

Measuring Faucet.

Patented May 1, 1866.



WITNESSES
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EDMUND BIGELOW, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN MEASURING-FAUCETS.

Specification forming part of Letters Patent No. 54,282, dated May 1, 1866.

To all whom it may concern:

Be it known that I, EDMUND BIGELOW, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and Improved Measure-Faucet; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a transverse section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

My invention consists in the application of vitreous or non-corroding material to measuring-faucets, such as are used in measuring sirups at soda-fountains and for similar purposes, the sirups being liable to have their flavor injured by corroding a metal faucet if allowed to stand in contact with it.

There were many difficulties to encounter in constructing a measuring-faucet with a non-corrosive measuring-chamber, which should be simple, efficient, cheap, and ornamental, all of which qualities it was necessary to combine to bring it into use.

I will here premise that I do not claim to be the inventor or originator of a non-corrosive lining for a faucet, as that may have before been essayed; but in a measuring-faucet for purposes for which mine is intended such a lining could not be applied without a peculiar construction and adaptation of parts, and in this essential feature consists my invention. For the purpose I provide a measuring-faucet of metal, with a measuring-chamber made of glass or other proper non-corroding material, so constructed as to accurately measure the sirup or other material to be drawn through it, while at the same time none of the metallic parts of the faucet are exposed to the corrosive action of the material to be measured. It would be impossible to combine the brass or pewter parts of which the metal portion of the faucets are made with the non-corrosive parts without injuring or destroying their form or the integrity of the lining if they were put together before the metal parts were entirely

finished, and it therefore became necessary so to form them as to be put together after they were both finished, to retain their accuracy of construction and juxtaposition necessary for the working of the valves and for protecting the measuring part of the faucet from the corrosive action of the liquid measured.

A represents the metal portion of the faucet, which is provided at its outer end with a cap, *a*, through which a rod, B, passes and is allowed to slide or work freely, said rod having a handle, C, at its outer end for the convenience of working it, and also a shoulder, *b*, to limit the inward movement of the rod.

The inner part of the metal portion A passes through the side of the vessel containing the liquid to be drawn, a collar, *c*, bearing against the outer surface of the vessel, and a nut, *d*, secured up against the inner surface and the inner side of the vessel, as shown clearly in Fig. 1.

D represents a measure-chamber constructed of glass, porcelain, or other material which will not corrode or be affected by the sirup or other liquid to be drawn. This chamber D is fitted within the inner part of the metal portion A of the faucet, and it may extend within the vessel if necessary or desired, the internal diameter of D being equal to the internal diameter of A, as shown clearly in Fig. 1.

The metal portion A of the socket has an opening, *e*, in its under side and a vent, *f*, above it, as shown in both figures.

The rod has a piston, E, upon it, which works in the metal part A of the faucet, and upon its inner end there is a valve, F, which, when the rod B is fully shoved inward, is without the chamber D, but when said rod is drawn outward works snugly within said chamber. Upon the rod B there is also a cylindrical head, G, which, when the rod B is shoved inward, covers the opening *e* and vent *f*, as shown in Fig. 1.

From the above description it will be seen that when the rod B is shoved inward the chamber D will become filled with the liquid to be drawn, said liquid being prevented from entering the metal part A by the piston E. In drawing the rod B outward the valve F enters the chamber D, and the contents of D are drawn inward between the valve F and piston E, and the head G drawn past the open-

ing *e* and vent *f*, and said liquid escapes through *e*, the vent *f* causing a free discharge of the same.

The valve F, it will be seen, on entering the chamber D, cuts off all communication between the interior of the vessel and the space between F and E. Hence a specific quantity of the liquid will be drawn each time the rod B is pulled out to its fullest extent. In shoving inward the rod B the head G covers the opening *e* and vent *f*, the valve F passes out from the inner end of the chamber D, the piston E closes the outer end of said chamber, and the latter again becomes filled with liquid to be drawn when the rod B is pulled out. The shoulder *b* on rod B prevents the piston E from striking against the outer end of the glass chamber D. Thus by this simple arrangement the liquid is prevented from being injured by the corrosion of the metal socket, and a specific quantity of the sirup or other liquid drawn each time the faucet is used.

I claim as new and desire to secure by Letters Patent—

1. The measuring-chamber D, constructed of glass or other suitable non-corrosive material, as described and constructed, fitted to the metal portion A of the measuring-faucet, as herein specified.

2. In combination therewith, the valve F and piston E, arranged and operated substantially as and for the purposes specified.

3. The head or cut-off G, when used in connection with the valve F and piston E, and arranged relatively with the opening *e* and vent *f* in the part A of the faucet, to operate in the manner substantially as and for the purpose specified.

The above specification of my invention signed by me this 11th day of October, 1865.

EDMUND BIGELOW.

Witnesses:

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