July 10, 1923.

1,461,439

W. W. BURGIN

CHECK VALVE

Filed April 12, 1921

Fig. 1

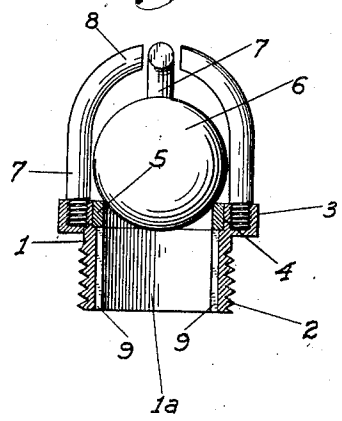


Fig. 2

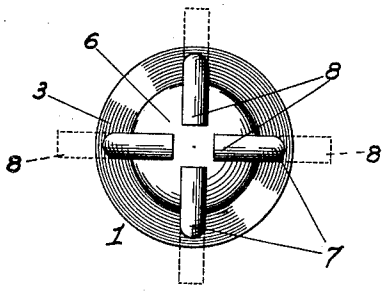
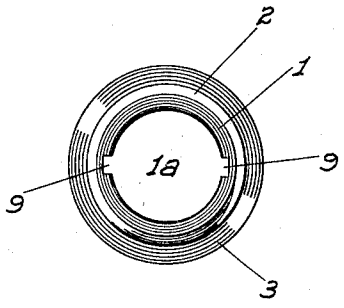


Fig. 3



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UNITED STATES PATENT OFFICE.

WALDO W. BURGIN, OF LODI, CALIFORNIA.

CHECK VALVE.

Application filed April 12, 1921. Serial No. 460,707.

To all whom it may concern:

Be it known that I, WALDO W. BURGIN, a citizen of the United States, residing at Lodi, county of San Joaquin, State of California, have invented certain new and useful Improvements in Check Valves; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in check-valves such as are used in pipe lines and other locations, the principal object of the invention being to provide a seat member for the valve which may be easily reversed so that a spare seat for the valve is had, which will of course enable the valve to give twice the length of service over what is had with an ordinary valve, without regrinding the seat.

Another object is to provide a check valve of the ball type which may be constructed as a unit article to be inserted or interposed in a pipe. That is, the valve seat and the ball are mounted together, and cannot become accidentally displaced from each other when being handled, without the need of any separate parts or attachments, not a part of the check-valve, being necessary to hold the ball in place.

A further object of the invention is to provide a simple and inexpensive device and yet one which will be exceedingly effective for the purposes which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Fig. 1 is a sectional elevation of the valve.

Fig. 2 is a top plan view thereof, and

Fig. 3 is a bottom plan of the shell or body.

Referring now more particularly to the characters of reference on the drawings, the numeral 1 denotes a tubular shell, threaded as at 2 a certain distance upwardly from the bottom, and having an outwardly projecting flange 3 at the top thereof.

From the top, and extending a certain distance downwardly the normal bore 1^a is enlarged somewhat as at 4 to form a seat for a ring 5, the inner periphery of which is preferably flush with the bore 1^a.

The upper and inner edge of this ring forms the seat for a ball 6, which is held in place while allowed a certain amount of vertical movement by means of a plurality of pins 7 secured into the upper face of the body 1 beyond the ring, these pins when normally positioned bending inwardly above the ball and toward each other, as shown at 8.

In order to enable the seat-ring to be removed and reversed, opposed slots 9 are cut in the walls of the bore 1^a, and extend from the bottom to the enlarged bore 4, so that a tool may be inserted to abut against the lower face of the ring to drive the same out without nicking or otherwise marring the seat edge.

To remove the ball and seat member, it is only necessary to give each of the pins 7 a half turn, so that the overhanging portions 8 project outwardly, as indicated by the dotted lines in Fig. 2.

The body 1 is adapted to be screwed directly into a pipe or into a ring or sleeve fitted therein, so that the flange 3, in connection with a gasket, will make a tight joint with the pipe or sleeve.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to and do not form a departure from the spirit of the invention, as defined by the appended claim.

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

A check valve including a tubular body, a closure member for the body, and a ring removably fitted into one end of the body, the inner peripheral edges of the ring being adapted to either at a time form a seat for said closure member the body-bore being provided with longitudinal slots extending to the ring from the opposite end of the body.

In testimony whereof I affix my signature.

WALDO W. BURGIN.