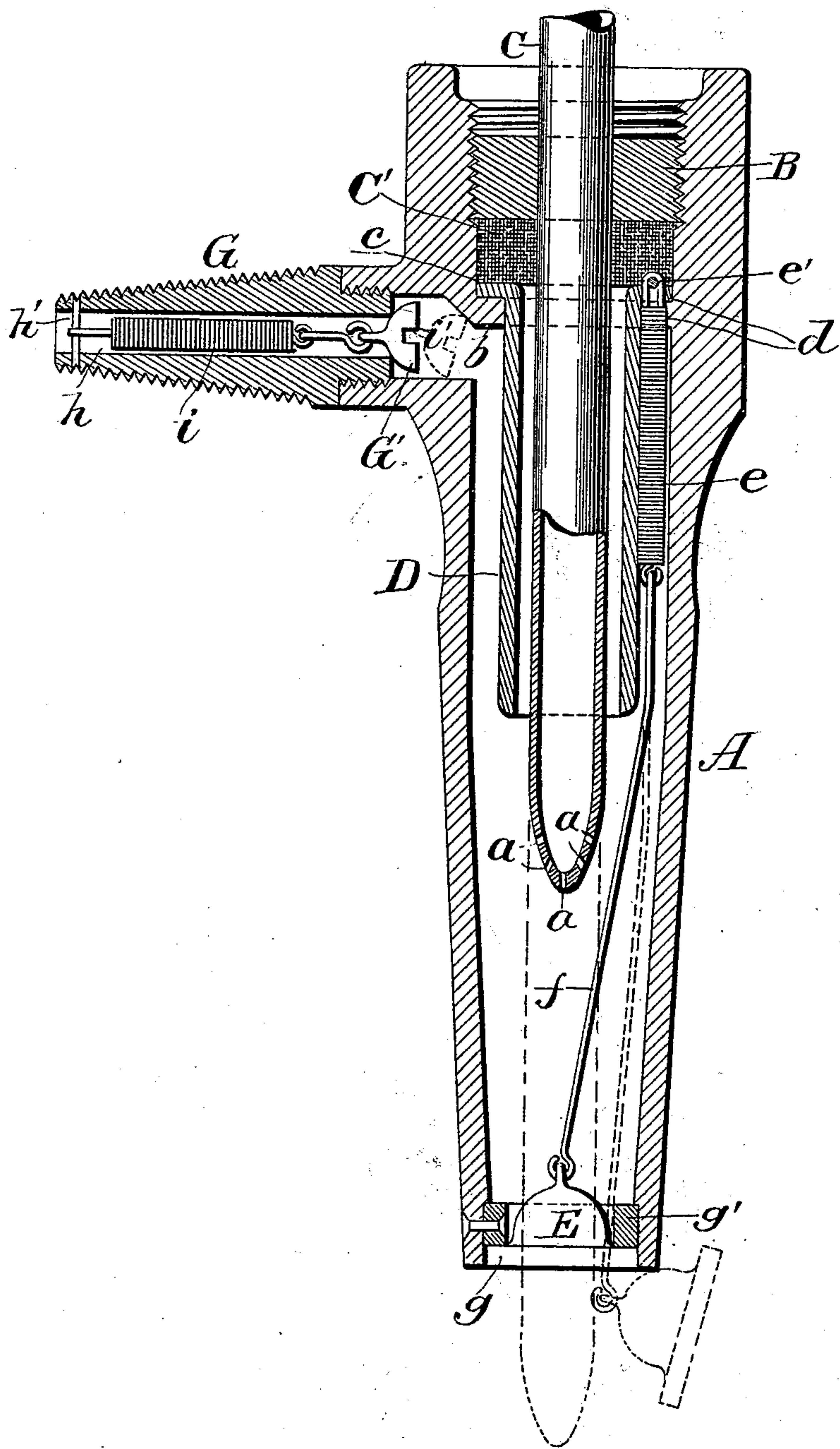


(No Model.)

P. C. LEIDICH.
TAP FOR DRAWING LIQUIDS FROM CASKS.

No. 519,430.

Patented May 8, 1894.



Witnesses
E. Nottingham
G. F. Downing

Inventor
P. C. Leidich
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

PETER CHRISTIAN LEIDICH, OF ASHLAND, PENNSYLVANIA.

TAP FOR DRAWING LIQUIDS FROM CASKS.

SPECIFICATION forming part of Letters Patent No. 519,430, dated May 8, 1894.

Application filed December 8, 1893. Serial No. 493,114. (No model.)

To all whom it may concern:

Be it known that I, PETER CHRISTIAN LEIDICH, residing at Ashland, in the county of Schuylkill and State of Pennsylvania, have
5 invented certain new and useful Improvements in Taps for Drawing Liquids from Casks, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others
10 skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in taps for withdrawing liquids from barrels or casks,—the object of the invention being to
15 produce a tap for the purpose stated which shall be simple in construction, easy to operate and effectual in the performance of its functions.

A further object is to construct the tap in
20 such manner that the accidental escape of air, gas or fluid from the barrel or cask will be avoided.

A further object is to so construct the tap that the use of the removable corks heretofore
25 employed can be dispensed with.

A further object is to construct the tap in such manner that it can be easily inserted into a barrel or cask, or removed at any time
30 therefrom without danger of permitting any of the air, gas or fluid to escape from the barrel or cask.

A further object is to so construct the tap that the parts thereof will be prevented from injury when the device is operated.

35 A further object is to construct the tap in such manner that it can be readily driven into the barrel or cask without having first started or partially driven the bung with a mallet.

40 With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as hereinafter set forth, and pointed out in the claims.

45 The accompanying drawing illustrates a sectional view of my improved tap.

A represents the body of the tap having a tapering end adapted to be driven into the bung hole of a barrel or cask. The upper
50 end of the body A is internally screw threaded for the reception of a perforated screw threaded plug B, through which a pipe C is adapted

to loosely pass, said pipe being contracted at its lower end and provided with a series of perforations *a*. In proximity to the upper
55 end of the body A is an internal flange *b* and encircling the pipe C is a loose ferrule or sleeve D having a flange *c* on its upper end which overlaps the flange *b*, by means of which latter said sleeve or ferrule is sup-
60 ported. This sleeve or ferrule D may be cast to flange *b* of body A. A packing ring C' encircles the pipe C and is disposed between the plug B and the flange *c* of the sleeve or ferrule D, said packing ring being compressed
65 around said pipe by means of the plug B, so that fluid cannot escape from the body A around the pipe C. The flanges *b, c* are made with aligned perforations *d* for the accommodation of the upper end of a spring *e*, which
70 is retained in place by means of a loose pin *e'*. To the lower end of the spring *e*, a rod *f* is connected and the lower end of said rod is attached to a conical valve E. The valve E is made with a flat peripheral flange *g* adapt-
75 ed to have a square bearing on a collar or bush *g'* inserted in the lower end of the body A and held therein by means of rivets, or said collar or bush may be cast in the end of the body of the tap.
80

The object of the sleeve or ferrule D is to protect the spring *e* from injury when the pipe C is moved, and also to guide said pipe into the center of the tap.

A taper nipple G is screwed into the body
85 A near its upper end and is adapted to communicate with the interior of said body of the tap by a passage *h*. The nipple G is adapted to be normally closed by means of a valve G', which is held normally in place by a spring
90 *i*, connected at one end to said valve and at the other end to a pin *h'*, at or near the outer end of the nipple. A slot *i'* is made in the valve G', to form a by pass and permit air forced through the nipple to enter the body
95 of the tap should the valve be forced tightly against the inner wall of tap. Without this slot there is danger of the passage becoming closed.

The complete tap, as shown in the drawing,
100 is driven into the cask or barrel. The tension of the spring *e* holding the air tight valve E on its seat prevents the leakage of air or liquid. The pipe C is then pushed through

the plug B and the packing C' and through the end of the tap into the barrel or cask. This operation forces the valve E into the position shown in dotted lines. Air is then admitted through a hose or pipe attached to the taper nipple G, forcing the valve G' from its seat and entering the cask or barrel through the body of the tap and around the pipe C. The packing C' prevents any leakage from around the pipe C into the atmosphere, as above explained. The pressure of the air (or gas) thus introduced into the cask or barrel forces the liquid through the pipe C to the place or places where it is to be used. When the supply of liquid has been exhausted or it is desired to remove the pipe for any purpose, the supply of air or gas is closed, the pipe C is withdrawn and the tension of the spring e will instantly return the valve E to its seat before the pipe C is withdrawn through the packing C', thus preventing any splashing of liquid or rush of any air or gas remaining in the cask or barrel.

By the employment of the valve E, connected with the spring e by the rod f, the cork or plug heretofore employed in the end of the tap will be entirely dispensed with. By the employment of the valve E connected in the manner above explained, the easy insertion and withdrawal of the pipe C may be accomplished at any time without the escape of gas or liquid. By employing my improved arrangement of the valve (E) prevents the necessity for forcing a cork or plug into the tap each time the tap is inserted. By the employment of the valve G' in the nipple G, the escape of gas or liquid through the nipple into the pump will be avoided. The body of the tap, as well as the valves, springs and connections are all made of non-corrodible metals and thus prevents any contamination of the liquids. All the parts of my improved

tap can be applied to old and well known or new taps. The application of the valve E, presenting a solid face of metal on the end of the tap, allows the driving of the tap into a cask without previously starting the bung of said cask with a mallet or otherwise and avoids the consequent danger of driving the bung into the cask before the insertion of the tap.

My improvements are very simple in construction, cheap to manufacture, easy to handle and are effectual, in every respect, in the performance of their functions.

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

1. In a tap, the combination with a body portion, a sleeve or ferrule held therein, and a pipe having sliding connection within the body portion, of a collar or bush at the lower end of the body portion, a valve adapted to be seated upon this collar or bush, an elastic device between the sleeve and body portion for returning the valve to its seat, a nipple leading laterally into the body portion, and a check valve operating in said nipple, substantially as set forth.

2. The combination with a body portion, and a nipple extending laterally therefrom, of an approximately cone shaped check valve yieldingly supported in the nipple, said valve of greater diameter than the passage way into the body portion and provided with slotted inner face, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PETER CHRISTIAN LEIDICH.

Witnesses:

I. J. YARNALL,
H. M. SAYLOR.