(No Model.)

W. & C. A. GUTENKUNST.

HAY CARRIER.

No. 413,781. Patented Oct. 29, 1889.

Fig. 1.

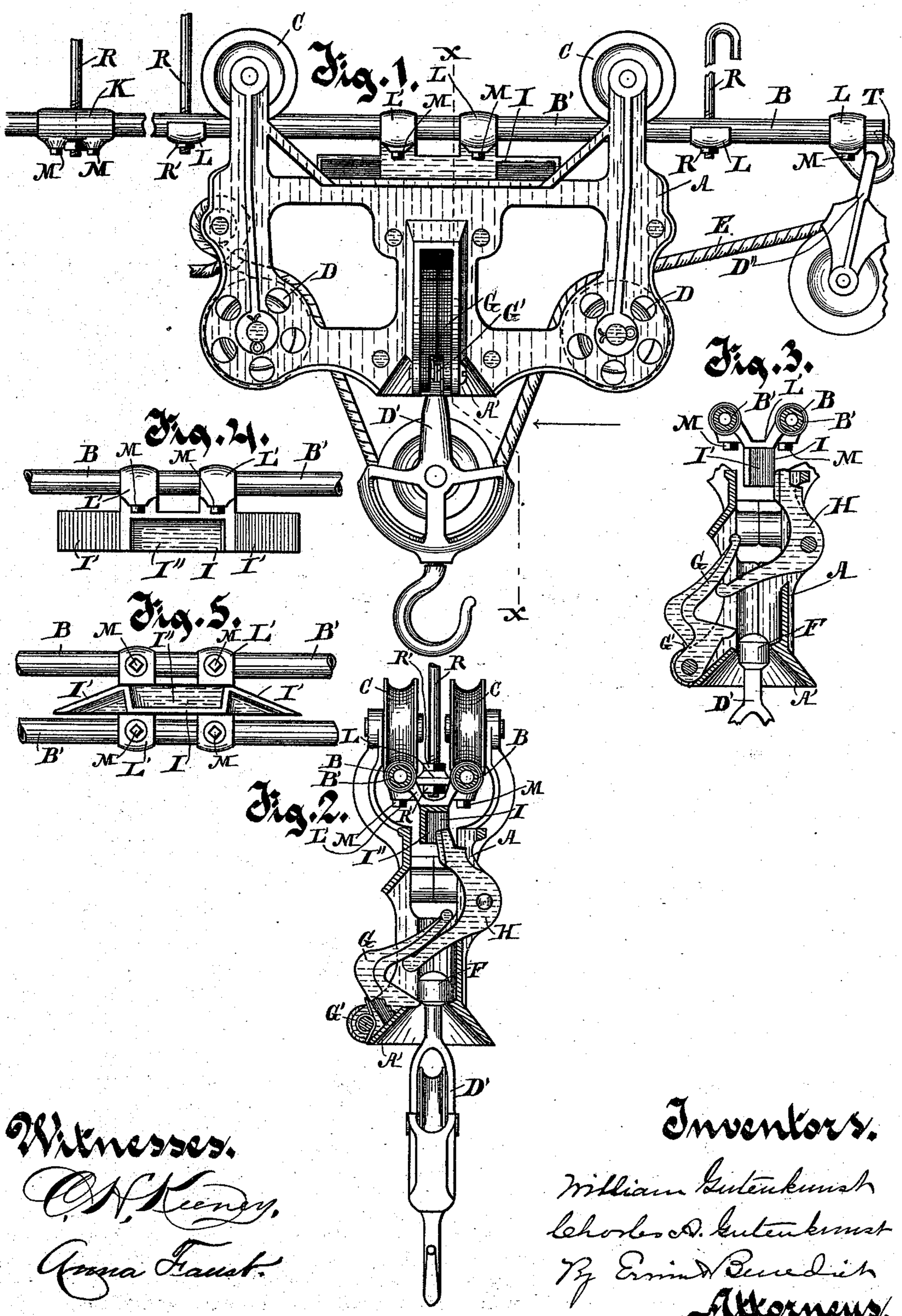

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 2.

Witnesses.

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HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 413,781, dated October 29, 1889.

Application filed May 11, 1889. Serial No. 310,417. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM GUTENKUNST and CHARLES A. GUTENKUNST, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Hay-Carriers; and we do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

Our invention consists in improvements made in the carrier whereby simplicity of construction, strength, and steadiness of the parts are secured and facility and reliability of operation are accomplished.

In the drawings, Figure 1 is a side view of our improved device. Fig. 2 is a vertical transverse section on line X X of Fig. 1, looking in the direction of the arrow. Fig. 3 is a view of some of the same parts shown in Fig. 2, but in different position. Fig. 4 is a side view of the stop, showing how it is attached to the track. Fig. 5 is a view from the under side of the same device shown in Fig. 4.

The carrier-frame A is supported and travels on the track B on wheels C C, having their axles in the upper part of the frame. In the lower part of the frame are two pulleys D D, one at each end, axled in the frame, the peripheries of which pulleys are grooved and carry therein the elevating-rope E. The rope E carries thereon, between the pulleys D D, the tackle-block D′, the rope running under a sheave therein. The rope E is carried over a sheave in a sheave-frame D″, which frame is supported on the track B. The other end of the rope is secured rigidly to the carrier-frame. The tackle-block D′ is provided with a head F, adapted to enter a throat in the frame through a flaring mouth A′. A bent grappling-lever G is pivoted in the lower part of the frame and is constructed to swing transversely of the frame in a recess provided therefor. The lower end of this grappling-lever is adapted to engage with the shank of the tackle-block D′ under the head F and retain it in the frame in the position shown in Fig. 2, a spring G′ bearing against the frame and against the grappling-lever, being adapted to hold the grappling-lever yieldingly up to its work in the position shown in Fig. 2. A bent lever-latch H is pivoted in a recess therefor in the opposite side of the frame, and also swings transversely of the frame. The lower end of this latch is adapted to bear against the lever G and throw it outwardly, in the manner shown in Fig. 3. The upper end of the latch H is adapted to impinge against the inclines I′ I′ of the stop I, and as the carrier passes one or the other of these inclines to be forced outwardly, thereby throwing its lower end inwardly against the lever G, raising it out of engagement with the head F of the tackle, in the form shown in Fig. 3. When the travel of the carrier has carried the latch H along the incline I′ to the lateral recess I″ therein, the upper end of the latch is tilted forward into the recess by the gravity of the latch and the action of the spring G′ on the lever G, which bears against the lower end of the latch H. When the lever-latch H has entered the recess I″, the carrier is locked against further travel on the track by the contact of the latch against the end walls of the recess in the stop. It will be understood that as the latch H passes an incline I′ during the travel of the carrier the grappling-lever G is disengaged from the head F, and the tackle-block D′ is permitted to drop away from the carrier-frame, and when the lever-latch H has entered the recess I″ the carrier will be locked in position on the track until the sheave-frame D′ is raised again by the draft-rope E, which, when sufficiently elevated by the draft-rope, is adapted to strike against the lower end of the lever-latch H and carry it inwardly, throwing the upper end outwardly and disengaging it from the stop I, so that the carrier is permitted to travel on the track away from the stop. The track B consists of two round metal rods, or, preferably, of round gas-pipe B′ B′, secured rigidly together at a distance from but parallel to each other by means of double coupling-bars K K and supporting cross-bars L L, the rods or pipes being secured therein by means of set-screws M M turning therethrough against them. The cross-bars are each provided with a supporting-hook R, which passes through a central aperture therefor in the bar, and is secured thereto by means of a nut turning thereon

below the bar. These hooks are adapted to engage with the carrier-supporting structure. The stop I is conveniently made integral with cross-bars L′ L′, which are secured to the gas-pipe by means of set-screws M M. One or more of the cross-bars L is provided with a downwardly-extending hook T, adapted to support thereon sheave-frames D″ at such points on the track as may be desired.

The track and the devices attached directly to it are believed to be novel, and we reserve the right to secure them by an application to be filed before this patent is issued.

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

1. In a hay-carrier, the combination, with the frame of the carrier, of a lever G, pivoted at one end in the lower part of the carrier, so as to swing transversely thereof, and having a median projection adapted to engage the head of the tackle, and a lever-latch H, pivoted centrally in the side of the carrier and swinging transversely thereof, the lower end of the lever-latch being adapted to bear movably against the upper end of the lever G, and the upper end of the latch being adapted to impinge and bear laterally against a fixed stop on the track, substantially as described.

2. In a hay-carrier, the combination, with the frame, of a grappling-lever G, so pivoted in the frame as to swing transversely thereof, a spring G′, adapted to hold the lever G yieldingly up to its work, and a lever-latch H, pivoted in the frame and bearing at one end against the grappling-lever G and at the other end adapted to engage a stop on the track, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:
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