(No Model.)

C. C. BURTON.

FLUID GATE.

No. 338,711. Patented Mar. 30, 1886.

Fig. 1

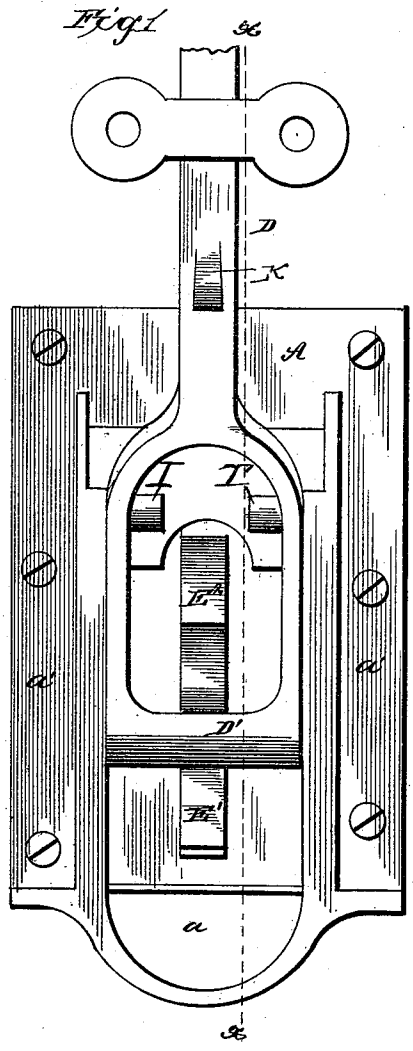


Fig. 2.

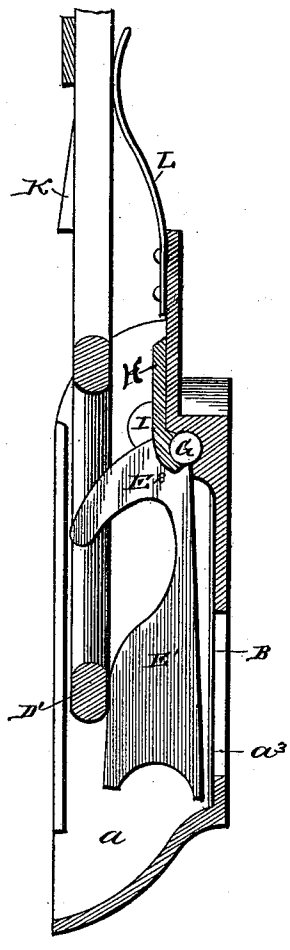
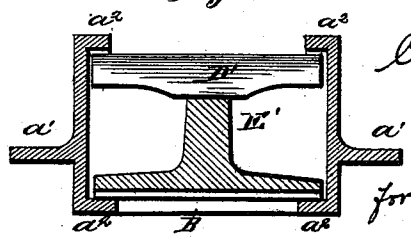


Fig. 3.



WITNESSES

Jos. A. Ryan

Wm. L. King.

Charles C. Burton

INVENTOR

by Chas. E. Barber assc.

for Risley Dunn & Perry

His Attorneys.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES C. BURTON, OF UTICA, NEW YORK.

FLUID-GATE.

SPECIFICATION forming part of Letters Patent No. 338,711, dated March 30, 1886.

Application filed May 22, 1885. Serial No. 166,407. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. BURTON, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Fluid-Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to a valve for controlling the movements of fluid; and it consists of a movable valve or gate pivoted at one of its extremes, with inclined projections on the back for engaging with a cross-bar of a movable rod for opening or closing the valve or gates, hereinafter more fully described and claimed.

In the accompanying drawings similar letters of reference refer to corresponding parts throughout the several views.

Figure 1 represents the front view of my improved valve and the valve seat and rod. Fig. 2 represents a vertical section of the same, taken through line *x x*, Fig. 1. Fig. 3 represents a cross-section of the same, taken through line *c c*, Fig. 1.

Having described my invention by reference to the figures illustrated in the accompanying drawings, I will now proceed to describe the same with reference to the letters marked thereon.

In the drawings the valve illustrated is constructed to be used on the external surface of a tank, reservoir, or other receptacle containing fluids for allowing the same to be discharged. It is quite obvious that by slight changes in the form of construction the same can be applied to the inside of similar tanks and receptacles containing fluids from which the contents are required to be drawn. In this general description I do not intend to limit the use of my improved valve to any particular place.

A represents the valve-seat, with a central opening for the passage of the fluid. *a* represents the passage-way. This valve-seat is provided with flanges a' a', for fastening the same to a cask containing the liquid or fluid.

a^2 a^2 a^2 a^2 represent four angular flanges, as indicated in Fig. 3. The opening a^3 in the valve-seat is closed by the valve or gate B, which is of sufficient size to fully close the opening in the valve-seat. In the drawings this valve is illustrated as being pivoted to the valve-seat at G, Fig. 2. It is preferably pivoted at this point, although the same may be pivoted at the other extremity of the opening. This valve may be provided with rubber or other suitable packing attached to the face of the valve or surrounding the opening attached to the valve-seat for forming a water or steam tight joint. This valve is constructed and pivoted to be moved out or in for opening or closing passage-way a^3. On the back of the valve is an inclined projecting lug, E′, as indicated in Fig. 2. On the upper extremity of this valve is a projecting inclined hook, E^2. (Indicated in Fig. 2.)

D represents an operating valve-rod, having a loop formed in the lower end with a projecting cross-bar, D′. This valve-rod is inserted inside of flanges a^2 a^2 of the valve-seat, where it is loosely movable up or down for opening or closing the pivoted valve.

H represents a removable cap, which forms the upper part of a journal for seating pivots G at the upper end of valve B.

I is a projection cast on cap H, for retaining the valve-rod in a proper vertical position and to reduce friction.

L represents a spring, one end attached to the valve-seat and the other end bearing against the valve-rod, for keeping the same in proper place, and for allowing the same to be moved inward to allow catch K to pass guide S, for holding the valve up when in use. The valve is closed by forcing the valve-rod downward. Cross-bar D′ strikes the inclined projection E′ on the back of the valve, forcing the same into close contact with the valve-seat. The valve is opened by raising the valve-rod until cross-bar D′ comes in contact with upper inclined projection, E^2, which projects through the loop in the valve-rod, which, from its peculiar construction, moves the lower end of the valve, thereby opening the same for the passage of the fluid.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the valve-seat, valve, and movable rod and cross-bar, arranged

substantially as shown, of the spring rigidly attached to the seat and bearing against the rod, having a catch on its opposite surface for engaging with a stationary stop or guide, whereby the valve may be opened and held in a fixed position, substantially as shown.

2. In a valve, the perforated seat with ways and the valve pivoted thereto, in combination with a removable plate which secures the valve in place, said plate having the projection I I″, and the sliding lever which operates the valve, all constructed and combined to operate substantially as and for the purposes stated.

3. In a valve, the perforated seat having on its face a guide or way, and also provided with a valve pivoted thereto, said valve having lugs on its back which engage a lever, in combination with a lever which operates the valve by its engagement with the lugs, and also serving to lock the valve in place by wedging between the way or guide and one of the lugs on the valve, substantially as described.

In witness whereof I have affixed my signature in presence of two witnesses.

CHARLES C. BURTON.

Witnesses:
EDWIN H. RISLEY,
WILLIAM P. QUIN.