Belt-Suspended Hammer Holder

9 Claims, 5 Drawing Figs.

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ABSTRACT: The hammer holder is an L-shaped bracket having a vertical portion and a horizontal portion. Holes in the vertical portion permit it to be suspended from a belt or apron string. The horizontal portion has a U-shaped opening for receiving the shank of a hammer head. Lugs at the entrance of the opening prevent sideways removal of the hammer head. The external edges of the horizontal portion are diagonal, causing the hammer handle to rock against the leg of the user.
BELT-SUSPENDED HAMMER HOLDER

This invention relates to a hammer holder to be suspended from the belt of a carpenter's apron or the like.

In previously proposed belt-suspended hammer holders, the hammer rests either in a ring, or in some resilient clip device. The disadvantage of the ring type is that the hammer must be lifted the full length of the handle in order to remove same. In the resilient clip type, considerable force is required to disengage the hammer handle from the clip.

According to my invention, I provide a hammer holder in which the hammer may be removed merely by lifting it a few inches and then twisting it 90°, after which it can be freely removed horizontally.

A further disadvantage of the prior art hammer holders is that the handle extended down vertically so that the lower end is spaced from the leg or thigh of the carpenter. This arrangement causes the hammer handle to catch on ladders, scaffolds, 2 × 4 uprights and the like.

According to my invention, I provide a hammer holder in which the hammer handle hugs the leg of the user, but the arrangement is such that force with which the hammer handle engages the leg is not so heavy that it interferes with the free leg movement of the user.

Other objects, features and advantages will become apparent as the description proceeds.

In the drawings:

FIG. 1 is a perspective view of a preferred embodiment of my invention, with the hammer and the carpenter's apron shown in phantom;

FIG. 2 is an elevation of the holder of FIG. 1;

FIG. 3 is a plan view of FIG. 2;

FIG. 4 is an end view taken along the line 4-4 of FIG. 3 showing a portion of the hammer head in section to illustrate the operation;

FIG. 5 is a horizontal section taken along line 5-5 of FIG. 4 showing the shape of the hammer handle.

With reference now to FIG. 1, the hammer holder comprises an L-shaped bracket 10 which is supported by the belt or string 11 of a carpenter's apron 12. The L-shaped bracket comprises a vertical portion 13 and a horizontal portion 15. The vertical portion has circular holes therein lined by suitable grommets 14 or the like, to provide a smooth rounded edge through which the apron string 11 can extend, and be protected from any sharp edges which tend to cut the string.

The horizontal portion 15 is bifurcated to provide two legs 9, each having at its outer end a lug 17 which extends toward the opposite lug 17. The legs 9 and lugs 17 define a U-shaped opening 16 of generally rectangular shape having an entrance constriction.

The external side edges 18 of the legs 9 are diagonally disposed; that is, they are each outwardly tapering with respect to the vertical medial plane of the bracket 10.

The bracket 10 is adapted to hold a hammer 19 having a head 20 and a handle 22. The hammer head 20 is provided with a shank 21 of generally rectangular cross section. The dimensions of the rectangular U-shaped opening 16 are such that the head shank 21 is received loosely within the opening 16.

The hammer handle 22 as shown in FIG. 4 has a somewhat narrower throat portion 23 which, in the example shown in FIG. 5, may be of an oval cross section having a long dimension X and a shorter dimension Y. The distance between the lugs 17 is greater than the shorter dimension Y so that when the hammer head is lifted a few inches and twisted through 90°, the throat portion 23 can pass laterally through the space between the lugs 17. Of course, the cross section of the hammer handle 22 may be rectangular or of an irregular shape, as long as at least one dimension is smaller than the distance between the lugs 17.

Although the distance between the lugs 17 could be sufficiently great as to permit the hammer handle to be moved laterally therethrough without rotating the same through 90°, the preferred arrangement is as shown in which the distance between the lugs 17 is somewhat less than the dimension X and greater than the dimension Y.

Thus the hammer is loosely received within the opening 16 from which it may readily be moved by first a lifting motion and then a lateral motion, the arrangement being such that the weight of the hammer maintains it in the FIG. 1 position in which the lugs 17 interfere with the head shank 21 to prevent an inadvertent removal of the same.

In order to prevent the hammer handle from catching on a ladder or the like, the arrangement is such that the hammer handle tends to swing against the leg of the user. This is accomplished by the diagonal orientation of the side edges 18. If the hammer handle is oriented vertically as shown in FIG. 4, then contact between the claw portion 25 and the horizontal portion 15 will occur only at the inner corner edge 26 of the claw, as shown in FIG. 4. Therefore the weight of the hammer tends to cause it to swing in the direction of the arrow 27 until such time as the outer corner edge 28 contacts the side edge 18 of the horizontal portion 15. In most instances, the leg of the user prevents rotation of the hammer to this extent with the result that the handle rocks into contact with the user's leg and hugs the same. The force with which the hammer handle engages the leg is not so heavy that it interferes with the free leg movement of the user with the result that the hammer handle rocks back and forth with the body movements of the user but never hangs clear of the leg where it would catch on ladders, scaffolds, uprights, and the like.

The vertical portion 13 may also have vertically oriented elongate holes 29 so that the holder 10 may be supported from the trouser belt of the user, instead of an apron belt 11.

I claim:

1. A belt supported claw hammer holder comprising an L-shaped bracket having a vertical portion and a horizontal portion, the horizontal portion being bifurcated and providing two fixed, nonresilient legs, lugs at the outer end of each leg extending toward each other, said lugs cooperating with said legs to define an opening adapted to receive the shank of a hammer head, the distance between said lugs being less than the corresponding dimension of said hammer head shank and greater than the smaller dimension of the throat of the handle of said hammer to permit passage of said throat in a lateral direction through the space between said lugs wherein said hammer head is elevated, at least one leg having an external side edge which is diagonally disposed in the outwardly tapering direction so that contact between the hammer claw and said diagonal edge will occur at the inner edge of the claw and cause said hammer to rock in a direction such that said handle swings toward the leg of the user.

2. A hammer holder as claimed in claim 1 in which the edges of said shank receiving opening are rectangular.

3. A hammer holder as claimed in claim 1 in which said vertical portion has openings to receive a supporting belt.

4. A hammer holder as claimed in claim 3 in which said openings are circular, and grommets disposed in said opening.

5. A belt supported hammer holder for a claw hammer comprising an L-shaped bracket having a vertical portion and a horizontal portion, the horizontal portion being bifurcated and providing two fixed, nonresilient legs, lugs at the outer end of each leg extending toward each other, said lugs cooperating with said legs to define a U-shaped opening having an entrance restriction, the width of said legs being such that the external side edge of one leg provides a support for the claw of the hammer, said external side edge being diagonally disposed in the outwardly tapering direction for supporting said claw only at the inner corner edge thereof.

6. A hammer holder as claimed in claim 5 in which the edges of said U-shaped opening are rectangular.

7. A hammer holder as claimed in claim 6 in which said vertical portion has openings to receive a supporting belt.

8. A hammer holder as claimed in claim 7 in which said belt receiving openings are circular, and grommets disposed in said opening.
9. In combination, a hammer and a belt supported holder therefor, said hammer comprising a head and a handle, said head including a shank and a claw, and said handle including a throat portion of smaller dimensions than said shank, said holder comprising an L-shaped bracket having a vertical portion and a horizontal portion, the horizontal portion being bifurcated and providing two legs, lugs at the outer end of each leg extending toward each other, said lugs cooperating with said legs to define an opening adapted to receive said shank, the distance between said lugs being less than the corresponding dimension of said shank and greater than the smaller dimension of said throat portion to permit passage of said throat portion in a lateral direction through the space between said lugs when said hammer head is elevated, at least one leg having an external side edge which is diagonally disposed in the outwardly tapering direction, said claw extending laterally beyond said diagonal side edge and downwardly with the inner corner edge of said claw engaging said diagonal edge, the outer corner edge of said claw being spaced above said diagonal edge when said handle is vertically disposed so that said hammer will rock in a direction such that said handle swings toward the leg of the user.