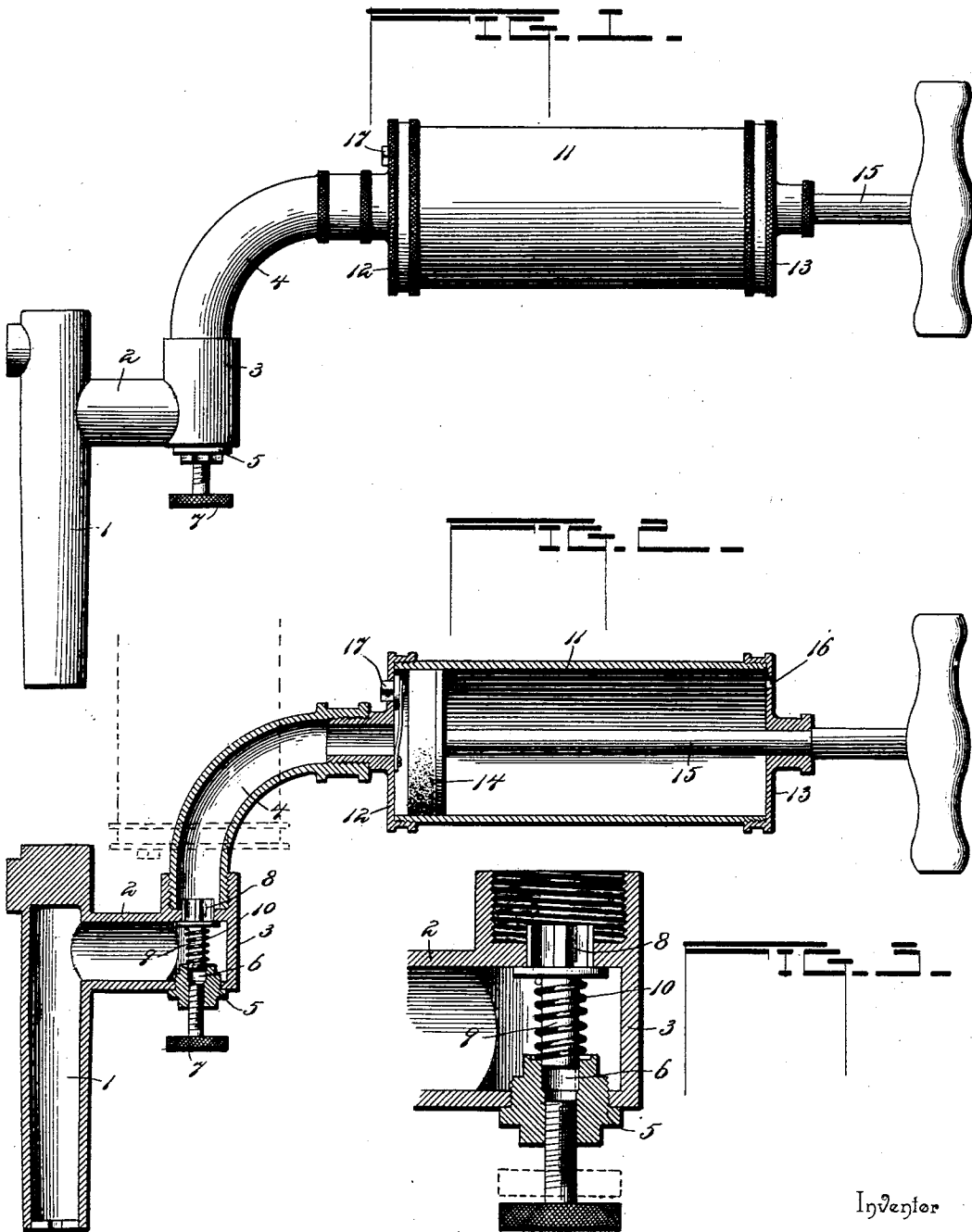


(No Model.)

A. L. HEIDEMAN.
BEER PUMP.

No. 587,963.

Patented Aug. 10, 1897.



Inventor

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UNITED STATES PATENT OFFICE.

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BEER-PUMP.

SPECIFICATION forming part of Letters Patent No. 587,963, dated August 10, 1897.

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To all whom it may concern:

Be it known that I, ALBERT L. HEIDEMAN, a citizen of the United States, residing at Elgin, in the county of Kane and State of Illinois, have invented a new and useful Beer-Pump, of which the following is a specification.

This invention relates to means for facilitating the drawing off of liquid or fluid contents from a barrel, cask, or other package by introducing into the barrel air under pressure, the latter acting as a piston and exerting a force to cause the discharge of the liquid upon opening the faucet for drawing off the contents.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The improvement is susceptible of various changes in the form, proportion, and the minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a pump constructed in accordance with this invention for attaining the objects thereof. Fig. 2 is a central longitudinal section, the dotted lines showing the pump differently related. Fig. 3 is a sectional detail of the valved branch portion of the vent.

Corresponding and like parts are referred to in the following description and indicated in the several views of the drawings by the same reference-characters.

The vent 1 is a hollow plug closed at its outer end and made sufficiently heavy to receive the blows necessary for driving the plug into the vent or bung of a barrel or package containing the fluid or liquor to be drawn off. A lateral branch 2 connects with the vent or plug a short distance from its closed or driving end and is closed at its outer extremity and formed at one side with a sleeve 3, having its upper or outer end portion internally threaded to receive the pump, or a connection 4, by means of which the pump is united to the vent. A plug 5 is let into an opening opposite the projecting end of the sleeve 3, and is formed with an outer flange and an an-

gular head to receive a wrench or tool when it is required to tighten or loosen the said plug. This plug has a longitudinal bore which is enlarged at its inner end, as shown at 6, and which has its outer portion internally threaded to receive a thumb-screw 7, for the purpose presently to be described. A check-valve 8 operates in an opening formed in the upper side of the branch 2 in line with the plug 5, and its stem 9 operates in the enlarged portion 6 of the opening formed in the plug 5. A spring 10 is mounted upon the stem 9 and is confined between the valve 8 and the inner end of the plug 5, and the latter is recessed to receive the adjacent end of the spring, whereby it is prevented from binding against the sides of the stem 9 during the movements of the valve when the pump is in operation. By removing the plug 5 the valve and its actuating-spring are rendered accessible for any required purpose, and the interior of the branch 2 can be reached for cleaning or any other purpose.

The pump is of ordinary construction and consists of a cylinder 11, heads or end pieces 12 and 13, secured to the ends of the cylinder by a screw-thread connection, a piston 14, and an operating-stem 15, the latter working through a gland provided on the head or end 13. An opening 16 is formed in the head 13 for the escape of air on the return stroke of the piston, and an opening in the head or end 12 is closed by a spring-actuated valve 17, which opens inwardly, so as to admit air into the cylinder upon moving the piston to the front end of the cylinder, and which closes automatically to prevent the escape of the air upon the forward stroke of the piston, thereby causing the air to pass into the barrel or package through the vent and by the check-valve 8, as will be readily understood.

The pump may be connected directly with the vent, or a coupling 4 may be interposed between it and the said vent. The coupling being curved, as shown, enables the pump to be used horizontally or at right angles to the hollow plug. When it is required to use the pump vertically or about parallel with the hollow plug, it is applied directly to the sleeve 3, as indicated by the dotted lines in Fig. 2.

The barrel or package to be emptied of its

fluid contents has the vent applied thereto in any of the usual ways and is charged with air under pressure by operating the pump in the ordinary manner. After the barrel has
5 been sufficiently charged with air under pressure, the pump may be detached and the check-valve 8 forced to its seat by operating the screw 7, which is turned up until its inner end engages with the stem 9, thereby
10 forcing the valve firmly upon its seat and holding it seated, whereby leakage is avoided.

Having thus described the invention, what is claimed as new is—

1. In means for charging a barrel or package with air under pressure, a vent to be secured to a barrel or package provided with oppositely-disposed openings, an inwardly-opening check-valve for controlling one of the said openings, means for closing the
20 other opening, a regulator applied to the closure for limiting the movement of the check-valve and holding it against its seat, and a pump fitted to the opening having the check-valve for charging the barrel, &c., with
25 air, substantially as and for the purpose set forth.

2. The herein-described means for charging

a barrel, package &c., containing a liquid with air under pressure, the same consisting of a hollow plug having a lateral branch terminating in a sleeve, and having the branch
30 formed with openings in its sides at diametrically opposite points, a pump adapted to be fitted to the said sleeve, an inwardly-opening check-valve located within the branch and
35 closing the opening opposite the sleeve and having a stem, a plug fitted in the other opening and having a bore which is enlarged at its inner end to receive the stem of the check-valve, a spring mounted upon the stem of
40 the check-valve and confined between the said plug and check-valve, and a screw operating in the outer threaded portion of the bore in the plug to engage with the stem of the check-valve and hold the latter seated,
45 substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ALBERT L. HEIDEMAN.

* Witnesses:

ED. N. DANGERFIELD,
BERNHARD HAGELOW.