May 20, 1924. 1,494,951

H. J. CRAGUN

PRY HOOK

Filed July 14, 1922

Fig. 1.

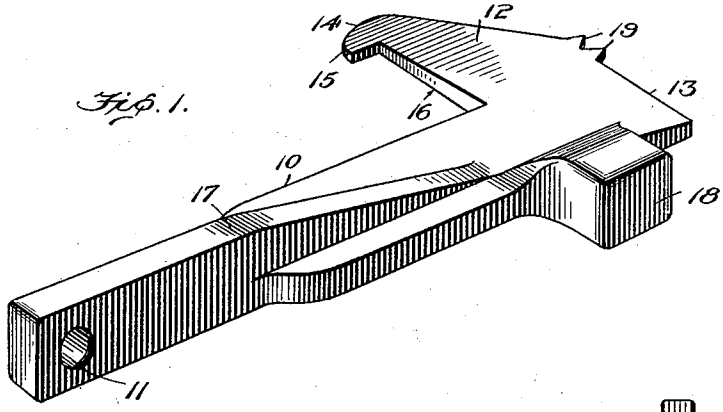


Fig. 2.

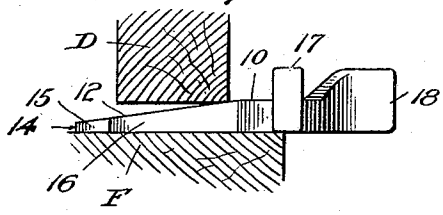


Fig. 4.

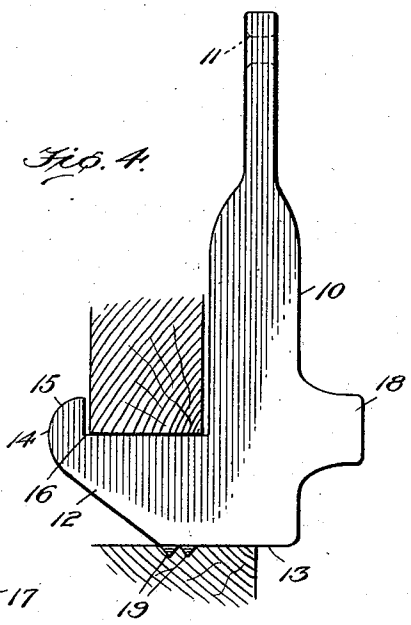
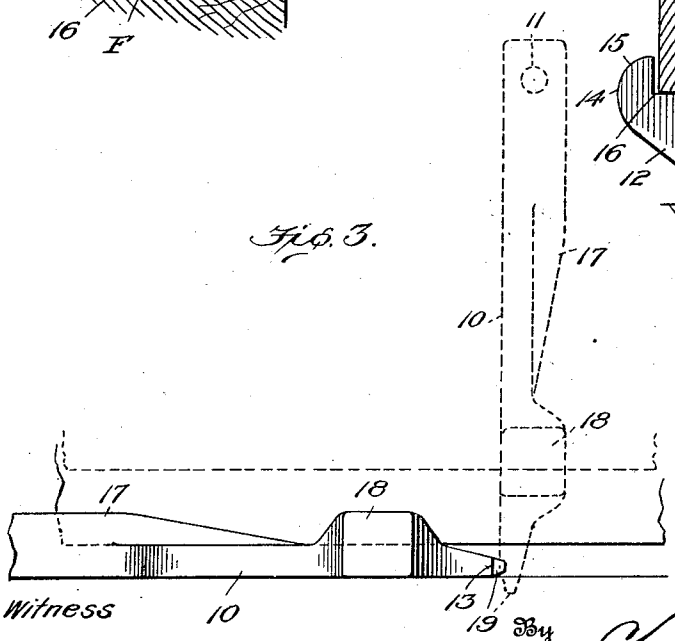


Fig. 3.



Witness

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Patented May 20, 1924. 1,494,951

UNITED STATES PATENT OFFICE.

HYRUM J. CRAGUN, OF OGDEN, UTAH.

PRY HOOK.

Application filed July 14, 1922. Serial No. 574,933.

To all whom it may concern:

Be it known that I, HYRUM J. CRAGUN, a citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented certain new and useful Improvements in Pry Hooks; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to pry hooks and especially to hooks adapted for use in loosening and elevating the doors of grain cars.

The doorways of grain cars are generally nailed up and the contents of the car, when the latter is filled with grain, exert a tremendous pressure on the door closure. This, of course, renders the removal of the door quite troublesome, but as no attempt is made to extract and preserve the fastening elements used in securing the door, the present invention has for its object the provision of a hook that may readily be driven between the car door and car floor and then successively turned and elevated to first rupture the door fastenings and then elevate said door. Power-operated mechanism and connections are, of course, utilized for imparting these movements to the hook after it has been placed under the door; but as said mechanism forms no part of this invention, and has been made the subject-matter of a separate application, it need not be disclosed or described herein.

In the accompanying drawings—

Figure 1 is a perspective view of a hook made in accordance with the present invention;

Fig. 2 is a detail view showing the hook driven under the car door;

Fig. 3 is a view taken at right angles to Fig. 2 looking at the exterior of the car; and

Fig. 4 is a view similar to Fig. 2 showing the hook after it has been turned.

In its preferred form the hook comprises a comparatively broad, thin shank 10 which has an opening or eye 11 adjacent one of its ends for the attachment of a cable or other connection leading to suitable operating mechanism such as that shown and described in my previously mentioned application.

At its opposite end, shank 10 is provided with a broad, deep hook portion 12 extending laterally of the shank and adapted to be inserted, by force, between the bottom edge of the car door D and the car floor F. For facilitating the insertion of the hook portion 12, it is wedge-shaped, being gradually reduced in thickness towards its bottom edge 13 and towards its outer end 14 thus being tapered transversely of the shank, at which points it is comparatively thin.

The outer end 14 of said hook portion is provided with a projection 15 extending parallel to the shank which, together with the shank 10, forms a recess 16 of sufficient width to accommodate the car door D. Said projection 15 is also tapered towards its outer edge to conform to the wedge-shaped formation of the hook portion 12, and to further increase the ease with which the hook portion may be placed under door D, its outer end is made somewhat pointed adjacent projection 15, as by reducing its depth towards said projection. Preferably in tapering the shank and hook portion, only the front face is affected, the entire hook being left flat and perfectly plane on its opposite face so that it will lie perfectly flat while being inserted under the door.

To strengthen shank 10, a longitudinally extending rib 17 is formed on its front face and as the hook can best be inserted between the door and floor by driving with a heavy instrument, a striking face 18 of increased thickness is formed on the edge of shank 10 opposite the hook portion 12 and in line with the pointed outer end of said portion 12.

In removing a car door, the shank is placed practically parallel with the side of the car and hook portion 12 driven under the door with the hook lying on its flat face and then, by power suitably applied to the then protruding end of shank 10, the entire hook is turned or rotated on a horizontal axis whereupon the door fastenings will be ruptured and the door free to be elevated, all as is outlined in the accompanying drawings and more fully described in my before-mentioned application.

To insure against slippage of the hook while being turned under the door, there are formed on the bottom edge 13 a series of small, sharp projections or teeth 19 which are adapted to penetrate or take a secure hold on the car floor F.

What is claimed is:

1. A pry hook comprising a shank, and a wedge-shaped hook portion having an offset end, the entire hook portion being tapered transversely of said shank.

2. A pry hook comprising a shank, and a hook portion extending laterally from the shank and having its end turned parallel to the shank, said hook being relatively thin and narrow at its outer end and of increasing thickness and depth toward the shank.

3. A pry hook for grain-car doors comprising a shank, a wedge-shaped hook portion, and floor gripping members on the bottom of the hook.

4. A pry hook for grain-car doors comprising a shank, a wedge-shaped portion at the base of the shank and extending laterally thereof, and a projection at the outer end of the hook portion extending parallel to said shank.

5. A pry hook for grain-car doors comprising a shank, a hook portion extending laterally from one side of the shank, a projection on the outer end of the hook portion, a striking head on the other side of the shank, and floor gripping projections on the base of the hook.

6. A pry hook comprising a shank and an outwardly extending hook portion at one end of the shank, said shank and hook portion having one flat plane face, and the opposite face of said shank and hook portion being tapered toward said end of the shank and toward the outer end of the hook portion.

HYRUM J. CRAGUN.