No. 816,682. PATENTED APR. 3, 1906.

F. E. REED & J. HEALD.

LINING FOR WOODEN TANKS.

APPLICATION FILED JAN. 2, 1904.

Fig. 1.

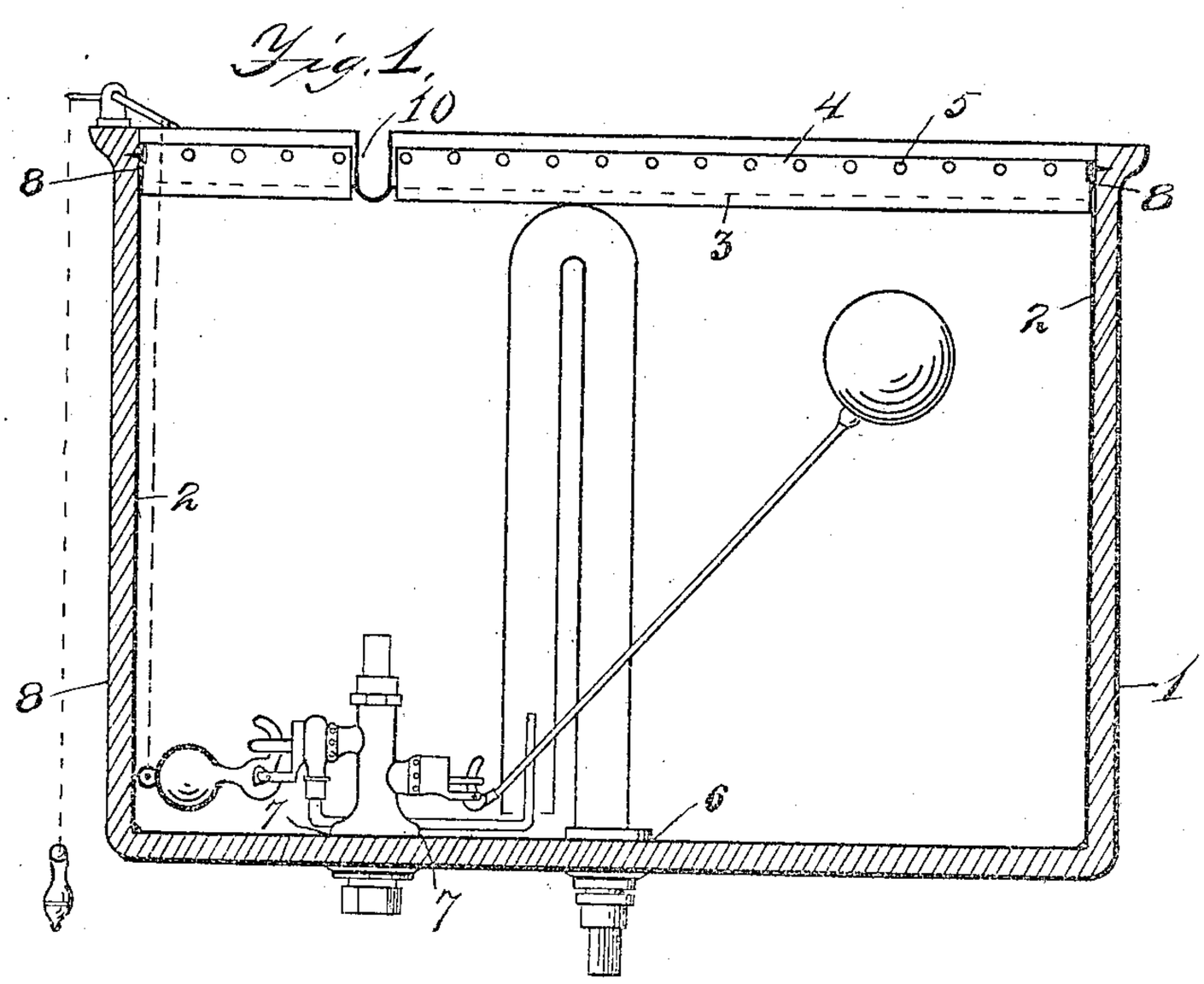


Fig. 2.

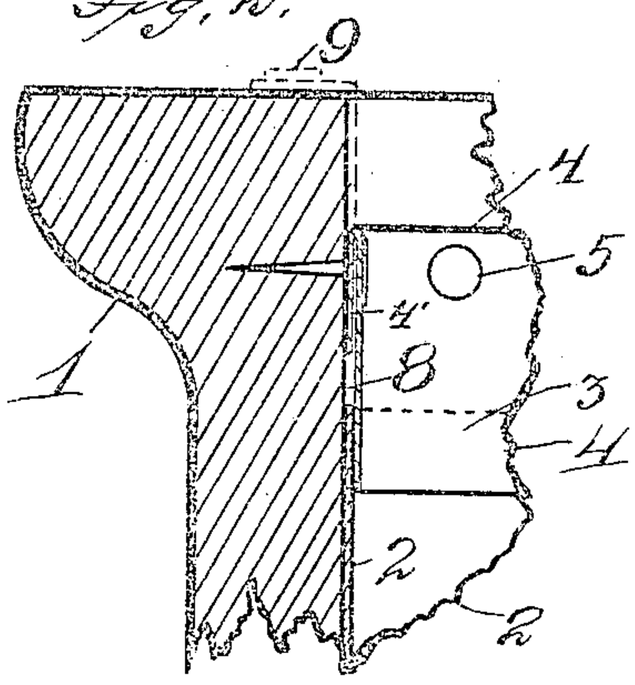
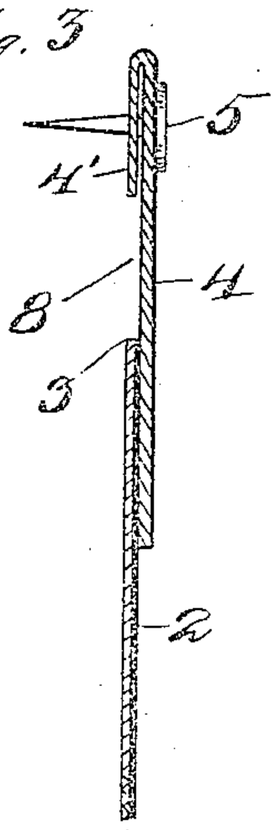


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK E. REED AND JOHN HEALD, OF JAMESTOWN, NEW YORK, ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, TO THE COLUMBUS BRASS COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

LINING FOR WOODEN TANKS.

No. 816,682. Specification of Letters Patent. Patented April 3, 1906.

Application filed January 2, 1904. Serial No. 187,479.

To all whom it may concern:

Be it known that we, FRANK E. REED and JOHN HEALD, citizens of the United States, and residents of Jamestown, in the county of Chautauqua and State of New York, have invented a new and useful Lining for Wooden Tanks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

Our invention relates to improvements in sheet-metal linings for wooden tanks, more especially for water-closet tanks; and the object of our improvement is to securely hold the lining within the tank, and at the same time so provide that the expansion and shrinkage of the wood from moisture will not tear the lining loose at the joints around the outlet and inlet pipes, and at the same time to protect the upper edge of the tank-lining, so that the drip or moisture cannot get in behind the tank-lining and cause the decay of the wood.

In the drawings, Figure 1 is a sectional view of a water-closet tank having our expansion-strip around the upper edge. Fig. 2 is an enlarged sectional view of one corner of the same. Fig. 3 is an enlarged sectional view of the strip and the upper edge of the lining.

Similar numerals refer to corresponding parts in the several views.

The numeral 1 is a common wooden water-closet tank having an unattached lining 2 on its inner side, which extends upward to a dotted line 3. Lining 2 is usually made of sheet-copper in the best tanks. A strip 4, preferably made of galvanized iron in order to secure stiffness and durability in the same, is secured to the wooden tanks over the upper edge 3 of lining 2 by suitable tacks 5, the upper edge of strip 4 being turned on itself in order to increase the stiffness of the strip, to strengthen the hold of tacks 5, and also to provide room for lining 2 in underneath the lower edge of strip 4, so that the wooden sides of the tank may come and go without tearing the lining 2 loose around pipes 6 and 7, a space 8 being left between the upper edge 3 of the tank-lining and the turned edge of strip 4.

Strip 4 can be cut, as at 10, for the purpose of admitting any of the working parts of the machinery of the tank, and yet perfectly fulfils its office of securing and protecting the upper edge of the unattached tank-lining. The tank-lining 2 is first made complete and then set into the wooden part 1. Lining 2 is only attached to the wood by the compression of the disks on the outer and inner sides at the outlet and inlet pipes 6 and 7. The sides of the lining are only confined by the strip 4. Hence the wood can come and go without effecting the efficacy of the lining.

Heretofore the lining of such tanks is commonly extended up and is tacked to the upper edge of the tank, as shown in dotted outline at 9. When so tacked to the upper edge of the tank, the expansion and shrinkage of the wood in damp lavatories causes the copper lining to draw off from the ferrules which hold the lining at the place of entrance for pipes 6 and 7, and in consequence the lining is broken and the utility of the tank destroyed. Our simple construction allows the wood to come and go as it pleases, the copper lining having plenty of room for such shrinkage or expansion. The upper edge 3 of the copper lining is thoroughly protected and at the same time firmly held against the side of the wooden tank, so that the water will run off the strip into the tank and cannot get in between lining 2 and the wood. All difficulty is thus overcome in placing wooden tanks in damp places where it has hitherto been an impossibility for a wooden tank to be successfully operated for any great length of time.

We claim as new—

A tank consisting of a wooden shell, an unattached sheet-metal lining within said shell, a strip attached to said shell above the upper edge of said lining and extending over the same, the upper edge of said strip folded toward said shell, and a space between the lower edge of said fold and said upper edge of the lining, substantially as and for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRANK E. REED.
JOHN HEALD.

Witnesses:
A. W. KETTLE,
F. E. BALDWIN.