(No Model.)

J. SIEBERT, Jr.

TAP AND FAUCET.

No. 538,554. Patented Apr. 30, 1895.

Fig. 1

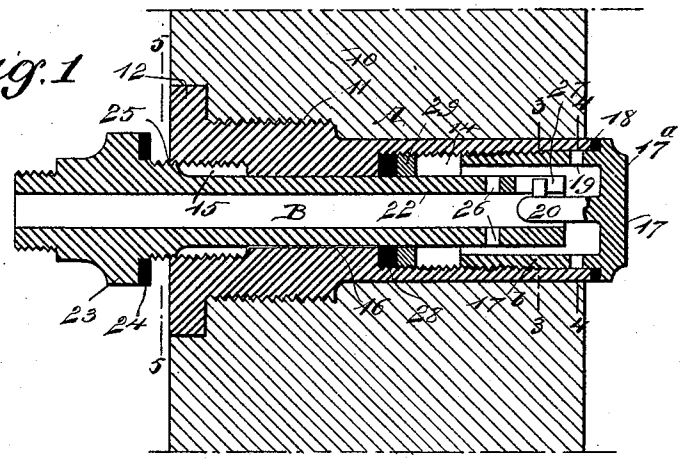


Fig. 2

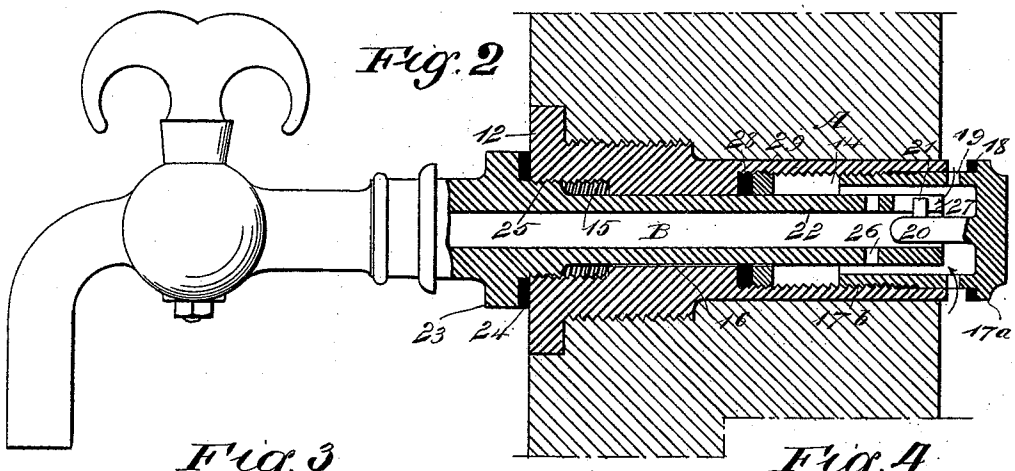


Fig. 3

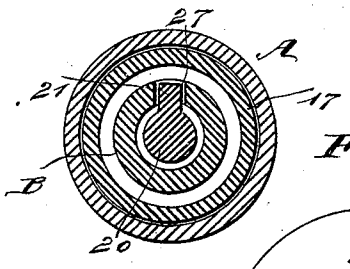


Fig. 4

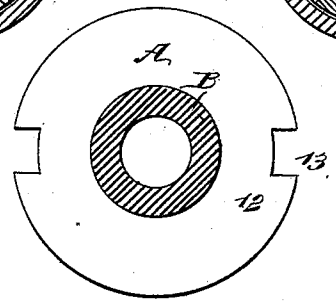
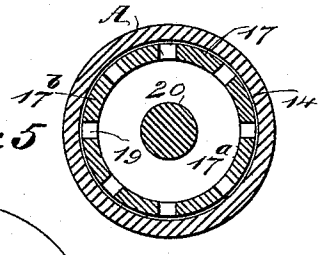


Fig. 5



WITNESSES:

John A. Bergstrom

J. Fred. Acker

INVENTOR

J. Siebert Jr.

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JACOB SIEBERT, JR., OF YONKERS, NEW YORK.

TAP AND FAUCET.

SPECIFICATION forming part of Letters Patent No. 538,554, dated April 30, 1895.

Application filed June 19, 1894. Serial No. 515,043. (No model.)

To all whom it may concern:

Be it known that I, JACOB SIEBERT, Jr., of Yonkers, county of Westchester, and State of New York, have invented a new and Improved Tap and Faucet, of which the following is a full, clear, and exact description.

My invention relates to certain improvements in that class of faucet taps which are intended to be permanently secured in the head of a barrel, and are provided with a valve which is opened by the aid of the faucet introduced into the tap and through which the liquid is to be drawn.

The object of this invention is to simplify the construction of such taps, and provide a tap in which a faucet may be expeditiously and conveniently inserted and wherein when the faucet is manipulated to secure it in the tap, the valve of the tap will be simultaneously and automatically opened, and whereby the valve will be closed in an automatic manner when the faucet is withdrawn.

A further object of the invention is to so construct the tap that a possible leakage will be avoided between the valve chamber and the receiving chamber for the faucet.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical longitudinal section through the faucet-tap, illustrating the application of the tap to a coupling-faucet, the valve being shown closed. Fig. 2 is a section similar to Fig. 1, the valve being shown open and a bib-faucet introduced into the tap. Fig. 3 is a transverse section taken, essentially, on the line 3 3 of Fig. 1. Fig. 4 is a like section taken on the line 4 4 of Fig. 1, and Fig. 5 is a similar section taken, practically, on the line 5 5 of Fig. 1.

The tap A, may be made in a manner to be inserted into the barrel, preferably the head 10 thereof, either from the inside or the outside, the construction illustrated being by attaching the tap to be introduced, from the outside of the barrel. The body of the tap is made preferably in two exterior diameters, the surface at the larger exterior diameter being provided with an exterior thread 11, while the reduced portion is preferably exteriorly plain. At the mouth of the tap, a flange 12 is formed, adapted to enter a recess in the head so that the outer surface of the flange will be flush with the outer surface of the head; and this flange, as shown in Fig. 5, is preferably provided with marginal recesses 13 to facilitate the introduction of the tap into the barrel and its removal therefrom.

The interior of the tap is preferably made in three diameters, the rear portion being bored to provide what may be termed a valve chamber 14, and this chamber is of greater diameter than is the bore at any other point in its length, while a receiving chamber 15, is made at the mouth of the tap, of less diameter than that of the valve chamber, and the interior of both the valve chamber and receiving chamber is exteriorly threaded, the latter throughout its entire length, and the former from a point near its rear end to its forward end.

The section of the bore 16 intervening the valve and the receiving chambers is of less diameter than either and is perfectly smooth. A cap valve 17 is located at the extreme inner end of the tap, which valve comprises a head 17^a constituting its outer end, and a sleeve section 17^b the latter being adapted to enter the valve chamber 14; and the forward portion of the said sleeve section of the valve is exteriorly threaded to engage with a threaded surface of the valve chamber, and when the valve is closed, the head 17^a will extend beyond the sleeve section of the valve, and is made to engage with a washer 18, located at the inner end of the body of the tap.

The sleeve section of the valve is provided with a series of apertures 19, located near the head section of the valve said apertures being circumferentially arranged, as illustrated in Fig. 4; and a stud 20 is horizontally projected from the central inner surface of the head section of the valve, and is provided with a block or lug 21, at or near its forward end, whereby the said stud and lug form practically a key as shown in Fig. 3.

The faucet B may be made to terminate in a coupling head for attachment to a hose as is usually required in tapping ale, or it may be made to terminate in a bib as shown in Fig. 2, in which instance the liquid may be drawn directly from the faucet. In either event the faucet consists in a body barrel 22, having a shoulder 23 produced near its outer end, supporting a gasket 24, the said gasket being adapted to engage with the outer surface of the body of the tap around its mouth when the faucet is in place in the tap. Adjacent to this shoulder 23, the barrel is provided with an exterior thread 25 adapted to engage with the threaded surface of the receiving chamber 15 of the tap. The remaining portion of the barrel is of such a diameter that it will snugly enter the intermediate and reduced section 16 of the interior bore of the tap, while the said barrel section of the faucet near its open or inner end, is provided with a series of ports 26 and at its extreme inner end the faucet is provided with a longitudinal slot 27, as shown in Figs. 1, 2 and 3, the said slot being adapted to receive the lug 21 of the stud 20, forming a portion of the valve; and in order that a leakage shall not occur between the valve chamber 14 and the receiving chamber 15, a gasket 28 is made to engage with the forward wall of the valve chamber, being spaced by a metal washer 29, the washer and gasket each having an opening therein of sufficient diameter to just admit of the passage of the barrel of the faucet.

In operation, when a faucet has been withdrawn from the tap, its valve will be closed or in the position shown in Fig. 1. When the receptacle is to be tapped, the barrel of the faucet is made to enter the tap and its slot 27 will receive the key of the valve just prior to the exteriorly threaded surface of the barrel screwing into the receiving chamber 15. Consequently, as the barrel is screwed inward to its seat in the tap, the barrel will be screwed outward, or unscrewed from the tap, and at the time that the faucet will have properly seated itself, the barrel will have been carried inward a sufficient distance to bring its ports 19 in communication with the interior of the receptacle, whereupon the liquid from the receptacle will enter the tap through the ports of the valve, and will enter the barrel of the faucet through the slot 27 and its ports 26. When the faucet is withdrawn it must be unscrewed from the tap, and in so doing the valve will be screwed again into the tap, and in a manner to close the inner end of the latter, as shown in Fig. 1, at which time the faucet may be withdrawn from the tap. Thus it will be observed that a faucet cannot be withdrawn without insuring the tap being securely closed, and that the act of introducing the faucet is sufficient to open the valve.

It is obvious that under the construction above set forth but few parts are necessary, and the several parts are durable and simple in their construction as well as economic, and that when the valve is closed, that portion of the tap which enters the receptacle will be perfectly smooth. Therefore the taps will not gum, nor will sediment collect in a manner to be detrimental to the operation of the valve.

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

1. In a tap-faucet, the combination with a tap provided with a threaded receiving chamber at its mouth, a valve chamber at its inner end, the inner end portion of the said chamber being open, a valve comprising a flanged cap adapted for engagement with the open end of the valve chamber to close the same, a sleeve section which enters the valve chamber and is provided with ports and has a portion of its exterior surface threaded to engage with the interior threaded surface of the valve chamber, and a key forming a portion of the head of the valve and extending forwardly therefrom, the said tap being also provided with a bore connecting the receiving and the valve chambers, of a faucet, the barrel of which is of a diameter corresponding to that of the connection bore in the cap, the said barrel being provided with a shoulder near its outer end adapted for engagement with the outer face of the tap, an exteriorly threaded surface adjacent to said shoulder, adapted to enter the receiving chamber of the tap, the inner end of the barrel being provided with ports and a longitudinal slot to receive the key of the valve, whereby the valve is opened and closed through the medium of the faucet, and the surface of the tap to be located in a receptacle is free from obstructions, as and for the purpose specified.

2. In a tap-faucet, the combination with a tap provided with a threaded receiving chamber at its mouth, a valve chamber at its inner end, the inner end portion of said chamber being open, a valve comprising a flanged cap adapted for engagement with the open end of the valve chamber to close the same, a sleeve section which enters the valve chamber and is provided with ports and has a portion of its exterior surface threaded to engage with the interior threaded surface of the valve chamber, and a key forming a portion of the head of the valve and extending forwardly therefrom, the said tap being also provided with a bore connecting the receiving and the valve chambers, of a faucet, the barrel of which is of a diameter corresponding to that of the connecting bore in the tap, the said barrel being provided with a shoulder near its outer end, adapted for engagement with the outer face of the tap, an exteriorly threaded surface adjacent to said shoulder, adapted to enter the receiving chamber of the tap, the inner end of the barrel being provided with ports, and a longitudinal slot to receive the

key of the valve, whereby the valve is opened and closed through the medium of the faucet, and the surface of the tap to be located in a receptacle is free from obstructions, a gasket located at the inner end of the valve chamber, and a washer engaging with the gasket, the washer and the gasket being provided with apertures which neatly receive the barrel of the faucet, as and for the purpose specified.

JACOB SIEBERT, JR.

Witnesses:
O. C. EDDY,
FRANK LOEHE.