

(No Model.)

2 Sheets—Sheet 1.

R. N. LOWE & F. C. GUYSER.

BEER PUMP AND FAUCET.

No. 511,962.

Patented Jan. 2, 1894.

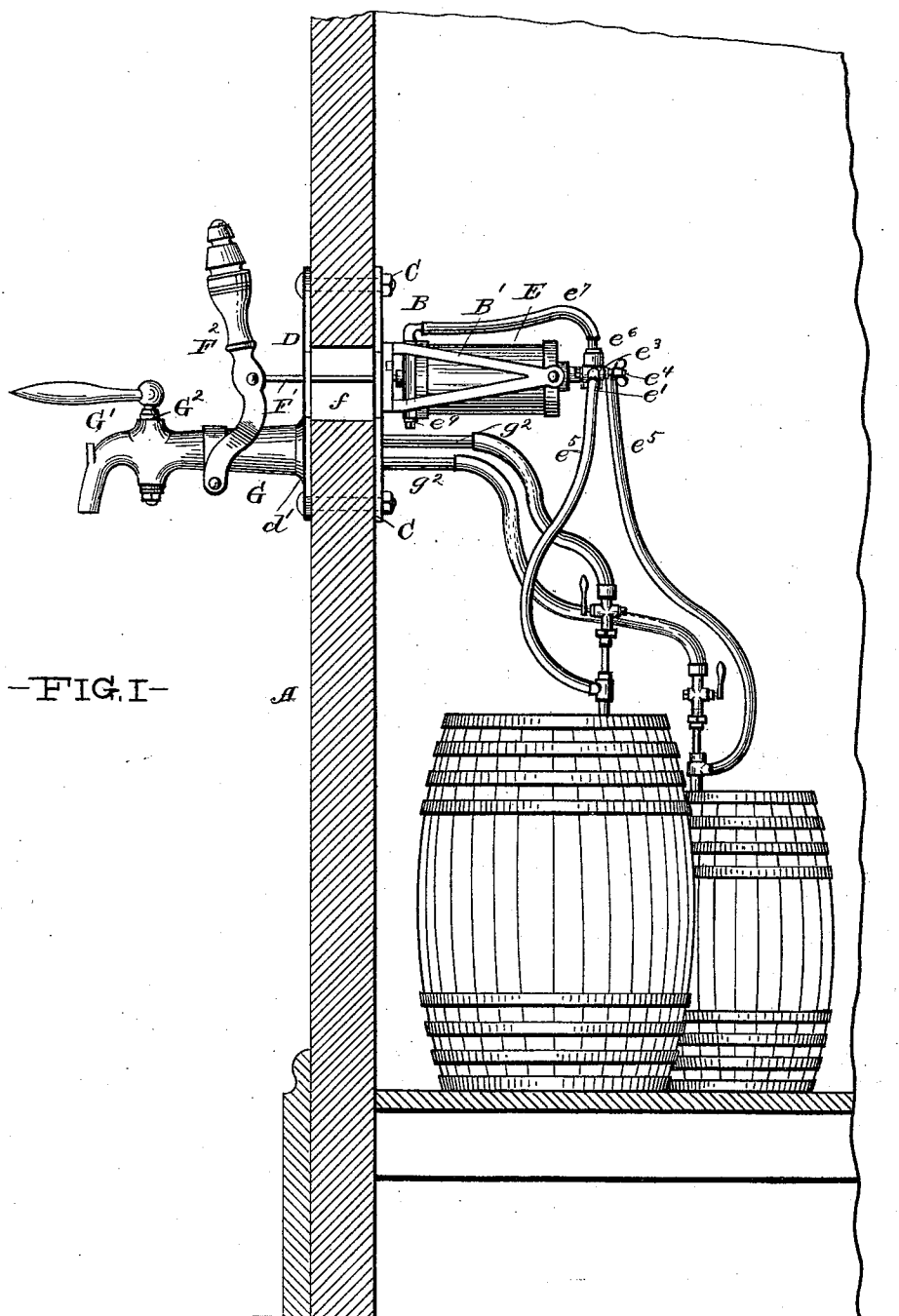


FIG. I-

WITNESSES:

J. C. Turney
Inspector

INVENTORS:

R. N. Lowe & F. C. Guyser
By Hall & Fay
ATTORNEYS.

(No Model.)

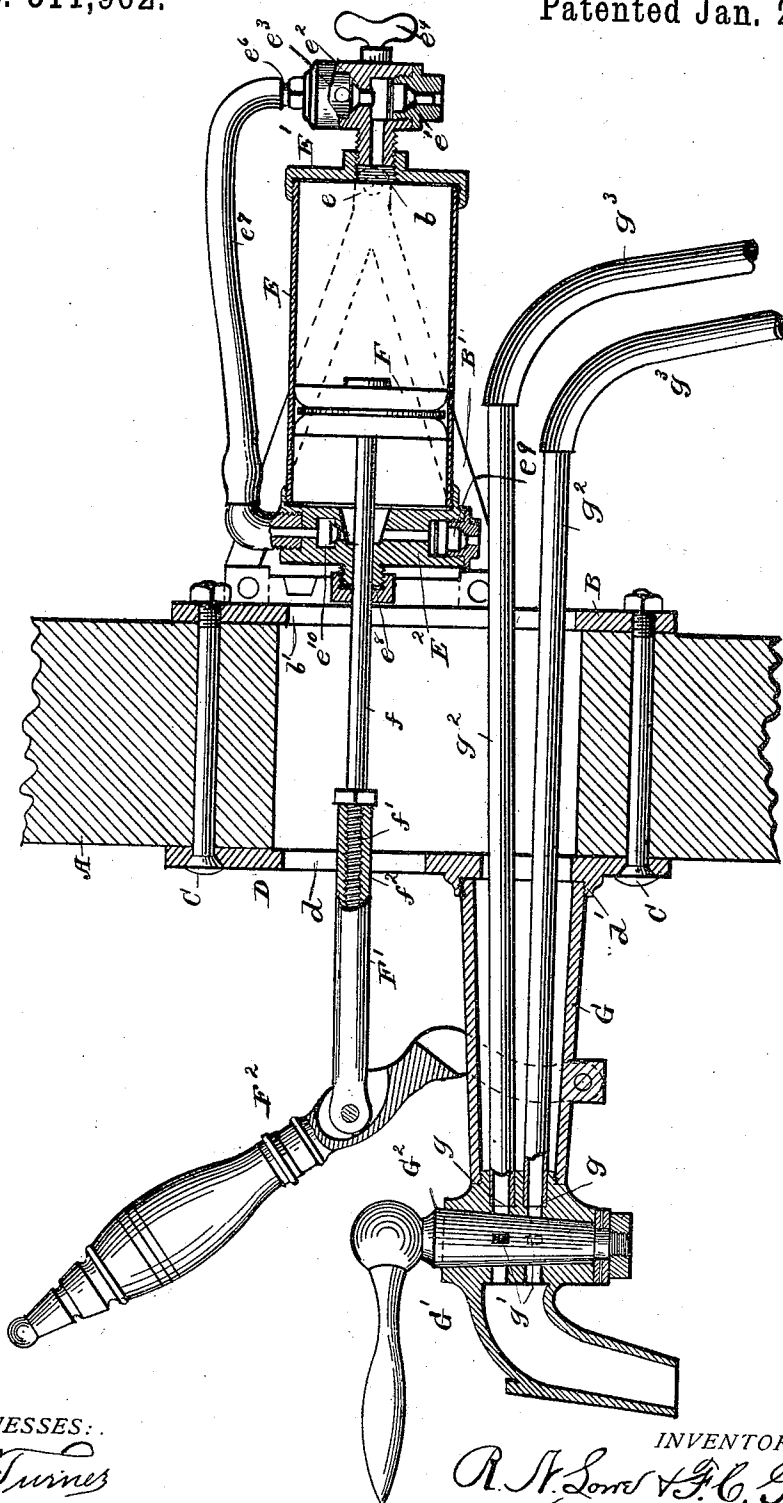
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BEER PUMP AND FAUCET.

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- FIG. II -



WITNESSES:

J. C. Turner
W. J. Leckie

INVENTORS,

R. N. Lowe & F. C. Guyser
By Hall & Fay
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT N. LOWE AND FRANK C. GUYSER, OF CLEVELAND, OHIO, ASSIGNORS
TO THE VULCAN BRASS COMPANY, OF SAME PLACE.

BEER PUMP AND FAUCET.

SPECIFICATION forming part of Letters Patent No. 511,962, dated January 2, 1894.

Application filed March 25, 1893. Serial No. 467,616. (No model.)

To all whom it may concern:

Be it known that we, ROBERT N. LOWE and FRANK C. GUYSER, citizens of the United States, and residents of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Beer Pumps and Faucets, of which the following is a specification, the principle of the invention being herein explained and the best mode in which we have contemplated applying that principle, so as to distinguish it from other inventions.

The annexed drawings and the following description set forth in detail, one mechanical form embodying the invention; such detail construction being but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawings—Figure I represents a vertical section of a refrigerator, showing our improved pump and faucet in operative position, and Fig. II, a longitudinal vertical section of the pump and faucet.

Heretofore all hand pumps which are secured to the wall of a refrigerator and operated by a handle from the outside of the latter and with which we are acquainted, have been constructed single acting; as it has been necessary to pivot the piston rod to the piston,—for the purpose of allowing for the rocking of the hand lever,—and to therefore leave that end of the cylinder open. When drawing from two or more kegs which receive their air supply from one pump, such single acting pump is not sufficient to keep up the air supply unless it is operated to a considerable extent, which consumes time and considerable exertion. To overcome this drawback and to provide a hand pump of this character, which will be capable of keeping up the air supply without trouble, we have constructed the pump as double acting, and have pivoted the pump cylinder to admit of the piston rod being directly pivoted to the operating handle.

To the inside of the wall A, of the refrigerator, a plate, B, is secured by means of the screw bolts, C, which secure the face plate D, to the outside of the refrigerator wall. Brackets, B', are detachably secured to the inside

plate B, to project from the same, and the outer ends of said brackets are formed with bearings, b. A pump cylinder, E, has trunnions, e, projecting laterally from its head, E', and said trunnions rock in the bearings b of the brackets. The head E' has an air inlet valve, e'; an air outlet valve, e²; air outlet nozzles, e³, provided with cocks, e⁴, and to which the air pipes e⁵, to the kegs may be attached; and a nipple, e⁶, to which a tube, e⁷, may be attached. A head, E², is secured to the opposite end of the cylinder and has a stuffing box, e⁸; an air inlet valve, e⁹, and an air outlet valve, e¹⁰, to which the tube e⁷ is connected. A piston, F, reciprocates within the pump cylinder, and has a piston rod, f, fitted to slide in the stuffing box of the latter. The outer end of the piston rod has a screw-threaded portion, f', to which an extension rod, F', having a threaded socket, f², is secured. Said extension rod is pivoted at its end to the operating handle F², and the length of the connected piston and extension rod, or adjustable piston rod, may be adjusted by said threaded portion and socket according to the thickness of the wall of the refrigerator and the length of stroke desired.

The face plate and the inside plate have, respectively, registering slots, d and b', through which the adjustable piston rod may have play. The face plate has furthermore a circular hole surrounded by an internally screw-threaded flange, d', and a slightly tapering shell, G, is secured with its inner screw-threaded end into said flange. The seat and nozzle portion, G', of the faucet, for which the tapering shell serves as shank, is screwed into the outer end of the shell, and said portion has two horizontal passages, g, which register with connected ports, g', in the plug G², of the faucet so that both passages may be closed by said plug or either one of the inner portions of the passages may be opened to the nozzle. Two tubes, g² g², are secured with their ends in the inner end of the seat and nozzle portion of the faucet, so as to have their interior bores register and be flush with the passages in said portion; and said tubes extend through the interior of the shell and are connected by pipes, g³ g³, to the casks.

The operating handle F^2 is fulcrumed with its lower forked end upon the shell of the faucet.

The double acting air pump will compress air at both the in-stroke and the out-stroke of its piston, and the piston rod may be rigid to the piston and without joint,—excepting at its connection to the operating handle,—as the pump cylinder is pivoted to oscillate and to thus allow for the rigid piston rod and closed outer end of the pump.

The construction of the faucet renders the latter simple and inexpensive to manufacture, and the tubes g^2 provide an unobstructed and unbroken passage for the beer or other liquid without any joints to cause leaks or where the liquid may settle and become tainted.

The piston rod may be adjusted in length, according to the thickness of the wall of the ice box and according to the length of stroke desired, by means of the screw-threaded portion upon the piston rod proper and the threaded socket in the extension rod.

Other modes of applying the principle of our invention may be employed for the mode herein explained. Change may therefore be made as regards the mechanism thus disclosed, provided the principles of construction set forth respectively in the following claims are employed.

We therefore particularly point out and distinctly claim as our invention—

1. The combination of a front plate, an inside plate provided with brackets,—said plates adapted to be secured to the opposite sides of a wall or similar support,—an air pump cylinder supported to oscillate in the brackets, an operating handle pivotally supported from the front plate, and a piston rod rigidly connected at one end to the piston of the air pump cylinder and pivotally connected at the other end to the operating handle, substantially as set forth.

2. The combination of a front plate, an inside plate provided with brackets,—said plates adapted to be secured to opposite sides of a wall or similar support,—a double acting air pump cylinder supported to oscillate in the brackets and provided with a stuffing box at one end, an operating handle pivotally supported from the front plate, and a piston rod rigidly secured to the piston of the double acting air pump and pivotally connected to the operating handle and sliding in the stuffing box, substantially as set forth.

3. The combination of a front plate, an inside plate provided with brackets,—said plates adapted to be secured to the opposite

sides of a wall or similar support,—a double acting air pump cylinder supported to oscillate in the brackets and provided with a stuffing box at one end, a faucet rigidly attached to the front plate, an operating handle pivoted upon said faucet, a piston in the cylinder, and a piston rod rigidly secured to said piston and sliding in the stuffing box and pivoted to the operating handle, substantially as set forth.

4. The combination of a front plate, an inside plate provided with brackets,—said plates adapted to be secured to the opposite sides of a wall or similar support,—an air pump cylinder supported to oscillate in the brackets, an operating handle pivotally supported from the front plate, and a piston rod secured to the piston of the air pump and pivotally connected to the operating handle and provided with means for adjusting its length according to the distance between the front and inside plate, substantially as set forth.

5. The combination of a front plate, an inside plate provided with brackets,—said plates adapted to be secured to the opposite sides of a wall or similar support,—an air pump cylinder supported to oscillate in the brackets, an operating handle pivotally supported from the front plate, a piston rod secured to the piston of the air pump and provided with a screwthreaded end, and an extension rod connected to the operating handle and provided with an internally screwthreaded socket for the screwthreaded end of the piston rod, substantially as set forth.

6. The combination of a front plate having a faucet projecting from its face, an inside plate having projecting brackets,—said plates adapted to be secured to the opposite sides of a wall or similar support,—an air pump cylinder supported to oscillate in the brackets and provided with a stuffing box at one end and with individual air inlets at its opposite ends and connected air outlets at its opposite ends, a piston in said cylinder, an operating handle pivoted upon the faucet, and a piston rod rigidly connected to the piston and pivoted to the operating handle and sliding in the stuffing box of the pump cylinder, substantially as set forth.

In testimony that we claim the foregoing to be our invention we have hereunto set our hands this 21st day of March, A. D. 1893.

R. N. LOWE.
F. C. GUYSER.

Witnesses:

WM. SECHER,
J. C. TURNER.