C. F. LINK.

TRIP SLING LOCK.

APPLICATION FILED JUNE 13, 1916.

1,233,376. Patented July 17, 1917.

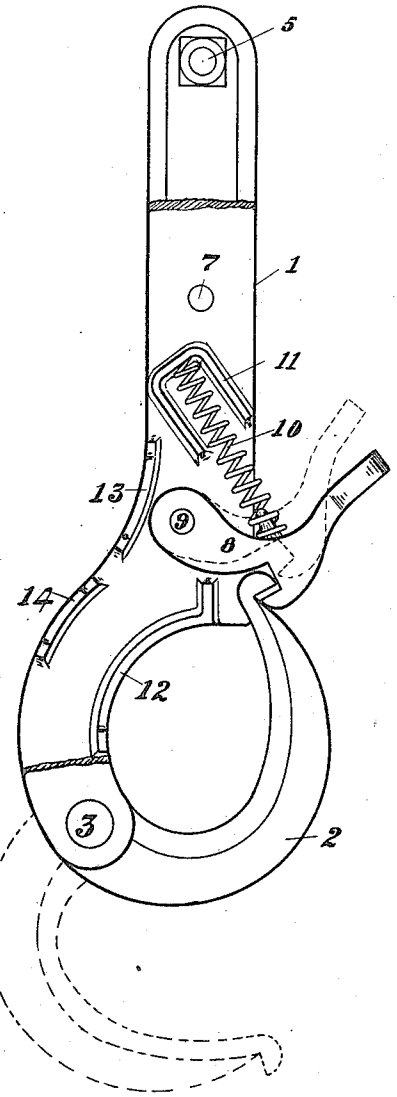


FIG. 1

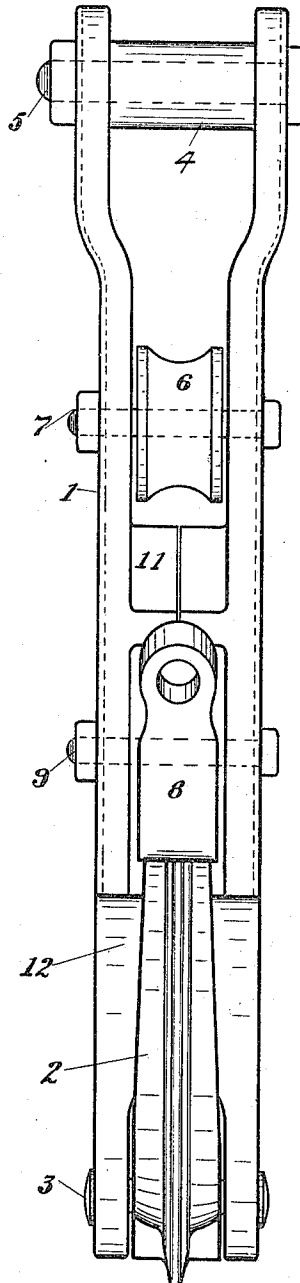


FIG. 2

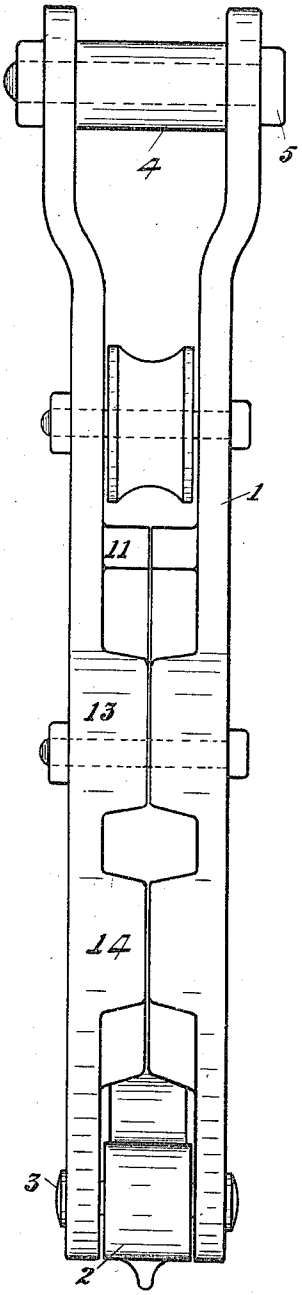


FIG. 3

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CHARLES F. LINK, OF FRANKENMUTH, MICHIGAN.

TRIP SLING-LOCK.

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Application filed June 13, 1916. Serial No. 103,387.

To all whom it may concern:

Be it known that I, CHARLES F. LINK, a citizen of the United States, residing at Frankenmuth, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Trip Sling-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention is a trip-hook adapted to support loads that are suspended from the hook by rope or chain slings and the like, and adapted to trip or release the load when the tripping device of the hook is operated.

The objects of my improvement are, to provide a simple and strong trip hook that shall be inexpensive to manufacture, and so constructed that likelihood of accidentally bending or twisting the frame of the hook will be avoided, and proper alinement and consequent positive operation of the hook and its tripping device will be assured even under conditions of rough usage.

A further object is to provide a spring-pressed latch device that will be protected from injury by the frame of the hanger, yet so arranged as to be easily accessible for purposes of replacing the spring, and for cleaning out accumulated dirt. The latch and spring are, however, self-cleaning under normal conditions of use.

With these and certain other objects in view, which will appear later in the specifications, my improvement consists in the devices described and claimed, and the equivalents thereof.

In the drawings, Figure 1 is a side view, broken away in part, showing the trip-hook assembled.

Fig. 2 is an enlarged front view.

Fig. 3 is an enlarged rear view.

As is clearly shown in the drawings, the trip-hook consists in the hanger frame 1, preferably made of two malleable iron castings, or equivalent material, forming a housing between the hanger members. At their lower ends is a drop-hook 2, secured to the frame by means of a pivot 3. The frame members are spaced apart at their upper ends to receive a thimble 4 between them, the thimble being bolted to the frame members by a through bolt 5. In like manner a sheave 6 is secured between the two halves of the housing by a bolt 7.

The latch 8 is pivotally secured between the housing members by a bolt 9, and is normally spring-pressed downwardly by a compression spring of suitable form, as the helical spring 10. The upper end of spring 10 is supported and inclosed within a pocket 11, and the lower parts, both front and rear, of the two sides of the hanger frame are spaced apart and reinforced against twisting by means of the front spacing ribs and the rear spacing ribs 13 and 14. The opposed walls of pocket 11, and the opposed ribs 12, 13 and 14 of the two sides of the housing abut against each other, as shown in Fig. 3. The curved lower part of the housing between the pivots 3 and 9 is thus reinforced to effectively resist distortion caused by twisting or wrenching in use.

Moreover, by separating the ribs 13 and 14 to form an opening, as shown in Figs. 1 and 3, the pivot end of latch 8 may be seen from the rear through the space between the ribs, and dirt or obstructions lodged against the latch may be discovered and easily removed. Similarly the spring 10 and its pocket 11 may be inspected from the front, as indicated in Fig. 1.

The pivoted latch connection 9, being located between the ribs 12 and 13 is thereby protected against accidental injury.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

In a trip sling hook including two frame members spaced apart, a drop-hook pivotally secured between them, a latch pivotally secured between said members; a compression spring removably mounted between said members above said latch and adapted to normally press said latch downwardly, oppositely located ribs on the two frame members, said ribs abutting at their inner edges and forming a pocket in said frame adapted to receive one end of said spring, said

pocket having one end open and directed forwardly and downwardly toward the front of said frame, oppositely located front and rear spacing ribs on the respective hanger members, said ribs abutting at their inner edges, for the purposes set forth.

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

CHARLES F. LINK.

Witnesses:
OTTO TRINKLEIN,
FRITZ NUNTHERLEIN.

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