

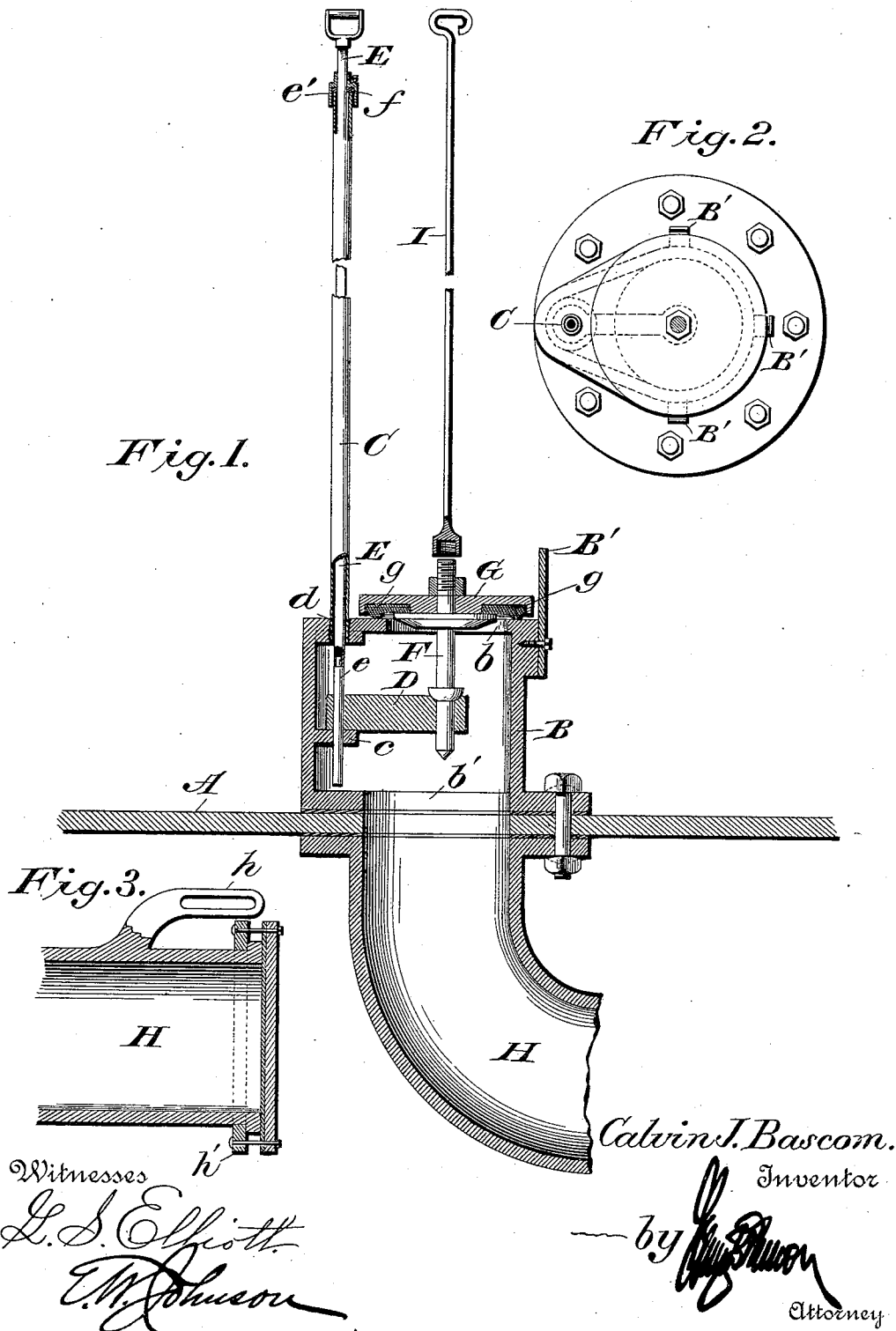
(No Model.)

C. J. BASCOM.

OUTLET VALVE FOR RAILWAY WATER TANKS.

No. 463,472.

Patented Nov. 17, 1891.



UNITED STATES PATENT OFFICE.

CALVIN J. BASCOM, OF ELLIS, KANSAS.

OUTLET-VALVE FOR RAILWAY WATER-TANKS.

SPECIFICATION forming part of Letters Patent No. 463,472, dated November 17, 1891.

Application filed August 8, 1891. Serial No. 402,100. (No model.)

To all whom it may concern:

Be it known that I, CALVIN J. BASCOM, a citizen of the United States of America, residing at Ellis, in the county of Ellis and State of Kansas, have invented certain new and useful Improvements in Outlet-Valves for Railway Water-Tanks; and I do hereby 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in railroad water-tanks.

The object of the invention is to provide outlet mechanism for the tank, which is so constructed that the lower end of the pipe can be closed and the valve removed for renewing the packing thereof; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a vertical sectional view of the valve mechanism of a railroad-tank constructed in accordance with my invention. Fig. 2 is a plan view. Fig. 3 is a detail sectional view of the end of the discharge-pipe to which the goose-neck is usually attached.

A refers to the bottom of the tank, which has rigidly bolted thereto a box or casing B, which is provided with apertures *b* and *b'*, the valve-seat being adjacent to the aperture *b*. To the sides of the box or casing B are secured strips *B'*, which serve as guides for the valve.

c refers to a projection formed within the box or casing, which is apertured on a line with the aperture *d* in the top of the casing, the aperture *d* being preferably screw-threaded for the reception of a tube C, which extends upwardly above the tank.

D refers to an arm which is rigidly attached to a rod *e*, secured to or forming part of the rod or tube E, which passes through the tube C and is of less diameter than the inner diameter thereof. To the upper portion of the rod E is secured a cover or cap *e'*, having a rubber washer *f*, said cap being adjusted upon the rod by means of a set-screw. The arm D is apertured at its outer end for the reception of the valve-stem F, said valve-stem carrying the valve-plate G, provided with a packing or rubber gasket *g*. The upper end of the valve-stem is screw-threaded, and the valve is secured thereto in the usual manner, which is substantially as shown. The lower end of the outlet-pipe H has a slotted arm *h*, to which the goose-neck is secured in the usual manner, and the flanged end of this pipe is provided with a ring *h'*, having bolt-holes, for clamping over the lower end of the pipe a covering-plate, which may be provided with a suitable packing. It will be observed that in practice the valve has a direct vertical movement and is elevated off its seat by an upward pull of the rod E, and that when the valve is removed from its seat the cap *e'* will be carried with the rod to open the upper end of the vent-pipe C and allow air to enter the box below the valve-seat.

Should from any reason it become necessary to remove the valve, especially to renew the packing or rubber gasket, I employ a rod I, having a screw-threaded socket which is adapted to engage with the valve-stem and lift the valve off its seat and out of the aperture in the arm D. If the tank contains water when the valve is being removed, the end of the pipe H is closed, as shown in Fig. 3. The rod E may be operated by a lever, as is usually practiced.

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

1. In combination with an outlet-pipe for railway-tanks, a box or casing B, having an apertured lug *c*, through which passes the lower end of a rod, an arm D, rigidly secured to said rod, and a valve having a stem which is adapted to engage with the arm D, substantially as set forth.

2. In combination with a box or casing B, having apertures *b* and *b'*, a valve-seat surrounding the upper aperture, a vertically-movable rod E, carrying an arm D, a valve having a depending stem which engages with the arm D, and a tube C, secured to the casing through which the rod E passes, substantially as set forth.

3. In combination with a box or casing B, having a valve-seat, a valve having a depending stem, a vent-tube C, secured to the box and opening at its lower end into the box below the valve-seat, a rod E, carrying a cap adapted to move over the upper end of the tube C, an arm carried by the lower end of said rod, the outer end of which is apertured for the reception of the lower end of the valve-

stem, said valve-stem having an enlarged portion and a screw-threaded upper end, substantially as set forth. 10

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

CALVIN J. BASCOM.

Witnesses:

A. R. ADAIR,
M. M. FULLER.