

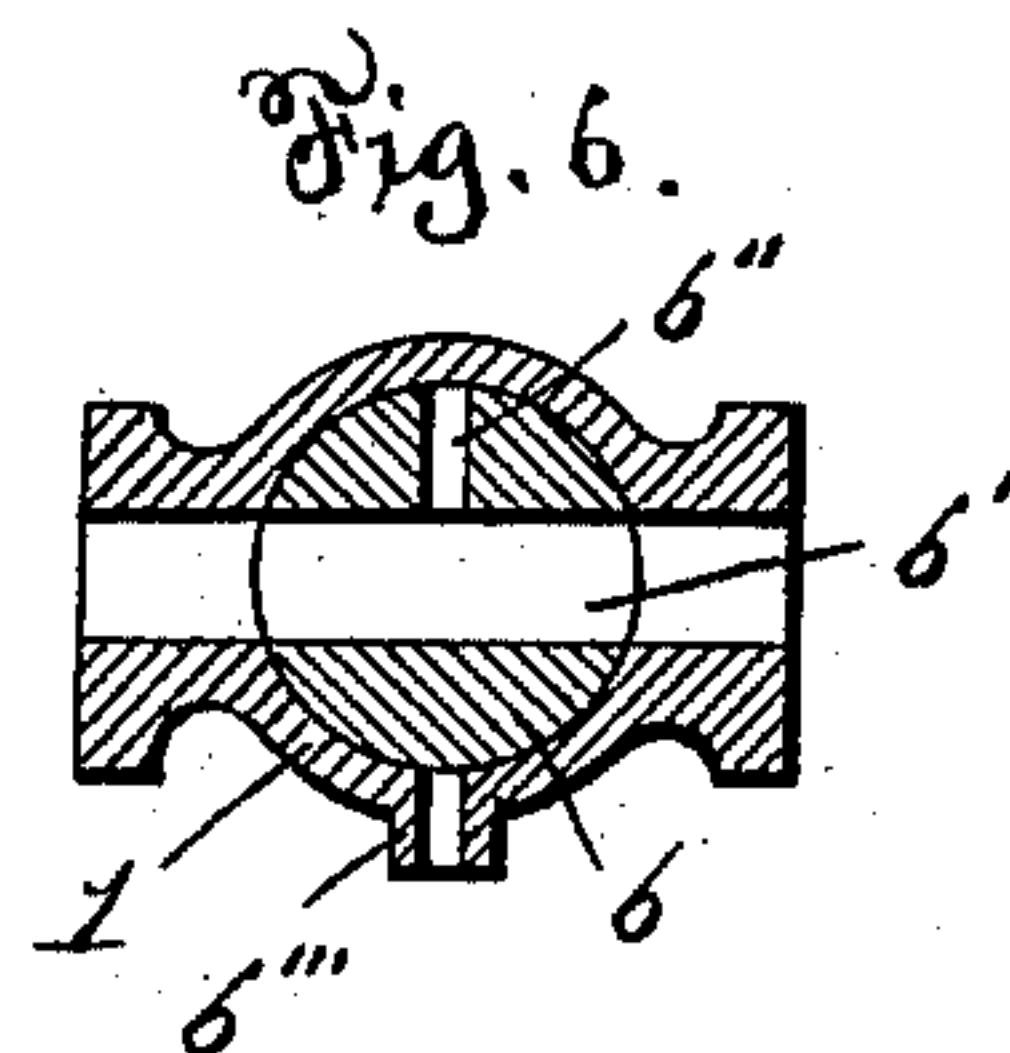
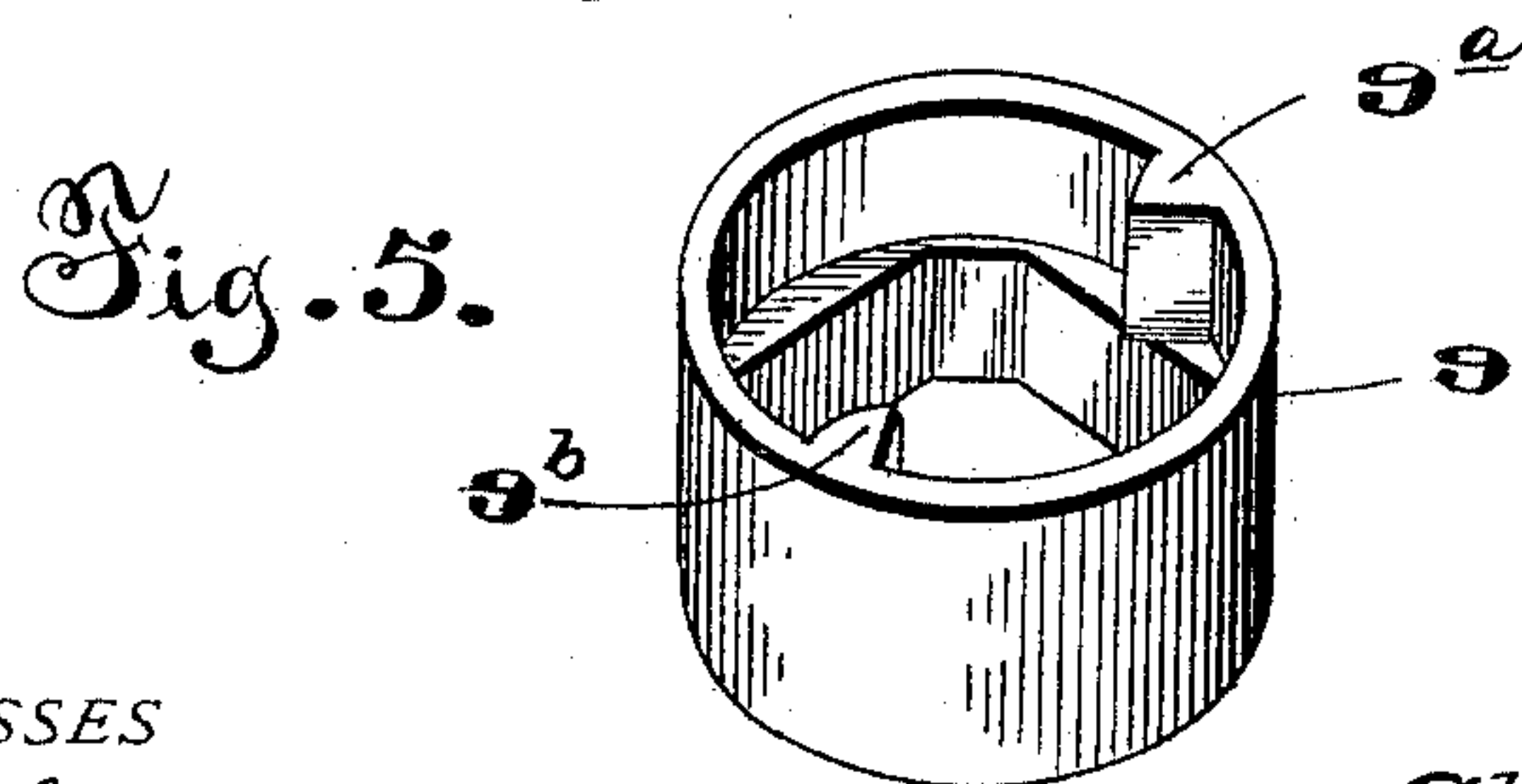
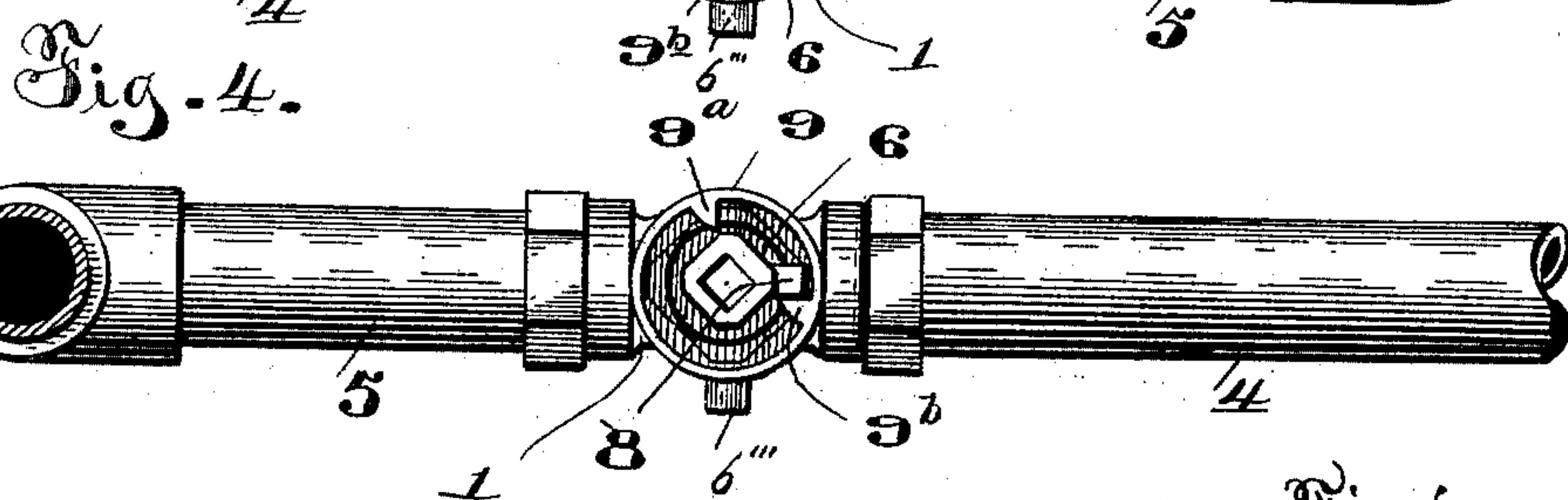
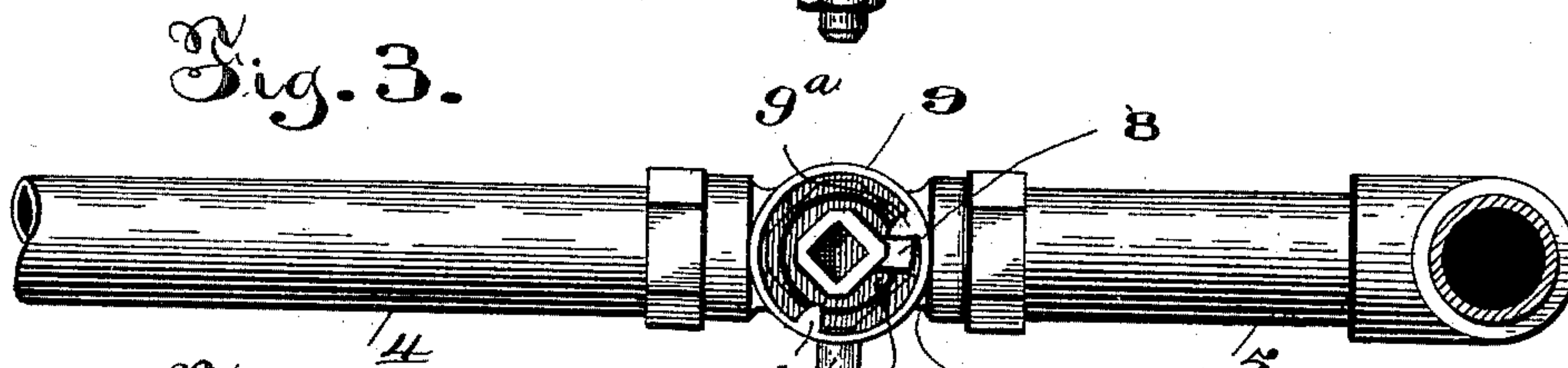
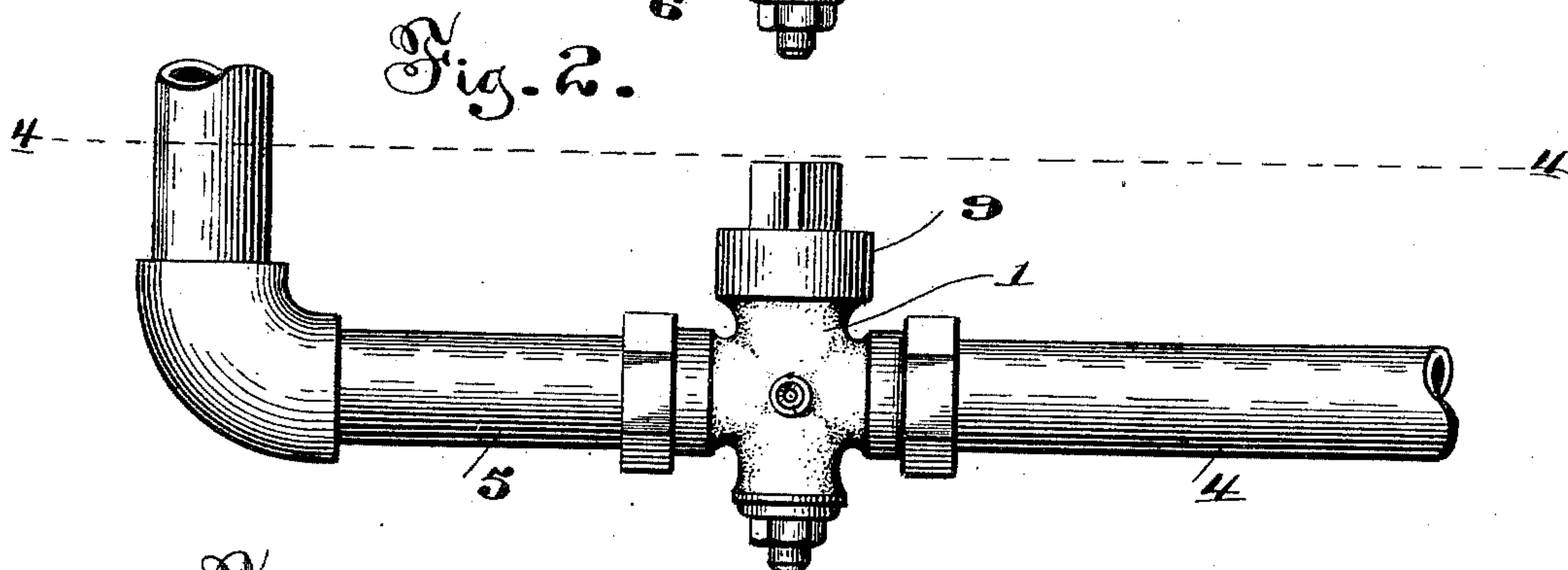
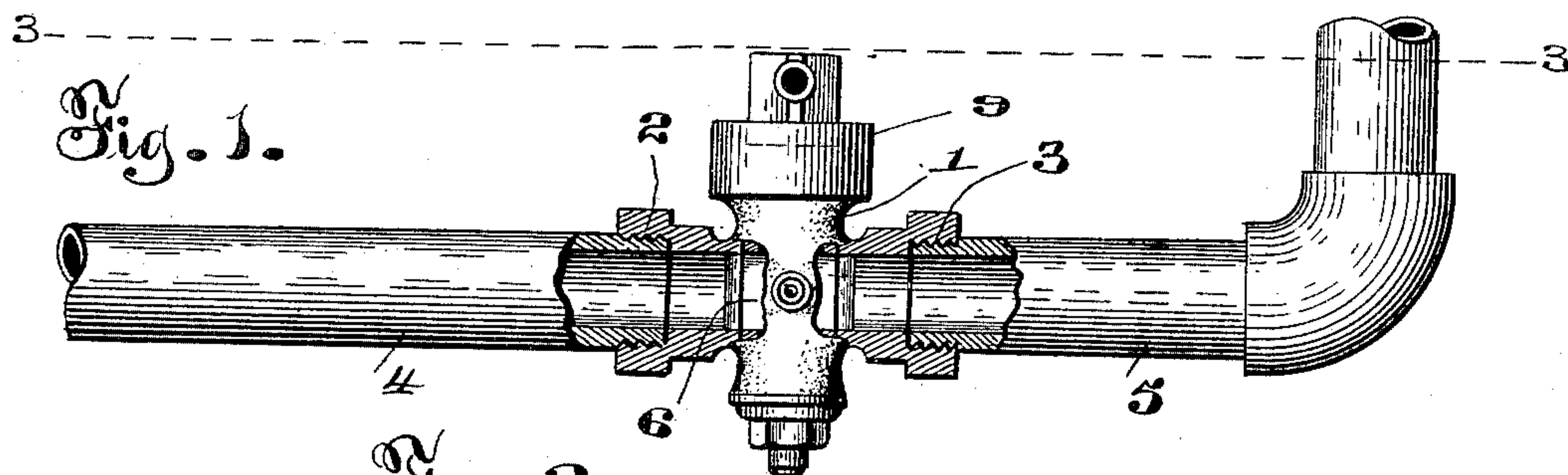
No. 619,256.

Patented Feb. 7, 1899.

C. M. JARVIS.
STOP AND WASTE COCK.

(Application filed Mar. 12, 1897.)

(No Model.)



WITNESSES

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STOP AND WASTE COCK.

SPECIFICATION forming part of Letters Patent No. 619,256, dated February 7, 1899.

Application filed March 12, 1897. Serial No. 627,110. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. JARVIS, a citizen of the United States, residing at Stewart, in the county of Athens and State of Ohio, have invented certain new and useful Improvements in Stop and Waste Cocks; and I do hereby 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 certain improvements in stop and waste cocks, the object being to provide a cock of this character which can be readily and quickly changed so as to be applicable to either a right or left hand supply-pipe, this change being effected by the use of a device used upon the shell thereof, which may be removed to permit of the change being made without disturbing any of the parts of the cock.

The invention comprises certain novel features of construction and arrangement of parts whereby the above and other important advantages are attained, as will be hereinafter fully described, and specifically defined in the appended claims.

In the accompanying drawings, Figure 1 represents my invention applied to a main water-pipe leading from the left. Fig. 2 is a similar view showing my invention applied to a main supply-pipe leading from the right. Fig. 3 is a section on the line 3 3 of Fig. 1, showing the valve in open position. Fig. 4 is a similar view on the line 4 4 of Fig. 2, showing the valve in open position. Fig. 5 is a detail perspective view of a device used to change the cock from right to left and to limit the movement of the core or plug; and Fig. 6 is a detail section through the valve and casing, showing the arrangement of ports in the valve in open position.

Similar reference-numerals indicate corresponding parts in all the figures of the drawings.

1 represents the shell of any ordinary waste and stop cock, having internally-threaded openings 2 and 3. The former is shown in Fig. 1 connected with the main supply-pipe 4 and the latter connected with the pipe 5, leading to the faucets within the house. The shell 1 is also provided with a central bore,

which connects with the openings 2 and 3 to receive within it the usual plug or core 6, which latter is provided with a supply-opening 6' to admit of the water passing there-through from the main supply-pipe to the pipe leading to the faucets and with a vent 6'', adapted to register with pipe 5 when the valve has been turned to cut off the water, thereby permitting the waste water in pipe 5 to drain out through said vent and supply-opening and an outlet or drain pipe 6''', projecting from the casing.

The outer end of the core or plug is provided with the usual socket to receive the handle and with a projection 8, which is adapted to engage stops 9^a and 9^b, located upon the inner face of an adjustable collar 9, which serve to limit the rotative movement of the core or plug, and thus bring its opening into proper position to turn on or shut off the water. These stops 9^a and 9^b are slightly more than ninety degrees apart, and by reason of the projection 8, lying between them, the rotation of the valve is limited to a quadrant's distance. This collar 9 has its inner face for about one-half its depth squared, and the end of the shell adjacent to the projecting end of the core or plug is correspondingly shaped, so that when the collar engages therewith a rotative movement of the latter is absolutely prevented.

The position of the collar upon the waste or stop cock when the main supply leads from the left is clearly shown in Fig. 3 of the drawings, the projection upon the core or plug resting beneath the stop 9^a of the collar 9, to the right thereof, in which position the opening in the plug registers with the openings 2 and 3 and admits water into the pipes leading to the faucets, and the vent is disposed diametrically opposite the drain-pipe; but a movement to bring the projection on the plug against the stop 9^b will serve to shut off the supply from pipe 4 and bring the vent in alinement with pipe 5 and the supply-opening in register with the drain-pipe, so that the waste water in pipe 5 will pass out through the drain-pipe.

In arranging the parts to make the cock applicable to a supply-pipe leading from the right the collar is moved so as to bring the stop 9^b beneath the projection of the core or

plug, in which position the water is turned on; but an upward movement to the left to bring the projection against the stop 9^a, as shown at the top of Fig. 4, will serve to limit the movement of the core or plug in that direction, as well as shut off the supply of water. The vent in this instance will also register with the pipe 5, and the water from said pipe can drain out through the drain-pipe while the water is turned off from the supply-pipe 4.

I do not wish to limit myself to the precise details of construction herein shown and described, as it is evident that many modifications can be made without departing from the essential features of my invention. Among others, I may provide the cock with grooves arranged at predetermined intervals and provide the collar with projections adapted to engage said grooves, so that by withdrawing these projections from the grooves the collar may be readily turned so as to bring its stops in position to change the cock from right to left hand, as will be readily apparent, and I reserve the right to make this change and such others as may fairly fall within the spirit and scope of my invention.

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

1. In a stop and waste cock, the combination with a valve-casing having couplings and provided with a polygonal portion and a waste-opening, of a plug-valve having a supply-

opening and a vent, a stop on the valve, and a removable and adjustable collar having a polygonal recess adapted to fit over the polygonal portion of the casing and provided with stops between which the stop on the plug plays and which rest on the polygonal portion and hold the collar in position.

2. In a stop and waste cock, the combination with a valve-casing having diametrically-disposed pipe-couplings and an outlet located at right angles thereto and provided with a polygonal portion, of a plug-valve mounted to turn in said casing and the polygonal portion thereof, which valve has a supply-passage extending therethrough from side to side and a vent located at right angles to said supply-passage, and said valve also having an upwardly-extending stop adapted to play over the polygonal portion aforesaid, and a collar snugly fitted over the polygonal portion but detachable therefrom, which is provided with a rim and with inwardly-projecting stops adapted to rest on the polygonal portion and located approximately ninety degrees apart, and between which the stop on the plug can play, said stop also being guarded by the rim of the collar.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES M. JARVIS.

Witnesses:

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