

J. A. SCHOFIELD & J. BRIERLEY.

TAP FOR KEGS, BOTTLES, &c.

No. 385,730.

Patented July 10, 1888.

Fig. 1.

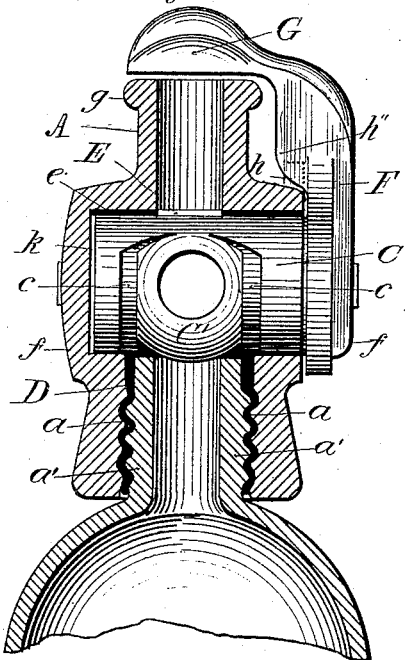


Fig. 2.

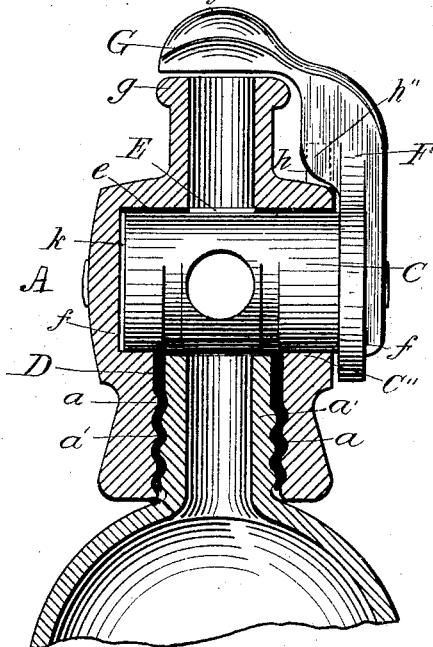


Fig. 3.

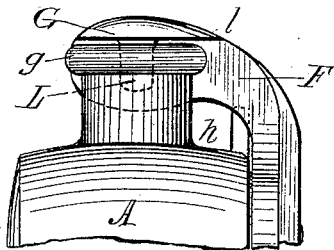


Fig. 4.

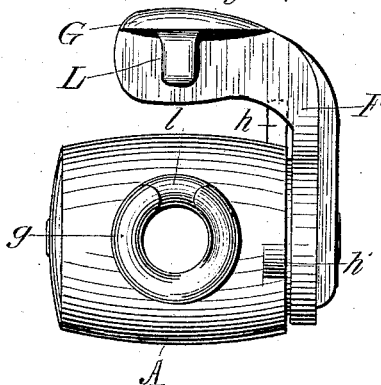


Fig. 5.

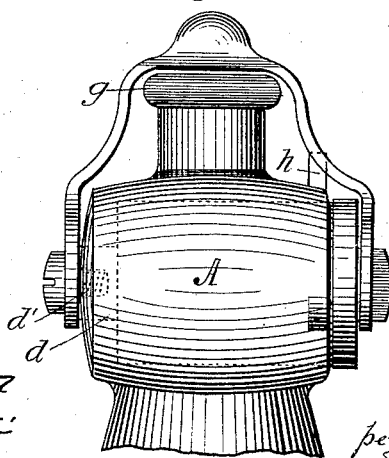


Fig. 6.

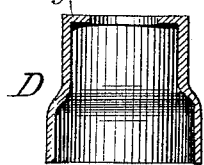
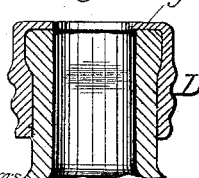


Fig. 7.



Witnesses  
*Edgar George*  
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Inventors  
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per *James Stevenson*  
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Fig. 8.

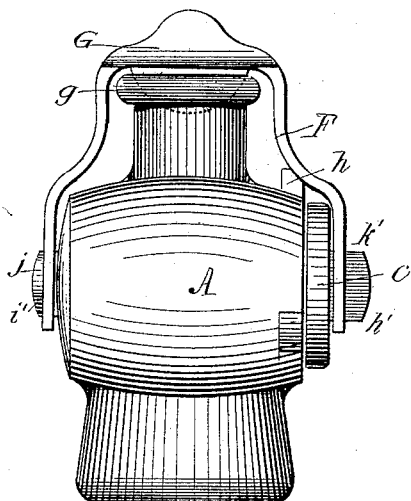


Fig. 9.

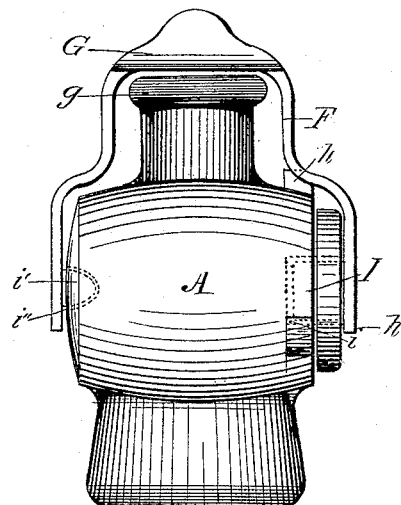


Fig. 10.

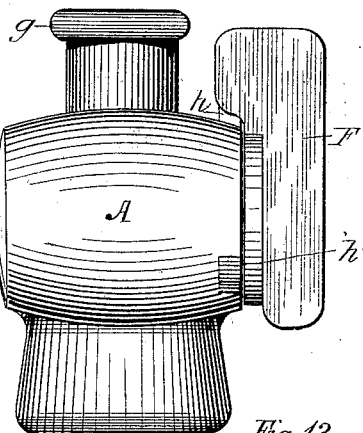


Fig. 11.

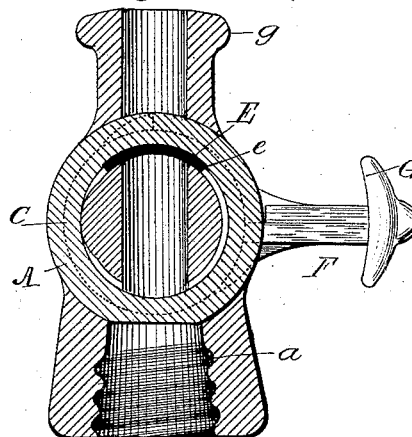


Fig. 12.

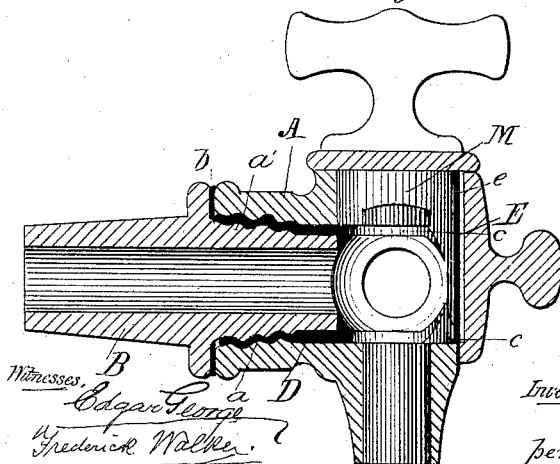
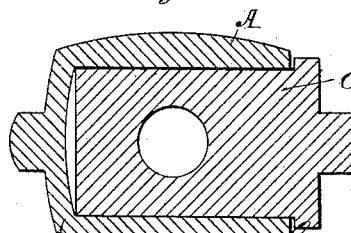


Fig. 13.



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Edgar George  
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per James Stevenson Attorney.

# UNITED STATES PATENT OFFICE.

JAMES ARTHUR SCHOFIELD AND JOHN BRIERLEY, OF SOUTHPORT, COUNTY OF LANCASTER, ENGLAND.

## TAP FOR KEGS, BOTTLES, &c.

SPECIFICATION forming part of Letters Patent No. 325,730, dated July 10, 1888.

Application filed September 19, 1887. Serial No. 250,127. (No model.)

*To all whom it may concern:*

Be it known that we, JAMES ARTHUR SCHOFIELD and JOHN BRIERLEY, subjects of the Queen of Great Britain, residing at Southport, in the county of Lancaster, England, have invented certain new and useful Improvements in Taps for Kegs, Barrels, Jars, Filters, Bottles, and other Receptacles for Containing Fluids, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of our invention is to provide an independent tap for use with bottles and the like, and also in combination with a spigot for kegs, barrels, jars, filters, and other vessels, which shall at the same time possess all the other features indispensably necessary, and found in taps generally hitherto used in connection with bottles for containing aerated beverages.

Referring to the drawings, Figures 1 2 are vertical sections of a bottle fitted with our improved tap, the turning-plug of Fig. 2 being slightly different from that of Fig. 1. Fig. 3 is a side elevation, and Fig. 4 a top view, of a modified construction. Fig. 5 is a side elevation of a modification. Figs. 6, 7 are sectional views of two forms of the elastic packing-sleeve. Figs. 8, 9, 10, 11, 13 illustrate modifications. Fig. 12 is an axial section of a tap fitted upon the neck of a spigot.

The device, in accordance with our invention, comprises a tap, A, Fig. 1 of the accompanying drawings, having an internal screw-thread, *a*, bayonet-joint, or other suitable fastening, formed in its enlarged lower part to fit a corresponding form of connection, *a'*, upon the neck of a bottle when such is used, or upon the exterior end of a spigot, B, Fig. 12, such as are used for inserting in the bungs of kegs, barrels, jars, filters, or other vessels, a washer, *b*, Fig. 12, of india-rubber, cork, or other suitable material, being interposed, if thought desirable, between the tap and the top of the bottle or flange of the spigot to form a perfectly tight joint.

In the top of the interior of the body of the tap is formed a groove or recess, E, in which is inserted a flat washer or seating, *e*, for the twofold purpose of separating the plug from

the body of the tap and insuring a smooth movement of the plug, at the same time forming a liquid and gas tight joint. The plug C, which may be either conical or cylindrical, may be ground or otherwise fitted into its seat, and has formed on one side thereof a curved or flat projection, C', Fig. 1, C', Fig. 2, against which bears or presses the end of a short tube or collar, D, (shown detached at Fig. 6,) of india rubber, cork, or other suitable resilient material, fitted onto the end of the neck of the bottle or end of the spigot. (See Figs. 1 and 12.) Said india-rubber tube or sleeve D is formed to fit accurately upon the mouth of the bottle, and has at its upper extremity a thin narrow flange, *f*, upon which presses the projection C' upon the plug C, in close proximity to the mouth of the bottle without actually touching the glass.

On inserting the plug C into its seat the end of the tube or collar D, above referred to, embraces the projection C', formed upon the plug, insuring thereby a liquid and gas tight joint, at the same time that it holds the plug in its place and prevents its accidental withdrawal or removal without necessitating the employment of any screws or washers; or, if desired, the plug may have a small aperture, *d*, in the end, having a screw-thread, *d'*, formed therein, Fig. 5, for the reception of a screw, by which means said plug may be secured in its seat.

When it is requisite to use the improved tap for ordinary bottles or spigots not being provided with the necessary screw-thread, we employ a short tube or sleeve, Fig. 7, of india-rubber or other suitable material, screw-threaded on the exterior. Said tube or sleeve on being drawn over the neck of a bottle or spigot, the body of the top is screwed thereon, forming a very perfect gas and liquid tight joint.

We may in some cases form a screw-thread or other means of connection upon the top or mouth-piece of the tap, onto which may be screwed or otherwise connected a cap for the exclusion of dust, or said cap may form a part of a spout of any suitable design and be bent to any desired angle.

According to our invention, to the outer end of the plug and forming a portion thereof may

be cast, molded, or otherwise formed an arm, F, having at its extremity an overhanging enlargement, G, serving as a cap to protect the mouth-piece *g* from dirt, dust, or the like, said arm serving also as a lever for opening and closing the tap. Upon the body of the tap are cast or otherwise formed lugs *h h'*, corresponding to a similar projection or lug, *h''*, upon the arm F, said lugs being devised for the purpose of limiting the movement of the plug to about one quarter of a revolution; and in order to prevent the end of the plug from impinging and rubbing against the plug-seating at the end of the tap at K we may insert between these surfaces a cushion of cork, india rubber, or other suitable material.

The handles or levers F for turning the plug C may be of any desired form and material. One end of said handles F may have a square or an irregular-shaped boss, I, Fig. 9, taking into a recess, *i*, in the end of the plug of the tap, the other end being furnished with a conical projection, *i'*, and which moves freely in a corresponding recess, *i''*, formed in the body of the tap; or the last-referred-to end *i'* of the lever F may have an eye or a hole formed therein, in order that it may work freely upon a pin or boss, J, Fig. 8, formed upon the body of the tap; and, further, instead of a recess being formed in the outer end of the plug, said outer end may be extended beyond the body of the tap, as at *k'*, Fig. 8, and be made either square or round, with a keyway or channel for the reception of a key, in order to allow of the plug being turned by the aforesaid lever or arm. The caps G upon the levers F, above referred to, for protecting the mouth of bottles from dust, dirt, and the like, may be formed of any suitable shape, and in some cases may be provided with a side guard, L, Figs. 3 and 4, to close a corresponding opening, *l*, in bottles, such as may be used by druggists and for other purposes, as illustrated.

In the production of taps, as above described, in accordance with our invention, for attaching to kegs, barrels, jars, filters, or other ves-

sels, we prefer to form them on the faucet and-spigot principle, Fig. 12, the plug M being a hollow spigot perforated on one side only. The spigot B or other attachment, which is inserted into the bung of a keg, barrel, jar, filter, or other vessel, may, if found too large for the body of the tap, be reduced in size, and the short tube or sleeve D, Figs. 6 and 12, with the screw-thread, above referred to, be drawn thereon, when the tap may be screwed into its place; or, in place of the spigot, a loose metal tube, with or without a flange, may be inserted in the india-rubber tube or sleeve, Fig. 7, so as to prevent the latter collapsing when inserted in the bung, and thus form the spigot, upon which the tap is screwed or otherwise connected.

Having fully described our invention, we declare that what we claim is—

1. An improved tap for kegs, barrels, jars, filters, bottles, and other vessels, the body of which is provided with an internal screw and recess E, to receive a seating, *e*, in combination with a sleeve, D, and a plug, C, having a central elevation, the tube being recessed at each side of the elevation to receive the end of the tube or sleeve, substantially as described and shown.

2. The combination, in a tap, of a body, A, plug C, lever F, cap G, and side guard, L, substantially as and for the purposes set forth.

3. In combination with the neck of a bottle or spigot, a tap having a body provided with a turning-plug and an internally-threaded annular projection secured upon the neck, and a tubular elastic packing compressed between the neck and the internal thread and bearing at one end against the turning-plug.

In testimony whereof we affix our signatures in the presence of two witnesses.

JAMES ARTHUR SCHOFIELD.  
JOHN BRIERLEY.

Witnesses:

JAMES ROBINSON,  
JOHN WILLIAM BULMER.