No. 634,948. Patented Oct. 17, 1899.

W. LOUDEN.

HAY CARRIER STOP.

(Application filed Jan. 11, 1898.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 2

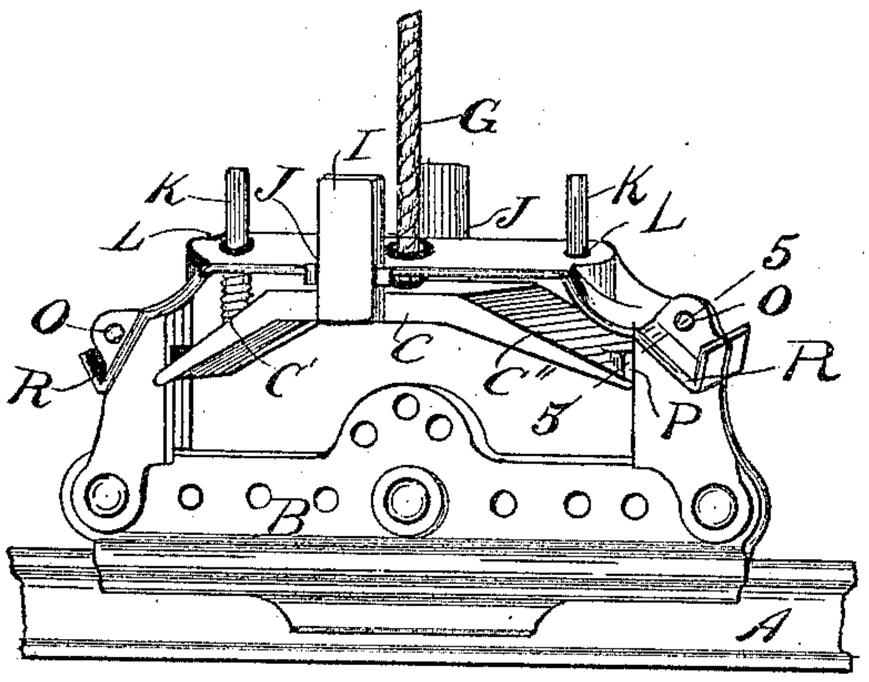

Fig. 1

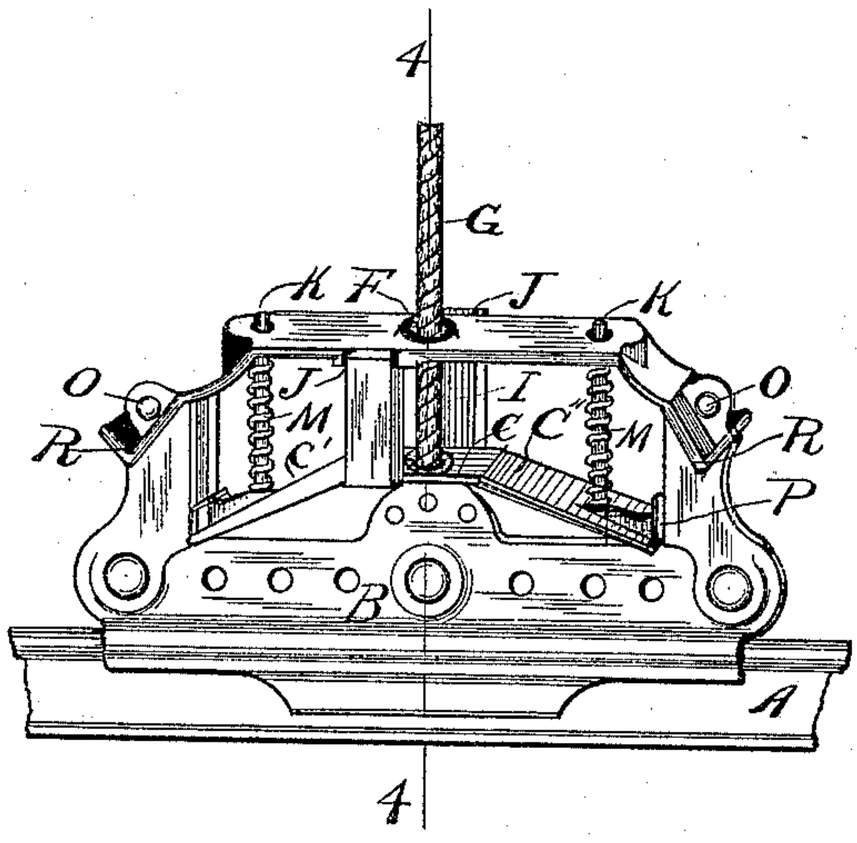

Fig. 4

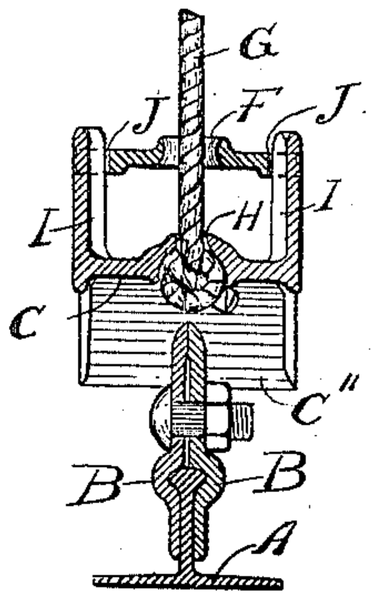

Fig. 3

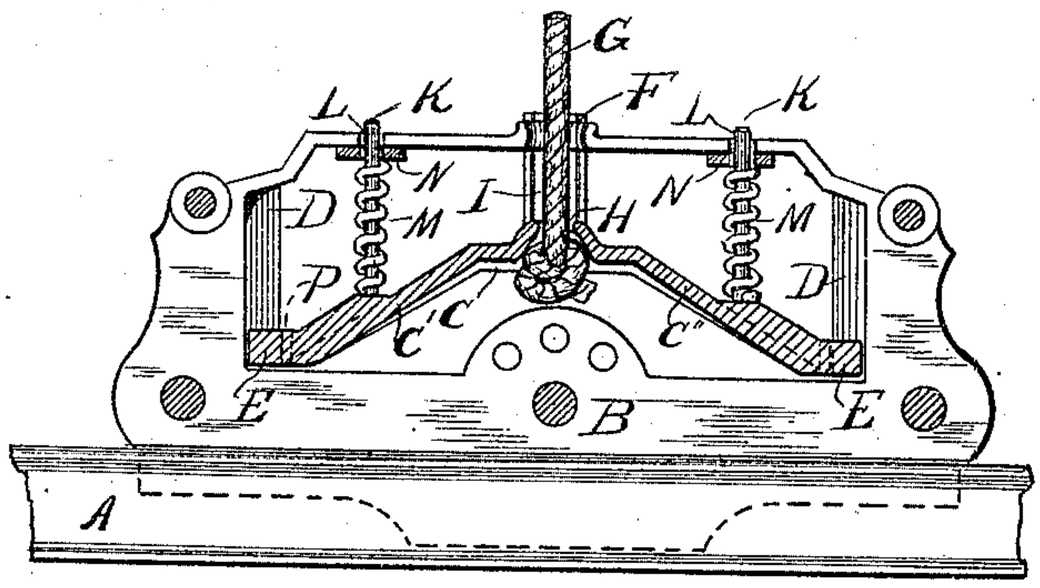

Fig 5

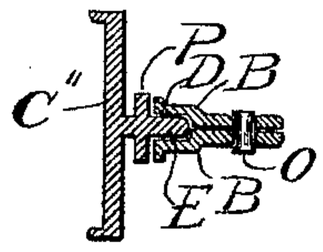

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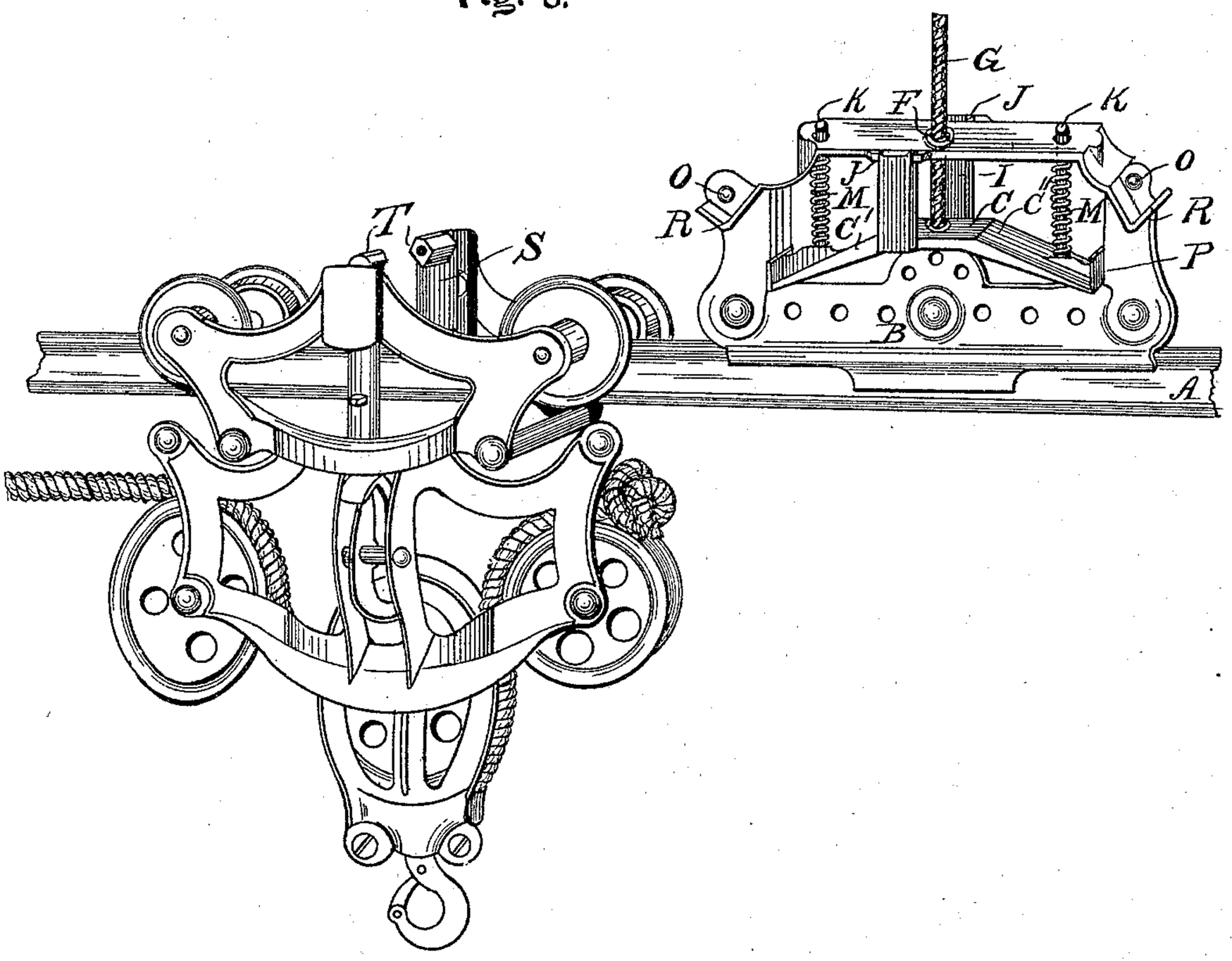
Fig. 6.



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UNITED STATES PATENT OFFICE.

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HAY-CARRIER STOP.

SPECIFICATION forming part of Letters Patent No. 634,948, dated October 17, 1899.

Application filed January 11, 1898. Serial No. 666,270. (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-Carrier Stops, of which the following is a specification.

My invention relates to hay-carriers having stops provided with an inclined face to lift and thereby release the lock mechanism of the carrier; and it consists, first, in making said incline movable in the main part of the stop, so that it can be drawn up to let the lock mechanism of the carrier pass freely under it, and, second, in the details of construction whereby the carrier may be prevented from running past the stop and the incline be securely held in working position, as fully set forth in the specification.

In the accompanying drawings, Figure 1 is a side perspective showing a stop embodying my invention in working position. Fig. 2 is the same, showing the incline drawn up so that the lock mechanism of the carrier will pass under it. Fig. 3 is a side view, the front side of the main frame of the stop being removed and the movable incline being shown in vertical section. Fig. 4 is a cross-section on the line 4 4 of Fig. 1. Fig. 5 is an oblique section on the line 5 5 of Fig. 2. Fig. 6 shows the stop in use with a hay-carrier.

The stop as I construct it consists, essentially, of two side pieces B B, adapted to clamp on a track-rail A, and a central movable part C, having inclined ends C′ and C″. The central portions of the side pieces B are cut away to provide room for the vertical movement of the part C, and in each end of the pieces B a recess D is formed, in which the ends E of the part C are adapted to slide up and down. The pieces B B are also provided with retaining-shoulders R for the lock mechanism of the carrier to catch against in the usual manner.

In the upper part of the stop is an opening F, through which a cord G is passed. In the center of the part C is also an eye H, and the cord G is also passed through this opening and knotted, so that an upward pull on the cord G will lift the part C, as shown in Fig. 2. When in this position, the locking-dog of the carrier will be free to pass under it the same as if there were no stop there.

When it is desired to have the stop operate the lock mechanism of the carrier, the part C is let down, as shown in Fig. 6, and the lugs T of the carrier-dog S will then slide up the incline C′ and while elevated will be held from passing out of the stop by the shoulders R next to them. When in this position, the stop will operate the same as if the incline had been rigidly connected to the main part of the stop as commonly constructed.

It will be understood by those familiar with the art that the dog S when it has been lifted into its elevated position by the incline C′ will be held in such position by the lock mechanism of the carrier, as usually done, and when held in this position the upper parts of the lugs T will come in contact with the lower and inner sides of the shoulders R and will be held from passing out under the shoulders R until the dog S is released from its elevated position. The upper parts of the shoulder R are preferably cut away simply to lighten the stop and to make room for the rivets O.

The advantages of my invention are that a number of stops may be placed upon the track-rail at different points where it is desired to use the carrier, and the inclines in all of them except the one in use may be drawn up out of the way of the carrier and the carrier may be made to operate with either one of the stops at any point, as desired, while the others are drawn up out of the way.

The cord G is usually passed over a small pulley or over the rounded edge of a rafter and then down to within reach of the operator below. In order to counterbalance the weight of the cord G and to make sure of the prompt and certain drop of the part C into working position, I interpose springs M between the movable part C and the fixed part B. Pins K are preferably formed on the central upper edge of the part C and are passed through an opening L in the upper part of the stop. Coiled springs M are placed on these pins, so as to bear against the upper part of the stop and hold the part C down in place. When the main part of the stop is constructed in two separate parts, it is also preferable to in-

sert washers N between the spring M and the upper parts of the stop and to connect the upper edges together by loosely-set rivets O.

The carrier (shown in Fig. 6) is provided with a locking-dog S vertically slidable in the frame of the carrier and fitted with horizontally-pointing lugs or fingers T to slide up and be lifted by the incline C or C″ or to pass unmoved below them when the part C is drawn up, as already explained. Carriers fitted with this kind of dog or with others adapted to slide up or be lifted by an incline can be used with my invention. The operation of said dogs being known to those skilled in the art, it is unnecessary to explain them here.

To prevent the carrier from running past the stop when in working position, I form upwardly-extending arms I on the sides of the part C and adapt them to vertically slide in notches J in the upper edges of the stop. One of the defects of doubly-inclined stops as heretofore generally constructed has been that they permitted the carrier-dog to pass entirely through the stop when it was desired that the dog should be held in it without passing through. By the use of the arms I the stop is rendered positive unless the incline is drawn up, when the carrier will pass along the track the same as if the stop had been entirely removed. The arms I, sliding in the notches J, the pins K in the opening L, and the ends E in the recesses D all combine to hold the part C securely in place, while it is entirely free to slide up and down, as and for the purpose heretofore set forth; but to more effectually guard it against longitudinal displacement I form flanges P on the sides of the ends E, so as to abut against the end portions of the pieces B. It is preferable to construct the stop with double inclines C′ and C″; but, if desired, it may be made with an incline on one end only without departing from the main features of my invention. My invention may also be modified to attach to different kinds of hay-carrier tracks.

What I claim is—

1. A hay-carrier stop having a fixed part adapted to be secured to a track-rail, and a vertically-movable part mounted in said fixed part, and having an incline on its upper face, substantially as and for the purpose set forth.

2. A hay-carrier stop having a fixed part adapted to be secured to a track-rail and provided with a retaining-shoulder, and a vertically-movable part mounted in said fixed part and having an incline on its upper face, substantially as described.

3. A hay-carrier stop having a fixed part adapted to be secured to a track-rail and provided with a retaining-shoulder, a vertically-movable part mounted in said fixed part and having an incline on its upper face, and means for lifting said movable part, substantially as set forth.

4. A hay-carrier stop composed of two fixed parts adapted to be clamped on the edge of a track-rail and provided with one or more retaining-shoulders, a vertically-movable part mounted between said fixed parts and having one or more inclines on its upper face, and means for lifting said movable part, substantially as described.

5. A hay-carrier stop comprising a fixed part adapted to be secured to the track-rail, a vertically-movable part having upwardly-inclined faces to lift and release the lock mechanism of the carrier, centrally-located upwardly-pointing pins on the vertically-movable part passing into openings in the upper side of the main part, and coiled springs encircling said pins, substantially as described.

6. A hay-carrier stop comprising a fixed part adapted to be secured to the track-rail and a vertically-movable part having upwardly-inclined faces to lift and release the lock mechanism of the carrier, the ends of the vertically-movable part being adapted to fit in recesses in the fixed part and vertically slide therein, substantially as described.

7. A hay-carrier stop comprising a fixed part adapted to be secured to the track-rail, and a vertically-movable part having upwardly-inclined faces to lift and release the lock mechanism of the carrier, the ends of the vertically-movable part being adapted to fit in recesses in the fixed part and vertically slide therein, and vertically-set flanges on said ends, substantially as described.

8. A hay-carrier stop comprising a fixed part adapted to be secured to the track-rail, a vertically-movable part having at each end upwardly-inclined faces to lift and release the lock mechanism, and upwardly-extended arms formed centrally on the sides of the vertically-movable part, substantially as described.

9. A hay-carrier stop comprising a fixed part adapted to be secured to the track-rail, a vertically-movable part having at each end upwardly-inclined faces to lift and release the lock mechanism, and upwardly-extended arms formed centrally on the sides of the vertically-movable part, and adapted to slide in notches in the upper edges of the fixed part, substantially as described.

10. A hay-carrier stop comprising a fixed part adapted to be secured to an elevated track and having lugs adapted to catch and hold a locking-dog, and a vertically-movable part having upwardly-inclined faces to lift said dog into contact with the lugs, or to be elevated above the dog and let it pass as desired, substantially as described.

11. A hay-carrier stop having a fixed part adapted to be secured to a track-rail and provided with retaining-shoulders, a vertically-movable part having upwardly-inclined faces at each end to lift the locking-dog of a hay-carrier and a central arm on the upper edge of said movable part adapted to prevent said dog from passing from one end to the other of the stop, substantially as set forth.

12. A hay-carrier stop having a fixed part

adapted to be secured to a track-rail and provided with retaining-shoulders, and a central opening in its upper side, a vertically-movable part having upwardly-inclined faces at each end and an eye in its center, and a cord passed down through said opening into said eye and there secured, substantially as shown and described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLIAM LOUDEN.

Witnesses:
AGNES M. LOUDEN,
C. J. FULTON.