Dec. 29, 1925. 1,567,030

C. L. BRYANT

VALVE

Filed August 25, 1924

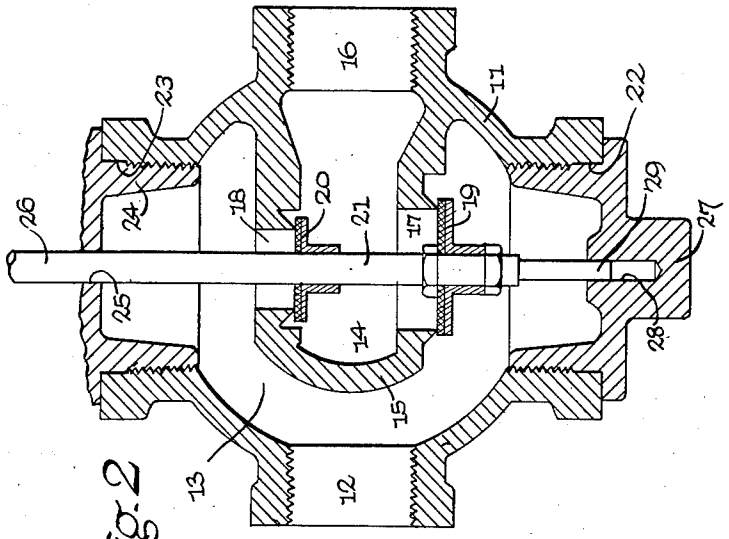


Fig. 2

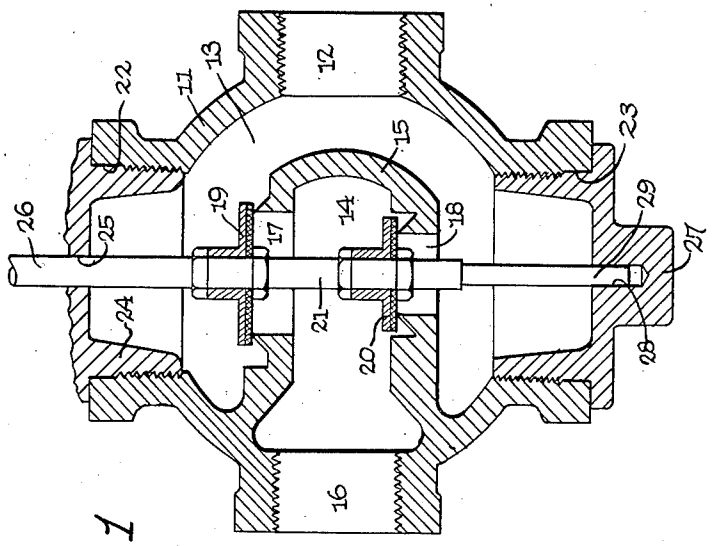


Fig. 1

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Patented Dec. 29, 1925. 1,567,030

UNITED STATES PATENT OFFICE.

CHARLES L. BRYANT, OF CLEVELAND, OHIO.

VALVE.

Application filed August 25, 1924. Serial No. 734,042.

To all whom it may concern:

Be it known that I, CHARLES L. BRYANT, a citizen of the United States of America, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Valves, of which the following is a full, clear, and exact description.

In connecting a valve assembly as part of a pressure responsive valve it is ordinarily desirable that the seat be closed by downward movement of the valve and valve stem while in connecting a valve assembly as part of a pressure regulator it is ordinarily desirable that the seat be closed by upward movement of the valve and valve stem. Accordingly, and in spite of the fact that the two valve assemblies may be otherwise identical, it has heretofore been necessary to manufacture and maintain in stock two separate and different valve assemblies each suitable for one of these purposes. My invention provides a valve assembly adapted to be used for either purpose. In the drawings accompanying this specification and forming a part thereof I have shown, for purposes of illustration, one form which my invention may assume. In these drawings:

Figure 1 is a central vertical section of this illustrative embodiment of my invention showing the valve assembly arranged to close by downward movement, while

Figure 2 is a similar view showing the valve assembly arranged to close by upward movement.

The valve assembly shown herein comprises a casing 11 provided with an opening 12 leading into an outer chamber 13 surrounding an inner chamber 14 formed by the wall or partition 15, directly in communication with the opening 16, and in communication with the outer chamber 13 by means of apertures 17 and 18 through the partition 15 arranged to form seats for valves 19 and 20 arranged to close the apertures 17 and 18 respectively and mounted upon and reciprocated by a single valve stem 21. The valve casing 11 is also provided with a pair of apertures 22 and 23 alined with the apertures 17 and 18 and each adapted to screw-threadedly receive either a plug 24 provided with an aperture 25 arranged to form a guide for and permit passage therethrough of the projecting end 26 of the valve stem 21 or a plug 27 provided with a recess 28 arranged to form a guide for but not permit passage therethrough of the inner end 29 of the valve stem 21.

When the valve assembly is to be arranged to be closed by downward movement of the valves 19 and 20 and valve stem 21 the plug 24 will be positioned in the aperture 22 and the plug 27 in the aperture 23, all as shown in Figure 1, and when the valve assembly is to be arranged to be closed by upward movement of the valves 19 and 20 and valve stem 21 the plug 24 will be arranged in the aperture 23 and the plug 27 in the aperture 22, all as shown in Figure 2.

It will be apparent from the above description that I have provided a valve assembly adapted to be arranged to open upon upward movement of the valves and valve stem or upon downward movement of the valves and valve stem, that I thereby reduce by half the variety of assemblies to be manufactured and maintained in stock, and that in this way I effect a material and consequential saving both in money and convenience. It will be obvious to those skilled in the art that the particular embodiment of my invention herein shown and described may be variously changed and modified without departing from the spirit of my invention or sacrificing the advantages thereof and it will therefore be understood that the disclosure herein is illustrative only and that my invention is not limited thereto.

I claim:

1. A valve assembly comprising a valve casing having an inlet and an outlet and a valve seat and two openings disposed in opposite directions from said valve seat, a valve adapted to close said seat from one side only, a valve stem adapted to carry said valve and extend through either of said openings, and a plug adapted, to close either of said openings.

2. A valve assembly comprising a valve casing having an inlet and an outlet and a valve seat and two openings disposed in opposite directions from said valve seat, a valve adapted to close said seat from one side only, a valve stem adapted to carry said valve, a plug adapted to close either of said openings and apertured to permit said stem

to pass therethrough and to support said stem, and a second plug also adapted to close either of said openings.

3. A valve assembly comprising a valve casing having an inlet and an outlet and a valve seat and two openings disposed in opposite directions from said valve seat, a valve adapted to close said seat from one side only, a valve stem adapted to carry said valve, a plug adapted to screw threadedly engage and close either of said openings and apertured to permit said stem to pass therethrough and to support said stem, and a second plug also adapted to screw threadedly engage and close the other of said openings.

In testimony whereof, I hereunto affix my signature.

CHARLES L. BYRANT.