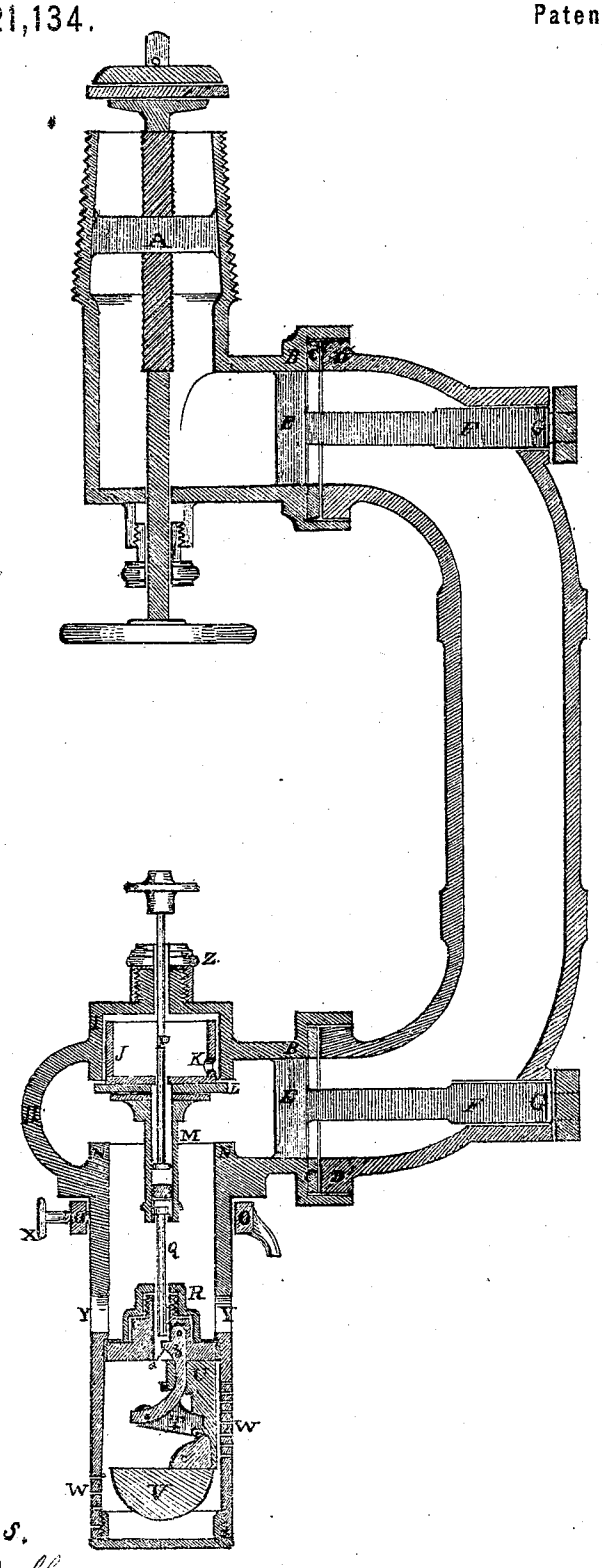
Frederick Stitzel's Device for Filling Barrels.

No. 121,134. Patented Nov. 21, 1871.



Witnesses.

W. W. Pullin,

E. F. Hancock

Inventor.

Frederick Stitzel

UNITED STATES PATENT OFFICE.

FREDERICK STITZEL, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN DEVICES FOR FILLING BARRELS.

Specification forming part of Letters Patent No. 121,134, dated November 21, 1871.

To all whom it may concern:

Be it known that I, FREDERICK STITZEL, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Devices for Filling Barrels; and I do hereby declare the following to be a full, clear, and exact description thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawing making part of this specification, in which the figure is a central sectional view of my device.

My invention relates to an improvement in that class of devices which is used for filling barrels, casks, &c., with liquids; and consists of a cock of ordinary construction, to be inserted into the vessel to be emptied; a valve of peculiar construction, forming the principal part of my invention, which is to be inserted into the vessel to be filled; and a pipe which connects the two together.

Referring to the drawing, A designates the cock, which is provided with a valve-stem extending through the whole length of the casing, which stem is provided on one end with a valve which fits tightly, when desired, over the lower end of the casing. This lower end of the casing has a screw-thread cut in it, by means of which it is secured in the cask or barrel to be emptied or from which the liquid is to be drawn. The casing of the cock is made with a lateral branch, B, which has its outer end recessed to receive one end of the connecting-pipe D, the joint being made tight by means of a washer, C, the pipe being secured to the branch by a bolt, F, extending from the cross-bar E in the branch through the pipe, and fastened on the outside thereof by a washer and nut, G. This pipe D may be made of metal or rubber, and, if of the latter of course the bolts F, &c., will be unnecessary, as the tube can then be slipped over the end of the branch. The valve and its casing are constructed as follows: The tube or pipe D is secured to a branch, B, similar in construction to that above described, and by the same means. The casing is made with two chambers, H and I, which receive the valve, which valve consists of a cylinder, J, open at one end, and is provided with a hollow stem, M, secured to the under side or face of the valve, with a metallic or other washer, L, interposed, the said washer being of greater diameter than either the cylinder or stem, and which, when the valve is closed, fits tightly over the seat N made inside the casing. The cylinder J is perforated at K to admit some of the liquid into it, in order to form a balance against the pressure of the liquid on the outer surface of the valve, whereby it is more firmly held in its place, the pressure being equalized on the side by the liquid accumulated in the chamber H. P is a rod passing up through the valve-stem and valve, and surrounded on the outside of the casing by a stuffing-box, Z. It is used for raising the valve when it is desired to admit the liquid into the barrel being filled, which liquid passes out through openings Y Y made in the casing. A pin, Q, is secured in the lower end of the hollow stem M, and extends thence downwardly through a stuffing-box made in a partition, R, set in the casing below the openings Y. A lug, U, projects from the partition R, and is slotted to receive a trigger-lever, S, which is hinged in the partition. A pawl, T, is secured to the lower end of the lever S, and is provided with a notch in one end, which engages with a lug made on a semi-cylindrical float, V, which is likewise hinged to or suspended from the lug or flange U.

These several devices operate the valve—that is, to close it—in the following manner: When the vessel being filled is as full as is desired the liquid will pour in the casing below the partition R through numerous small openings W; the end of the casing being closed the float will be lifted up by one end, whereby the pawl T will be released by the lug on the float, and the lever S will swing back and drop the rod or pin Q, which rests on the lug *a* on the lever; and the valve, being then unsupported, will drop out of the chamber I and rest on its seat N, thereby shutting off the supply of liquid from the barrel, the supply from the vessel from which it is drawn being regulated by the valve in the cock A.

The depth to which the casing of the valve extends in the barrel to be filled is adjusted by a movable ring, O, surrounding the casing, and secured thereto by a set-screw, X. The ring may be provided with feet to rest on the rim of the bung-hole or the opening in the vessel into which the casing is inserted.

Thus a barrel-filling device is produced which is simple, always reliable, and can be manufactured at a small cost.

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

1. The combination of the cylinder J K, washer L, hollow stem M, rod P, and nut *z*, the float V, pawl T, lug U, trigger-lever S *a*, partition R, and rod Q, all arranged within the casing B H I N N, and operating substantially as herein described.

2. The combination of the cock A B, connecting-pipe D, bolts and nuts F, and cross-bars E with the casing B H I N N having openings Y Y and perforations W W, the cylinder J K, washer L, hollow stem M, rod P, and nut *z*, the float V, pawl T, lug U, trigger-lever S *a*, partition R, and rod Q, all arranged and operating substantially as herein described.

FREDERICK STITZEL.

Witnesses:
W. W. PULLEN,
E. F. HUYCK.

(167)