(No Model.)

R. MARSH.

FAUCET AND BUNG.

No. 482,408. Patented Sept. 13, 1892.

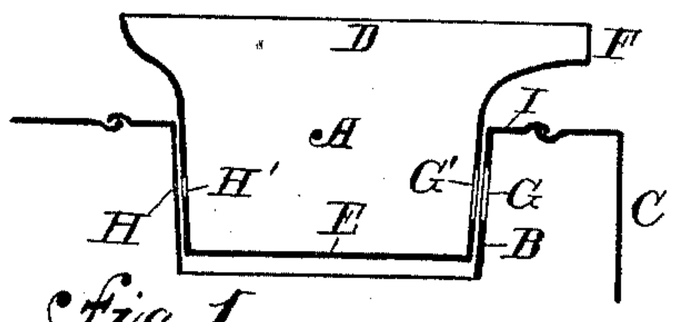

Fig. 1.

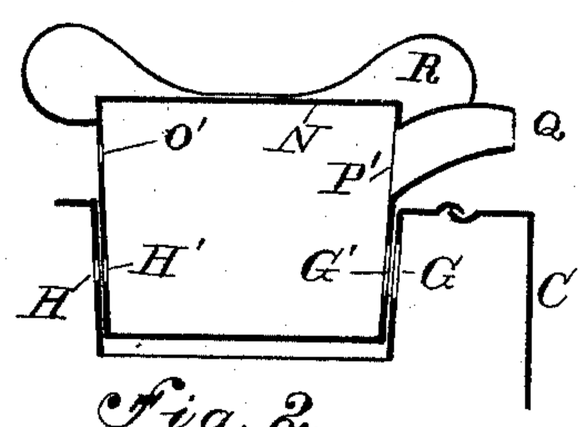

Fig. 2.

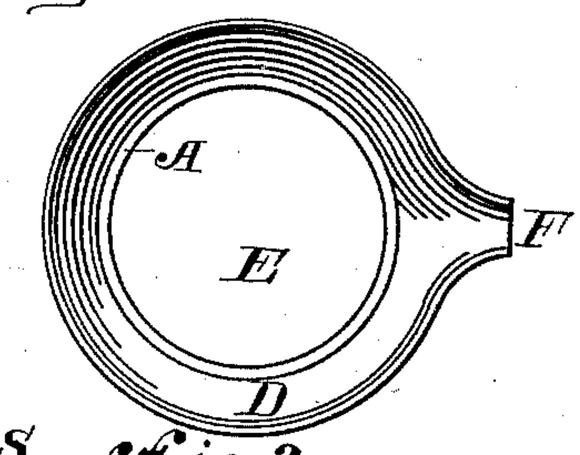

Fig. 3.

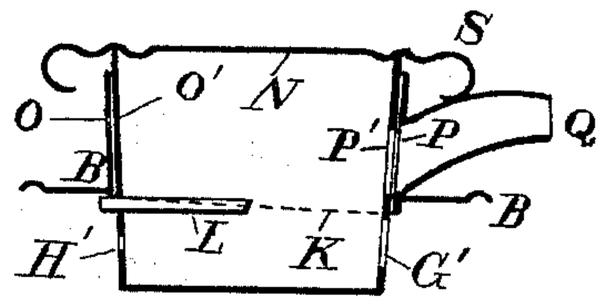

Fig. 4.

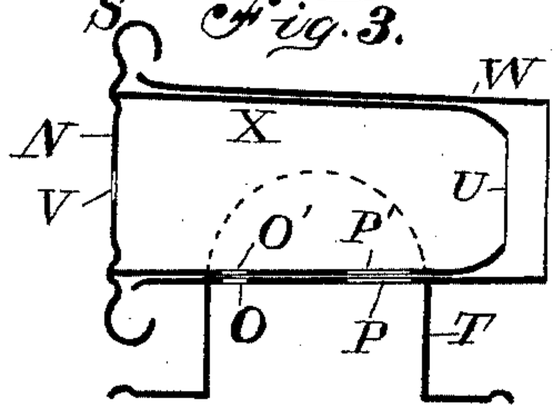

Fig. 5.

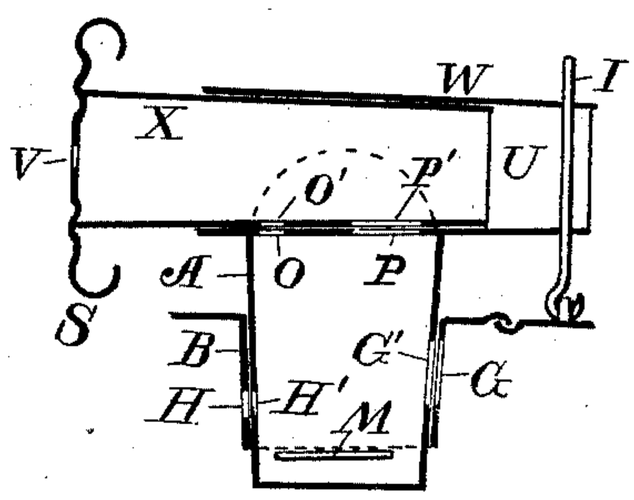

Fig. 6.

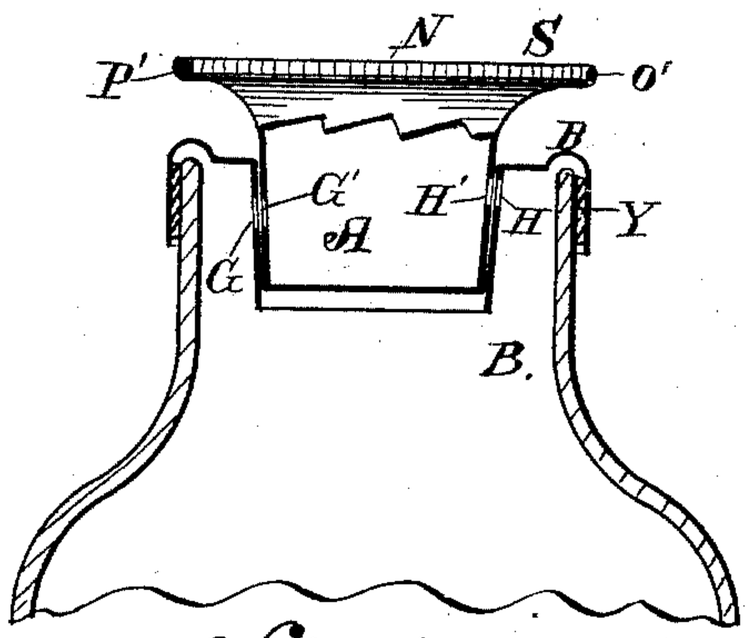

Fig. 7.

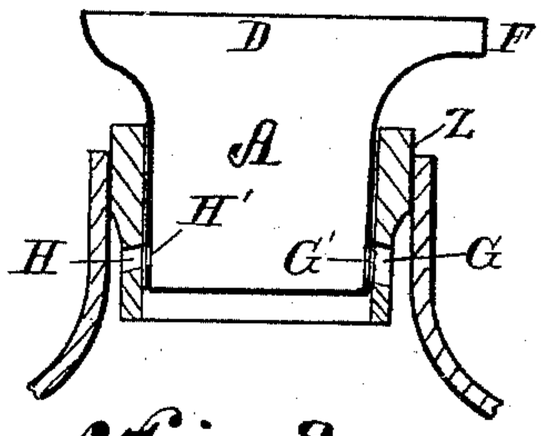

Fig. 8.

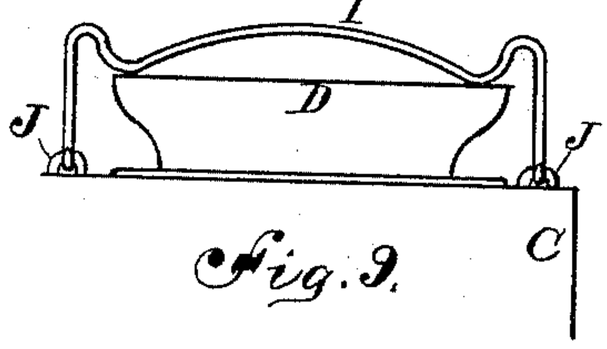

Fig. 9.

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UNITED STATES PATENT OFFICE.

RIVERIUS MARSH, OF NEW BRUNSWICK, NEW JERSEY.

FAUCET AND BUNG.

SPECIFICATION forming part of Letters Patent No. 482,408, dated September 13, 1892.

Application filed November 14, 1890. Serial No. 371,417. (No model.)

To all whom it may concern:

Be it known that I, RIVERIUS MARSH, a citizen of the United States, and a resident of New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Faucets and Bungs, of which the following is a specification.

My invention relates to improvements in faucets and bungs; and it consists in making simple sheet-metal structures at a small cost by drawing the metal in a tapering form, so as to necessitate only one set of drawing-dies instead of a separate set for each drawn body, thereby enabling me to make the shells interchangeable and at the same time of a more perfect fit, and also permits each shell to be used for two or more purposes after the body is drawn up, as may be instanced in the case of curving the open end of one shell so as to form a cap or cover for the vessel, or it may have its upper end stamped into a pouring-spout, or it may be formed with thumb-pieces, so that the shell can be turned, thereby saving great cost of material and labor in construction and also avoiding the use of cast metal and the consequent cost of tapping and polishing the same.

My invention contemplates the manufacture of metal faucets and bungs having perfectly-ground and self-fitting valves, and in connection I provide pouring and venting chambers, which act in unison.

The devices herein shown illustrate a wide range of modifications germane to the invention, adapting it for use on iron, stone, glassware, paper, tin, wood, or other vessels, and for some of these purposes I obviate the use of corks, bungs, or stoppers, its exceeding cheapness enabling me to furnish a reliable substitute.

For general use the frictional contact of the parts is sufficient to prevent leakage when used for shipping purposes. Still I have provided various forms of fastening devices to hold the tubular plugs in place, all of which will now be set forth in detail.

Referring to the accompanying drawings, Figure 1 is a vertical section of a portion of a can and my improved bung and faucet. Fig. 2 is the same, showing a different form of pouring-spout. Fig. 3 is a top view of the device shown in Fig. 1. Fig. 4 is a vertical section showing different manner of locating the shells in the can-tops and a modified form of attaching the pouring-spout. Fig. 5 is a vertical section of a modified form of disposing the shells. Fig. 6 shows a modified form of attaching and operating the shells so as to provide a double means of cutting off the flow of the liquid and illustrating the manner of holding the same in place when used for shipping purposes. Fig. 7 is a sectional view showing its application to jars or similar vessels. Fig. 8 is an illustration of a modified form of construction for use on jars, bottles, &c.; and Fig. 9 is a side view of the fastening-stirrups.

In manufacturing my invention the simplest form will be employed, although the various modifications can be utilized, as may be required, and this simple form is shown in Figs. 1 and 3. In these figures I show a faucet composed of two parts A B as applied to a vessel C, in which the plug A is formed of one piece of sheet metal, with an open top D and a closed bottom E. On one side the top D is stamped with a projection or extension F to provide a pouring spout or channel. The downturned body B within the can on the side from which the spout F projects has a discharge-port G, and coinciding therewith in the plug A a similar port G′. On the opposite side the body B has a vent-hole H, and coinciding therewith in the plug A is a similar hole H′. Both of these shells A B are drawn up in the same die, but finished differently, the shell B having a flange I, by means of which it may be soldered to the can-top, whereas in the case of the plug A the upper end is enlarged, as shown, and provided with a pouring-channel at one side.

It will be observed that in all the other forms shown the discharge and vent openings are in the sides of the shells and, except in Fig. 5, the plug portion has a closed lower end. In order to close the discharge and vent apertures, the plug is rotated, and for filling purposes the plug may be removed. For ordinary use no fastening is required, as the plug

and receiving-shell taper sufficiently to hold the two parts tightly together; but for shipping purposes I prefer to place a wire bail I×, Fig. 9, over the plug, said bail being attached to suitable eyes J on the top of the case. Another form of fastening is shown in Figs. 4 and 6. This consists in cutting off the lower end of the shell B on an incline, as represented by the dotted lines K, and in soldering into the plug A a wire L, which projects under the inclined edge, so that when the plug turns the projecting end of the wire rides under the incline and draws down the plug tightly. Instead of the wire a bead M may be formed in the plug to rest under the incline.

While the form shown in Fig. 1 has an open top, for some uses I prefer to have the top of the plug closed, as shown at N in Figs. 2, 4, and 7. In such cases, in addition to the vent-holes H *h'* at the lower ends, I place vent-holes O O' through the shell and plug above the can-top, and also discharge-openings P P'. In Figs. 2 and 4, for instance, the shell B is exactly similar to the same part in Fig. 1; but the plug in each case has a closed top and discharge-openings P', as well as vent-openings O'. In Fig. 2 a spout Q is soldered to the plug A; but in Fig. 4 the spout is soldered to the outer shell B, because the latter in this instance projects above the can-top instead of being extended down into the can, as shown in Figs. 1, 2, 6, and 7.

Now in order to provide a means for turning the plug A, I provide it with ears R, as shown in Fig. 2, or the top N, as shown in Figs. 4 and 7, may have a projecting rim S, milled or corrugated, so as to provide a purchase for the hand.

In the simple forms shown in Figs. 1, 2, 7, and 8 the air and liquid are cut off or turned on by merely turning the plug so as to bring the discharge and vent orifices together properly; but for use on large or immovable cans when the movement of the plug turns on the liquid great care must be exercised or the liquid will flow out before the nozzle or discharge-spout is turned around sufficiently. To overcome this objection, I have contrived the forms shown in Figs. 5 and 6. In Fig. 5 the can-top has a shell T with a dome-top, which is cut away transversely to receive the horizontal tapering shell W, open at both ends. Within this shell is the plug X, having its discharge end U open and provided with the cap or head N at the other end, through which is formed the vent-hole V. The body of both the shells A B within the shell T has the discharge and vent orifices P P' O O', so that while the shell T is stationary on the can the liquid is turned on and off by merely turning the plug. Practically the form shown in Fig. 2 is applied in this case at right angles, the only point of dissimilarity being that the plug has no closed lower end, because the end is made to serve as a discharge. In Fig. 6 I combine both features of Figs. 2 and 5, so that the plug A turns within the shell and the plug X within its horizontal shell W, thus affording a double cut-off. I also place a bail I over one end of the transverse shell to hold it in position, and, although shown in Fig. 6 in position to discharge liquid, I employ the bail only when the plug is turned so as to cut off the liquid.

In applying the invention to jars, stoneware, or goods of that class the shell B is either turned over the jar, as shown in Fig. 7, and a gaslet Y or other means employed to seal the same, or a cork, packing, or gaslet Z may be placed in the mouth of the jar, as shown in Fig. 8. In this latter case the discharge and vent orifices are made through the tubular cork, as shown. In all of these forms I have kept in view the fundamental idea of providing a rotatable sheet-plug with a closed bottom and vent and discharge orifices in the sides, so that for shipping, filling, or pouring purposes the plug would not have to be removed. My aim has been to dispense with the necessity of using screw-threads or packing material, thereby greatly simplifying the construction of the same and reducing its cost.

In addition to the uses of the plug for a faucet or as a pouring-spout, I employ it as a bung, either with or without the receiving-shell B. In that case the discharge and vent holes are not required. When made and used as a bung, I prefer the upper end somewhat as shown in Figs. 1, 8, and 9, so as to afford strength to the upper end.

What I claim as new is—

1. A faucet composed of a removable tapering shell or plug of sheet metal, with a spouted top and a solid bottom and an outer tapering and closely-fitting shell, also of sheet metal, attached to the can to receive the removable plug, both shells having discharge-orifices and vent-holes, substantially as herein set forth.

2. A faucet composed of a fixed outside shell and a rotatable inside shell, in combination with a horizontal shell upon the rotatable shell and a hollow rotatable plug or shell within the latter, each shell aforesaid being suitably provided with venting or discharge orifices, all as set forth.

3. A faucet having a rotatable inside shell of sheet metal provided with discharge-orifices and vent-holes, in combination with and closely fitting into a corresponding and spouted outside shell, also of sheet metal, with coinciding orifices and holes, substantially as set forth.

4. A faucet having a removable and rotatable sheet-metal plug with a closed bottom, in combination with a corresponding outer

shell having its lower end cut at an incline, and a projecting wire in the plug engaging beneath the incline of the outer shell for holding the plug in place, substantially as herein set forth.

5. A faucet composed of an outer conical shell of sheet metal provided with venting and discharge orifices and a conical rotatable shell closely fitting the outer conical shell and provided with corresponding venting and discharge orifices, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 11th day of November, A. D. 1890.

RIVERIUS MARSH.

Witnesses:
J. S. ZERBE,
S. J. CHASE.