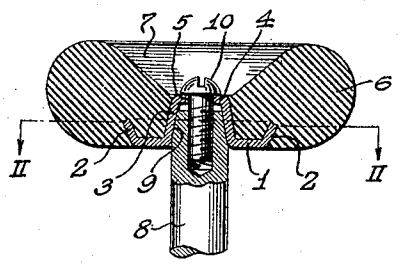
Jan. 22, 1924. 1,481,323

C. S. KELLUM

VALVE HANDLE

Filed July 8, 1922

Fig. 1.



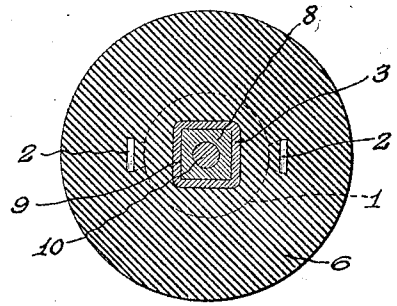


Fig. 2.

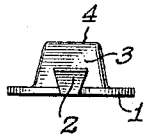


Fig. 3.

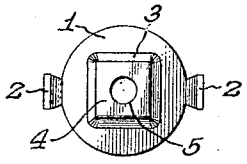


Fig. 4.

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Patented Jan. 22, 1924. 1,481,323

UNITED STATES PATENT OFFICE.

CHARLES S. KELLUM, OF DETROIT, MICHIGAN, ASSIGNOR TO COMMONWEALTH BRASS CORPORATION, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

VALVE HANDLE.

Application filed July 8, 1922. Serial No. 573,616.

To all whom it may concern:

Be it known that I, CHARLES S. KELLUM, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Valve Handles, of which the following is a specification, reference being had therein to the accompanying drawings.

Many types of valves have the stems thereof provided with handles that will not readily transmit heat, such handles being ordinarily made of insulation material or composition and in one instance which I now have in mind the valve handles are connected to the valve stems by metallic washers or socket members provided with teats or protuberances which extend into the handles and anchor the washers, but very often the handles become loose relative to the washers and worn to such an extent that the handles cannot be firmly anchored relative to the washers. In another instance, the upper ends of valve stems are provided with integral heads on which handles are mounted and the heads have projections extending into the handles to establish continuity therebetween. The handles also become loose and in the course of time are useless.

My invention aims to improve the usual practice of mounting valve handles relative to valve stems by providing metallic handle inserts which will serve as top plates and handle followers so that when the handles are mounted on valve stems there is no danger of the handles becoming loose and freely turning relative to said stems. The metallic inserts afford sockets or pockets into which the valve stems may extend and establish a driving relation between the valve stems and handles, and the manner of mounting the metallic inserts prevents the handles from being subjected to any twisting action that would cause wear between the handles and the metallic inserts. The manner of mounting the inserts also eliminates splitting of the handles and the configuration of the inserts permits of handles being readily molded or cast thereabout.

The construction entering into my invention will be hereinafter specifically described and then claimed, and reference will now be had to the drawing, wherein—

Figure 1 is a vertical sectional view of a valve handle attached to a portion of the valve stem;

Fig. 2 is a horizontal sectional view taken on the line II—II of Fig. 1;

Fig. 3 is a side elevation of a detached metallic insert, and

Fig. 4 is a plan of the same.

To put my invention into practice I cut, stamp and press from sheet metal a metallic insert member comprising a disk 1 having diametrically opposed upturned dove-tail shaped tongues 2 which are preferably disposed at an obtuse angle relative to the plane of the disk 1. The central portion of the disk is pressed outwardly to provide a substantially rectangular socket 3 having its flat walls tapered inwardly from the disk 1 to an end wall 4 of said socket and the end wall has a central opening 5.

6 denotes a molded composition handle cast around the metallic insert, said handle having its upper face dished or provided with a central recess 7 exposing the end wall 4 of the metallic insert, and the lower face of the handle is flush with the disk 1 with the tongues 2 embedded in the handle and the socket 3 open at the lower face of the handle. The configuration of the tongues 2 and the socket 3 permits of the metallic insert being firmly anchored in the composite handle, which may be made of a non-conducting material to afford an insulation between any valve stem and a hand that may rotate or adjust the valve stem.

8 denotes a portion of a valve stem having its upper end tapered inwardly to provide flat surfaces or facets 9 engaged by the walls of the socket 3 to establish a driving relation between the handles 6 and the valve stem.

10 is a screw extending axially into the valve stem 8 with its head engaging the end wall 4 of the socket 3, said screw, when tightened, forcibly wedging the handle on the tapered end of the valve stem so that the same cannot become accidentally displaced.

The screw 10 is relieved of any turning action, during manipulation of the handle 6, by the side walls of the socket 3 engaging the flat walls or facets of the valve stem 8 and it is the flat walls of the metallic insert that prevent the handle 6 from rotating relative thereto. It is unnecessary to use washers above and below the handles

6 and the disk 1 will prevent wear of the handle 6 when mounting or dismounting said handle relative to the valve stem. It will be noted that the metallic insert provides a new article of manufacture and its simplicity of construction permits of the article being manufactured at a comparatively low cost.

What I claim is:—

Means for mounting a handle relative to a valve stem comprising a one piece metallic insert member about which the handle may be formed, said insert member having a disk portion flush with the lower face of the handle and provided with dovetail tongues embedded in the handle to prevent displacement of said insert member should it become loose in said handle, and a stem receiving socket having an integral wall exposed at the upper face of the handle and extending over said stem to receive a stem screw.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES S. KELLUM.

Witnesses:

R. F. DUBUQUE,

D. W. BORCK.