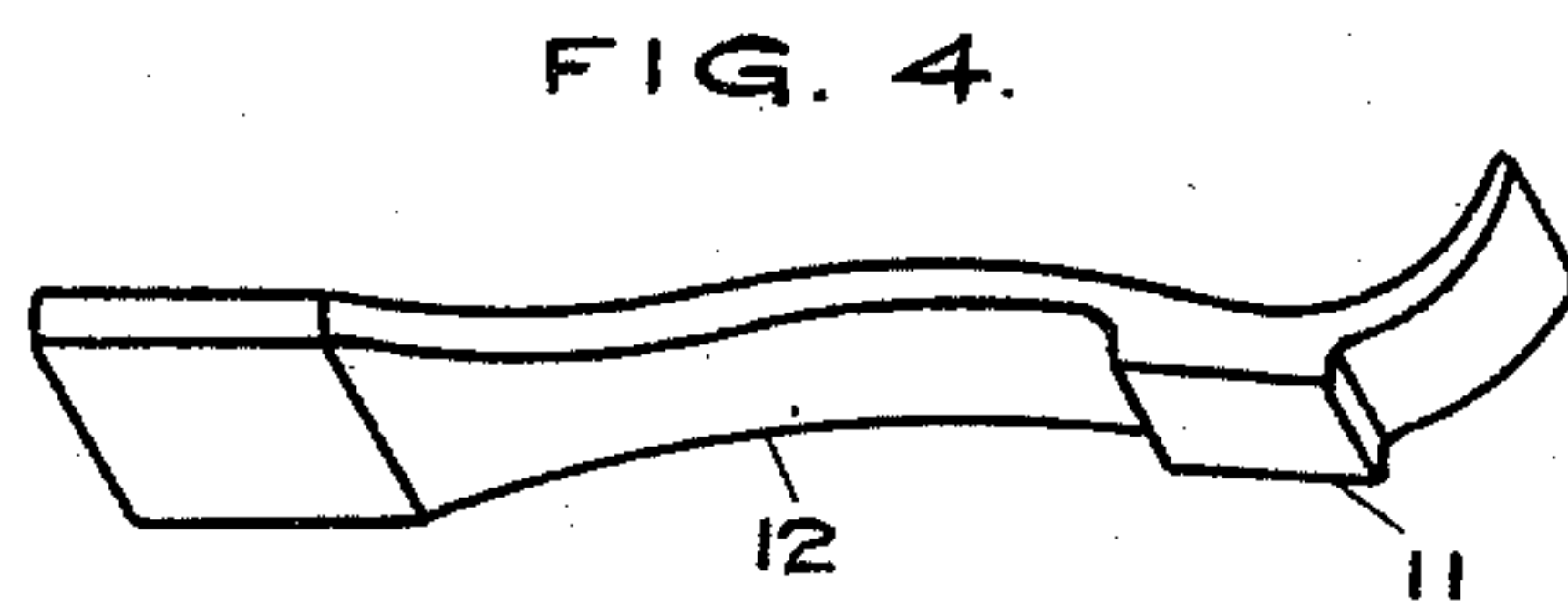


FIG. 4.

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Witnesses Eugene W. Burbank
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UNITED STATES PATENT OFFICE.

THOMAS R. STANLEY, OF OIL CITY, PENNSYLVANIA.

VALVE.

995,193.

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To all whom it may concern:

Be it known that I, THOMAS R. STANLEY, a citizen of the United States, residing at Oil City, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Valves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in valves or stop cocks.

One object of the invention is to provide a valve having an improved means for holding the plug in place and means whereby the plug may be adjusted from either end of the valve.

Another object is to provide an improved means for locking the plug adjusting mechanism whereby the plug will be securely held in operative engagement with its seat.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claim.

In the accompanying drawings: Figure 1 is a top plan view partly in section of a valve constructed in accordance with the invention; Fig. 2 is a side view thereof; Fig. 3 is an end view of the same; Fig. 4 is a detail perspective view of the locking lever for the plug adjusting and holding cap.

Referring more particularly to the drawings, 1 denotes the casing of my improved valve, said casing having in its opposite sides inlet and discharge passages 2 and 3^a and having formed therein between said passages a tapered valve seat 3. The valve seat 3 opens through one end of the valve casing and is adapted to receive a tapered plug valve 4 which is adapted to snugly fit said seat and to be held in adjustable engagement therewith by adjusting devices hereinafter described. The valve 4 is here shown as being of hollow construction and has formed at diametrically opposite points in the side walls thereof, passages 5 which when turned in alinement with the passages 2 and 3 in the valve casing permit fluid to pass through the valve.

On the outer end of the valve is formed

a reduced cylindrical shank or stem 6 having a squared outer end 7 with which is adapted to be engaged a wrench or operating handle (not shown). The adjacent end of the casing 1 is threaded as shown at 8 and on said threaded end is adapted to be screwed a plug holding and adjusting cap 9 having formed therein a centrally disposed circular passage through which the stem 7 projects. The cap 9 when screwed onto the threaded end 8 of the casing is adapted to engage the annular shoulder formed by the reduced stem of the plug whereby when said cap is screwed up the end of the plug will be forced into tight engagement with its seat.

In the outer edge of the cap 9 is formed a series of notches 10 with one of which is adapted to be engaged the tooth 11 of a locking lever 12 the inner end of which is engaged with the upper side of the valve casing between two bracing lugs 13 formed on said side of the casing. The inner end of the lever 12 is firmly secured to the casing between the lugs by a screw 14 as shown. By arranging the inner end of the lever between the lugs 13 the lever will be firmly held against lateral or turning movement so that the tooth on the outer end of the lever when engaged with the notches 10 in the cap 9 will securely hold said cap against turning in either direction.

In the opposite end of the valve casing from that engaged by the cap 9 is formed a threaded passage 15 with which is engaged a plug adjusting screw 16 having a squared outer end adapted to be engaged by a wrench whereby the screw may be turned inwardly or outwardly into engagement with the adjacent end of the plug thereby providing for the adjustment of the plug from this end of the casing as well as from the opposite end where the adjustment is obtained through the cap as herein described. On the adjusting screw 16 is arranged a locking nut 17 whereby the screw 16 is securely locked in its adjusted position.

By constructing the valve as herein shown and described it will be readily seen that should the end of the casing containing the adjusting screw 16 be broken off that the plug may still be adjusted by the cap 9 and any leakage of the valve thus prevented and that when the plug becomes worn that the same may be quickly and easily adjusted

and kept in fluid tight engagement with its seat.

5 A plug constructed in accordance with my invention may be used in connection with any fluid conducting pipes but is especially adapted for use in connection with high pressure pipe lines from oil wells and the like where a broken valve would result in a great loss.

10 From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

15 Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claim.

20 Having thus described my invention, what I claim is:

In a valve of the character described, a casing having formed therein a tapered

valve seat, a tapered plug valve engaged 25 with said seat, a cap having a screw threaded engagement with one end of said casing, and having an operative engagement with the adjacent end of the valve plug, said cap having formed in its outer side an annular 30 series of radial notches, embracing-lugs on the casing a spring locking lever secured to the casing, between said lugs a tooth formed on the outer end of said lever and adapted to be engaged in any one of the notches in 35 said cap whereby the latter is secured in any adjusted position, an adjusting screw arranged in the opposite end of the casing and engaging the adjacent end of the plug and a locking nut arranged on said screw. 40

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

THOMAS R. STANLEY.

Witnesses:

EUGENE W. BURBANK,
CHARLES WITMER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
