No. 654,001. Patented July 17, 1900.

W. L. HULL.

POST EXTRACTOR.

(Application filed Apr. 23, 1900.)

(No Model.)

Fig. 1.

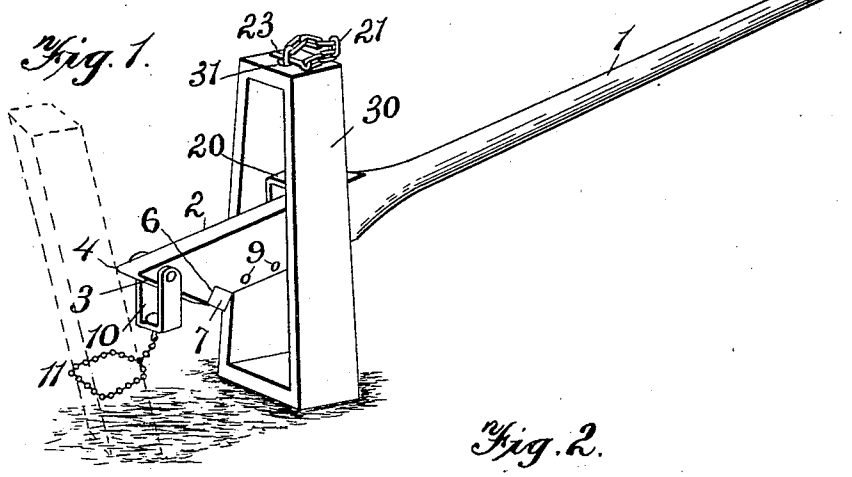
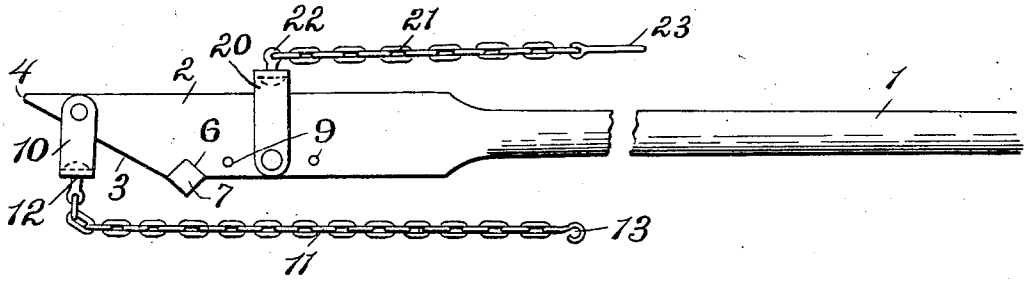


Fig. 2.



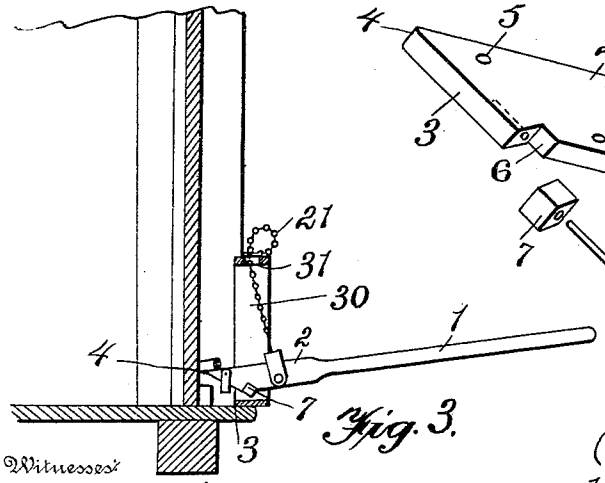


Fig. 3.

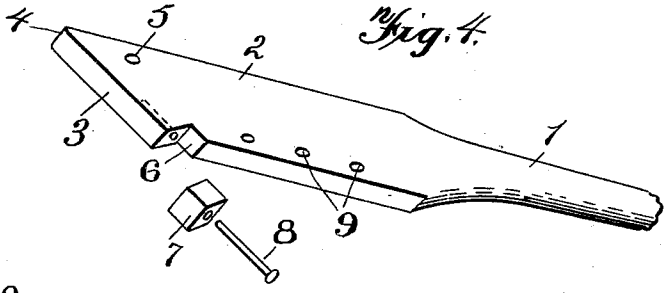


Fig. 4.

Witnesses:
Geo. E. Frech.
R. P. Harrick.

Inventor:
William L. Hull,
By Collamer & Co.,
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHIN.

UNITED STATES PATENT OFFICE.

WILLIAM L. HULL, OF ALPHA, MINNESOTA.

POST-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 654,001, dated July 17, 1900.

Application filed April 23, 1900. Serial No. 14,007. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. HULL, a citizen of the United States, and a resident of Alpha, Jackson county, State of Minnesota, have invented certain new and useful Improvements in Post-Extractors; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to hoisting, and more especially to post-extractors; and the object of the same is to produce an improved device of this character which is also useful in a number of other ways, mostly about the railways, some of which are described below.

To this end the invention consists in the details of construction hereinafter more fully set forth and as illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the device in use as a post-extractor. Fig. 2 is an enlarged side elevation of the tool itself. Fig. 3 is a sectional view through the side of a freight-car, showing how the tool can be used to lift a door which may have become stuck or may be held in place by a heavy load of granular substance, such as coal. Fig. 4 is a perspective detail of the bar itself, showing the fulcrum-block as slightly removed from position.

Referring to the drawings, Figs. 2 and 4 show a bar comprising a rounded handle 1 and a rectangular head or front end 2, flat on its upper and lower edges save for the bevel 3 on the latter producing the point or nose 4, as is usual in crowbars. Near the nose and near the upper edge is a single hole 5. Near the angle of the bevel with the lower edge is a notch 6, in which fits a steel fulcrum-block 7, held removably therein by a screw or bolt 8, passed through the parts, as indicated. Near the lower edge and in rear of this notch are holes 9.

10 is a front clevis pivoted on a bolt passing removably through the hole 5, and 11 is a chain swiveled at one end, as at 12, into this clevis and having a hook 13 at its other end.

20 is a rear clevis bolted through one of the holes 9 with its body inverted, so as to stand over the top of the head 2.

21 is a chain swiveled, as at 22, into the rear clevis and having a pin 23 at its remote end.

30 is a support preferably made of one heavy casting and substantially rectangular in shape, although tapering a little toward its top, and through the upper end is a hole 31 large enough to permit the free passage of the chain 21.

The crowbar can obviously be used as such, especially when both clevises are removed. Its steel fulcrum-block is at the point on which it is generally supported, and I render this fulcrum removable for purposes of substitution when it becomes worn. For an upward pull requiring not excessive power the bar is reversed and its nose laid upon a support, after which the chain 21 may be passed around the load and the same lifted by raising the remote end of the handle. The support is useful as shown in Figs. 1 and 3, as well as in a number of other ways. In these two instances it sustains the fulcrum, which is here the chain 21, that passes up through the hole 31 and receives the pin 23 through the proper link to hold the clevis 20 where the point of fulcrum is desired. The chain 11 then hangs from the front clevis and is passed around a load, such as the post in Fig. 1, and the hook 13 engages the chain, as will be clear. In either instance the swivels 12 and 22 are of obvious advantage.

In Fig. 3 is shown a use of my device to overcome a constant source of annoyance to those who desire to open a freight-car door which is stuck. The support is rested upon the sill, the chain 21 let out and locked by the pin 23, so that the bar stands about as shown and with its nose under the handle of the car-door, and downward pressure on the handle starts the door a little. Then the nose is inserted under the lower edge of the door, and further pressure on the handle raises the door above the sticking-point, or, if not, then the chain 21 is drawn up and the pin inserted to raise the fulcrum to a new point.

Other uses and advantages will suggest themselves to those who require a tool of this character. I cannot explain all its functions herein, and I desire not to be limited to the precise details of construction nor to the sizes, proportions, or materials of parts.

What I claim as new is—

1. The combination with an open support having a hole in its top bar; of a bar passing through the support for carrying the load at one end and having a handle at the other, a clevis pivoted to the bar, a chain swiveled to this clevis and leading loosely through said hole in the support, and a pin at the remote end of the chain passing through a link thereof just above the support, substantially as described.

2. The combination with a support, a chain pendant therefrom, a clevis connected with the chain, and a bar to which the clevis is pivotally attached; of a second clevis pivoted to the bar near the first, a chain swiveled to this clevis, and a hook at the other end of the chain, as and for the purpose set forth.

3. The combination with a bar provided with the usual fulcrum-point and nose, and having a series of holes passing through it near that edge which has the fulcrum and a single hole near its other edge and adjacent its nose; of two clevises passed astride the bar from different edges, one pivoted in one of said series the other in the single hole, and independent chains leading from the bends of said clevises, one to the load and the other to an overhead support, as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my signature this the 18th day of April, A. D. 1900.

WILLIAM L. HULL.

Witnesses:
CHAS. F. ALBERTUS,
W. A. RHOADS.