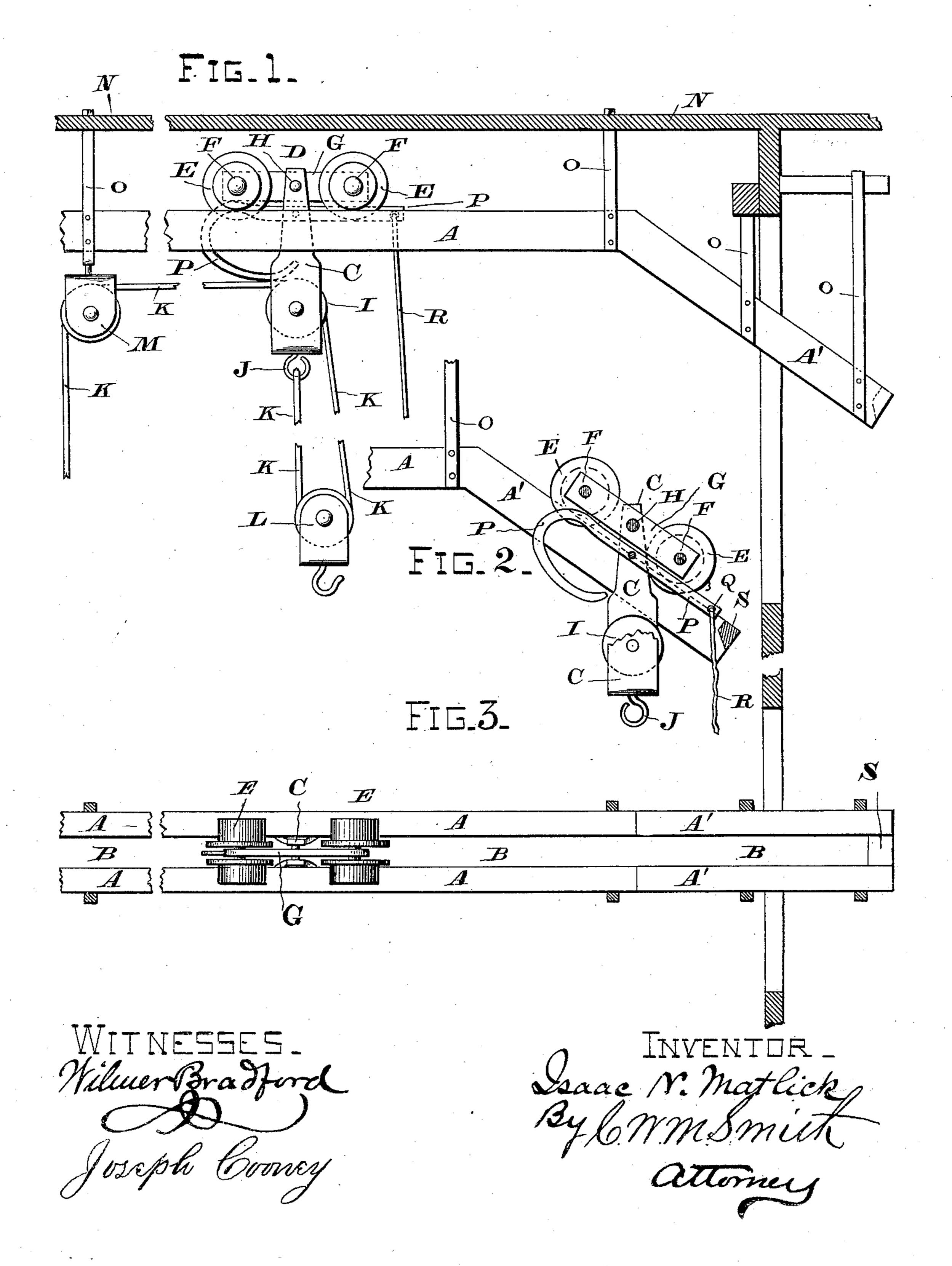
I. N. MATLICK.

HAY CARRIER AND TRACK FRAME.

No. 310,951.

Patented Jan. 20, 1885.



United States Patent Office.

ISAAC N. MATLICK, OF SAN JOSÉ, CALIFORNIA, ASSIGNOR OF ONE-HALF TO JOHN N. PRATHER, OF SAME PLACE.

HAY-CARRIER AND TRACK-FRAME.

SPECIFICATION forming part of Letters Patent No. 310,951, dated January 20, 1885.

Application fi'ed June 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, Isaac N. Matlick, a citizen of the United States, and residing at San José, in the county of Santa Clara and 5 State of California, have invented new and useful Improvements in Hay-Carriers and Track-Frames Combined, of which the following is

a specification.

My invention relates to certain improveto ments in hay-carriers and track-frames combined; and the object of my invention is, first, to provide a means whereby bales, boxes, casks, &c., of merchandise may be readily lifted or raised from the ground through the ordinary 15 windows, doors, or other openings usually left in the walls of barns and warehouses and carried in a continuous manner along the trackframe to any part of the store-house; second, to provide an improved form of trackway for 20 hay-carriers, whereby the track-frame is continued out past and overhangs the doorway or window and forms a substitute for the ordinary horizontal hoist-beam; third, to provide an improved hay-carrier provided with a fric-25 tion-brake automatically operated by the degree of inclination given to the hanger or hoistpulley frame. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents, in side elevation, a view of my improved hay-carrier and track-frame. Fig. 2 is a sectional side elevation showing the carrier upon the inclined portion of the track.

Fig. 3 is a plan or top view.

Similar letters of reference are used to indicate like parts throughout the several figures.

A A' represent the carrier-frame, which is composed of two scantlings of the desired length, secured together at their ends in any 40 suitable manner, with an intervening space, B, in which the hanger C of the carrier D travels when the device is operated to carry the weight.

The carrier consists of two sets of inner flanged wheels, E E, journaled upon axles F F, 45 placed a short distance apart and connected by a truck-bar, G, to the center of which is pivoted the hanger C by a bolt, H. The lower end of the hanger is provided with a pulley, I, and hook or eye J, for the attachment of the

hoisting-rope K. This hoisting-rope passes 50 from the eye upon the carrier, and is rove through the hoisting-block L, the hook of which is passed through the sling-line around the bundle or package. The rope is then passed upward and back over the pulley I, 55 contained within the hanger-frame, and is led backward to the rear end of the track-frame, where it passes over a snatch-block or pulley. M, secured to any suitable fixed support, and the bight falls down to within convenient 60 reach of the operator. The wheels E of the carrier travel on the track or rails of the carrier-frame, which is hung from the deck, beams, girders, or roof N of the store-house by means of strap-irons O, and securely bolted, 65.

as shown in Fig. 1.

The carrier is provided with a brake, P, which consists of a bar of iron curved, as shown, and pivoted to the upper portion of the hanger C immediately beneath the truck-70 bar G, as shown in Fig. 2. The inner end of this brake-bar projects backward beyond the truck-bar, and is then curved or bent downward, so as to rest upon the hoisting-rope and bind it against the pulley-block I. The for- 75 ward end of the brake bar is provided with a hole, Q, to which is attached a rope, R. The trackway is so hung that that portion of it designated by the letter A is perfectly level, while the portion A' is inclined at an angle of 80 about thirty-five degrees, and is made continuous with the level portion. This inclined portion projects downward and outward out through the upper part of the window or doorway, only sufficient space being left between 85 the track and the top of the opening to admit of the passage of the wheels of the carrier.

The operation of my improved carrier and track will be as follows, to wit: Let it be supposed that the carrier is on the trackway and oc at the farther end of the store-room. The operator now catches hold of the brake-rope R and draws the carrier forward along the level track until it reaches the inclined portion thereof, and then pulls it down until further 95 progress is arrested by the chock-block S, when the hoisting-block is made fast to the bale or package, and by pulling upon the hoistingrope K the bale is raised up vertically until further progress in that direction is stopped by the hoisting-block striking against the lower part of the hanger C. By continuing 5 the pull upon the hoisting-rope the carrier is now drawn up the inclined track A' and onto the level portion A thereof and along such portion until the bale is immediately over the place of deposit.

It should here be observed that while the carrier is upon the inclined track that the hanger will extend downward at an angle to the truck-bar G, as shown in Fig. 2, and the hoisting-rope and hanger-block will be moved out of contact with the brake bar or shoe; but when the carrier has ascended up onto the level portion of the track the weight of the bale will cause the truck-bar and hanger to assume a position at right angles to each other, and the overbalancing-weight of the curved end of the brake and also the pressure of the rear end of the truck-bar upon the top rear end of the brake-bar will cause the brake-shoes to be pressed with sufficient force upon the rope to

jam it against the hanger-block and prevent 25 the bale from descending, should the strain upon the hoisting-rope be slackened. When the bale is over the place of deposit, the cord R is pulled upon, which will raise the brake from off the hoisting-rope and permit the cargo 30 to be lowered, when the whole operation may be repeated.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a hay-carrier, the combination, with the horizontal tracks A A and inclined tracks A' A', having chock-block S, of the wheeled truck or carrier D, pivoted hanger C, pulleys I M, hoisting-block L, brakes P, and ropes K R, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

ISAAC N. MATLICK. [L. s.]

Witnesses:

WILMER BRADFORD, CHAS. E. KELLY.