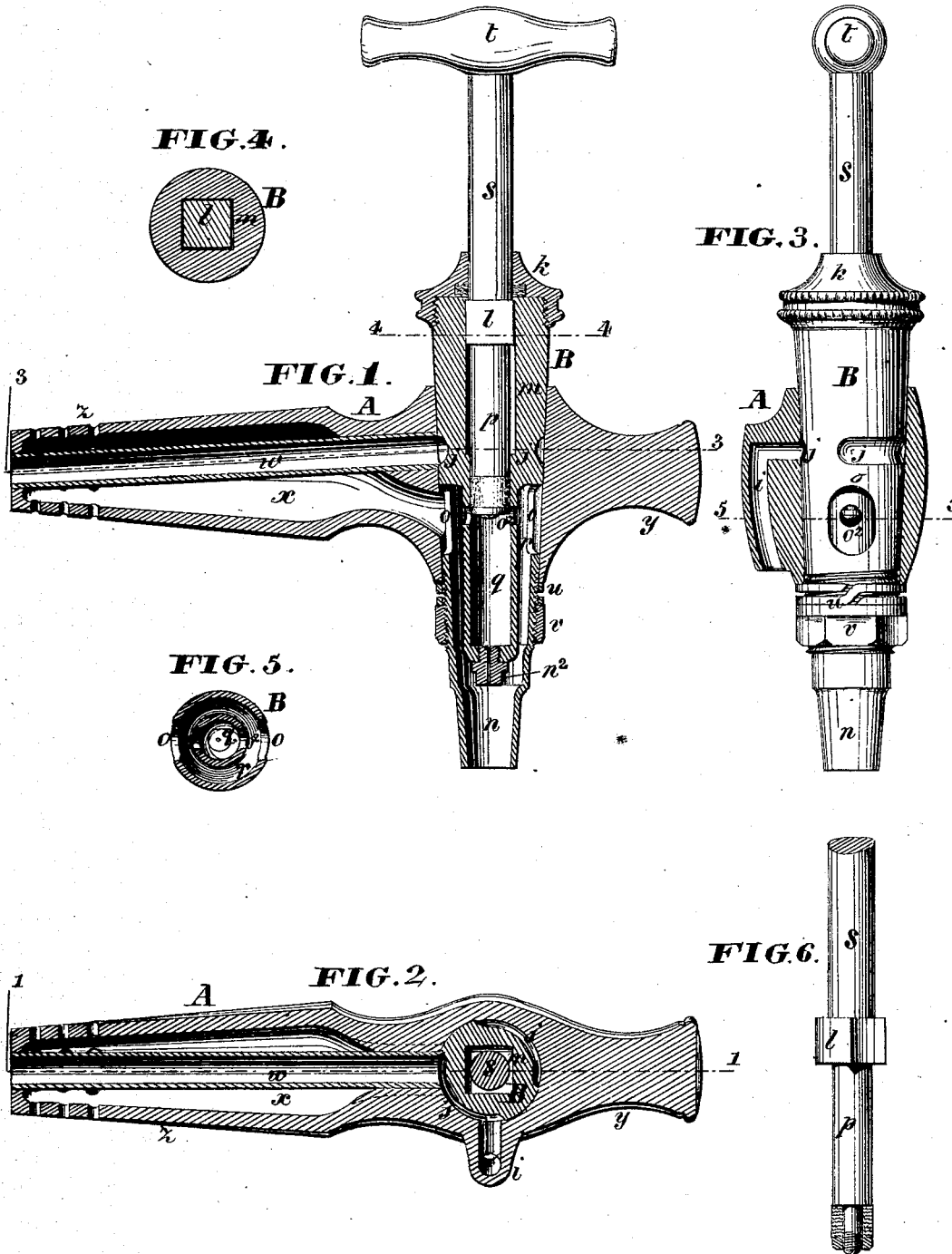


M. J. SULLIVAN.  
Beer-Faucet.

No. 160,242.

Patented Feb. 23, 1875.



WITNESSES  
Geo L. Ewing  
Walter Allen

INVENTOR  
Michael James Sullivan  
By Hugh B. ... Attorneys

# UNITED STATES PATENT OFFICE.

MICHAEL J. SULLIVAN, OF NEW YORK, N. Y.

## IMPROVEMENT IN BEER-FAUCETS.

Specification forming part of Letters Patent No. **160,242**, dated February 23, 1875; application filed March 17, 1874.

*To all whom it may concern:*

Be it known that I, MICHAEL JAMES SULLIVAN, of the city, county, and State of New York, have invented an Improved Beer-Faucet, of which the following is a specification:

This invention relates to a metallic faucet of superior simplicity, provided with air-lets for venting the barrel or keg, and a pump or ejecter for foaming the beer in the glass, and operated by a single handle, as hereinafter set forth, the improved faucet being opened or closed by a quarter-turn of the valve or plug in either direction.

Figure 1 is a vertical longitudinal section of this improved faucet. Fig. 2 is a horizontal section of the same. Fig. 3 is a transverse section, with the valve or plug in elevation. Figs. 4 and 5 are horizontal transverse sections of the plug in different planes. Fig. 6 is an elevation of the lower end of the combined handle-stem and plunger.

The planes of the several sections are indicated by lines correspondingly numbered.

This faucet is composed of two principal members, A B, of which the socket-member or stock A has the customary hollow conical shank *z*, to enter the tap of a barrel or keg, and a head, *y*, by which to drive it. The extremity of the shank is closed, and its sides are perforated to form a strainer for the admission of the beer into the cavity *x* of the shank, which opens into the lower part of the socket. An air-tube, *w*, extends longitudinally through the shank from the upper part of the socket to the center of the extremity of the shank. The valve or plug B sits vertically in the socket of the stock A, fitting the same tightly so as not to leak, and turning therein. The plug is held in position, and tightened as required, by a nut, *v*, on a threaded portion of its lower end, beneath a spring-washer, *u*, and is operated by a handle, *t*, applied to a central rod or stem, *s*, at the upper end of the plug. From the beer-port in the socket downward a certain distance the plug is constructed with two concentric chambers, *r q*, of which the inner chamber *q* receives a plunger-extension, *p*, of the handle stem *s* to constitute a pump; and the annular chamber *r* continues unobstructed to the nozzle-open-

ing *n*. Ports *o o'* give the beer access to these chambers respectively in each of two open positions of the plug, but only to the inner chamber *q* when the plunger *p* is elevated, as in the illustration. Beer thus admitted to the pump-chamber *q* fills the same, and is forcibly ejected into the glass through a very minute orifice in a supplemental nozzle, *n'*, by depressing the handle and plunger. A suitable packing is applied to the lower end of the pump-plunger *p*, as illustrated in Fig. 6. The upper end of the plug has a central square recess, *m*, which receives a squared enlargement, *l*, on the combined handle-stem and plunger, to adapt the latter to turn the plug, and to be reciprocated longitudinally independently of the same. An annular screw-cap, *k*, applied to the upper end of the plug, closes the same and confines the plunger.

The plug is provided within the socket, above its beer-ports, with horizontal segmental grooves *j*, arranged to operate simultaneously with said ports. These grooves form a channel leading to the air-tube *w* from an air-passage, *i*, in the side of the stock. This passage does not open outward directly, but is extended downward, in a vertical direction, to a point at or near the bottom of the socket, as shown in Fig. 3.

In Figs. 1, 2, and 3 this faucet is represented as fully opened, so as to admit air, and to discharge the beer into the glass, and also into the pump-chamber *q*. When the glass has been filled the flow may be stopped by turning the plug, and then, or previously, the contents of the pump may be ejected to foam the beer by depressing the handle and plunger.

The faucet is opened or closed, as the case may be, by a quarter-turn of the plug in either direction. This is a feature of considerable practical value, owing to the loss of time and wastage which it obviates.

The construction of the pump permits the employment of a minute discharge-aperture, and obviates dipping the nozzle in the glass. The combined handle-stem and plunger with square enlargement possesses simplicity and strength in a superior degree, while the single handle provides for completing the operation without removing the hand. The vertical air-passage possesses a decided advantage over

others, as the air draws or passes more freely into the barrel, or keg, and gives a quicker and better flow of beer, owing to this construction.

Having thus described this my invention, I claim—

The combination, with the conical plug or valve B, of the concentric chambers *q r*, with concentric discharge-nozzles *n n'* in the lower end of the same, duplicated coincident inlet-ports *o o'* at the upper end of the chambers,

duplicated horizontal air-grooves *j* in the periphery above the said ports, and a square socket, *m*, in the upper end of the plug, as herein shown and described, for the purposes set forth.

M. J. SULLIVAN.

Witnesses:

CHAS. MCFADDEN,  
JAMES CALLERY.