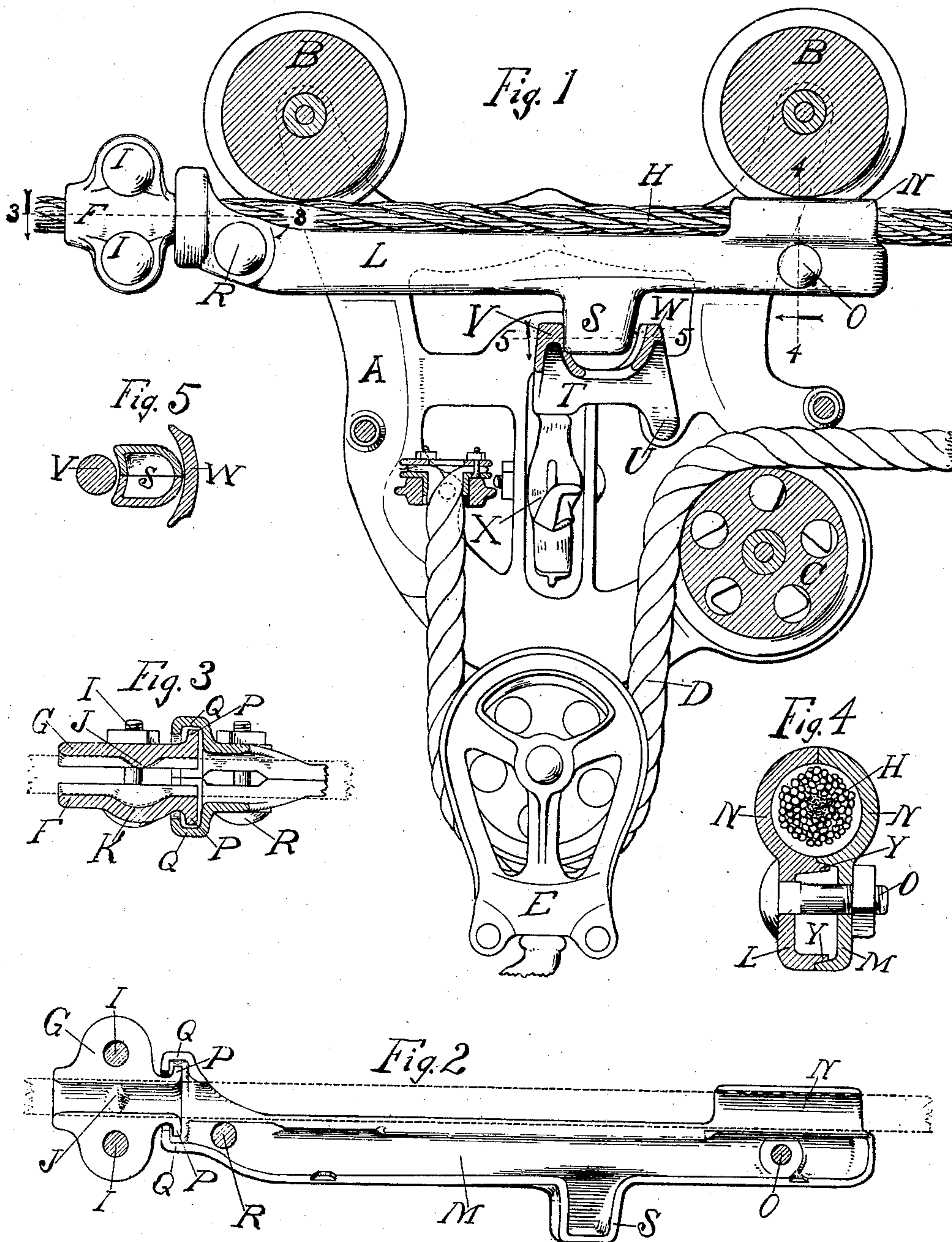


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PATENTED AUG. 7, 1906.

W. LOUDEN.
HAY CARRIER.

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HAY-CARRIER.

No. 827,928.

Specification of Letters Patent.

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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.

This invention relates to carriers adapted to run on a wire cable or a similar track; and it consists of an improvement in the stop device therefor whereby it may be securely connected to the cable and at the same time be adapted to engage and operate the lock mechanism of the carrier, as will be described in this specification and more particularly pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side view of a carrier embodying my invention, the frame of the carrier on the front side being removed to show the interior parts. Fig. 2 is a side view of the stop device, the front sides thereof being removed to show the interior parts and the wire cable being shown by dotted lines. Fig. 3 is a horizontal section on the line 3 3 of Fig. 1, the cable being shown by dotted lines. Fig. 4 is an enlarged transverse vertical section on the line 4 4 of Fig. 1. Fig. 5 is a horizontal section through the locking parts on line 5 5 in Fig. 1, said parts being shown in full.

Similar letters represent similar parts throughout the several figures.

Referring to the drawings, A represents one side of the carrier-frame, in which the track-wheels B B and a rope-wheel or sheave C are mounted in the usual manner. A rope D is secured to the carrier-frame and is passed over the sheave C in the usual manner, an elevating-pulley E being preferably hung in the loop of the rope D.

F and G represent the two parts of a clamp which is applied to the wire cable H by means of bolts I I. In order to make this clamp adhere firmly to the cable H, I form a projection J in the groove of the part G where it fits on the cable H and a corresponding recess K in the groove of the part F. By this means when the parts F and G are firmly clamped upon the cable H it will be bent or kinked between them, so that the clamp cannot readily slip upon the cable.

L and M represent the main parts of the stop device. These parts are made in two corresponding halves, preferably a little longer than the carrier-frame and adapted to

hang substantially below the cable H and to partially embrace it between them. At the rear ends they are fitted with corresponding curved parts N, which are adapted to encircle the cable H and to be held in engagement therewith, a bolt O preferably being used to clamp these ends together.

The pieces F and G are provided with extensions at the ends adjoining the parts L and M, and these extensions are fitted with flanges P, which when fitted together make an annular lip. The ends of the parts L and M adjoining the extensions of the clamp-pieces F and G are fitted with semicircular grooves Q, which are adapted to fit loosely over the flanges P and to swivel freely thereon. These ends of the pieces L and M are held together and in engagement with the flanges on the parts F and G by means of the bolt R.

The pieces L and M are each provided with a downwardly-projecting spur or lug S, which coincide with each other so as to form a single lug or downwardly-projecting prong. The carrier is provided with a dog T, pivoted in the carrier-frame at U and having two upwardly-projecting spurs or prongs V and W on its opposite ends, which are adapted to coact with the lug S. The free end of the dog T is supported by resting on the upper end of a pivoted grappling-hook X. When the pulley E is brought into contact with the hook, it is turned on its pivot, so that the free end of the dog T will drop so the spur V will pass below the lug S, when the carrier will be free to run along the cable H.

The carrier being returned to the stop, the spur W will come in contact with the lug S, which will cause the free end of the dog to rise, and the pulley E being lowered the hook X will turn on its pivot, so as to support the dog in position as shown in Fig. 1, and by this means the carrier will be held stationary on the cable.

By referring to Fig. 5 it will be seen that the front spur V of the dog T is rounded in cross-section, while the rear spur is broadened and made concave. To accommodate a dog of this construction, the rear faces of the spurs S are rounded to approximately correspond with the concaved face of the spur W, while their front faces are concaved or hollowed out to fit the rounded sides of the spur V. In this way there will be little or no danger of the lug S being deflected to one side by its contact with the dog T.

The parts L and M are preferably made concave or recessed on their inner sides, and small spurs Y are formed on one of them to catch in the recess of the opposite part and hold them from slipping on each other. The weight of the carrier and the load it is carrying will at all times be directly upon the cable, or substantially so, instead of being directly upon the stop-pieces, as it would be if a sleeve was used or the curved parts N were run the entire length of the pieces L and M. In that case the entire weight of the carrier and its load would be upon the pieces L and M and would be liable to break or bend them unless they were made quite strong and heavy.

The rear wheel standing upon the short curved parts N will not tend to bend or strain the pieces L and M, and the cable will be free to accommodate itself to the strain of the load. The swiveled connection between the parts F and G and L and M should be loosely joined, and there should be sufficient room between the cable and the pieces L and M so that the cable will be free to spring or bend at all points to accommodate the strain of the load.

What I claim is—

1. In hay-carriers, a clamp adapted to be applied to a hay-carrier track and having an extension on one end thereof, swiveling means on said extension and a stop device loosely fitted to the track and adapted at one end to embrace the swivel end of the clamp and to turn thereon.

2. In hay-carriers, a clamp adapted to embrace and grip a track and having an annular lip at one end, and a stop device having at one end an annular groove adapted to fit loosely over the annular lip and to turn thereon.

3. In hay-carriers, a two-part clamp adapted to embrace and grip a wire cable, said parts having at one end semicircular flanges adapted to form an annular lip, and a two-part stop device adapted to loosely embrace the cable, and at the end adjoining the clamp, semicircular grooves adapted to fit loosely over the annular lip and to run thereon.

4. In hay-carriers, a clamp adapted to embrace and grip a wire cable and having an annular lip at one end, a two-part stop device having at one end means to loosely embrace the cable, and at the other end, semicircular grooves to fit loosely over the annular lip and to turn thereon, and means to hold the parts together.

5. In hay-carriers, a clamp adapted to embrace and grip a cable and having an extension at one end, swiveling means on said extension and a stop device adapted to loosely embrace the cable, said stop device having a downwardly-projecting prong or spur adapted to coact with the lock mechanism of a hay-carrier, and means to connect with the

swivel end of the clamp and to turn thereon.

6. In hay-carriers, the combination of a hinged locking-dog having two upwardly-projecting spurs, the inner face of one spur being concave, and the inner face of the other spur being convex, a stopping device having a downwardly-projecting prong to coact with said spurs, one side of said prong being concave and the other convex, substantially as described.

7. In hay-carriers, the combination of a hinged locking-dog having two upwardly-projecting spurs, the inner face of one spur being concave and the other inner face of the other spur being convex, a two-part stopping device having downwardly-projecting coinciding prongs adapted to form a single prong and to coact with said spurs, one side of said prong being concave and the other convex substantially as described.

8. In hay-carriers, a wire-cable track, a clamp to embrace the cable, and having a flanged extension on one of its ends, a stopping device having one end adapted to fit loosely over the flanged extension of the clamp, and the other end adapted to catch loosely over the cable and be supported thereby, and a downwardly-projecting prong located midway on the stop and adapted to coact with the lock mechanism of the carrier.

9. In hay-carriers, a clamp adapted to embrace and grip a cable, and having an annular lip thereon, a stop device composed of two parts, each having a downwardly-projecting lug or spur adapted to coincide with each other and form a single downwardly-projecting prong, upwardly-projecting curved parts at one end adapted to catch loosely over the cable, and grooved parts at the opposite end adapted to loosely embrace the annular lip of the clamp and to turn thereon.

10. In hay-carriers, a dog pivoted at one end and having upwardly-projecting prongs or spurs, one of said spurs being concave and the other rounded in horizontal section, and a stop device having a downwardly-projecting prong to coact with the dog, one face of said prong being convex to fit the inner face of the semicircular spur and the other face of the prong being concave to fit the face of the rounded spur.

11. In hay-carriers, a wire-cable track, a clamp embracing the cable and having an extension on one end, swiveling means on said extension, a stop device adapted at one end to connect with said swiveling means, the opposite end being adapted to catch over and embrace the cable, and a downwardly-projecting double-faced prong on the central part of the stop adapted to coact with the lock mechanism of a hay-carrier.

12. The combination of a wire-cable track, a hay-carrier to run thereon, a hinged locking-dog having upwardly-projecting prongs

mounted in the carrier, a clamp embracing the cable and having an extension at one end, swiveling means on said extension, a stop device adapted at one end to connect with said
5 swiveling means, the opposite end being adapted to catch over and embrace the cable, and a downwardly-projecting double-

faced prong on the central part of the stop adapted to coact with the prongs of the locking-dog.

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Witnesses:

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