

W. Westlake,

Faucet,

Nº 66,656,

Patented July 9, 1867.

Fig. 1.

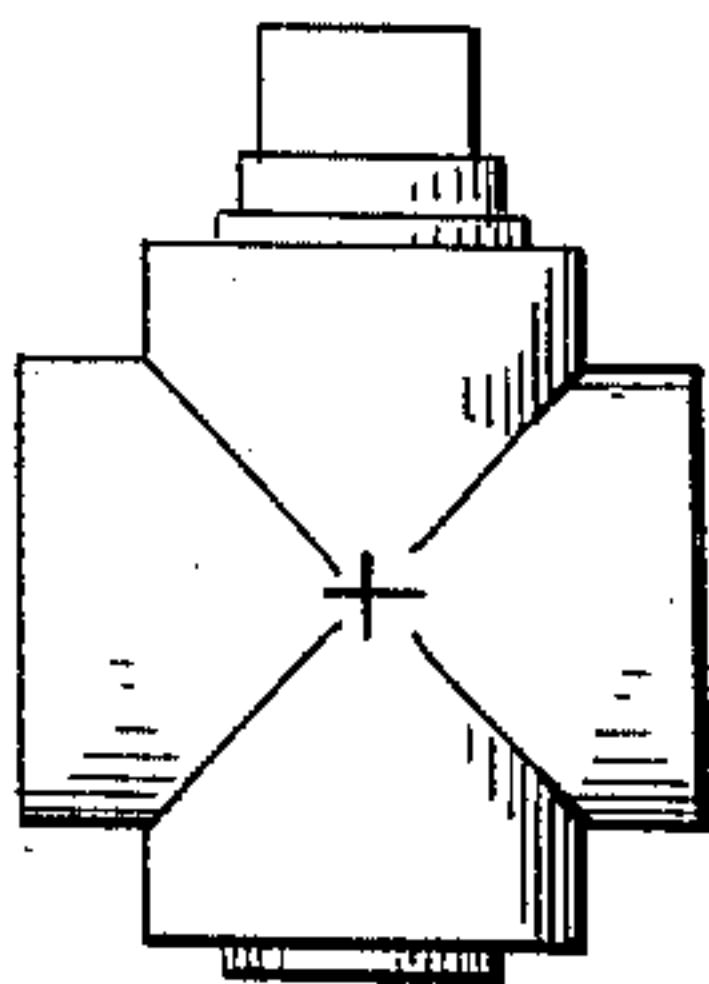


Fig. 2.

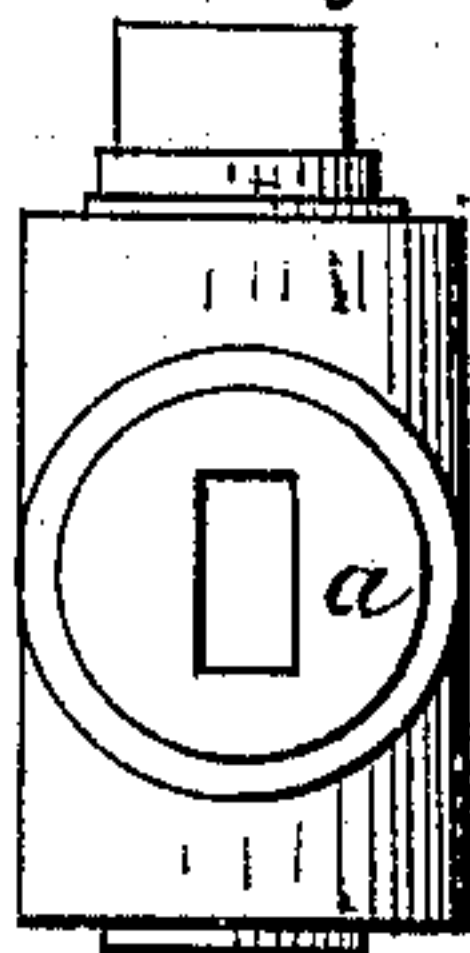


Fig. 3.

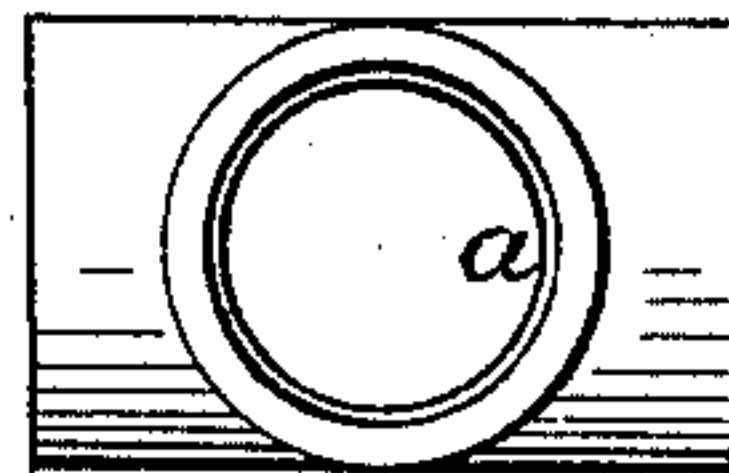


Fig. 4.



Witnesses:

*J. Smith,
S. C. Jones.*

*Inventor:
W. Westlake.*

United States Patent Office.

WILLIAM WESTLAKE, OF BROOKLYN, NEW YORK.

Letters Patent No. 66,656, dated July 9, 1867.

IMPROVED METHOD OF MANUFACTURING FAUCETS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM WESTLAKE, of the city of Brooklyn, in the county of Kings, and State of New York, have invented certain new and useful improvements in the Method of Constructing Faucets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and to the letters of reference marked thereon.

The nature of my invention consists in making faucets or cocks of cast iron, with a lining of sheet brass to the socket or eye for the key or plug, and in lining or covering the fitting part of the plug also with sheet brass, by the process hereinafter more fully described. Heretofore faucets have been made of cast iron and lined or bushed with brass, but in all cases the linings have also been cast and turned off on both their interior and exterior surfaces, which not only causes an unnecessary amount of labor and consumes uselessly much time, but is also a great waste of material, as there is loss of metal in the turning and fitting, and the linings prepared by that process are required to be left much thicker than is necessary for the purposes for which they are desired, as the main purpose of lining is to prevent iron cocks from rusting, which they do so rapidly as to prevent their use for general purposes, notwithstanding they can be made at a much less expense. Although iron faucets with brass linings have been made at a reduced cost of material, the great waste of brass, and the time consumed in casting, turning, and fitting cast linings, has made their cost equal to solid brass, so that, though long known in that mode of manufacture, they have never come into general use, and have never been known in the trade or general manufacture of faucets. All of these difficulties of manufacture are overcome by my method of constructing them. I make them entirely of sheet brass, which, owing to the manipulations used in its manufacture, is of a finer and better quality than cast brass, and when properly formed the linings made by me fit the socket, and also the plug, without any turning or other preparation than that used in forming them, and when ready to be ground together or "ground in," it can be done in less than one-fourth of the time required to "grind in" cast ones, as, when the formers are perfect, they almost always fit, so that scarcely any grinding is required; and as they can be cut and formed from sheet brass in less time than cast ones can be cleaned and turned, the entire time occupied by the casting and the expense thereof are saved, and are thereby made much cheaper than solid brass or iron with cast brass linings.

To enable others skilled in the art to make my improved iron faucets with brass linings, by my method, I will proceed to describe the same. The drawings, forming a part of this specification, show only that part of the body of the faucet (+) which has the socket and the plug.

Figure 1 is a side view of the body of the faucet, with the plug in place.

Figure 2 is a front view of the same, showing the passage through the lining and through the plug.

Figure 3 is a top view of the body, with the plug removed; and

Figure 4 is a view of the plug.

I cast the body of the faucet in any of the known forms, of malleable cast iron, and bore or ream out the socket-hole, when it is ready for the lining. I also cast, of the same metal, the plug, either with or without suitable appendages for operating it, and turn off the bearing portion to a suitable size to receive its lining. When all of the turning required is completed, I then take sheet brass, and with a suitable die or swage made for that purpose, and cut therefrom a piece, which, when its side edges are brought together, will form a tapering or conical cylinder, *a*, which, when made for the socket, will be slightly larger than the hole. I then usually solder or braze it together, although it is not necessary, as it is so made that the joint is at the side, and no evil effects will be produced if not soldered at all. Before bending the plate of sheet metal so cut on or in the former, I cut holes through it with a suitable die, so that, when driven in, these holes will correspond with the hollow of the pipe or faucet; I then drive it into the socket, whereby it is made to conform to and press against all parts of the socket firmly. I then solder it in place by the process usually called "soaking," and trim the ends, when it is completed. A lining, *b*, prepared in a similar way, by similar dies, made just enough smaller to make it fit perfectly the inside of the one just described, when it is soldered to the brazing part of the plug, either with or without being brazed, but I prefer brazing for this one. It is then ready to be ground in. When every tool is in order they will be found to fit so well that they can be "ground in" in a few moments, with oil and emery, and even without their use; and in this respect a great saving is made, as in cast brass much time is

required to grind them in properly. When ground in, they are secured in place by any of the usual methods, and make a cheap, durable, and complete faucet or cock. It will be obvious that this process can be applied to any form of faucet, and to cast, cast malleable, or wrought iron.

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

The method, herein described, of making faucets or cocks partly of cast iron and partly of sheet brass, substantially as specified.

WILLIAM WESTLAKE.

Witnesses:

JAMES M. NICHOLS,
WALTER F. METCALF