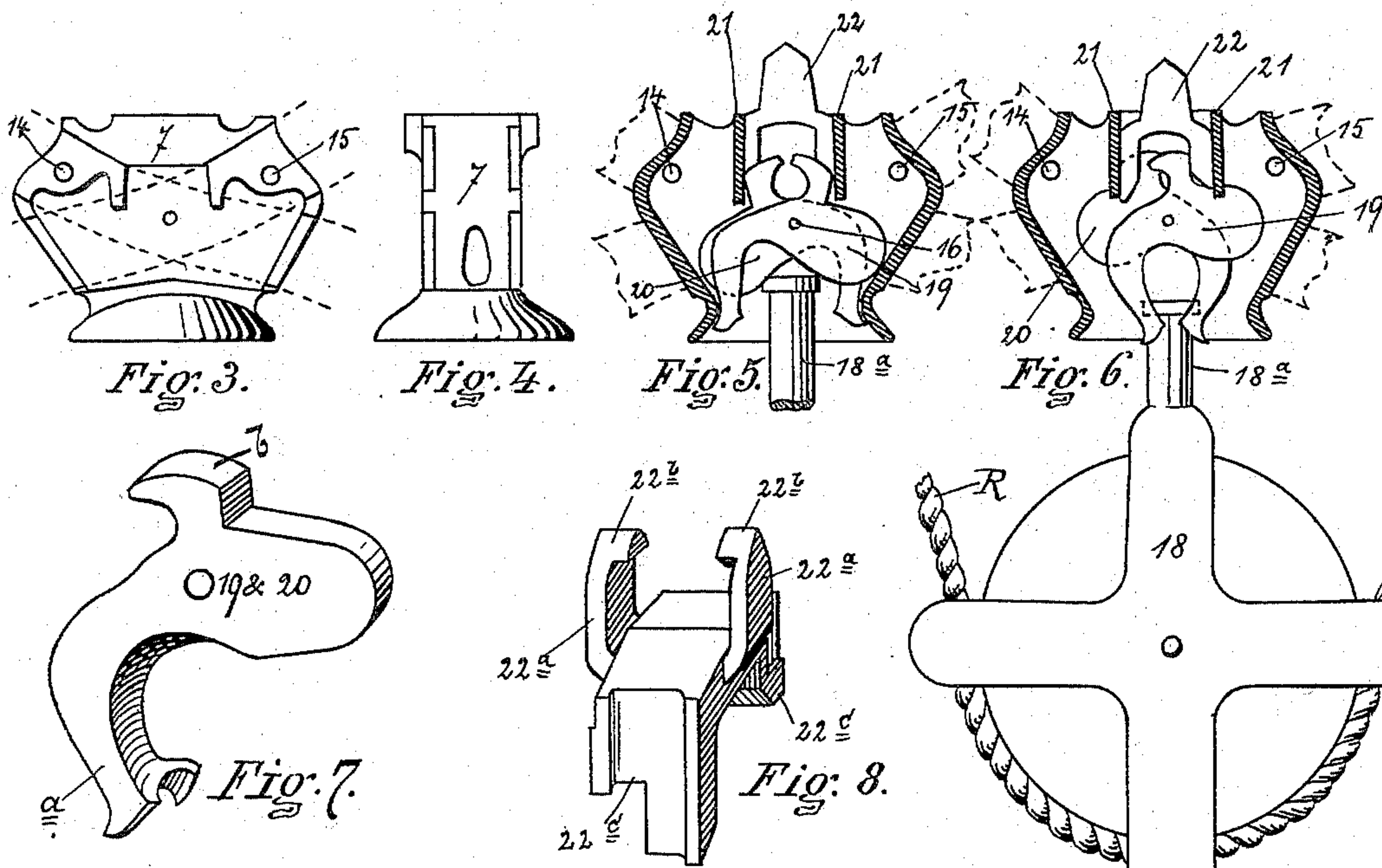
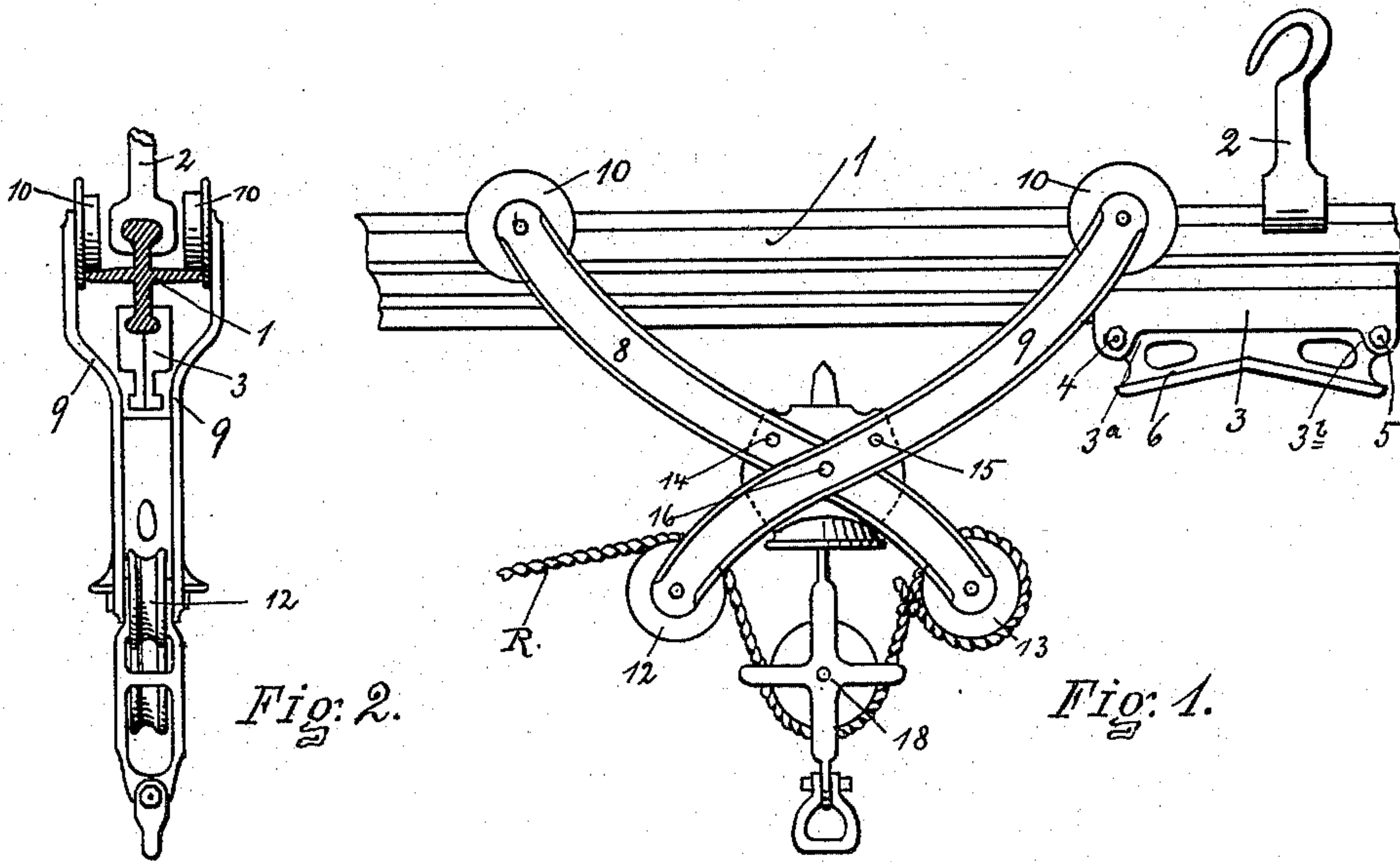


(No Model.)

H. H. DURR
HAY CARRIER.

No. 488,330.

Patented Dec. 20, 1892.



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. 488,330, dated December 20, 1892.

Application filed July 1, 1892. Serial No. 438,726. (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 and tracks therefor.

In the drawings which accompany and to which this specification refers, Figure 1 shows in side elevation the improved car or carrier in connection with a section of the track on which it runs, a track suspending hook and a trip block. Fig. 2 shows a cross section of the rail and edge or end views of the carrier, suspending hook and trip block. Fig. 3 shows a side view of the frame of the carrier. Fig. 4 shows an edge view of the same. Fig. 5 shows the carrier in section with the working parts in open position. Fig. 6 shows the same in connection with the bail pulley, which, however, has not a bail, but a headed bolt or projection. Fig. 7 shows in perspective one of the gravitating jaws. Fig. 8 shows in perspective the gravitating catch block.

Referring more particularly to the reference numerals in a more particular description of the device, 1 indicates the track which has upwardly and downwardly extending headed flanges and laterally projecting plain flanges, on which the wheels of the carrier run. The track is suspended by hooks 2 located at intervals along the track and which engage by lips the head of the upwardly extending flange. The trip block 3 consists of two duplicate parts or halves clamped to the head of the lower web of the track by means of bolts 4 and 5. The trip block is provided with a double inclined or cam face 6 on each part.

The carrier consists of a frame 7. On each side of the frame and engaging in suitable recesses to insure their retaining proper positions, are secured pairs of arms 8 and 9,

which extending above the frame carry the carrying wheels 10, 11, and extending below the frame, carry rope sheaves 12, 13. The arms 8 and 9 are secured by bolts 14 and 15, and a bolt 16 which also serves as a pivot for the jaws. The lower end of the frame is provided with a bell shaped mouth 17 which is located vertically between the sheaves 12 and 13 and is adapted to receive and guide the upper end of the bail pulley 18 into engagement with the holding jaws 19 and 20. The jaws are located just within the bell mouth and are pivoted on bolt 16, and each is provided with a holding arm *a*, a securing and supporting projection *b* and a counter weighted arm *c*. Sliding in ways 21, in the upper part of the frame, is a gravity catch block 22, having upwardly extending arms 22^a, having inwardly extending projections 22^b, adapted to ride upon the cam faces 6 of the trip block. The catch block is also provided with walls or shoulders 22^c adapted to engage behind the projections *b* on the jaws, and secure them locked, or the catch block will become itself locked by the shoulders 22^c engaging upon the top of the projections *b*, *b* of the jaws. On the trip block 3, are provided at each end shoulders 3^a and 3^b against which the projections 22^b engage when the catch block is in elevated position, and prevent the carrier from leaving the trip block. The bail pulley 18 is provided with a headed projection or spindle 18^a adapted to enter the carrier, and the ends of the arms of the jaws are made hollowing to adapt them to engage it.

In operation the carrier is placed upon the track as shown, and the trip block is placed at the point in the track directly above the place where the load is to be received, and the trip block secured. The rope is placed over one of the sheaves, thence through the bail pulley and secured to the other sheave. The carrier is adapted to run in either direction from the trip block, depending on which way the rope is placed in. When the carrier in passing, along the track, arrives at the trip block, the projections 22^b of the catch block ride up the inclines 6 on the trip block and raise the block 22 until the projections *b* on the jaws become disengaged, which allows the jaws 19 and 20 to separate by reason of the

counter weighted arms *c*, thus releasing the bail pulley. After the catch block has been raised and has passed off from the highest part of the incline 6, the block is supported
 5 and secured in elevated position by the projections *b*, *b* on the jaws. In this position it prevents the carrier from leaving the trip block by reason of the upper ends of the arms
 10 22^a butting against one or the other of the shoulders 3^a or 3^b of the trip block. When the bail pulley is elevated to the carrier by drawing on the rope *R*, the projecting end
 15 18^a enters the mouth of the carrier, by which it is directed against the counter weighted end *c* of the jaws, and continuing upward, throws the jaws from the position shown in Fig. 5 to that shown in Fig. 6, the jaws at the
 20 same time centering the bail pulley projection in the carrier. When the jaws have been brought into the position shown in Fig. 6, the catch block drops in behind the projection *b*,
 25 *b* on jaws and secure them, at the same time it becomes disengaged from the shoulders 3^a or 3^b, as the case may be, and the carrier is allowed to move off, the jaws supporting the
 30 bail pulley and load. When the carrier is returned to the trip block, the bail pulley is released by the jaws and the carrier held as before described.

30 What I claim as new and desire to secure by Letters Patent is:

1. The combination in a hay carrier of a car having an opening for receiving the bail pulley, a pair of independent jaws pivoted upon

a common pivot located directly over the bail 35 pulley opening, each jaw having an upwardly extending projection, a sliding catch block having shoulders adapted to hold the projections together in locked position and to en- 40
 40 gage upon the ends of the projections and become itself locked, a trip block having inclined face and retaining shoulders, and a bail pulley, substantially as set forth.

2. The combination of a car having a bail pulley opening, a pair of jaws pivoted upon 45
 45 a common pivot located directly over the bail opening, each jaw having a projection extending above the pivotal point, a catch block having shoulders adapted to engage the projections from the outer sides and hold them 50
 50 together, and a bail pulley having a headed spindle, substantially as set forth.

3. In a hay carrier the combination of a car frame, pairs of arms extending above and below the frame, intersecting each other, and 55
 55 carrying the track wheels on their upper ends and the rope sheaves between their lower ends below the frame, the frame having notches or recesses for receiving the arms and retaining them in their proper positions, sub- 60
 60 stantially as set forth.

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

HENRY H. DURR.

Witnesses:

MARY A. KELLER,
 GEORGE C. CARTER.