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F. H. RAUH

CLIPPER KEEPER

Filed Feb. 23, 1924

Fig. 1

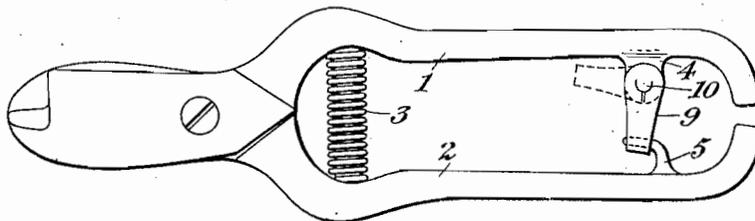


Fig. 3

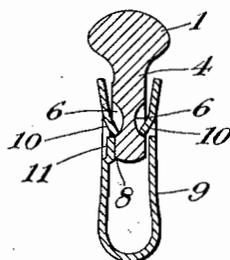


Fig. 2

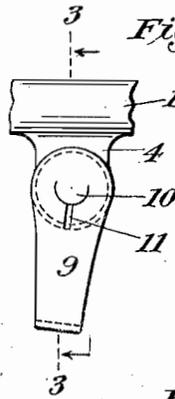


Fig. 6

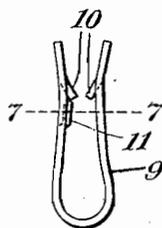


Fig. 4

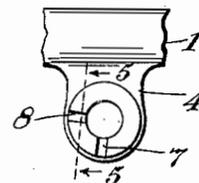
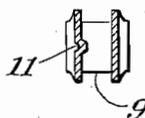


Fig. 5



Fig. 7



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CLIPPER KEEPER.

Application filed February 23, 1924. Serial No. 694,522.

To all whom it may concern:

Be it known that I, FREDERIC H. RAUH, a citizen of the United States, residing at South Orange, Essex County, New Jersey, have invented certain new and useful Improvements in Clipper Keepers, of which the following is a specification.

My invention relates to keepers or locking means for keeping closed the members of jawed tools, and the like, so as to prevent the jaws from springing apart or opening when the tools are not in use. And my improvements are directed to means whereby a simple and efficient form of spring keeper is provided, which will effectually lock the tool in the closed position, and when swung out of locked position will itself be locked in a fixed but detachable relation to the part of the tool which carries it.

I have illustrated and will describe the improvements as applied to a pair of orange clippers, but it is obvious that the principle can be used for other cutters, jawed tools, and the like.

In the drawings Fig. 1 is an elevation of a pair of clippers showing my improved clip in locked position thereon, the unlocked position of the clip being indicated by broken lines; Fig. 2 is a detail, on an enlarged scale, of the keeper and its supporting lug; Fig. 3 is a sectional view on the line 3—3 of Fig. 2, looking to the left; Fig. 4 is a detail of the supporting lug; Fig. 5 is a sectional view of the lug on the line 5—5 of Fig. 4, looking to the left; Fig. 6 is an edge view of the spring keeper, taken as looking to the left on Fig. 2; and Fig. 7 is a cross sectional view of the same, taken as looking down on the line 7—7 of Fig. 6. Figs. 2 to 7 inclusive are on an enlarged scale as compared with Fig. 1.

In all the figures similar parts are designated by similar reference numerals.

A conventional pair of clippers is illustrated as provided with shanks 1, 2 normally urged apart by a spring 3, the shank 1 being provided with a keeper carrying lug 4, while the shank 2 is provided with a keeper engaging hook 5.

The lug 4 is provided with two opposed cup-like depressions 6—6; and it is also provided, preferably on one side, with groove-like depressions 7, 8, disposed at an angle to each other.

The keeper or hasp 9 is preferably formed

of a loop of resilient sheet metal, from the body of which two lugs 10—10 are struck inward, so that their free ends will normally fall within the sockets 6—6, into which they may be passed by springing the keeper over the lug 4. The keeper 9 also has a projection 11 formed upon its inner side by pressing in the metal of the keeper, and this projection is adapted to register with the depressions 7 and 8 in the lug 4 as the keeper is swung around the lug, so as to retain the keeper in the positions shown by the full and the broken lines in Fig. 1, as may be desirable; the elasticity of the keeper 9 allowing the projection 11 to ride up out of the depressions when the keeper is forcibly swung around in either direction, the lug snapping back into whichever of the depressions 7 and 8 with which it is brought into register. When the keeper is swung into locking position with the hook 5, as shown in Fig. 1, it will be held against ordinary displacement by the projection 11 registering in the depression 7; and when it is swung out of locking position and into the positions shown by the broken lines in Fig. 1, it will be held in that position by the projection 11 registering with the depression 8, and will offer no interference with the hook 5 or with the shank 2 of the cutter in the ordinary use of the tool.

It should be noted that the conformation of the lugs 10—10 of the keeper is such that the drag of the hook 5 against the keeper, when they are in the position shown in Fig. 1, will cause the thrust of the lugs to be against the wall of the sockets 6—6 at an angle which will cause the lugs to grip the walls of the sockets and hang to the lug 4, instead of riding out of the socket, as might be the case if the lugs 10—10 were disposed at right angles to the body of the keeper 9, or were bent rearwardly. In practice, it is found that this formation gives a very dependable grip to the keeper on the lug and effectually prevents its displacement by the ordinary expansive force of the spring 3.

The convenience and efficiency of my improved form of clipper will be appreciated by those accustomed to the use of clippers, and like tools, wherein keepers of the ordinary loop style, or similar non-lockable types, are used. Keepers of the classes just

mentioned are objectionable in that they constitute loose or swinging elements attached to one shank of the tool and likely to come in contact with the other shank of the tool or its appendages at an improper time, perhaps catching the operator's hand between them, or being caught by twigs or parts of the tree or growth in connection with which the clipper is being used.

10 It will be understood that details of construction of my improved hasp lock may be varied, as by the use of mechanical equivalents, without departing from the scope and spirit of my invention as claimed.

15 Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States is:—

1. In releasable hasp-locks for detachably connecting relatively moveable elements, the combination, with one of such elements, of hasp engaging means, and with the other of said elements of an integral carrying lug provided with opposed, lateral sockets, and a resilient hasp mounted on the lug and provided with integral projections constituting means cooperating pivotally with the carrying lugs' sockets.

2. In releasable hasp-locks for detachably connecting relatively moveable elements, the combination, with one of such elements, of hasp engaging means, and with the other of said elements of an integral carrying lug provided with opposed, lateral sockets, and a resilient hasp mounted on the lug and provided with integral opposed elements having inwardly and forwardly inclined free ends constituting means cooperating pivotally with the carrying lugs' sockets.

3. In releasable hasp-locks for detachably connecting relatively moveable elements, the

combination, with one of such elements, of hasp engaging means, and with the other of said elements of an integral carrying lug provided with hasp locking means and opposed, lateral sockets, and a resilient hasp mounted on the lug and provided with integral projections constituting means cooperating pivotally with the carrying lugs' sockets and locking means.

4. In releasable hasp-locks for detachably connecting relatively moveable elements, the combination, with one of such elements, of hasp engaging means, and with the other of said elements of an integral carrying lug provided with lateral recesses, constituting hasp locking means, and with opposed, lateral sockets, and a resilient hasp mounted on the lug and provided with integral inwardly and forwardly inclined elements, constituting means cooperating pivotally with the carrying lugs' sockets, and provided with an integral, inward projection constituting means adapted to cooperate with the lugs' lateral sockets.

5. In releasable hasp-locks for detachably connecting relatively moveable elements, the combination, with one of such elements, of hasp engaging means, and with the other of said elements of an integral carrying lug provided with recesses constituting hasp locking means and with circular concavities constituting bearings for hasp pivots, and a resilient hasp provided with integral, inwardly and forwardly inclined elements having semi-circular ends, whereby it is pivotally mounted on the lug, and also provided with an integral, inward projection constituting means adapted to cooperate with the lugs' locking means.

FREDERIC H. RAUH.