

(No Model)

J. E. NORTON & W. W. PARRY.

CATCHING OR RELEASING DEVICE FOR ELEVATED CARRIERS.

No. 582,482.

Patented May 11, 1897.

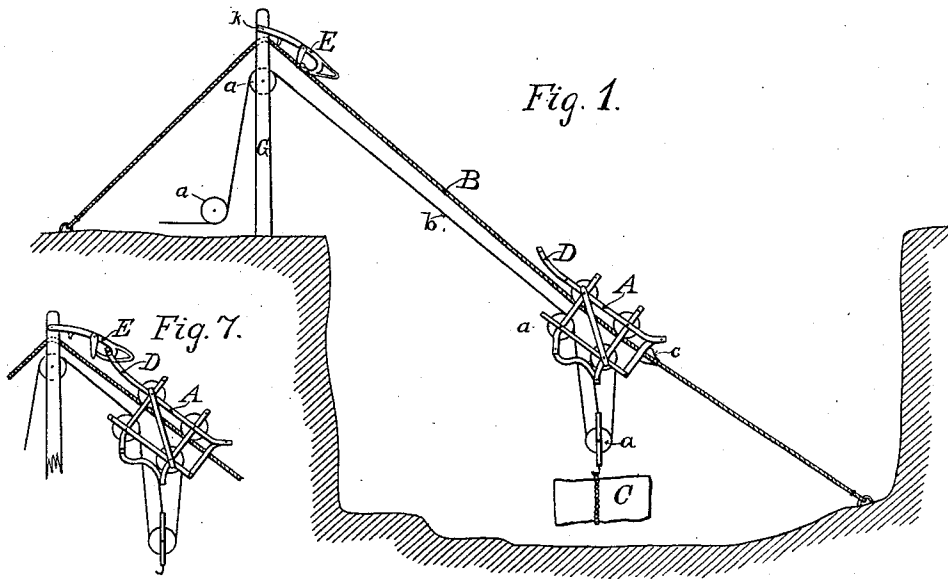


Fig. 1.

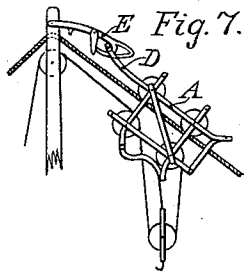


Fig. 2.

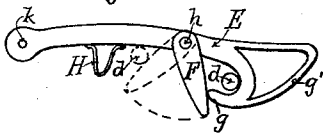


Fig. 3.

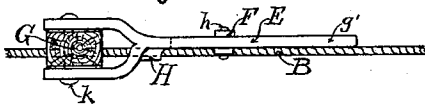


Fig. 4.

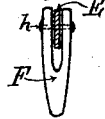


Fig. 5.

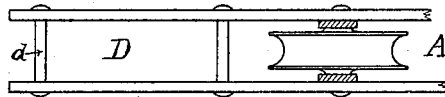
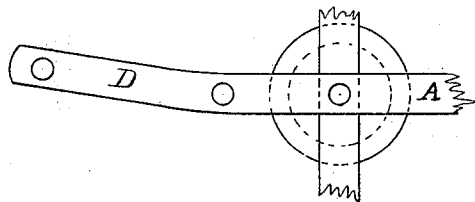


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES E. NORTON AND WILLIAM W. PARRY, OF GRANVILLE, NEW YORK.

CATCHING OR RELEASING DEVICE FOR ELEVATED CARRIERS.

SPECIFICATION forming part of Letters Patent No. 582,482, dated May 11, 1897.

Application filed August 18, 1896. Serial No. 603,121. (No model.)

To all whom it may concern:

Be it known that we, JAMES E. NORTON and WILLIAM W. PARRY, citizens of the United States, residing at Granville, in the county of Washington and State of New York, have invented certain new and useful Improvements in Catching or Releasing Devices for Elevated Carriers, of which the following is a specification.

Our invention relates to improvements in catching and holding devices employed in elevated carriers and analogous devices wherein the carriage is automatically caught and detachably retained at the upper end of its movement on its cable or track, and has for its object to provide an improved construction of catch that will operate through gravity to automatically engage with the carriage and which may be readily disengaged therefrom by a slight further movement of the carriage in the upward direction. This object we accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of an inclined carrier complete, showing our improved device in position thereon. Fig. 2 is a detail side elevation of the catch. Fig. 3 is a detail top plan view of the same and a portion of the cable or track. Fig. 4 is a detail transverse sectional view of the catch, showing the manner of pivoting the releasing-tongue thereon. Figs. 5 and 6 are detail views of the front end of the carriage. Fig. 7 is a detail side elevation of the catch in position and engaged with the carriage.

In the said drawings the device is illustrated in connection with a carrier employed in a stone-quarry, wherein the letter A denotes a carriage of any desired construction adapted to travel up and down on a cable B, the latter being anchored at its lower end in the bottom of the quarry and passing upward therefrom over a supporting mast or pole G and down again to the ground, where it is also anchored. An adjustable stop c on the cable B serves to limit the downward movement of the carriage A. A hoisting-rope b, passing over suitable pulleys a and actuated by suitable power, serves to draw up the carriage A and its load C to the mast G, where said load

may be deposited on the high ground and removed.

The particular construction of carriage A forms no part of the present invention and may therefore be of any suitable character except that the front end D thereof is provided with a cross-bar d, for a purpose hereinafter to be described.

Pivoted at k to the mast G just above the point where the cable B passes therethrough is the catch E, formed at its free end into the U-shaped hook g and extended forward into the V-shaped projection g', the latter adapted to be struck by the cross-bar d as the carriage approaches the mast G, thereby lifting the catch E on its pivot k and permitting said cross-bar d to pass into engagement with the hook g and thus retain the carriage in its uppermost position.

Pivoted to the catch E, intermediate its length, at h is a tongue F of a length sufficient to project slightly below the engaging hook g of the catch E. A stop H on the under side of the catch near its point of pivotal connection with the mast G is adapted to engage with the cable B and retain the catch in its operative position, it being seen from Fig. 3 that the front part of said catch and the tongue F lie slightly to one side of the cable B.

From the above description the operation of our improved device will be understood to be as follows: The carriage A, with its load C, is drawn up the cable B by the rope b until the cross-bar d on said carriage rides under the front end g' of the catch E, lifting the latter, as will be readily understood. Now when this cross-bar passes the hook g of said catch the latter drops again and the cross-bar is caught and retained, as clearly shown in Figs. 2 and 7, thus holding the carriage A in its uppermost position. The rope b may now be slackened and the load C dropped to the ground and detached from the carriage. To release the cross-bar d from the hook g, it is only necessary to draw up said carriage by means of the rope b until the cross-bar d rocks the tongue F back to the position shown in dotted lines in Fig. 2 and rides under and to the other side of the same. Now by slackening the rope b the cross-bar d will ride under the hook g, the tongue F serving to effectually prevent its engagement with said

hook *g*, and the carriage will be free to return by gravity to the stop *c* for a fresh load.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

5 In an elevated carrier, the combination with the carriage, the supporting-cable, and the hoisting-rope, of a catch adapted to engage with a projection on the carriage and pivoted
10 at the upper end of the line of travel of said carriage and overlying the cable, the same consisting of a hooked end and a projection, a pivoted tongue normally abutting against

said hook and overlapping the same said tongue and hook resting to one side of and 15 parallel with the cable, and a stop mounted on said catch and adapted to rest on said cable to retain the catch in its operative position, substantially as set forth.

In testimony whereof we affix our signatures in the presence of two witnesses. 20

JAMES E. NORTON.

WILLIAM W. PARRY.

Witnesses:

WILL S. HEWITT,

EUGENE R. NORTON.