A. MARRIOTT.

Valves.

No. 144,996. Patented Nov. 25, 1873.

Fig. 1.

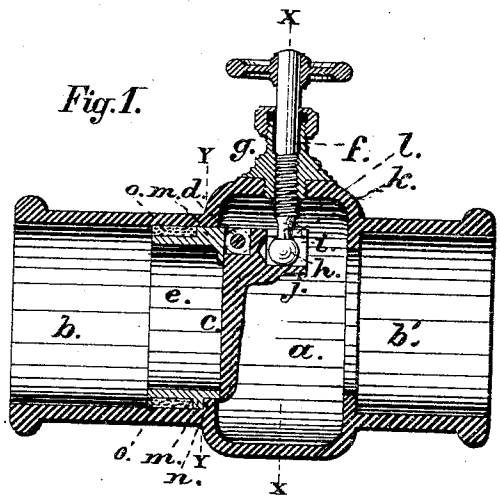


Fig. 2.

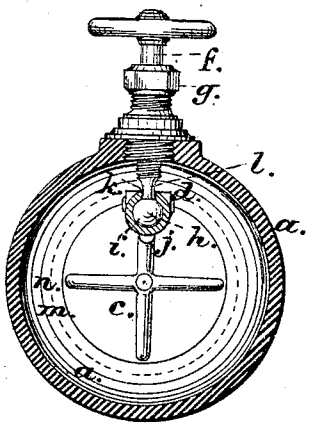
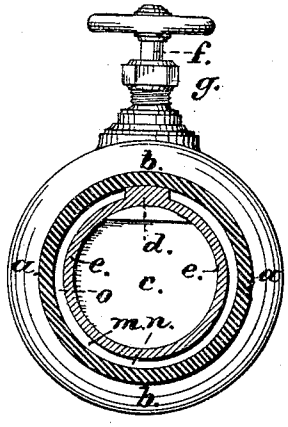


Fig. 3.



ATTEST:

Robert Burns
Walter Allen

INVENTOR:

Ambrose Marriott
By Knight Bros.
Attys.

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

AMBROSE MARRIOTT, OF ST. LOUIS, MISSOURI, ASSIGNOR TO JOSEPH W. BRANCH, OF SAME PLACE.

IMPROVEMENT IN VALVES.

Specification forming part of Letters Patent No. **144,996**, dated November 25, 1873; application filed October 7, 1873.

To all whom it may concern:

Be it known that I, AMBROSE MARRIOTT, of St. Louis, St. Louis county, Missouri, have invented an Improvement in Valves, of which the following is a specification:

The first part of my improvement consists in the construction of the valve proper. This is hinged to the seat, and has on its back a lug or projection having a slotted cylindrical socket, as shown, which receives the spherical head or ball of the screw, by which the valve is operated. The neck of the screw occupies the slot in the upper side of the socket, and the screw-shank passes through a stuffing-box. The second part of my improvement consists in the manner of securing the valve-seat in place. This seat is cylindrical in form, and is inserted through one of the necks at the opposite sides of the valve-chamber. A circumferential flange on the valve-seat cylinder abuts against a flange at the side of the valve-chamber. There is an annular space between the valve-seat cylinder and the neck, and this is filled with iron cement to hold the seat in place.

In the drawings, Figure 1 is a longitudinal section. Fig. 2 is a transverse section at X X. Fig. 3 is a transverse section at Y Y.

a is the valve-chamber. *b b'* are necks on each side of the valve-chamber *a*. These necks receive the ends of the pipe in which the valve is inserted. *c* is the valve, having a plain face, and hinged at one side to the lugs *d*, projecting from one side of the seat *e*. *f* is the operating screw, passing through the stuffing-box *g*. The lower end of this screw has a spherical head or ball, *h*, which rests in the cylindrical socket *i* in the lug *j*, projecting from the back of the valve *c*. Said lug has a slot, *k*, in the top of the socket *i*, for the passage of the neck *l* of the head *h*. The valve-seat *e* has a circumferential flange, *m*, on its outer surface, which abuts against an inside flange, *n*, of the valve-chamber *a*. The flange *m* has a diameter nearly equal to the diameter of the inside of the neck *b*. On the outer side of this flange, between the parts *b* and *e*, there is an annular space which is filled in with iron cement *o*, to hold the valve-seat *e* firmly in place. The flange *n* has a gap at its upper side, to allow the passage of the lugs or ears *d d*, to which the valve is hinged.

I claim as my invention—

1. The valve-seat *e*, formed with a circumferential flange, *m*, which abuts against an inside flange, *n*, of the valve-chamber *a*, and with lugs *d* for attachment of the axial valve *c*, substantially as and for the purpose set forth.

2. The axial valve *c*, formed with a lug, *j*, having a cylindrical socket, *i*, and slot *k*, and jointed to the valve-seat *e*, in combination with the operating screw *f* having a spherical head, *h*, as set forth, and for the purpose described.

3. The combination of the valve-chamber *a*, necks *b b'*, valve *c*, socket-lug *j i*, valve-seat *e d*, and screw *f* having a head, *h*, and passing through a stuffing-box, all substantially as set forth.

AMBROSE MARRIOTT.

Witnesses:

SAMUEL KNIGHT,

ROBERT BURNS.