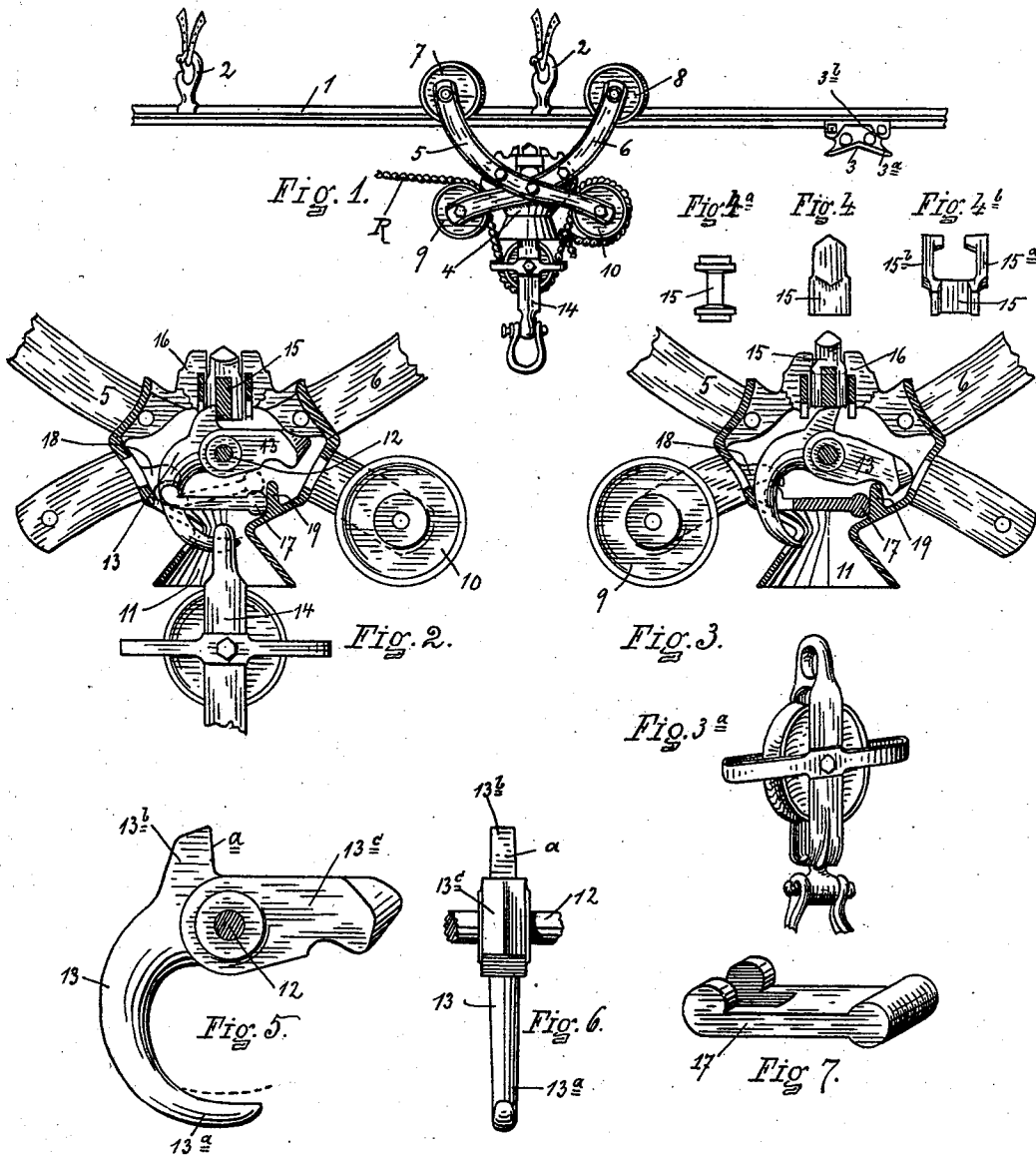


(No Model.)

H. H. DURR.
HAY CARRIER.

No. 537,143.

Patented Apr. 9, 1895.



WITNESSES.
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UNITED STATES PATENT OFFICE.

HENRY H. DURR, OF UTICA, NEW YORK, ASSIGNOR TO CHARLES H. CHILDS & CO., OF SAME PLACE.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 537,143, dated April 9, 1895.

Application filed August 20, 1894. Serial No. 520,774. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. DURR, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Hay-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

My invention relates to an improvement in hay carriers.

In the drawings which accompany and form a part of this specification, Figure 1 shows my carrier mounted on a section of elevated track and in connection with a trip block mounted on the track. Fig. 2 shows a vertical section of the frame of the carrier, showing operative parts in position to secure the bail pulley. Fig. 3 shows a vertical section of the frame of the carrier showing the operative parts in the position which they assume when the bail pulley is released and the carrier is locked to the trip block. Fig. 3^a shows the bail pulley. Figs. 4, 4^a and 4^b show the edge, bottom and side respectively of the lock block of the carrier. Fig. 5 shows side of jaw or supporting hook. Fig. 6 is end of same. Fig. 7 shows a latch piece for operating the jaw or hook.

Referring to the reference letters and figures in a more particular description of the device 1 indicates the rail suspended by hangers 2, and provided with a trip block 3 secured to the under side of the rail.

The carrier consists of a frame 4 having a pair of arms 5 and 6 upon either side, crossing each other and carrying the track wheels 7, 8 on their upper ends, and the rope sheaves 9 and 10 between the lower ends of the corresponding arms of each pair. The carrier is provided with a bell shaped bail pulley opening 11 in its under side. Pivoted centrally in the carrier at 12, directly over the bail pulley opening, is hook or jaw 13 provided with a hook portion 13^a, hanging outward from a true circle with the pivot as shown by the dotted line, and which hook portion is adapted

to engage the bail of the bail pulley 14. The hook or jaw 13 is also provided with a counter weight arm 13^c in which is a surplus of weight, and with an upward projection 13^b providing a shoulder *a* adapted to engage the lock block 15. The lock block 15 moves in guides 16 in the upper part of the frame and is provided with arms 15^a, 15^b adapted to engage on the inclines 3^a and with the shoulders 3^b on the trip block.

Across the bail pulley opening 11 lies the jaw operator 17 hinged to the frame at one end by being provided with an enlarged end received and held by the hooked prongs 18 on the frame. The jaw operator is held in place also by the wall 19 which also acts as a stop for the jaw or hook 13, and is disconnected from and independent of the hook or jaw.

This class of carriers as ordinarily used are operated only one way from the trip block and are readily changed to operate in the other direction by changing the rope.

As shown, the rope R is secured to the rope sheave 10, passed around the sheave of the bail pulley, over the carrier sheave 9 and extended in the direction of the length of the track. The carrier is locked to the trip block by the arms of the catch block 15 engaging with the shoulders 3^b of the trip block, the catch block being held up by its resting on the top of projection 13^b. When the bail pulley is brought up to the carrier by drawing on the rope R the bail strikes the jaw operator 17 which moves it from the position shown in full lines in Figs. 2 and 3 to the position shown in dotted lines in Fig. 2. At the same time, the jaw or hook 13 is moved by the swinging end of the latch from the position shown in Fig. 3 to that shown in Fig. 2. During this movement the hook is passed through the bail of the bail pulley and the support is removed from under the catch or lock block 15 which, as the car moves off from the trip block 3, drops behind the shoulder *a* of the hook or jaw 13, locking it and securing the bail pulley in the carrier and supporting any load that may be attached thereto. When the carrier is returned to the trip block the catch block 15 is withdrawn or lifted out of engagement with the hook projection 13^b by

the arms 15^a and 15^b riding up the inclines 3^a on the trip block. The car becomes locked and the hook 13 releases the bail pulley by reason of its weight acting on the inclined face of the hook, as well as with the aid of the counter weight 13^c. The counter weight 13^c is particularly useful, however, in maintaining the hook in open position and thereby supporting the catch block 15. When the hook releases the bail pulley, said pulley is supported only by the rope and may be handled by it while the car remains locked to the trip block.

It is evident that the bail pulley might be provided with a headed projection or some similar device in lieu of a true bail in which event the hook or jaw 13 would be modified to adapt it to engage it, and other modifications and variations may be made without departing from the equivalents of my construction.

What I claim as new, and desire to secure by Letters Patent, is—

1. A carrier having a bail opening, a single

outwardly hanging hook pivoted directly and centrally over the bail opening, an independent hook operator for closing the hook a lock for securing the hook in closed position and a bail pulley, combined, substantially as set forth.

2. The combination in a hay carrier of the frame having a bail pulley opening, the carrier wheels, the rope sheaves, the bail pulley, the single outwardly hanging bail hook pivoted in the carrier directly over the bail pulley opening, the independent jaw operator hinged in the carrier at one side of the bail pulley opening and projecting across the opening and adapted to operate the hook in closing it, the catch for securing the hook and a bail pulley, substantially as set forth.

In witness whereof I have affixed my signature in presence of two witnesses.

HENRY H. DURR.

Witnesses:

E. WILLARD JONES,
GEORGE C. CARTER.