Sept. 16, 1941. E. J. MAHONEY 2,256,164

SAFETY HOOK

Filed Nov. 14, 1939

Fig. 1.

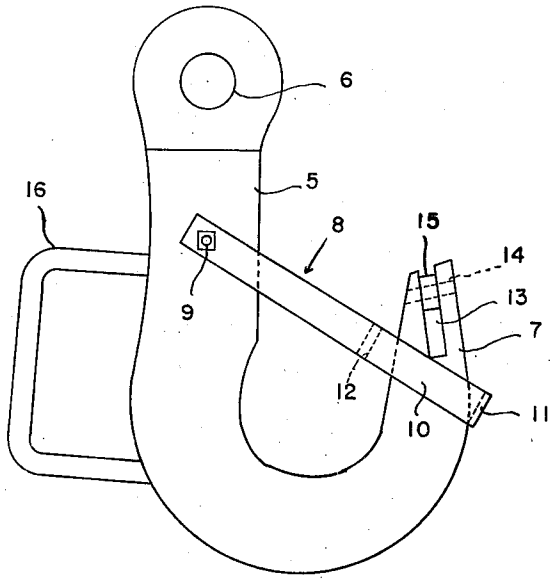


Fig. 2.

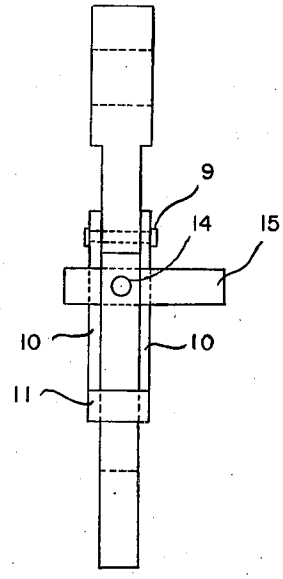


Fig. 3.

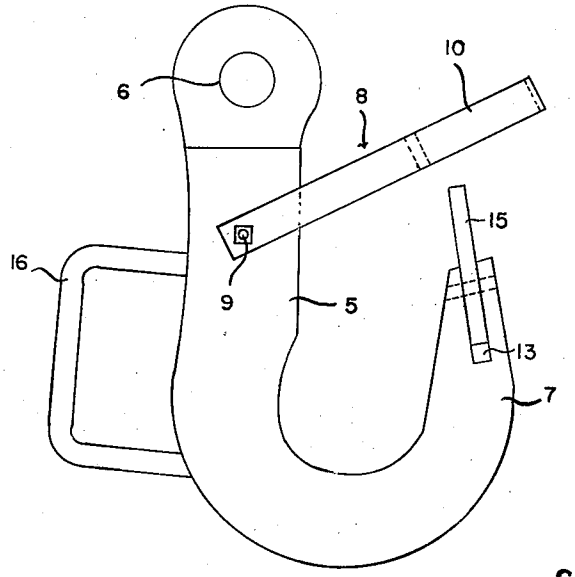


Fig. 4.

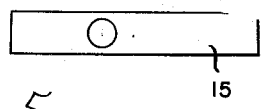


Fig. 5.

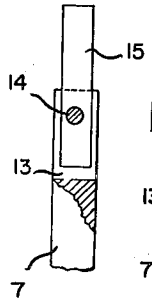
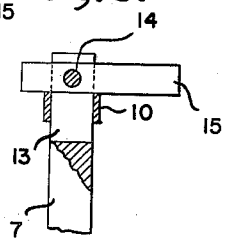


Fig. 6.



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Patented Sept. 16, 1941 2,256,164

UNITED STATES PATENT OFFICE

2,256,164

SAFETY HOOK

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Application November 14, 1939, Serial No. 304,361

2 Claims. (Cl. 294—82)

This invention relates generally to hooks and more particularly to so-called safety hooks.

It is a primary object of my invention to prevent buckets, pails or the like from being accidentally knocked off the hook from which they are suspended.

A further object is to lock securely the bucket, pail or the like on the hook.

Another object is to provide a hook of this kind that is positive in action and easy to operate.

A still further object is to provide a hook that is efficient, rugged, fool-proof and characterized by fewness of parts.

Yet another object is to provide such a hook that is simple in construction and economical to manufacture.

The foregoing and other objects and advantages will be apparent from the description of the invention taken in connection with the accompanying drawing in which—

Fig. 1 is a side view of my improved hook, with the parts in closed operative position.

Fig. 2 is an end view of the same.

Fig. 3 is a view similar to Fig. 1 with the parts in open inoperative position.

Fig. 4 is an enlarged detail view of the locking bar.

Fig. 5 is a view of the top portion of the nose showing the locking bar in inoperative position, parts being shown broken away and part in section for the sake of clearness.

Fig. 6 is a view similar to Fig. 5 showing the locking bar in operative position, with the link member in engagement with the underside of the bar.

The improved hook may be formed of cast iron or other suitable material and comprises a shank portion 5 which may be provided with an eyelet 6 at its upper end for receiving the link of a chain or the like. The other end of the shank is formed with a curved nose portion 7.

A bail or link member 8 is hinged at one end to a pin or bolt 9 passing through the shank 5 at a point near its top. This link member is formed with spaced arms 10 and outer and inner cross bars 11 and 12, respectively. The link is adapted to swing downwardly over the nose 7 with its arms 10 on the outside thereof. Downward movement is limited by the engagement of the outer cross bar 11 with the outer surface of the nose.

A bucket or pail or other like device is ordinarily suspended and carried by the hook by inserting its bail member over the nose and resting it on the inner surface of said curved nose portion, and the link member 8 is ordinarily sufficient to hold said bail portion on the nose and prevent it from being accidentally knocked off the nose.

It has been found in practice however that if the bucket, pail or the like meets with an obstruction, for example when the hook and bucket are being lowered, the shock will force the bail portion of the bucket upwardly against the link member with great force driving or pushing said link member off the nose and knocking the bucket off the nose as well.

It is an important feature of the present invention to provide means for preventing the link member from being forced off of the nose under any and all conditions. In the present instance, the upper free end of the nose 7 is formed with a slot 13 which extends to the upper surface of the nose and transversely to the sides thereof. Pivotally mounted in this slot 13 by means of a pivot pin or bolt 14 is a locking bar 15. The locking bar is sufficiently long to span the nose 7 and the spaced arms 10 of the link member when the latter is in position on the nose as shown in Fig. 2. It is mounted with its pivot point 14 to one side of its center to permit it to be swung upwardly into a vertical position as shown in Fig. 5.

In using my improved hook for carrying a bucket, pail or the like, the locking bar 15 is swung to a vertical position permitting the link member 8 to be swung upwardly off of the nose and out of the way. The bail portion of the bucket, pail or the like is then placed over the upright bar and moved downwardly over the nose. The link member is then swung downwardly over the nose and over the bail portion of the suspended bucket or the like. Next the locking bar is swung downwardly to horizontal position so that it overlies and spans the spaced arms of the link member. Any shock or blow against the bottom of the bucket or bottom of the nose will force both arms 10 of the link member 8 against the locking bar and as these arms are on opposite sides of the pivot point 14 of the locking bar it will be impossible to tilt the locking bar. The parts are thus securely and positively interlocked and the bail portion of the bucket, pail or the like cannot be knocked off of the nose.

An integral handle 16 may be provided on one side of the shank 5 to facilitate handling and transportation etc. of the hook.

Changes in detail may be resorted to without departing from the principle of the invention,

and I desire to be limited only by the state of the prior art and the appended claims.

I claim:

1. A hook of the kind described comprising a downwardly extending shank portion, a curved hook portion extending substantially parallel to the shank formed on the end thereof and terminating in an upwardly extending bifurcated nose portion to a point substantially midway the shank portion, a link member hinged to said shank portion at a point substantially opposite the end of the nose portion and including spaced arms with a cross piece at their outer ends, a flat locking bar pivotally mounted in the bifurcated portion of the nose, the pivotal point of said locking bar being positioned so that a portion of the bar on one side of said pivotal point may be swung into the bifurcated portion of the nose into alignment with said nose portion and so that the portion of the bar on the other side of the pivotal point forms an elongation of the nose portion whereby the link member may be moved free of the hook portion, said locking bar being adapted to be swung and to gravitate to a position horizontally across the nose portion and the spaced arms of the link member for locking said link member on the nose portion.

2. A hook of the kind described comprising a downwardly extending shank portion, having an eye at one end thereof to receive a cable, a curved hook portion extending substantially parallel to the shank formed on the end thereof and terminating in an upwardly extending bifurcated nose portion to a point substantially midway the shank portion, a link member hinged to said shank portion at a point substantially opposite the end of the nose portion and including spaced arms with a cross piece at their outer ends, a flat locking bar pivotally mounted in the bifurcated portion of the nose, the pivotal point of said locking bar being positioned so that a portion of the bar on one side of said pivotal point may be swung into the bifurcated portion of the nose into alignment with said nose portion and so that the portion of the bar on the other side of the pivotal point forms an elongation of the nose portion whereby the link member may be moved free of the hook portion, said locking bar being adapted to be swung and to gravitate to a position horizontally across the nose portion and the spaced arms of the link member for locking said link member on the nose portion and a substantially U-shaped handle on the shank substantially midway its length opposite the nose portion.

EDWARD J. MAHONEY.