

C. M. STONER.

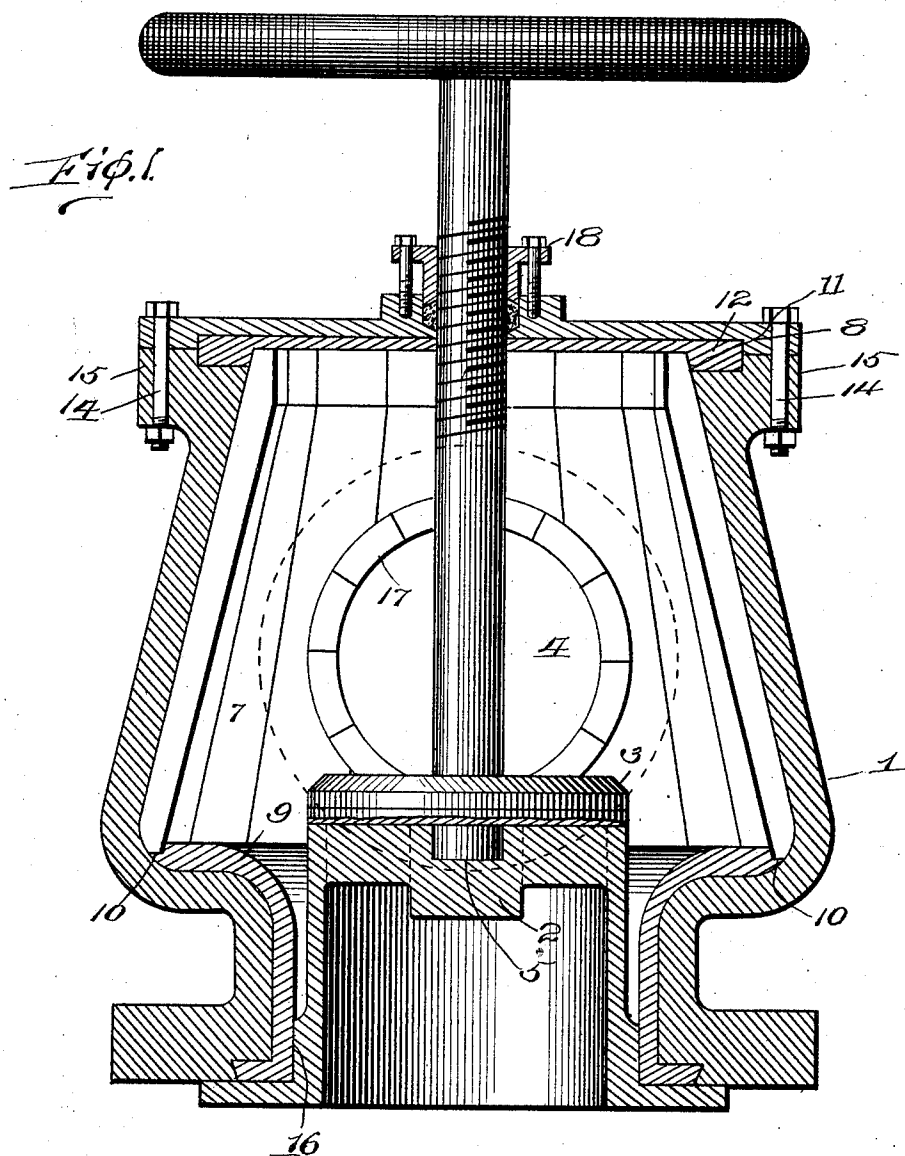
VALVE.

APPLICATION FILED JUNE 6, 1910.

1,038,455.

Patented Sept. 10, 1912.

2 SHEETS—SHEET 1.



Witnesses

J. M. Fowler Jr.
C. H. Fowler

Inventor

Cyrus M. Stoner

By

Johnson and Johnson

Attorneys

C. M. STONER.

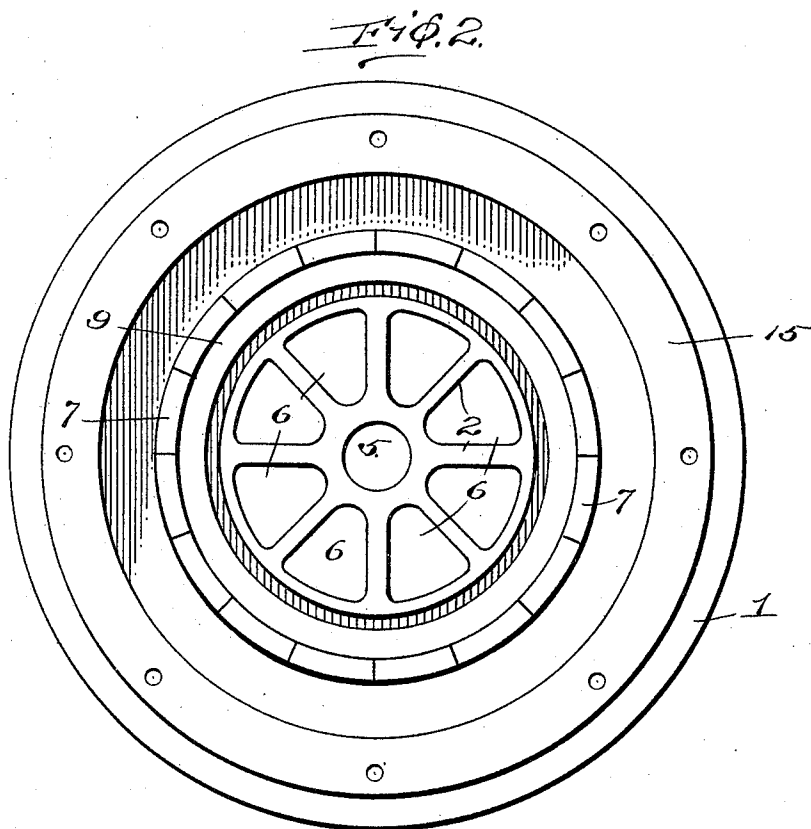
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UNITED STATES PATENT OFFICE.

CYRUS M. STONER, OF CONNELLSVILLE, PENNSYLVANIA, ASSIGNOR TO BOYTS,
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VALVE.

1,038,455.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Application filed June 6, 1910. Serial No. 565,270.

To all whom it may concern:

Be it known that I, CYRUS M. STONER, a citizen of the United States, residing at Conneltsville, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Valves, of which the following is a specification.

This invention relates to improvements in valves, and particularly to lined valves.

10 The object in view is the arrangement in a valve, of a lining formed of a plurality of materials for protecting the ordinary valve body.

15 A further object of the invention is the arrangement in a valve, of a lining therefor comprising a wooden portion, and a leaden portion, the leaden portion being arranged to assist in holding the wooden portion in position.

20 Another object in view is the arrangement in a valve, of a plurality of staves for lining part of the valve, a lead lining for the remaining part of the valve arranged with an offset portion for assisting in holding the staves in position, the lining being associ-
25 ated with a bronze valve seat, whereby minerals and acids passing through the valve will not materially affect the valve.

30 With these and other objects in view the invention comprises certain novel constructions, combinations, and arrangement of parts as will be hereinafter more fully described and claimed.

35 In the accompanying drawings: Figure 1 is a sectional view through a valve embodying the invention. Fig. 2 is a top plan view of the valve casing with the lining applied.

40 In forming a valve embodying the invention, the same is provided with a housing having a valve seat, preferably of bronze, which will resist the action of acids, minerals, and the like passing through the valve. The housing is interiorly lined with a plu-
45 rality of wooden staves and lead sheathing, the lead sheathing being arranged at a point difficult to provide a wooden lining. The lead sheathing is arranged to assist in holding the wooden lining in position, and to thoroughly protect the casing.

50 In order that the invention may be more clearly understood, reference is had to the accompanying drawings, in which 1 indicates the casing which may be of any desired material, having a seat 2 preferably

of bronze, and a movable valve member 3 55 of any desired material, actuated by a valve stem 4. The seat 2 is provided with a guiding member 5, and a plurality of apertures 6. Arranged on the interior of casing 1 is a lining 7 of wood staves which are held in 60 position by a cap member 8 and by a lead sheathing 9. The lead sheathing 9 is formed with an offset portion or notch 10 which firmly holds the bottom edge of the staves in position, while the upper edge of the 65 staves are held in position by a member 8.

The cap member 8 may be made of any material and is preferably provided with a wooden lining 12, in which a recess 11 is 70 formed to receive the upper ends of the staves. In addition to the wooden lining 12, the cap member 8 may be provided with a packing box 18 through which stem 4 passes. Cap member 8 may be held in position by 75 any suitable means, as for instance bolts 14, which pass through the edge of the cap and the flange 15 of the housing 1. The lead sheathing 9 is bent to conform to the 80 lower part of the housing 1, and covers the interior of the same, so that any liquid passing through the valve cannot come in contact with said housing. At the lower 85 edge, namely at the point designated 16, the lead sheathing 9 contacts with part of the valve seat 2, and effectually prevents any liquid from passing through the housing, except through the apertures 6, and at the same time prevents any liquid from con- 90 tacting with the housing 1. Valve seat 2 may be secured by bolts, screws, or the like, to the housing 1 in any desired manner, and housing 1 in turn may be secured to any suitable conduit by bolts or otherwise 95 as desired.

When in use a conduit or pipe 17, prefer- 95 ably lined with wood staves, is connected with the housing 1 in any desired manner, but preferably so that none of the contents will engage the housing, but may freely pass to the interior thereof, and from thence 100 down through the openings or apertures 6 in the valve seat 2. Of course if the flow of liquid is in the opposite direction the valve will accommodate the same, without any change except that the valve member 3 105 must be associated with means for holding the same against its seat in case the flow is desired to be stopped.

What I claim is:

1. In a device of the character described, an upwardly tapering housing provided on the interior of its bottom with an annular
5 recess, an upwardly tapering lining on the inside of the housing, said tapering lining comprising staves, the lower ends of which fit in the recess, and a detachable cover for the housing, said cover having a yielding
10 packing member which bears on the upper ends of the stave and holds same in the recess.

2. In a device of the character described, a housing and a lining therefor comprising
15 a wooden portion and a metallic portion formed with an annular notch accommodating one end of the wooden portion for assisting in holding the latter in place.

3. In a device of the character described,
20 a housing, a lining therefor, comprising a

wooden portion and a lead portion, the lead portion being formed with an annular notch adapted to accommodate one end of the wood portion for assisting in holding the wood portion in position.

4. In a device of the character described, a housing, a lining therefor provided with a plurality of wooden staves, a cap having a wooden lining formed with a recess for receiving the ends of said wooden staves, 25
30 and a lead sheathing for lining part of said housing arranged to engage the lower part of said staves, and hold the staves in position.

In testimony whereof I affix my signature 35
in presence of two witnesses.

CYRUS M. STONER.

Witnesses:

C. W. HAYS,

C. W. BRYNER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."