

No. 769,175.

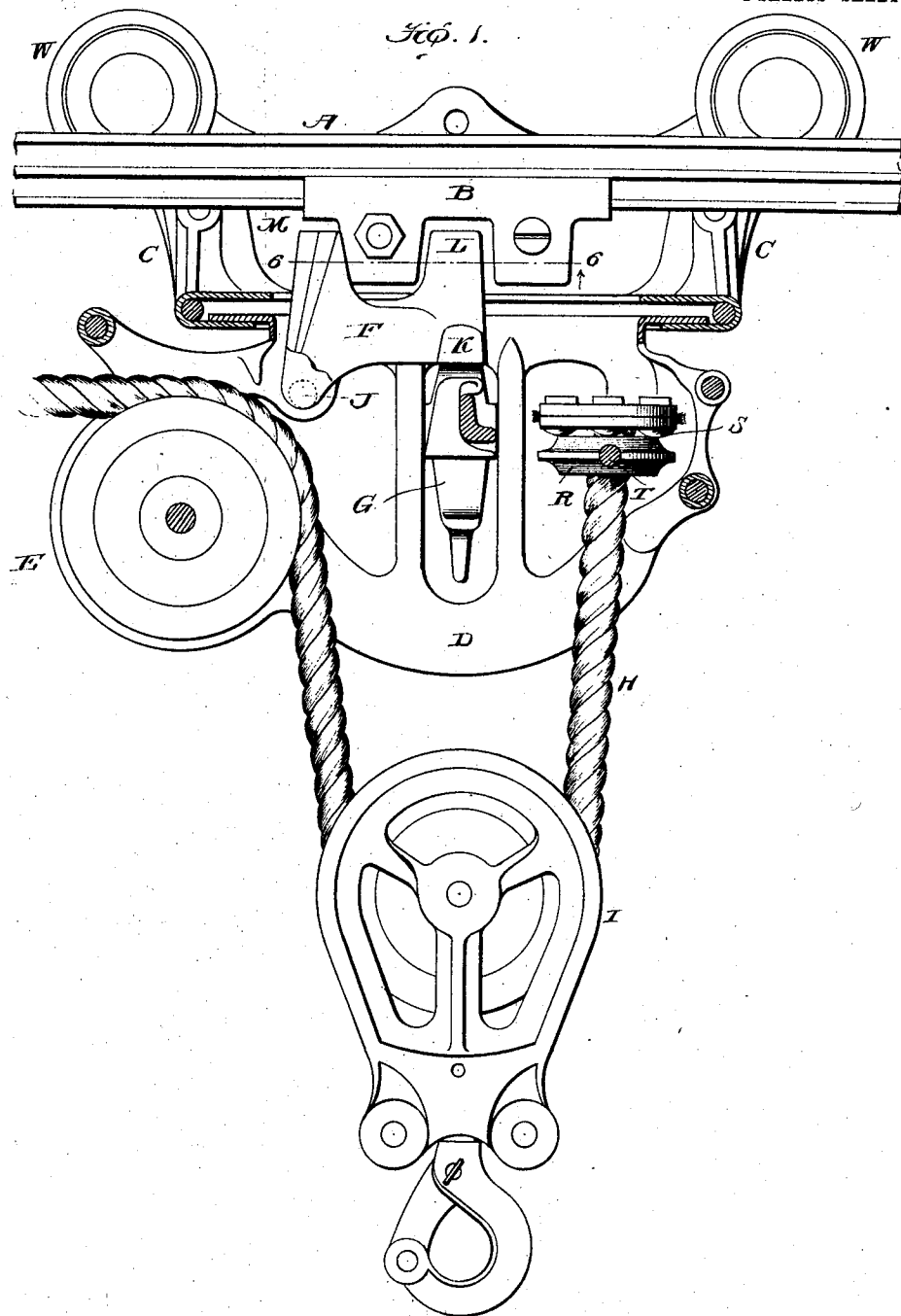
PATENTED SEPT. 6, 1904.

W. LOUDEN.
HAY CARRIER.

APPLICATION FILED APR. 28, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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Inventor.

William Loudon

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2 SHEETS—SHEET 2.

Fig. 2.

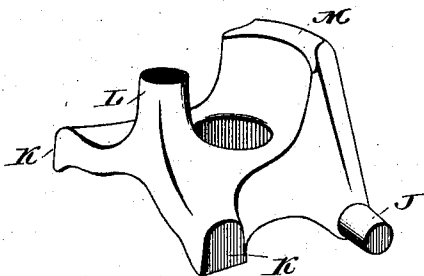


Fig. 3.

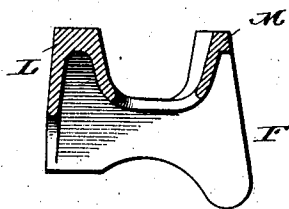


Fig. 4.

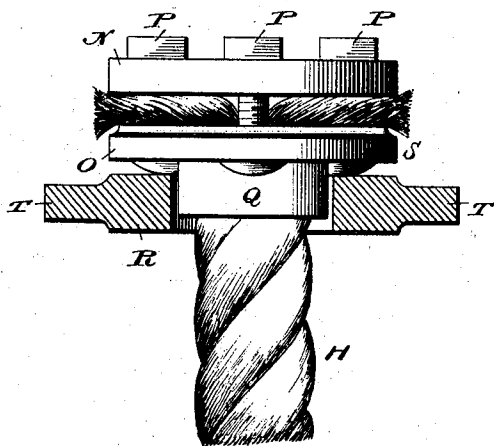


Fig. 5.

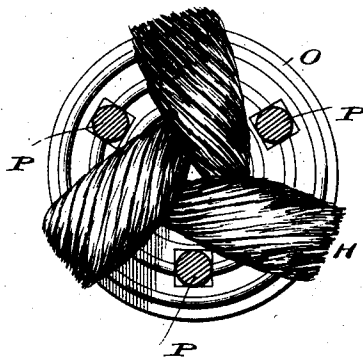
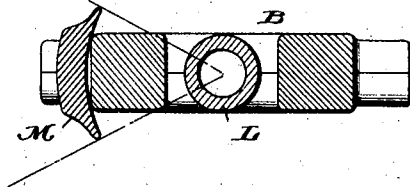


Fig. 6.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM LOUDEN, OF FAIRFIELD, IOWA.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 769,175, dated September 6, 1904.

Application filed April 28, 1903. Serial No. 154,671. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LOUDEN, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Hay-Carriers, of which the following is a specification.

My invention relates to elevated carriers designed for handling hay and other products; and it consists of an improvement in the details hereinafter set forth.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a hay-carrier embodying my invention, the front side of the frame being broken away to show the interior construction. Fig. 2 is a perspective of the locking-dog. Fig. 3 is a vertical section of the same. Figs. 4 and 5 are detail views of the swivel which connects the rope to the carrier. Fig. 6 is a horizontal section on the line 6 6 of Fig. 1.

In the drawings, A represents the track-rail upon which the carrier runs and to which a two-pronged stop-block B is secured. The frame of the carrier is composed of an upper section C and a lower section D, swiveled together, the upper section carrying the track-wheels W and the lower section having a rope-wheel E, locking-dog F, and grappling-hooks G. The carrier is also provided with a lifting-pulley I and elevating-rope H, all arranged to operate in the usual manner.

The locking-dog F is provided with pintles J, (one on each side,) which are pivotally mounted in the carrier sides, and also with two outwardly and downwardly projecting parts K, which are adapted to rest upon or drop between the upper ends of the grappling-hooks G in the usual manner, as shown and described in Patent No. 620,467. The locking-dog is also provided at each end with upwardly-projecting prongs or spurs L and M, the spur L, which is on the same end of the dog as the parts K, being substantially round in horizontal section and the spur M, on the end above the pintles J, being of a widened semicircular shape, the center of the circle being at or near the center of the spur L.

Fig. 1 shows the carrier held stationary on

the track A by means of the spur L being held between the prongs of the stop-block B, the dog F being held in this locked position by the parts K resting on the upper ends of the hooks G. The spur L is so located as to be in the center of the swivel which holds the upper and lower sections of the carrier together, and when the lower section is reversed the spur L will still be held between the prongs of the stop B; but the spur M will then be at the opposite end of the stop. The semicircular shape of the spur M makes it conform at all points within its range to the outer faces of the prongs on the stop B, as specially shown in Fig. 6. Also the range of its operative position is largely increased by reason of its widened semicircular shape. Should the carrier become partly swiveled around, it will still operate at all points within the limits of the dotted lines in Fig. 6. Instead of the spur being entirely round in horizontal section it may be essentially square, with its corners rounded off a little, so it will not wedge between the prongs on the stop B in being swiveled around.

In pulling a rope over pulleys the tendency is to run the most of the twist to the rear end, where it is liable to double up the rope and twist the lifting-pulley I around so it cannot enter the mouth of the carrier and operate the lock mechanism therein. To overcome this difficulty, I provide a swivel S, which is specially adapted for use in this position. The swivel proper is composed of two pieces N and O, which are held together by three bolts P, which are spaced so as to admit the separated strands of the rope H between them. The inner faces of the pieces N and O are ridged or corrugated, so as to more securely grip and hold the strands of the rope. The piece O is fitted with a downwardly-projecting annular flange Q, which is adapted to enter and swivel in the opening in a support R. This support R is provided with two pintles T, which are pivoted in the sides of the carrier-frame. By this means the end of the rope will be securely held, while it will be perfectly free to swivel around and let out surplus twist and to sway forward or back by means of the support R rocking in the frame

of the carrier. Also but a small amount of vertical space is required, even less than that required to tie a knot in the rope, and a neat and effective swivel connection for the rope is thereby secured.

What I claim as new is—

1. The combination of a track, a stop secured to the track, and a carrier having a locking-dog hinged at one end, and cooperating in the usual manner with a grappling device pivoted in the carrier-frame, the dog being provided with an upwardly-projecting spur at each end, the spur on the end above the grappling device being substantially round in horizontal section, and the spur over the hinged end being of a semicircular shape in horizontal section.

2. The combination of a track, a two-pronged stop secured to the track, and a locking-dog hinged at one end in the frame of a carrier, said locking-dog being provided with an upwardly-projecting semicircular-shaped spur on the end above the hinge to cooperate with the outer faces of the prongs upon the stop, and the other end having an upwardly-projecting spur adapted to cooperate with the inner faces of the stop.

3. In hay-carriers, a connection for a rope consisting of two plates adapted to embrace the strands of the rope between them, one of the plates having an opening for the rope to pass through, means to clamp the plates upon the strands, and a support for the plates having an opening for the rope to pass through and to freely turn therein.

4. In hay-carriers, a connection for a rope consisting of two circular-shaped plates adapted to embrace the strands of the rope between them, one of the plates having a central opening for the rope to pass through, means to clamp the plates upon the strands, and a support for the plates having a central opening for the rope to pass through and to freely turn therein.

5. In hay-carriers, a connection for a rope consisting of two plates set at right angles thereto, and adapted to embrace its strands between them, one of the plates having an opening for the rope to pass through, means for

clamping the plates upon the strands, and a support for the plates having an opening for the rope to pass through and to turn freely therein.

6. In hay-carriers, a connection for a rope consisting of two circular-shaped plates set at right angles thereto and adapted to embrace its strands between them, one of the plates having a central opening for the rope to pass through, means for clamping the plates upon the strands, and a support for the plates having a central opening for the rope to pass through and to turn freely therein.

7. The combination of two plates adapted to embrace the separated strands of a rope between them, means for clamping the plates upon said strands, a central opening in one of said plates, and an annular flange depending from the edge of said opening, and a support with an opening adapted to receive said flange and permit it to swivel therein.

8. In hay-carriers, a rope-holding device having a central opening and an annular flange depending therefrom, a support having a central opening to receive said flange and permit it to swivel therein, said support having pintles on opposite sides adapted to rotate in bearings therefor.

9. The combination with a hay-carrier of a swivel-support having an opening in its center and pintles on opposite sides mounted in bearings in the sides of the carrier, two circular plates facing together in horizontal position, the lower of which has a central opening with an annular flange depending therefrom, said flange being fitted to swivel in said support, a rope passed up through the opening in the lower plate and its strands separated and passed in diverging directions between the plates, and means to clamp the plates upon said strands.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM LOUDEN.

Witnesses:

H. M. BALDWIN,

FRANK D. BLACKSTONE.