No. 754,034. PATENTED MAR. 8, 1904.

J. ZOANETTO.

WATER GAGE.

APPLICATION FILED DEC. 10, 1903.

NO MODEL.

Fig. 1.

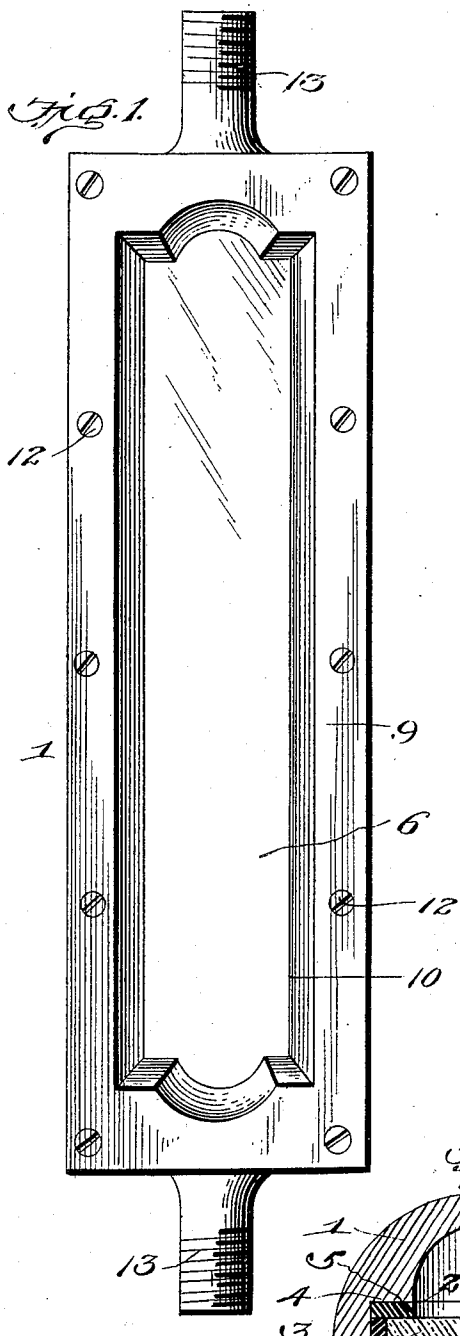


Fig. 2.

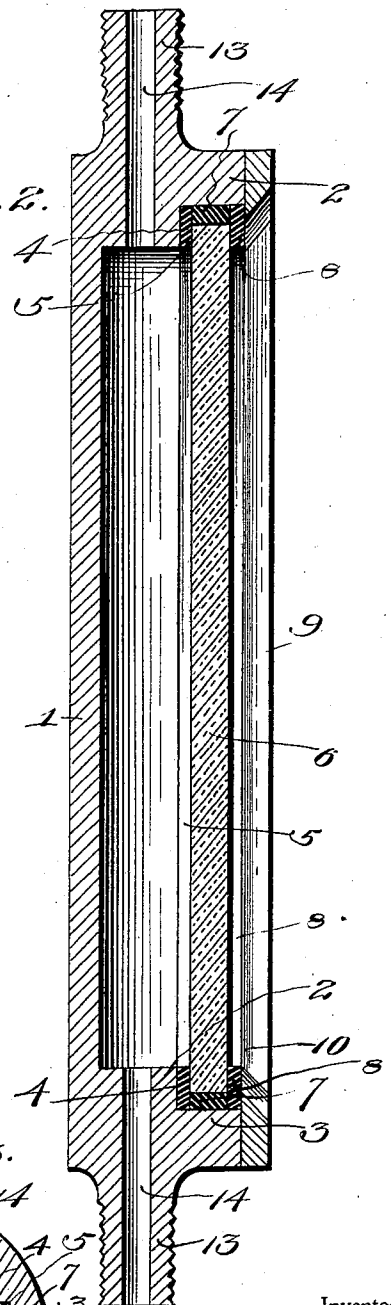
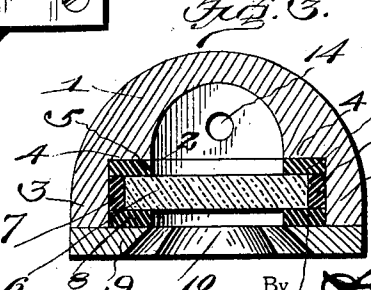


Fig. 3.



Witnesses

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No. 754,034. Patented March 8, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH ZOANETTO, OF NEW YORK, N. Y

WATER-GAGE.

SPECIFICATION forming part of Letters Patent No. 754,034, dated March 8, 1904.

Application filed December 10, 1903. Serial No. 184,647. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH ZOANETTO, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in 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 water-gages for steam-boilers and the like.

The object of the invention is to provide a water-gage of this character which will be strong, durable, and efficient and so constructed as not to be easily broken from rough or careless usage and which will be water-tight.

With this object 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 front elevation of a water-gage embodying the invention. Fig. 2 is a vertical sectional view. Fig. 3 is a horizontal cross-sectional view of the same.

Referring more particularly to the drawings, 1 denotes the body of the gage, which is constructed of metal or other material not easily broken and is preferably of hollow semicylindrical form closed at its upper and lower ends, as shown. In the flat front face of the body of the gage is formed an opening 2, around which and on the face of the tube is arranged a deep flange 3, the space formed by said flange being greater than the opening 2, thereby forming a shoulder or bearing-surface 4 all around the same, on which and within the flange is disposed a rubber gasket or packing-ring 5.

Within the flange 3 and engaging the gasket 5 is arranged a thick glass plate 6, between the edges of which and the inner sides of the flange are disposed packing-strips 7. On the outer face of the glass plate around the edges of and covering the same and the packing-strips 7 is arranged a rubber gasket or packing-ring 8. Over the gasket 8 is arranged a clamping plate or frame 9, provided with a central view-opening 10. The sides of the plate 9 around said opening are adapted to engage the edges of the flange 3 and to bear on the gasket 8. Screws 12 are passed through the plate 9 and into the flange 3, which when screwed into said flange clamps the plate 9 and gasket 8 onto the glass plate 6 and forces the same into close engagement with the inner gasket 5, thereby forming a fluid-tight joint between the edges of the glass plate and the body of the gage.

On the upper and lower ends of the gage are formed screw-threaded nipples 13, by which the gage may be connected to couplings on the boiler. The nipples 13 are provided with passages 14 to admit the water from the boiler, which will seek its level in the gage, and thereby indicate the amount of water contained in the boiler.

A gage constructed as herein described will be found superior to the ordinary form of gage-glasses, which are easily and frequently broken, this disadvantage being overcome by forming the body of the gage of practically unbreakable material and providing a view-opening in the same that is covered by a thick glass plate having a water-tight engagement with the body of the gage, through which the height of the water may be observed.

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.

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

A water-gage comprising a hollow non-frangible body closed at its ends, open on one side, having a shoulder extending around the opening in the body, at the sides and ends thereof, a flange also extending around the sides and ends of the opening and spaced therefrom, screw-nipples at the ends of the body having passages extending through them and commu-

nicating with the opening or hollow in the body, a gasket extending around the sides and ends of said opening and bearing against the shoulder, a transparent plate bearing against the gasket, a packing around the side and end edges of the plate and bearing against the side and end portions of the flange, a gasket on the outer side of the plate, extending around the sides and ends thereof, and a frame bearing against the outer side of the outer gasket and secured to the outer side of the flange, substantially as described.

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

JOSEPH ZOANETTO.

Witnesses:
PIETRO DE FILIPPO,
FRANCESCO DE VIO.