C. KITCHING.

CLAMP.

APPLICATION FILED JAN. 2, 1918.

1,280,239.

Patented Oct. 1, 1918.

Fig. 1.

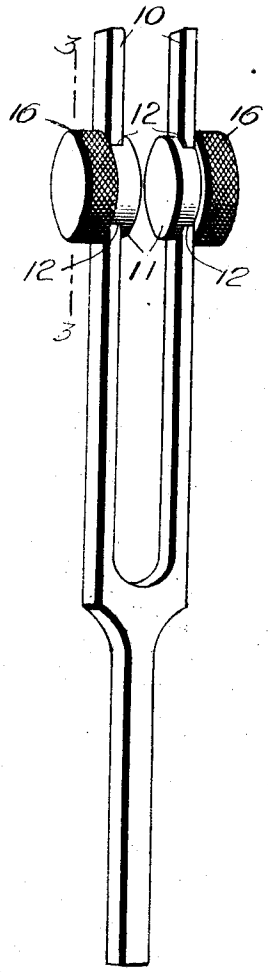


Fig. 3.

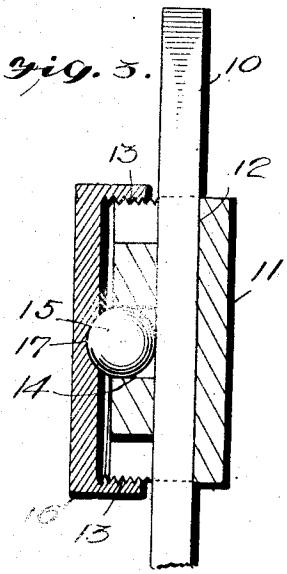
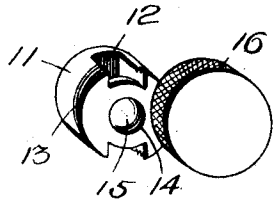


Fig. 2.



INVENTOR

Cyrus Kitching

BY Miller & Thomas

ATTORNEYS

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CYRUS KITCHING, OF CHICAGO, ILLINOIS.

CLAMP.

1,280,239. Specification of Letters Patent. Patented Oct. 1, 1918.

Application filed January 2, 1918. Serial No. 210,035.

To all whom it may concern:

Be it known that I, CYRUS KITCHING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Clamps, of which the following is a specification.

This invention relates to means for holding a longitudinally slidable member in adjusted position on a bar, rod or other member, and its object is to provide a clamping means which enables said slidable member to be easily adjusted, and which securely holds the same in adjusted position.

The object stated is attained by means of a novel combination and arrangement of parts to be hereinafter described and claimed, and in order that the same may be better understood, reference is had to the accompanying drawing forming a part of this specification.

In the drawing,

Figure 1 is a perspective view showing the application of the invention; Fig. 2 is a detail in perspective; Fig. 3 is an enlarged longitudinal section on the line 3—3 of Fig. 1.

The invention is shown applied to a tuning fork on the branches 10 of which are adjustably mounted blocks 11 for changing the pitch of the fork. It will be understood, however, that the invention may, with equal facility, be applied to various other instruments or apparatus having a slidable member which is to be locked in adjusted position on a bar, rod or similar member.

The slide block 11 is cylindrical and has a transverse aperture 12 through which the fork bar or branch 10 loosely passes so that the block may be slid along the same for the purpose stated.

The block 11 is externally screw-threaded at one end as shown at 13 and in this end of the block is an aperture 14 opening into the aperture 12. In the aperture 14 seats a ball 15 and as one side of the bar 10 is exposed through this aperture, the ball is in contact with this side of the bar.

On the apertured end of the block 11 is mounted a cap 16 which is threaded to screw on the threaded portion 13 of the block. In the center of this cap, on the inside thereof, is a depression 17 in which the ball 15 seats, it being understood that the ball is of such size that it projects partly from the aperture 14.

Upon screwing the cap 16 down on the ball 15, the latter is jammed inward against the bar 10, whereby the block 11 is held stationary in adjusted position on said bar, it being understood that the ball fits snugly in the aperture 14 so that there can be no relative motion between the ball and the block. When the cap 16 is unscrewed sufficiently to release the grip of the ball on the bar, the block is free to be slid along the latter, and as the ball is hard and long wearing, and also free to turn, it does not score the bar 10. Accurate adjustment of the slide block is made with facility as a slight turn of the cap 16 suffices to release the block for sliding movement.

I claim:—

The combination with a bar, of a block slidably mounted on said bar, said block having a transverse aperture to receive the bar and an end aperture opening into the transverse aperture, a ball seating in the end aperture and engageable with the side of the bar exposed through said aperture, the diameter of the ball being greater than the depth of the end aperture, and said ball projecting from the outer end of said aperture, and a cap screwed on the block over the apertured end thereof and engageable with the ball to clamp the same against the projecting portion of the bar.

In testimony whereof I affix my signature.

CYRUS KITCHING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."