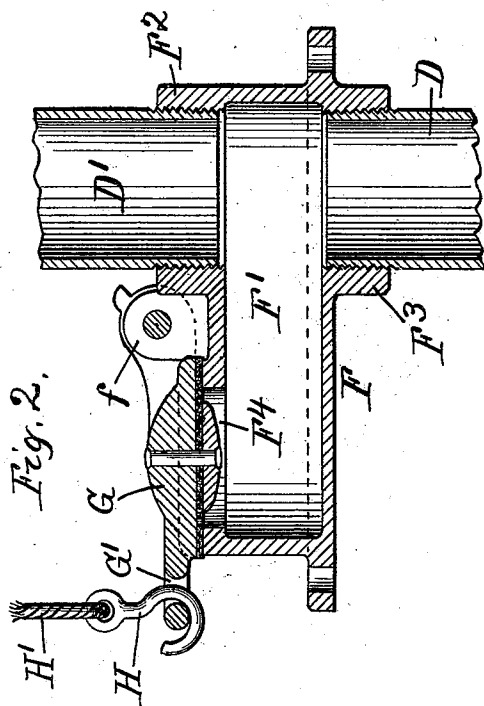
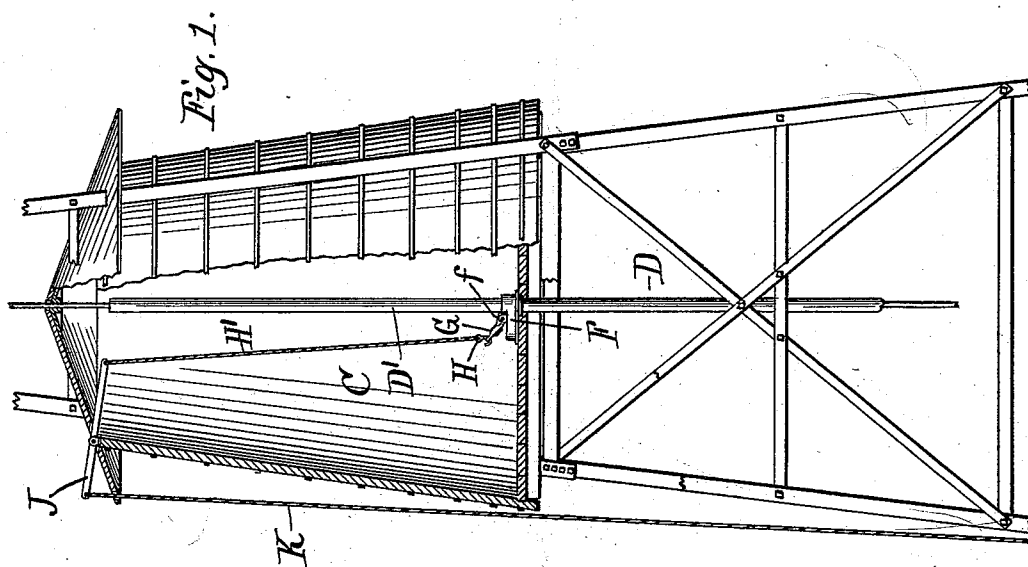


(No Model.)

A. B. WILSON.
FILL AND DRAINAGE VALVE FOR TANKS.

No. 550,064.

Patented Nov. 19, 1895.



Witnesses.
E. T. Wray.
Jean Elliott

Inventor.
Archibald B. Wilson
by Burton and Burton
his attys

UNITED STATES PATENT OFFICE.

ARCHIBALD B. WILSON, OF CHICAGO, ILLINOIS.

FILL-AND-DRAINAGE VALVE FOR TANKS.

SPECIFICATION forming part of Letters Patent No. 550,064, dated November 19, 1895.

Application filed April 23, 1894. Renewed April 29, 1895. Serial No. 547,574. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD B. WILSON, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Fill-and-Drainage Valves for Tanks, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part thereof.

This invention relates, primarily, to tanks which are supplied by a pump operated by a windmill or other source of power above the tank, the pump-barrel extending up into the tank and constituting the supply-pipe, and the pump-rod extending down through such supply-pipe or pump-barrel from the source of power above to the source of water below the tank. The device, however, is not strictly limited to use in just such situations, but may be employed whenever a tank is kept supplied by a pipe which protrudes up through the bottom, and its immediate purpose is to permit the tank to be emptied back to the source of the supply past the same valve through which it is supplied, and also to make it possible to repair or remove the pump without draining the tank and to relieve the pump-valve of the labor of holding the tank full when the pump is not in operation.

In the drawings, Figure 1 is a sectional elevation of a tank and a portion of the supporting-tower, the tank-wall being partly broken away to show the supply-pipe, pump rod and valve, and connections therein. Fig. 2 is a vertical section through the middle of the valve-fitting which pertains to my invention.

The tank C has the fitting F, secured to the inner surface at the center of the bottom of the tank. This fitting has the chamber F' and the hollow bosses F² and F³, projecting, respectively, upwardly and downwardly and interiorly threaded. The lower section D of the pipe is screwed into the lower boss and the upper section D' into the upper boss. The upper wall of the fitting has an opening F⁴, closed by a valve G, pivoted to the lugs f f, which project from the upper surface of said upper wall. This valve terminates at its outer edge in an eye G', with which a hook H is engaged, said hook being fastened to the lower end of a cable H', which is connected

at the upper end to the inner end of the lever J, which is fulcrumed upon the upper edge of the tank and has attached to its outer arm a cable K, extending down outside the tank and tower to a convenient point for operating the same to lift the valve.

It will be understood that when the pump is in operation the inflow of the water will lift the valve.

When for any purpose it is desired to completely empty the tank, the operator will pull down the cable K, and thereby lift the valve, and by fastening the cable cause it to remain open until the tank is drained.

When it becomes necessary to remove or repair the pump, it can be done without disturbing the contents of the tank, and even the lower section D of the supply-pipe can be detached without draining the tank, and at all times the pipe D', extending up into the tank as high as the latter is to be filled, prevents the water from leaking back through the pump when the latter is not in action, as might happen if the valves were loosely fitted. The presence of the pipe therefore renders it unnecessary to maintain the pump-valves so tightly fitted as would otherwise be necessary, and thus permits them to be relieved of the water-pressure while the pump stands idle.

I claim—

1. In combination with the tank and the pump barrel or supply pipe extending up through the bottom of the tank and open at a distance above the bottom and having the pump rod extending through it, such pipe having the discharge port into the tank at the bottom thereof, and a valve for such port adapted to be opened inwardly with respect to the tank by the inflow of the water, and to be normally seated and provided with connections extending outside the tank to open it at will: substantially as set forth.

2. In combination with the tank and the pump-barrel or supply pipe extending up through the bottom of the tank and open at a distance above the bottom and having the pump rod extending through it, such pipe comprising the inlet and drainage fitting F, secured to the inner surface of the bottom of the tank, and constituting a coupling between the pipe sections D and D', which extend re-

spectively above and below said fitting, the fitting having a discharge opening in its upper wall and a valve seating downwardly to close the same; and connections from such
5 valve outside the fitting extending outside the tank to open the valve at will: substantially as set forth.

In testimony whereof I have hereunto set my hand, in the presence of two witnesses, at Chicago, Illinois, this 16th day of April, 1894. 10
ARCHIBALD B. WILSON.

Witnesses:

CHAS. S. BURTON,
I. J. GIFFEN.