

899,117.

W. P. MARBLE.
VALVE HANDLE.

APPLICATION FILED JULY 24, 1907.

Patented Sept. 22, 1908.

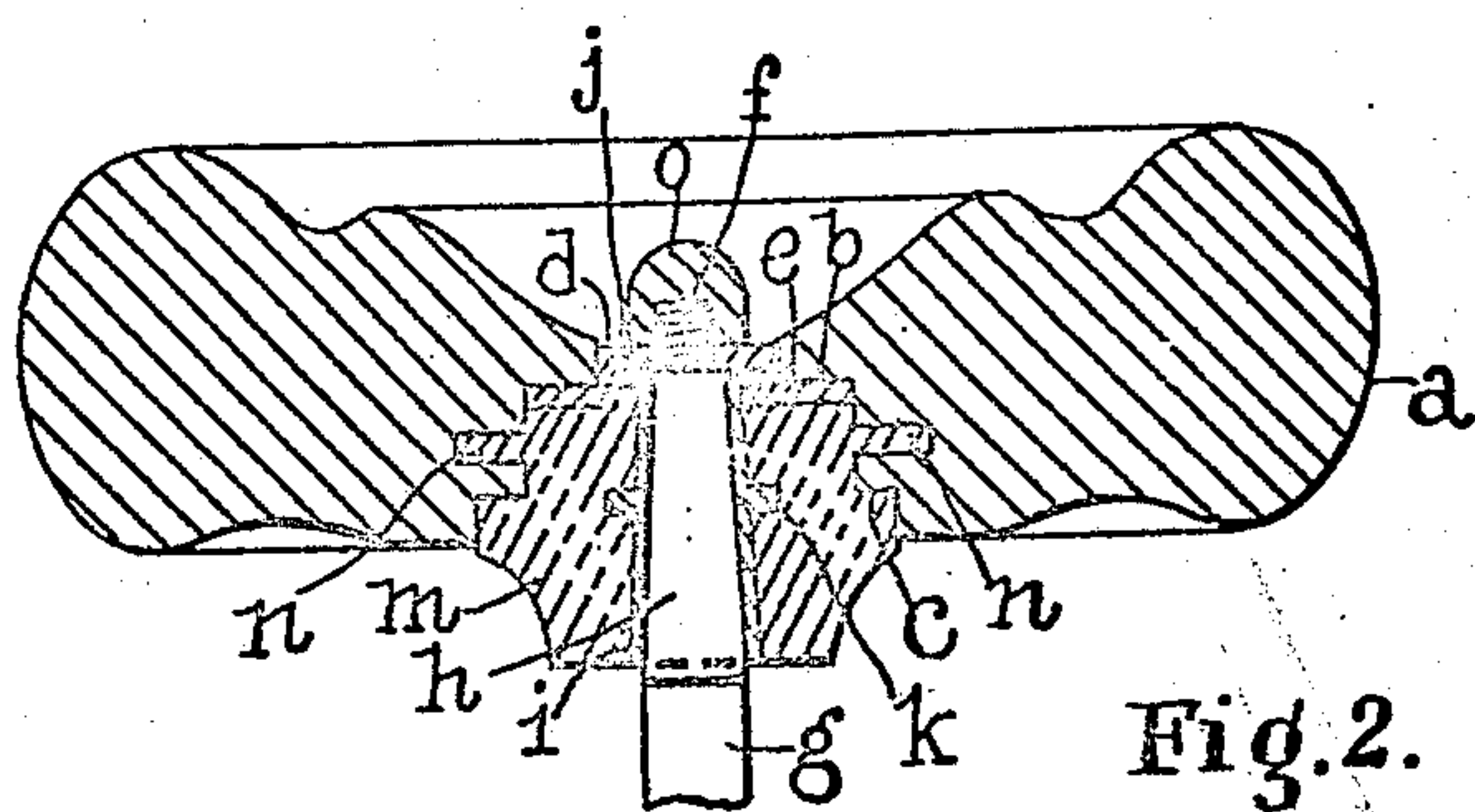


Fig. 2.

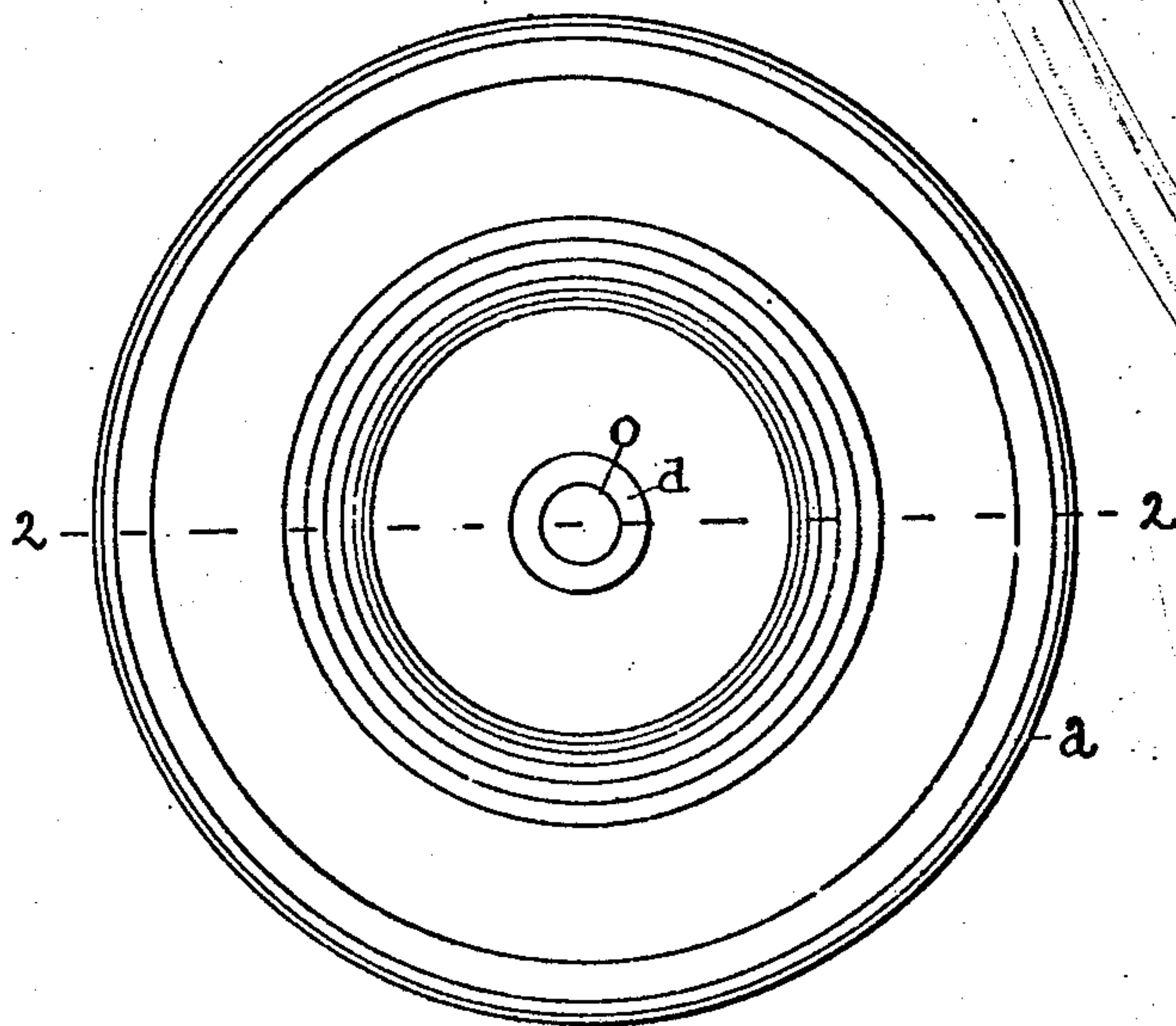


Fig. 1.

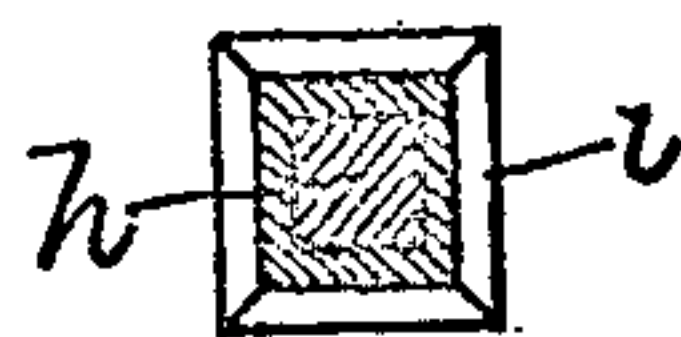


Fig. 3.

Witnesses.
G. B. Sammett
J. Murphy

Inventor.
Walter P. Marble
by Jas. H. Churchill
att'y.

UNITED STATES PATENT OFFICE.

WALTER P. MARBLE, OF CAMBRIDGE, MASSACHUSETTS.

VALVE-HANDLE.

No. 899,117.

Specification of Letters Patent.

Patented Sept. 22, 1908.

Application filed July 24, 1907. Serial No. 385,288.

To all whom it may concern:

Be it known that I, WALTER P. MARBLE, a citizen of the United States, residing in Cambridge, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Valve-Handles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a valve handle and has for its object to provide a simple, strong and efficient handle, in which the parts are assembled and held together to form a one-piece handle, which can be quickly and easily applied to the valve stem, and which can be removed therefrom without danger of losing parts thereof.

The particular features of the invention will be pointed out in the claims at the end of this specification.

Figure 1 is a plan view of a valve handle embodying this invention, Fig. 2, a section on the line 2—2, Fig. 1, and Fig. 3, a sectional detail to be referred to.

Referring to the drawing *a* represents the handle proper, which may be of wood or other non-heat conducting material, and preferably circular in form. The handle *a* is provided with a substantially central chamber or opening extended through it and made of different diameters to form one or more shoulders, herein shown as two in number and marked *b*, *c*. The chamber referred to, has fitted into it a cap *d*, provided with an annular flange *e*, which engages the shoulder *b* and prevents the cap *d* passing through the narrower end of the chamber or opening in the handle *a*. The cap *d* is provided with a hole for the passage of the threaded end *f* of the valve stem *g*, the upper end *h* of which is made angular in cross-section and preferably tapering, and is inserted into a tapering angular sleeve *i* (see Fig. 3), which is provided with locking devices or anchoring means, shown in the present instance as out-turned lips *j* at the upper end of the sleeve and lugs *k* projecting from the sides of the sleeve. The cap *d* and sleeve *i* are locked within the chamber or opening in the handle *a* by means of soft metal *m*, such as Babbitt or other suitable metal, which fills the chamber or opening in the handle and preferably covers the portion of the sleeve *i* projecting out from said opening to impart a finished appearance to the underside of the handle. The soft

metal *m* is retained in the chamber or opening in the handle *a* by providing the latter with cavities or sockets into which the soft metal flows to form locking fingers or projections *n*. The valve handle *a* is secured to its stem *g* by a nut *o*, which engages the threaded end portion of the stem projecting through the cap *d*.

By reference to Fig. 2, it will be seen that the cap *d* and angular sleeve *i* are permanently secured to the handle proper *a* by the soft metal *m*, so as to form a one-piece handle, that is, a handle in which the parts cooperating with the valve stem are secured together against displacement, which enables the handle to be quickly and easily applied to the valve stem and to be removed therefrom, and when removed the sleeve *i* and cap *d* are not capable of being mislaid or lost but are retained within the handle *a*. In Fig. 2, the handle *a* is shown as applied to the valve stem, and it will be seen, that by unscrewing the nut *o*, the handle is free to be disengaged from said stem substantially in an instant. The angular sleeve *i* cooperating with the angular portion of the valve stem, imparts the rotary movement of the handle to the valve stem.

The sleeve *i* may in practice be made from one piece of sheet metal and the lips *j* may be formed by punching the hole in the end of the sleeve, or said sleeve and its locking projections may be made of cast metal.

Claims.

1. In a handle of the class described, in combination, a handle proper provided with an opening extended through it and of different widths, a cap inserted into said opening and provided with a flange engaging a shoulder within said opening, a sleeve inserted in said opening and angular in cross-section to fit the valve stem, and a soft metal filling the said opening to secure the said cap and sleeve to said handle, substantially as described.

2. In a handle of the class described, in combination, a handle proper provided with an opening extended through it and having a socket extended from said opening, a cap inserted into said opening to close the opening at one end and provided with means to prevent said cap passing through said opening, a sleeve inserted in said opening and into which the valve stem is inserted, and soft metal filling said opening and the socket extended therefrom, substantially as described.

3. In a handle of the class described, in combination, a handle proper provided with an opening extended through it and of different widths, a cap inserted into said opening
5 from one end thereof and provided with means for preventing said cap from passing through said opening at the other end thereof, a sleeve separate from said cap inserted
10 into said opening, said sleeve cooperating with the valve stem and being smaller in cross-section than the widest part of said opening to leave a space between it and the walls of the larger part of said opening, and means interposed between said sleeve and
15 the walls of said opening to retain said sleeve and cap in said chamber, substantially as described.

4. In a handle of the class described, in combination, a handle proper provided with an opening through it, a sleeve inserted into
20 said opening and projecting beyond one face of the handle, and a metal body filling the opening in the handle between the said sleeve and the walls of said opening and enveloping the portion of said sleeve which pro-
25 jects beyond the handle, substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

WALTER P. MARBLE

Witnesses:

JAS. H. CHURCHILL,
J. MURPHY.