

No. 628,084.

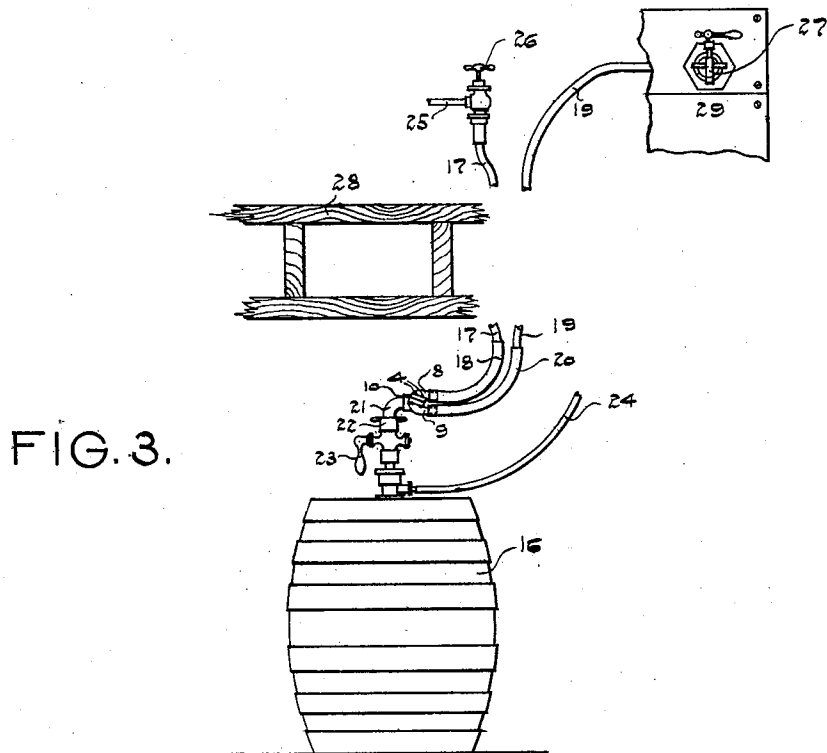
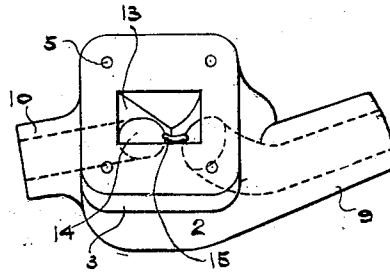
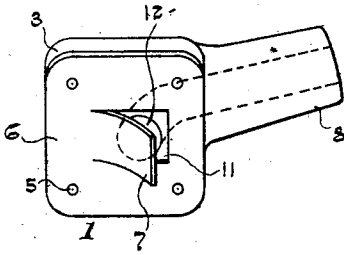
Patented July 4, 1899.

J. D. FREESE.

BEER DISPENSING AND PIPE CLEANING APPARATUS:

(Application filed Apr. 14, 1899.)

(No Model.)



WITNESSES :

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UNITED STATES PATENT OFFICE.

JOHN D. FREESE, OF CHICAGO, ILLINOIS.

BEER-DISPENSING AND PIPE-CLEANING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 628,084, dated July 4, 1899.

Application filed April 14, 1899. Serial No. 712,972. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. FREESE, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Beer-Dispensing and Pipe-Cleaning Apparatus, of which the following is a specification.

The main object of my invention is to provide convenient means for cleaning the pipes in a beer-dispensing system so arranged that an operator may clean the pipes by turning on the water at the dispensing end, the water passing into the beer-pipe near the storage end and thence discharging through the beer-faucet.

My present invention has been applied to my dispensing and cooling system described in my application, Serial No. 704,379, filed February 3, 1899. It is plain that the invention may also be applied to other purposes.

The construction and operation of my device will be understood from the following description, with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of one part of a pipe union and valve constructed according to my invention. Fig. 2 is a perspective view of the other and connecting part. Fig. 3 is an outside view of the device properly connected to a beer-dispensing device, partly broken away.

The form shown is made of two parts 1 and 2, the latter being hollow, so as to form a chamber between said parts. The parts 1 and 2 have each a flange 3 thereon. Said flanges are connected by bolts or rivets 4 through the holes 5. Between said flanges is a sheet 6 of rubber or other suitable flexible material. Said sheet is cut to form the flap 7. The part 1 has a pipe 8 thereon communicating with the chamber, and the part 2 has the two pipes 9 and 10, also communicating with said chamber. The flap 7 rests either against the seat 11 at the port 12 or against the seat 13 at the port 14 or inner opening of the pipe 10. The seat 13 preferably has a small groove 15, so that when the flap 7 is upon said seat a slight leakage from the valve-chamber into the port 14 is permitted. This permits the water remaining in the pipes after the beer-pipe has been cleaned to drain into the barrel 16.

In Fig. 3 the union is attached to the water-pipe 17 through the flexible tube 18 and to the beer-pipe 19 through the flexible tube 20. The pipe 10 of the union is rigidly attached to the pipe 21 of the barrel connection 22. 23 represents the stop-cock in said connection, and 24 represents the air-pipe leading to the beer-pump. (Not shown.)

The pipe 17 connects with the water-supply pipe 25 and is controlled by the stop-cock 26. The pipe 19 leads to the beer-faucet 27 in the dispensing-compartment or bar-room above the floor 28.

The cooling apparatus 29, through which the beer-pipe 19 extends, is mainly omitted from the drawings.

The operation of my device is as follows: When beer is drawn from the keg, the valve-flap 7 will be forced by the beer against the seat 11, thus closing the port 12 and permitting the beer to pass through the pipe 9 and to the faucet 27. When the barrel is empty and it is desired to clean the beer-pipes, the operator opens the faucet 27 and the stop-cock 26. The water will now flow through the pipes 17 and 8 into the pipe 19 and discharge at the faucet 27, the valve-flap 7 now being forced onto the seat 13. After a sufficient discharge to thoroughly clean the pipes the stop-cock 26 is closed, the faucet 27 being left open. The water in the pipes 17 and 19 will now drain into the barrel 16, the groove 15 permitting a slight leakage, which causes the flap to rise slightly and permit a considerable flow as soon as the maximum water-pressure is shut off by the cock 26. The process of cleaning is thus effected entirely from the dispensing-room, so that the operator may conveniently clean the pipes as soon as the barrel is empty.

It will be understood that the convenience in the matter of cleaning the pipes from the dispensing-room is of greater importance in large systems where a number of barrels are drawn from through different faucets. An assistant may in such case detach the empty barrel in the storage-compartment and attach a full barrel at any time, preferably before the remaining barrels are empty. Before changing the barrels the stop-cock 23 is closed by the assistant.

It will be understood that the details of

construction of my device may be altered in numerous ways without departing from the spirit of my invention. I therefore do not confine myself to such details.

5 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A beer-dispensing and pipe-cleaning system, comprising a dispensing-compartment and a storing-compartment; a water-
10 supply pipe extending between said compartments and controlled by a valve in the dispensing-compartment, a beer-discharge pipe extending between said compartments, a beer-
15 supply connection in the storing-compartment, and a three-pipe union joining said pipes, and connection and having a valve therein adapted to automatically close the water-pipe when beer is drawn through the discharge-pipe, and to automatically close
20 said beer-supply connection when water is forced through said water-supply pipe; said valve being arranged to permit a slight leakage into the beer-supply connection.

2. A three-pipe union comprising a body
25 with a chamber therein, having three ports entering same, and a flexible valve-flap secured between two of said ports and adapted

to substantially shut off communication between same, and to permit communication of either of said two ports with the third. 30

3. A three-pipe union comprising a body with a chamber therein having three ports entering same, said body consisting of two separable parts; the flexible sheet between
35 said parts; and the flap formed by cuts in said sheet, adapted to substantially shut off communication between two of said ports and to permit communication of either of said ports with the third.

4. A three-pipe union comprising a body
40 with a chamber therein having three ports entering same, and a gate secured between two of said ports and adapted to substantially shut off communication between same, and to permit communication of either of said
45 ports with the third; said valve being arranged to permit a slight leakage through one of said two ports.

Signed by me, at Chicago, Illinois, this 11th day of April, 1899.

JOHN D. FREESE.

Witnesses:

ROBERT W. MCCULLOCH,
WM. R. RUMMLER.