No. 620,389. Patented Feb. 28, 1899.

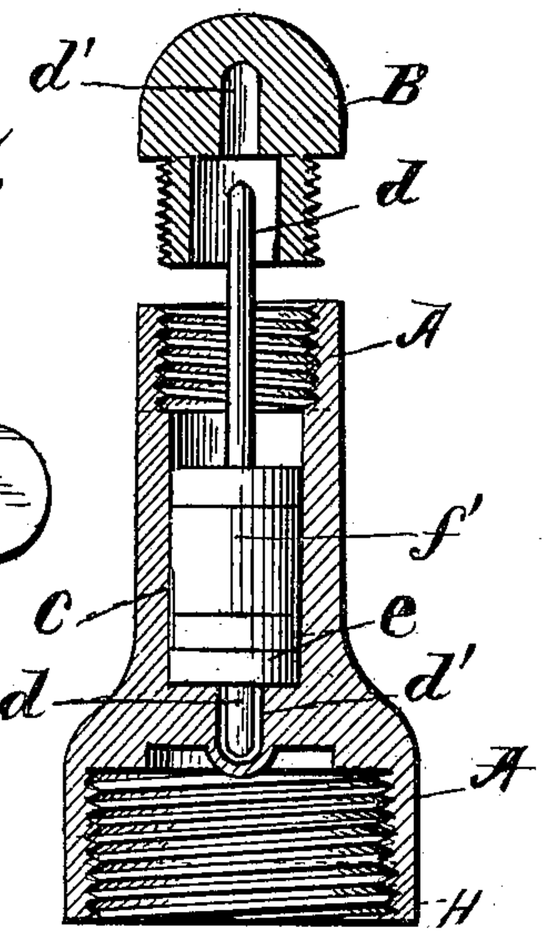
A. WELLING & L. FRITZ.

SIPHON HEAD.

(Application filed Oct. 8, 1898.)

(No Model.)

Fig. 1.



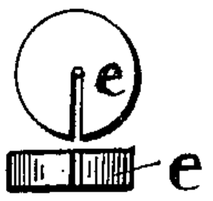


Fig. 6.

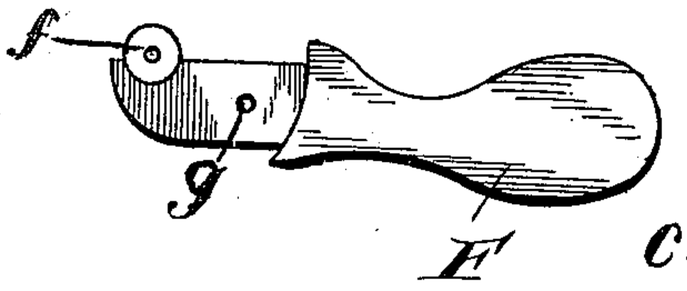


Fig. 5.

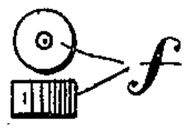


Fig. 7.

Fig. 3.

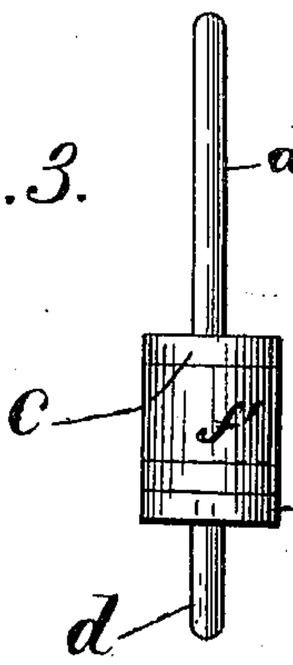


Fig. 2.

Fig. 4.

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UNITED STATES PATENT OFFICE.

ALVIN WELLING AND LOUIS FRITZ, OF COVINGTON, KENTUCKY.

SIPHON-HEAD.

SPECIFICATION forming part of Letters Patent No. 620,389, dated February 28, 1899.

Application filed October 8, 1898. Serial No. 693,051. (No model.)

To all whom it may concern:

Be it known that we, ALVIN WELLING and LOUIS FRITZ, citizens of the United States, residing at Covington, in the county of Kenton and State of Kentucky, have invented a new and useful Siphon-Head, of which the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in siphon-heads especially adapted to attachment to bottles containing mineral or other waters charged with gas; and one object of the invention is to have the top and bottom stems of the body-section of the valve operate or slide in guides, so as to prevent any leakage from lateral wear when operated, and to aid this we fix a friction-roller in the jaw of the short end of the lever and the body-section of the valve in the slot of the same.

Another object of the invention is to so construct the siphon-head that it will be simple, durable, and economic, containing but few parts, and wherein each and every part may be readily duplicated and all the parts expeditiously, conveniently, and thoroughly cleaned when occasion may demand.

We attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a section of the siphon-head, showing the working parts in the interior. Fig. 2 represents the outside casing and part of the interior at a right angle from Fig. 1 or on line *a b* of same. Fig. 3 represents the body-section of the valve. Fig. 4 represents the coil-spring to be fixed around the top stem of the valve. Fig. 5 represents the lever of the valve. Fig. 6 represents the rubber washer fixed near the lower end of the bottom stem of the valve. Fig. 7 represents the metal friction-roller fixed in the jaw on the short end of the lever, Fig. 5.

Similar letters refer to similar parts throughout the several views.

A represents the lower part of the siphon-head casting.

B represents the top part screwed to A. In it will be the spring shown in Fig. 4 to keep the valve at all times down tight.

C represents the body-section of the valve.

d d represent the top and bottom stems of the valve.

d' d' represent the recess made in the top and bottom of the siphon-head casting for the valve-stems to slide in and out when in operation, so as to guide and keep them in line and from lateral wear.

e represents the rubber washer fixed near the lower end of the bottom stem.

F represents the valve-lever.

f represents the metal friction-roller fixed in the jaw of the short end of the lever. Its office is to lessen the friction and help to do away with the lateral motion.

f' represents the slot in the body-section of the valve and in the casing.

G represents the spout of the siphon-head.

g represents the pin forming the fulcrum for the lever.

H represents the mouth of the bottle to which the siphon-head is screwed.

The difficulty heretofore in most siphon-heads is the leakage from lateral wear caused by the mechanism of the valve. This we claim to have overcome.

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

In a siphon-head, a suitable frame provided with a movable top portion which is provided with a recess in its under side, a vertically-movable valve placed in the frame and provided with stems which project above and below the upper and lower ends of the valve, and a spring which is placed around the upper stem, combined with a lever pivoted in an opening in side of the frame, a friction-roller journaled in the valve and against which the end of the lever presses, and a suitable guide formed as a part of the frame, and which receives the lower stem, substantially as shown and described.

ALVIN WELLING.
LOUIS FRITZ.

Witnesses:
LOUIS MENZER,
HERMAN SCHIRDLEHN.