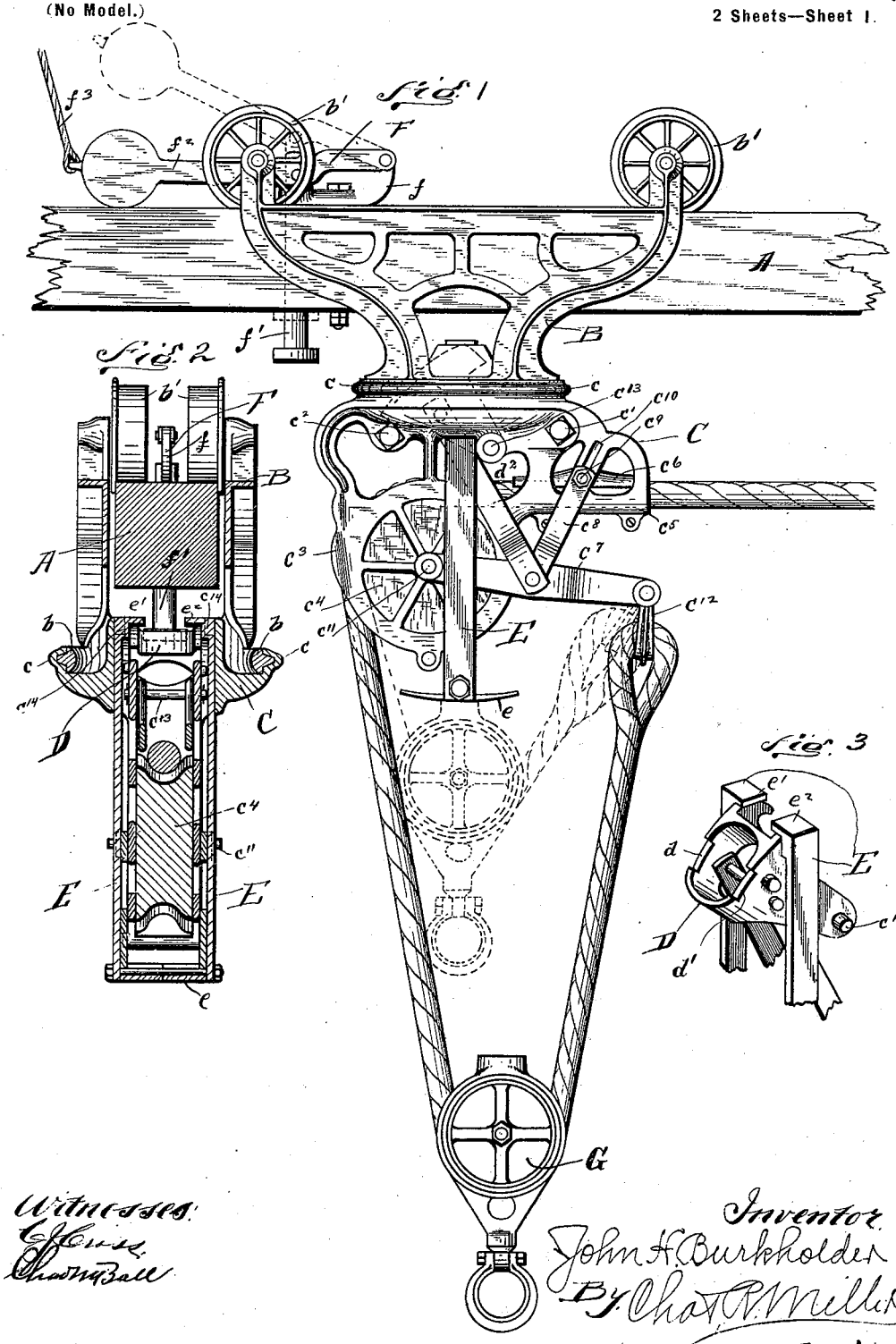
No. 646,261. Patented Mar. 27, 1900.

J. H. BURKHOLDER.

HAY CARRIER.

(Application filed Nov. 1, 1899.)

(No Model.) 2 Sheets—Sheet 1.



Witnesses:
E. F. Wise.
Thos. Ball.

Inventor.
John H. Burkholder
By Chas. R. Mills
Atty.

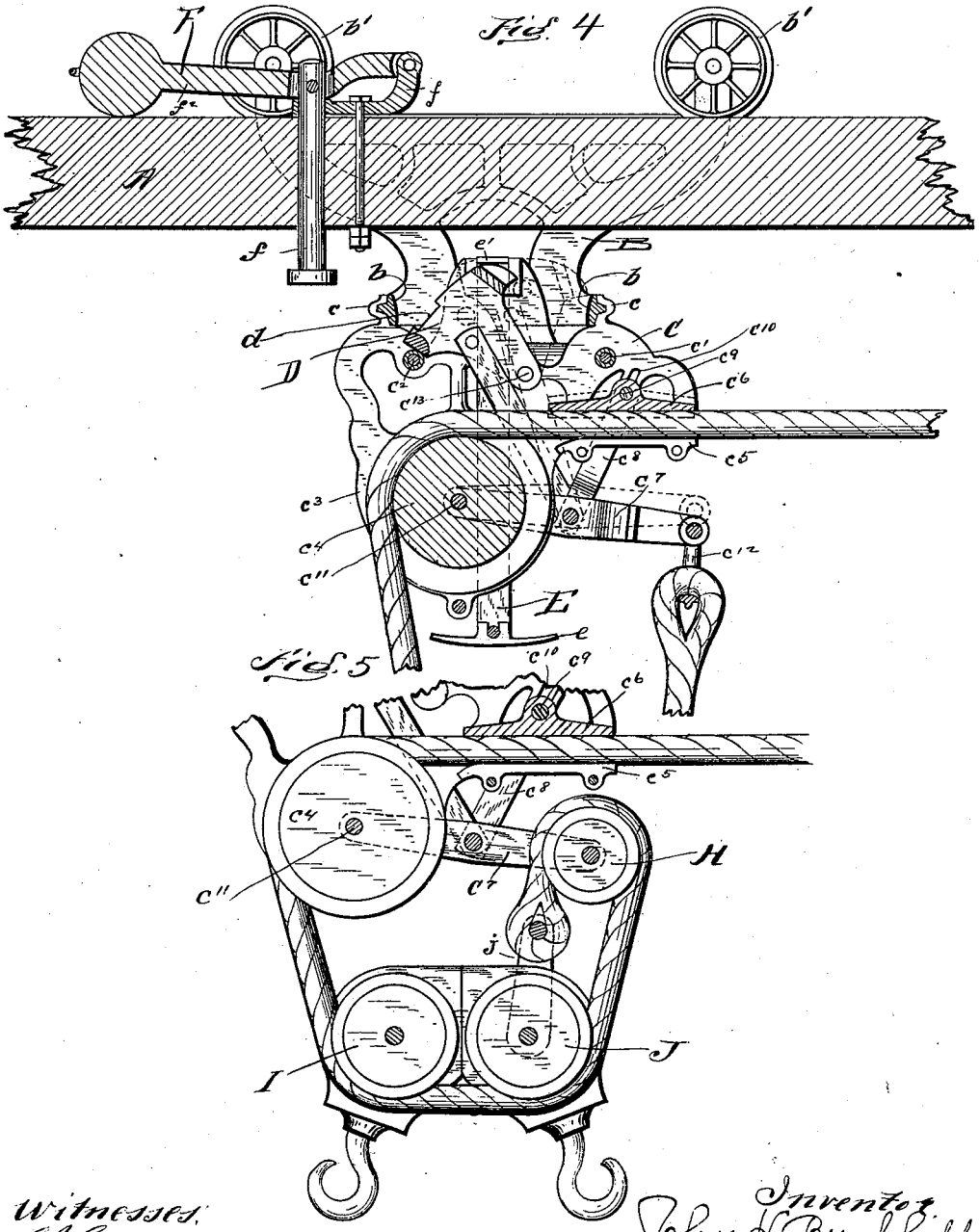
No. 646,261. Patented Mar. 27, 1900.

J. H. BURKHOLDER.

HAY CARRIER.

(Application filed Nov. 1, 1899.)

(No Model.) 2 Sheets—Sheet 2.



Witnesses:
C. F. Brown.
Thurman Ball

Inventor
John H. Burkholder
By Chas. R. Mills
Atty.

UNITED STATES PATENT OFFICE.

JOHN H. BURKHOLDER, OF ASHLAND, OHIO, ASSIGNOR TO THE NEY MANUFACTURING COMPANY, OF CANTON, OHIO.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 646,261, dated March 27, 1900.

Application filed November 1, 1899. Serial No. 735,460. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BURKHOLDER, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented new and useful Improvements in Hay-Carriers, of which the following is a specification.

My invention relates to improvements in hay-carriers, and has for its object the providing of means by which the carrier sustains a fixed relation to the track while the load is being elevated and may then be disengaged therefrom and the brake-shoe dropped upon the hoisting-rope to hold the rope and load against reverse movement while it is being moved on the track to the place of deposit.

In the accompanying drawings similar letters of reference refer to similar parts.

Figure 1 is a side view of a hay-carrier, illustrating my invention. Fig. 2 is a longitudinal section showing the carrier locked to the stop-block. Fig. 3 is a perspective view of the swinging yoke or latch. Fig. 4 is a vertical section showing the relation of the parts when the brake-shoe is engaged with the rope. Fig. 5 is a side view of the lower portion of the frame and pulleys when the double blocks are employed for the use of the hay-sling.

A represents the track.

B represents the upper part of the carrier-frame, the lower portions being circular in form and having provided thereon a rib *b*, which forms the inner member of the swivel. On the upper portion of the frame there are mounted the carrier-wheels *b'*, which may be of any desired form adapted to the track to be used.

C is the lower portion of the frame, cast in two parts, the upper portion thereof being semicircular in form and provided with the swivel-ring *c*, which engages the rib *b* upon the upper portion of the frame B, the two parts of the frame C being bolted together by bolts c' and c^2. The lower portion of the frame C has cast integral therewith the sheave c^3, which forms a frame or casing for the large pulley c^4. The lateral projecting frame c^5 is formed upon one side of the lower portion of the frame C and through which the hoisting-rope passes and forms the lower portion of the brake or grip, by means of which the load is locked in its elevated position. Mounted in this lateral frame c^5 there is provided the brake-shoe c^6, which is connected with the locking-lever c^7 by means of the links c^8, which are bolted to both sides of the brake-shoe by the bolt c^9, which travels up and down in the slot c^{10} in the said lateral frame c^5. The locking-lever c^7 is bifurcated, and the forked ends thereof are journaled upon either side of the shaft c^{11}, upon which is mounted the pulley-wheel c^4. To the outer end of the locking-lever c^7 there is journaled the clevis c^{12}, to which is attached the lifting-rope $C^\times$. The swinging yoke or latch D is journaled in the upper part of the frame C on the shaft c^{13} and is provided with notches *d* and *d'* on its upper end to receive the prongs e^3 e^2 of the trip E. It also is connected with the locking-lever c^7 by means of links d^2, journaled upon both sides thereof and to the locking-lever c^7. The trip E is substantially U-shaped and is provided upon its lower end with a buffer *e* and has upon its upper end the inwardly-projecting prongs e' and e^2 and has a vertically-sliding engagement with the upper portion of the frame C between projecting lugs c^{14}, cast on the inside of the frame C and on both sides thereof.

For the purpose of locking the carrier to the track while loading and for the additional purpose of tripping the locking mechanism heretofore described I provide a weighted stop-block F, mounted upon the track, which consists of a frame *f*, securely bolted to the track, and through one end thereof and the track there is passed the circular-headed rod *f'*, which has a pivotal connection with the weighted lever f^2, pivoted to the rear end of the frame *f*. To the outer end of the weighted lever f^2 there is attached an operating-rope f^3, by means of which the lever may be raised, carrying with it the headed rod *f'*. In operation these stop-blocks may be mounted upon the track at any desired position. The carrier is then placed upon the track and the lifting-rope securely fastened at one end to the clevis or link c^{12}, journaled upon the locking-lever c^7. It is then passed through the pulley G and thence up and through the frame and under the brake-shoe c^6. When it is desired to lock the carrier to the track at the point of loading, one of the locks or stop-

blocks F is mounted upon the track at that point. When the carrier passes thereunder, the depending head f^4 of the headed rod f' thereof engages with the swinging yoke or latch D, entering the opening d^2 therein, and causes the same to swing over upon its shaft, carrying with it the links, by means of which the locking-lever c^7 is raised, thus elevating the brake-shoe c^6 and disengaging it from the lifting-rope. At the same time the prongs e' and e^2 upon the upper portion of the trip E drop into the notches d and d' in the swinging yoke or latch D, thus locking the swinging yoke or latch D in its upright position and preventing the movement of the carrier upon the track. The rope is then pulled down until the hay-fork carried upon the pulley G is engaged with the load, when the load may be lifted to any desired height, and the rope f^3 is then operated so as to raise the lever f^2, carrying with it the headed rod f', the head of which engages with the prongs e' and e^2 upon the upper portion of the trip E, raising the same out of the notches d and d', and the trip then becoming disengaged from the swinging yoke or latch the same again turns upon its journal, throwing down the links which connect it with the locking-lever c^7, which causes the brake-shoe to thoroughly grip the lifting-rope and to hold the same against movement. In case it is desired to use a triple draft-sling I disengage the clevis c^{12} from the locking-lever c^7 and put in place thereof the pulley H. I then provide in place of the pulley G two pulleys I and J, having hooks upon their lower ends for engagement with the hay-sling. To the pulley J there is attached the clevis j, to which the end of the lifting-rope is securely attached after having passed through the pulleys I and J and over the pulley H.

It will be observed that I have provided a device in which all of the operative parts employed in the raising and lowering of the load are contained within and mounted upon the lower swiveling member of the carrier-frame and that when the stop-block is employed it can become operative or inoperative at the will of the operator.

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

1. A carrier having an upper and a lower frame swiveled together, the lower frame carrying a vertically-movable brake-shoe adapted to grip the draft-rope, a swinging latch journaled in the lower frame, and having a linked connection with a locking-lever journaled in said frame, and means for engaging said locking-lever with the lifting-rope, and a linked connection for said locking-lever with the brake-shoe, substantially as described and for the purpose set forth.

2. A carrier having an upper and a lower frame swiveled together, the lower frame carrying a vertically-movable brake-shoe adapted to grip the draft-rope, a swinging latch journaled in the lower frame, and having a linked connection with a locking-lever journaled in said frame, and means for engaging said locking-lever with the lifting-rope, a linked connection for said locking-lever with the brake-shoe, and a trip having a vertically-sliding engagement with the lower frame, and adapted to engage the swinging latch, substantially as described and for the purpose set forth.

3. A carrier having an upper and a lower frame swiveled together, the lower part thereof provided with a movable brake-shoe, a swinging latch journaled in said frame, means for connecting the same with the brake-shoe, and a vertically-sliding trip adapted to engage the swinging latch, substantially as described and for the purpose set forth.

4. A carrier having an upper and a lower frame swiveled together, the lower frame carrying a vertically-movable brake-shoe adapted to grip the draft-rope, a swinging latch journaled in the lower frame, and having a linked connection with a locking-lever journaled in said frame, a triple pulley mounted thereon, and a linked connection between the brake-shoe and the locking-lever, substantially as described and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN H. BURKHOLDER.

Witnesses:
CHAS. R. MILLER,
CHAS. M. BALL.