

No. 620,262.

Patented Feb. 28, 1899.

G. F. TONG.  
CAN FAUCET.

(Application filed Oct. 7, 1897.)

(No Model.)

Fig. 1

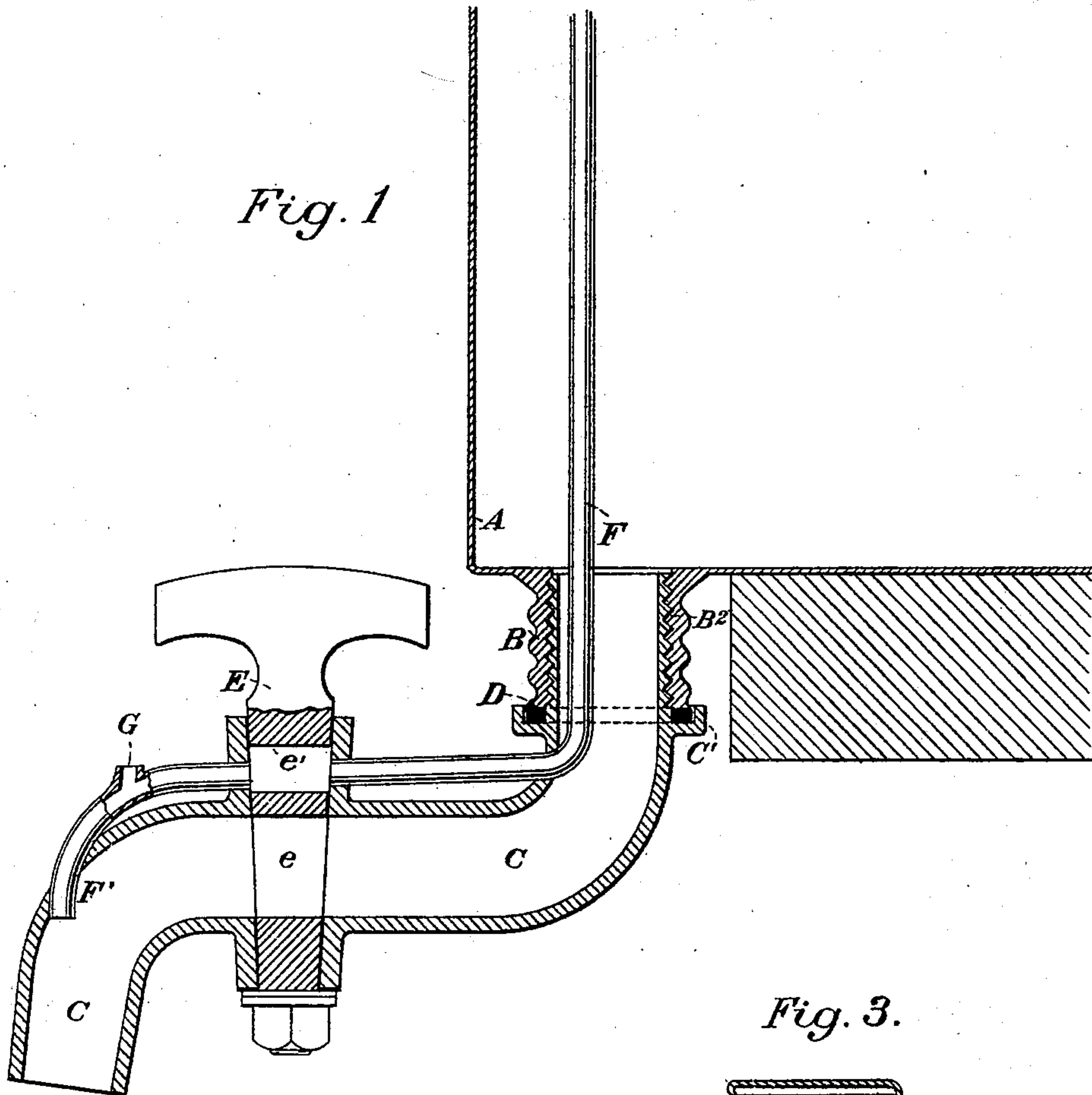


Fig. 2.

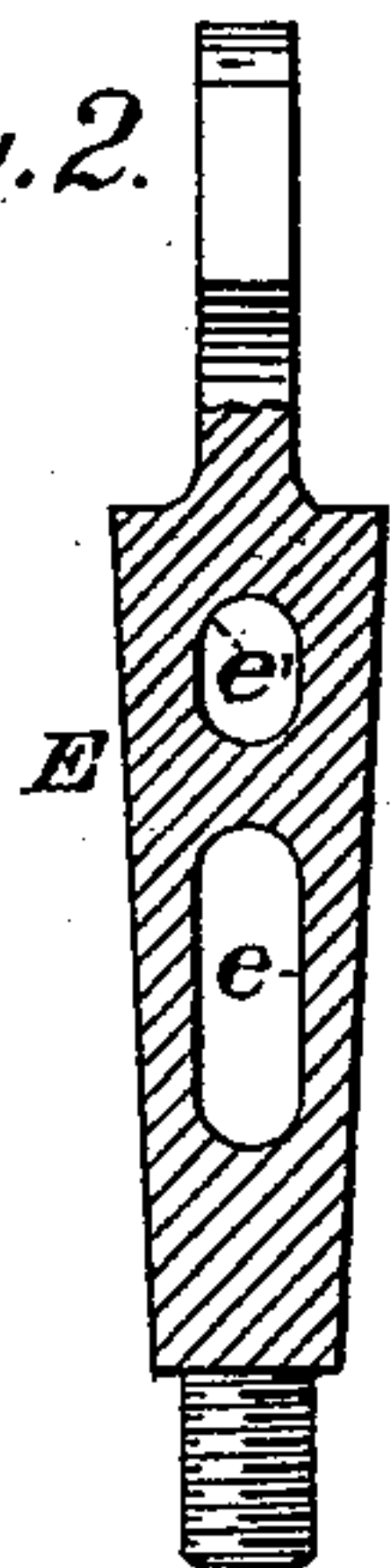
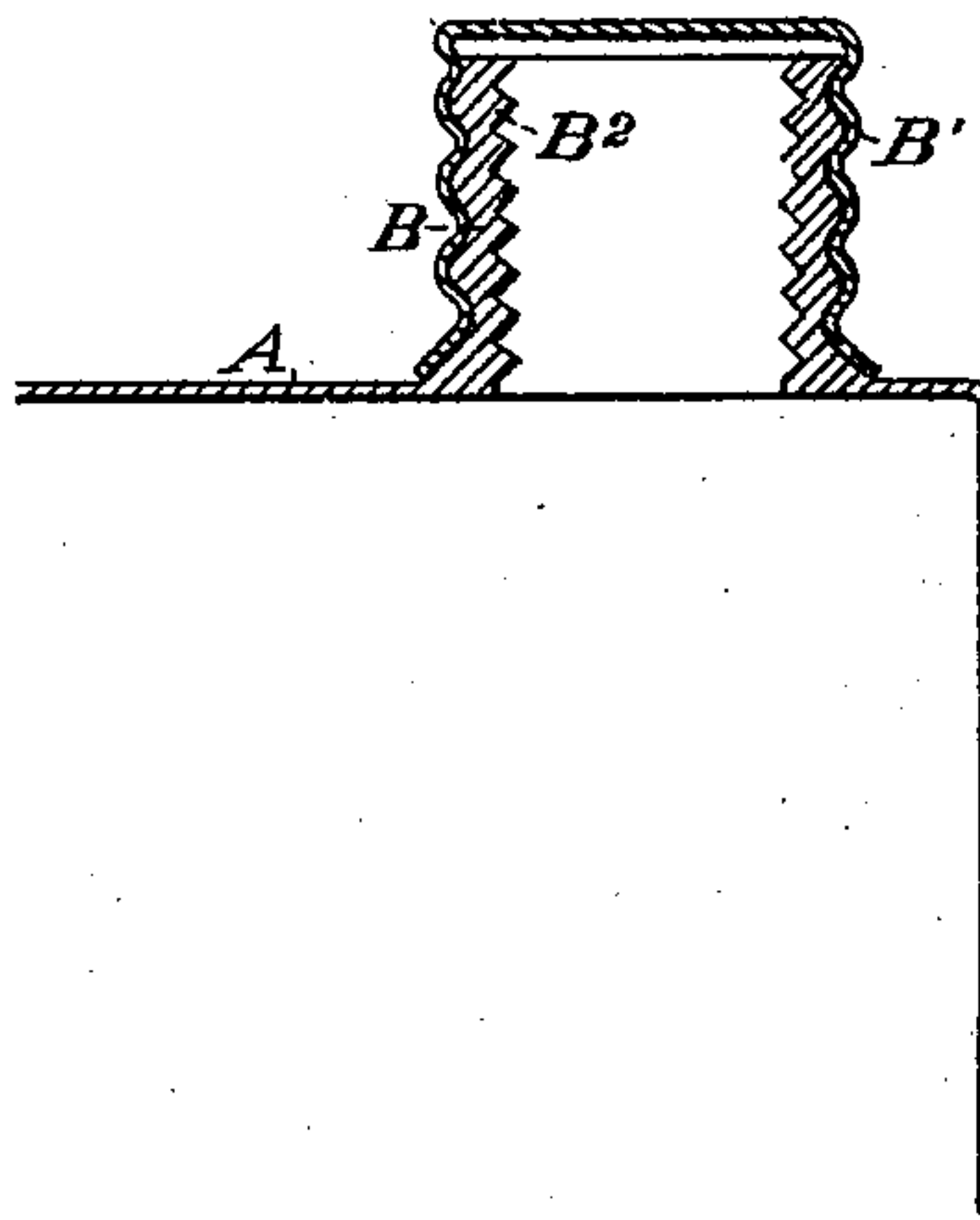


Fig. 3.



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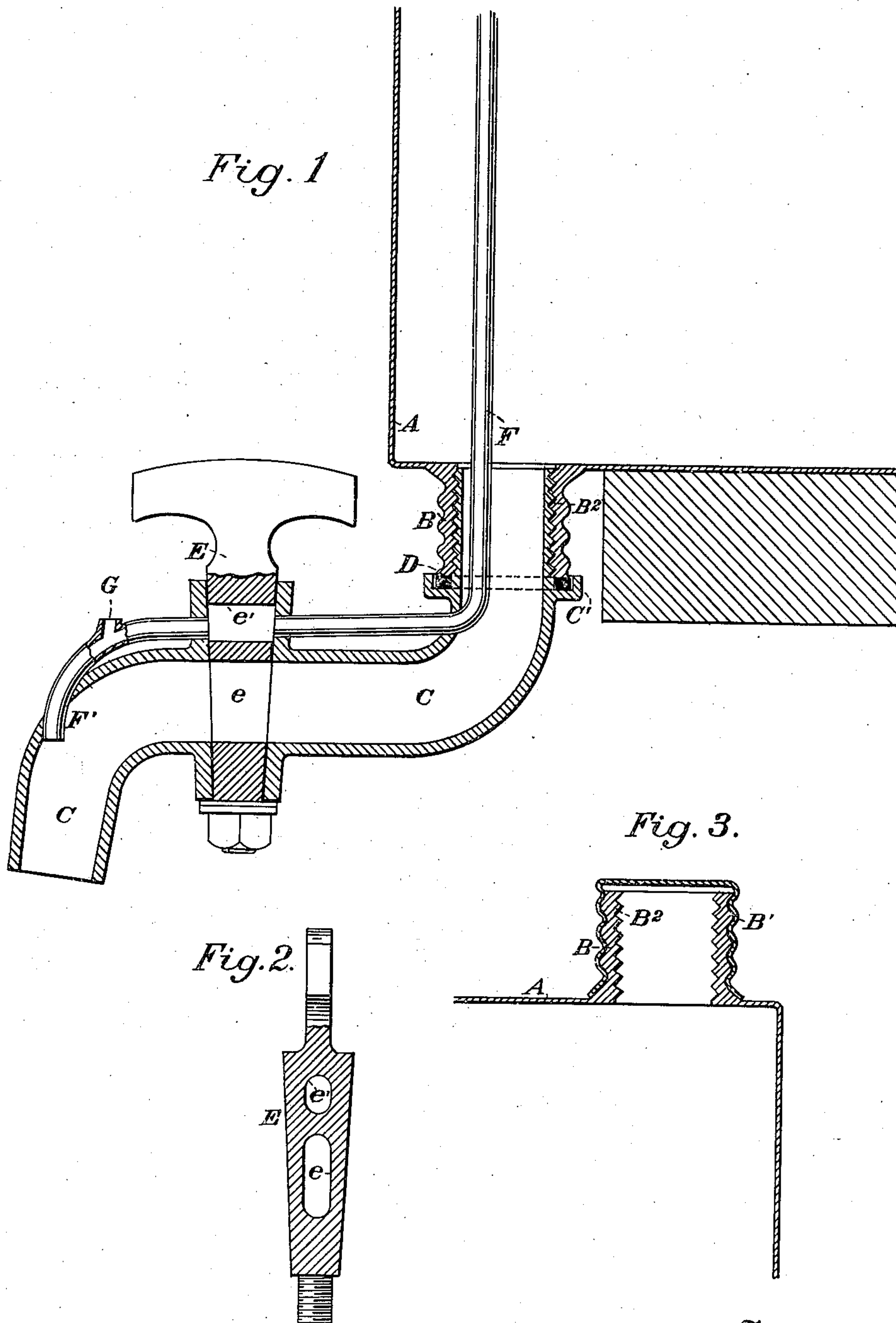
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# UNITED STATES PATENT OFFICE.

GEORGE F. TONG, OF SACRAMENTO, CALIFORNIA, ASSIGNOR TO M. K. BANETT, OF SAME PLACE.

## CAN-FAUCET.

SPECIFICATION forming part of Letters Patent No. 620,262, dated February 28, 1899.

Application filed October 7, 1897. Serial No. 654,426. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. TONG, a citizen of the United States, residing at Sacramento, county of Sacramento, State of California, have invented an Improvement in Can-Faucets; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a combined discharge-faucet and air-supply device which is especially designed for use in conjunction with air-tight cans, and particularly with that class of cans in which coal-oil, gasoline, naphtha, and similar products are sold and from which it is desirable to draw the contents in such quantities as may be needed without the trouble of transferring to other cans or receptacles.

My invention consists in the parts and the constructions and combinations of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a vertical section showing an inverted can and my faucet connected therewith. Fig. 2 is a sectional view of the faucet-plug. Fig. 3 is a view of the can in condition for ordinary transportation with its sealing-cap in position.

In putting up oil, gasoline, and that class of products for the market it is common to employ rectangular cans A, which contain about five gallons. In one corner of these cans is fitted a screw-threaded sheet-metal nozzle having a closing-cap which retains the contents for transportation. Various attachments have been made for the purpose of drawing the contents of these cans directly through the nozzle; but it is difficult to provide a draw-off cock of any description which will not leak or drip and which will withdraw the entire contents of the can.

In my invention I make the nozzle B screw-threaded upon the outside to receive the sheet-metal cap B', which fits over it and screws down to form a close cap or covering for the nozzle in the usual manner. The base of the nozzle is diverged, as shown, so that the cap screws down closely upon the top of the can. The interior of the nozzle is screw-threaded, as shown at B<sup>2</sup>, and adapted to receive the screw-threaded end of my improved faucet C. This faucet has the end threaded to fit the threads B<sup>2</sup>, and it has a flange, as shown

at C', with an annular groove or chamber into which is fitted a cork or other suitable packing D, which is not readily attacked by the liquid contained in the can. When the faucet is screwed down, this packing-ring fits snugly upon the outer end of the nozzle B and makes a tight joint therewith out of line of direct pressure of the liquid, and this will prevent leakage at this point.

The faucet-barrel C extends a short distance in a straight line with the nozzle B, then turns at approximately right angles, so as to carry the key or plug E, which is fitted into this portion, outside of the edge of the can, and the faucet-barrel then turns again into a position approximately parallel with the first-named portion, the shape being essentially a reverse curve. After having been screwed into position the can A is inverted and set upon any convenient shelf, the can projecting sufficiently beyond the edge of the shelf to make room for the nozzle B and the faucet to extend down in front of the shelf.

Through the horizontal portion of the faucet-barrel is made the tapering seat portion, which is adapted to receive the plug E. This plug is ground and fitted into the tapering seat in the usual way for faucets, and has two openings made through it, one opening e in the line with the faucet-barrel proper for the discharge of the liquid and the other opening e' in the line through the faucet above the opening e. This passage is for the admission of air to take the place of the liquid which is withdrawn and prevent a vacuum within the can which would stop the flow of the liquid. In order to provide for the admission of air, I have shown a pipe F, which extends into the interior of the can to a point very near the end which is opposite to the discharge-nozzle. This pipe extends down into the vertical portion of the barrel C, then turns in line parallel with the horizontal portion forming a connection through the passage e' in the plug, thence curving downward and opening into the vertical discharge portion of the barrel, as shown. It will be understood that this passage may be made in any suitable manner. I have found it cheaper and more convenient to make it as a separate pipe passing through the faucet-plug above and exterior to the main faucet-barrel C.



G is a small opening made into the pipe F at a point outside and in front of the faucet-plug, and this opening serves for the admission of air when the liquid is flowing from the faucet.

The operation will then be as follows: The can A being in its ordinary upright position the cap B' is removed, the faucet-barrel is introduced and screwed into place, the pipe F extending down to near the bottom of the can A when the faucet-barrel has been seated, so as to make a tight joint upon the washer D. The can is then inverted and set upon a shelf with the faucet projecting downwardly from the nozzle. In this condition it will be manifest that some oil will at first remain within the air-pipe F, and when the cock is turned for the first time if no other provision is made some of the oil within this air-pipe would spurt out through the small opening G. The oil in this pipe F will be prevented from spilling out through the hole G, because any oil in the part of the pipe between the hole G and the interior of the can will be sucked up by the vacuum produced by the withdrawal of the oil from the interior of the can. The small body of oil which remains in the part F' of the pipe below the opening G will be drawn downward by the suction produced by the weight of the body of oil flowing out through the lower curve of the faucet. As soon as the pipe F is once clear of this oil air will be admitted through the opening G and will pass up through the pipe F into the upper part of the can, thus taking the place of the oil as fast as the latter is withdrawn. The two passages *e e'* being in line with each other it will be manifest that both the discharge and air-inlet openings will be opened and closed simultaneously. When the plug is turned to cut off the liquid discharge and the air-supply, air will pass through the opening G into the discharge end of the faucet, thus allowing the liquid therein to flow out at once and preventing drip.

As the faucet-plug becomes worn and sinks into the tapering seat in which it is fitted, it is necessary to provide some compensation for this. I therefore make the discharge-passages *e e'* through the plug of an oval shape up and down, as plainly shown in Fig. 2, and this keeps the passages always in proper line with the discharge and air-inlet openings, although the plug may by wear settle a considerable distance within its seat.

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

1. The combination with a can having an exterior and interior screw-threaded nozzle projecting from one end, a faucet-barrel, one portion of which is screw-threaded to fit the nozzle and provided with an exterior closing-joint, said first section being axially in line with the nozzle whereby the contents of the can are discharged directly thereinto, a horizontal outwardly-projecting portion of the

faucet-barrel having a closing-plug fitting a seat transversely across it, a downwardly-curved discharge portion, an air-pipe having a vertical portion extending interior to the vertical portion of the faucet-barrel and to the opposite end of the can, and a horizontal portion extending above the horizontal portion of the faucet-barrel passing through the plug-seat having the outer end curved downwardly and entering the downwardly-curved discharge portion of the faucet-barrel, and a faucet-plug turnable in the seat having independent openings coinciding with the discharge-passage of the faucet-barrel and the superposed air-passage, whereby the turning of the plug opens or closes the two simultaneously.

2. A reversely-curved faucet-barrel having the inner end adapted to fit and form a joint vertically with the corresponding vertical nozzle of an inverted containing-can, a horizontal outwardly-projecting portion of the faucet-barrel, a downwardly-projecting discharge end, a tapering seat with controlling-plug fitting therein within the horizontal portion of the barrel, an air-pipe extending from the upper part of the interior of the reversed can downwardly within the first portion of the faucet-barrel, thence extending horizontally approximately parallel with the horizontal portion of the faucet-barrel and above it, thence curving downwardly and entering the vertical discharge portion of the barrel, a faucet-plug having openings corresponding respectively with the main opening of the faucet-barrel and with the opening of the supplemental air-pipe whereby both passages are opened or closed simultaneously, and an opening in the outer portion of the smaller pipe, whereby air is admitted through said pipe to the interior of the can while the liquid passes out through the main faucet-barrel.

3. A reversely-curved faucet-barrel having the inner end of the vertical portion adapted to fit and make a tight joint with the corresponding nozzle of an inverted can, a correspondingly-shaped air-pipe extending upwardly to near the top of the inverted can and above the horizontal portion of the faucet, a plug fitting a seat in said horizontal portion having openings corresponding with and controlling the liquid-discharge and air-inlet passages, an opening in the air-pipe exterior to the controlling-cock whereby air is admitted into the can as the liquid escapes, said air-pipe being bent to enter the discharge end of the faucet whereby the flow of the liquid produces a vacuum in said pipe and prevents the escape of any liquid therein through the air-inlet opening.

In witness whereof I have hereunto set my hand.

GEO. F. TONG.

Witnesses:

GEO. H. STRONG,  
S. H. NOURSE.



Correction in Letters Patent No. 620,262.

It is hereby certified that the name of the assignee in Letters Patent No. 620,262, granted February 28, 1899, upon the application of George F. Tong, of Sacramento, California, for an improvement in "Can-Faucets," was erroneously written and printed "M. K. Banett," whereas said name should have been written and printed *M. K. Barrett*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 21st day of March, A. D., 1899.

[SEAL.]

WEBSTER DAVIS,  
*Assistant Secretary of the Interior.*

Countersigned:

C. H. DUELL,  
*Commissioner of Patents.*