

W. D. GELSER.
CHECK VALVE FOR STEAM BOILER WATER GAGES.

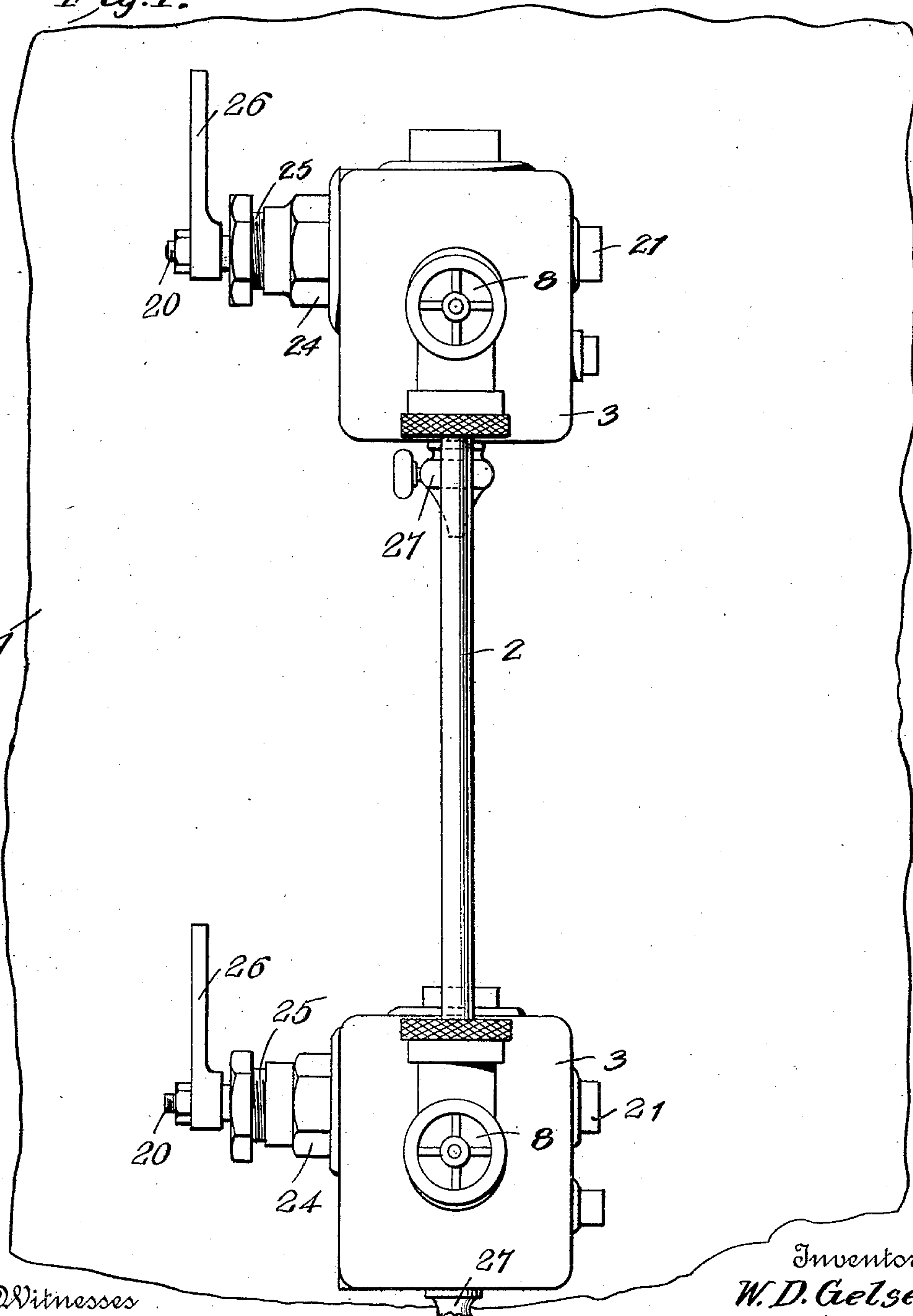
APPLICATION FILED AUG. 28, 1908.

908,240.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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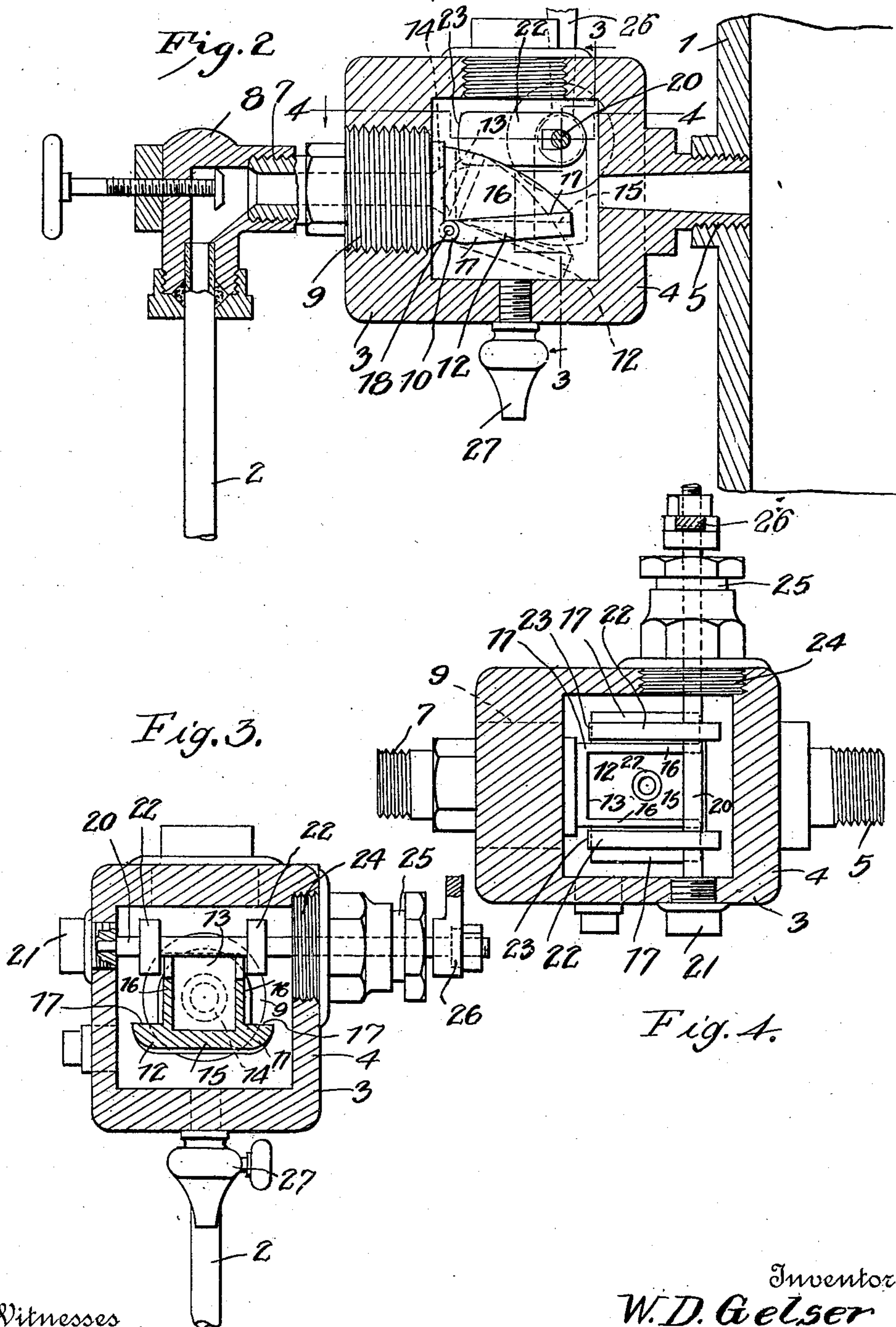
Inventor
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Witnesses
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UNITED STATES PATENT OFFICE.

WALTER D. GELSER, OF HUNT, NEW YORK.

CHECK-VALVE FOR STEAM-BOILER WATER-GAGES.

No. 908,240.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed August 28, 1908. Serial No. 450,922.

To all whom it may concern:

Be it known that I, WALTER D. GELSER, a citizen of the United States, residing at Hunt, in the county of Livingston and State of New York, have invented certain new and useful Improvements in Check-Valves for Steam-Boiler Water-Gages; 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 check valves for steam boiler water gages, and has for its object to provide a valve of this type for cutting off the escape of water or steam from the boiler should the water gage break.

With these 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 claims.

In the accompanying drawings, Figure 1 is a front elevation of a boiler equipped with my improvement; Fig. 2 is a central longitudinal section taken through the upper check valve; Fig. 3 is a vertical section taken on line 3—3 of Fig. 2; and Fig. 4 a horizontal section taken on line 4—4 of Fig. 2.

In the embodiment illustrated 1 indicates a boiler of any ordinary pattern, 2 the water gage and 3 the improved check valve. As shown in the drawings, the check valve comprises a suitable casing 4 provided at one end with a threaded tubular stem 5, which is screwed into the wall of the boiler. The opposite end of the casing is provided with a tubular exteriorly threaded stem 7, which screws into the stop cock or valve 8 of the water gage. Said stem is formed at the outer end of an exteriorly threaded plug 9, which screws into the outer end wall of the valve casing. As shown, the inner end of this plug is provided with a pair of laterally spaced apertured ears 10, adapted to receive a tubular extension 11 formed at the upper end of the check valve 12. As shown, this valve comprises an outer end wall 13 provided with a cylindrical portion 14, adapted to enter the bore of the plug 9, a bottom wall 15 and side walls 16. The side edges of the bottom wall extend beyond the side walls and provide engaging flanges 17, the purpose of which will be disclosed. This

valve is pivotally mounted at the inner end of the plug 9 by inserting the tubular portion thereof between the ears of said plug and inserting a coupling pin 18 through said apertures and extension.

An operating shaft 20 extends through the side walls of the casing, one end of the shaft extending into a plug 21, screwed into one side wall of the casing, and the opposite end of said shaft projecting a suitable distance beyond the other side wall of the casing. This shaft is provided at points within the casing with a pair of parallel spaced eccentrics 22, provided with outer beveled ends 23 adapted to engage the flanges 17 of the check valve 12 when the shaft is turned to bring the eccentrics in a vertical position, under which conditions the check valve is held open as will be understood. A suitable bearing 24 is screwed into one side wall of the casing to receive the operating shaft, and a gland or plug 25 screwed into the bearing to provide a water tight joint, as will be understood. A handle 26 is arranged at the projecting end of the operating shaft to provide for the manipulation of the latter, and a drain cock 27 screwed into the bottom wall of the casing. As shown in the drawings, the check valve is arranged at both the steam and water ends of the gage, and should the gage break, the operating shafts 20 are turned by means of the handles 26 to swing the eccentrics into an approximately horizontal position out of engagement with the engaging flanges of the check valves, as indicated in Fig. 2 of the drawings, when the latter will be instantly closed by the water and steam passing out of the boiler into the check valve casings, the cylindrical portions 14 of the outer end walls 13 of the check valves entering the bores of the plugs 9 and thus checking any outflow of water or steam from the boiler during the operation of the replacing of the water gage.

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.

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 this invention as defined in the appended claims.

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

1. A check valve comprising a casing, a
5 tubular plug screwing into one wall of the casing, a check valve provided at opposite sides with engaging flanges, pivotally mounted at the inner end of the plug, and a
10 shaft having a pair of eccentrics to engage the flanges of the check valve.

2. A check valve of the type described comprising a valve casing provided at one end with a tubular threaded extension, a
15 plug provided with a tubular exteriorly threaded extension screwing into one wall of the valve casing, a check valve provided with

an approximately cylindrical portion to enter the bore of said plug, pivotally mounted at the inner end thereof, said valve having laterally projected flanges at opposite sides, an
20 operating shaft having a pair of laterally spaced eccentrics to engage the flanges of the check valve, and a handle at one end of said shaft.

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

WALTER D. GELSER.

Witnesses:

WILL C. DOUGLASS,
JAY E. LYON.