(No Model.)

2 Sheets—Sheet 1.

P. A. MYERS.

HAY CARRIER.

No. 344,325. Patented June 22, 1886.

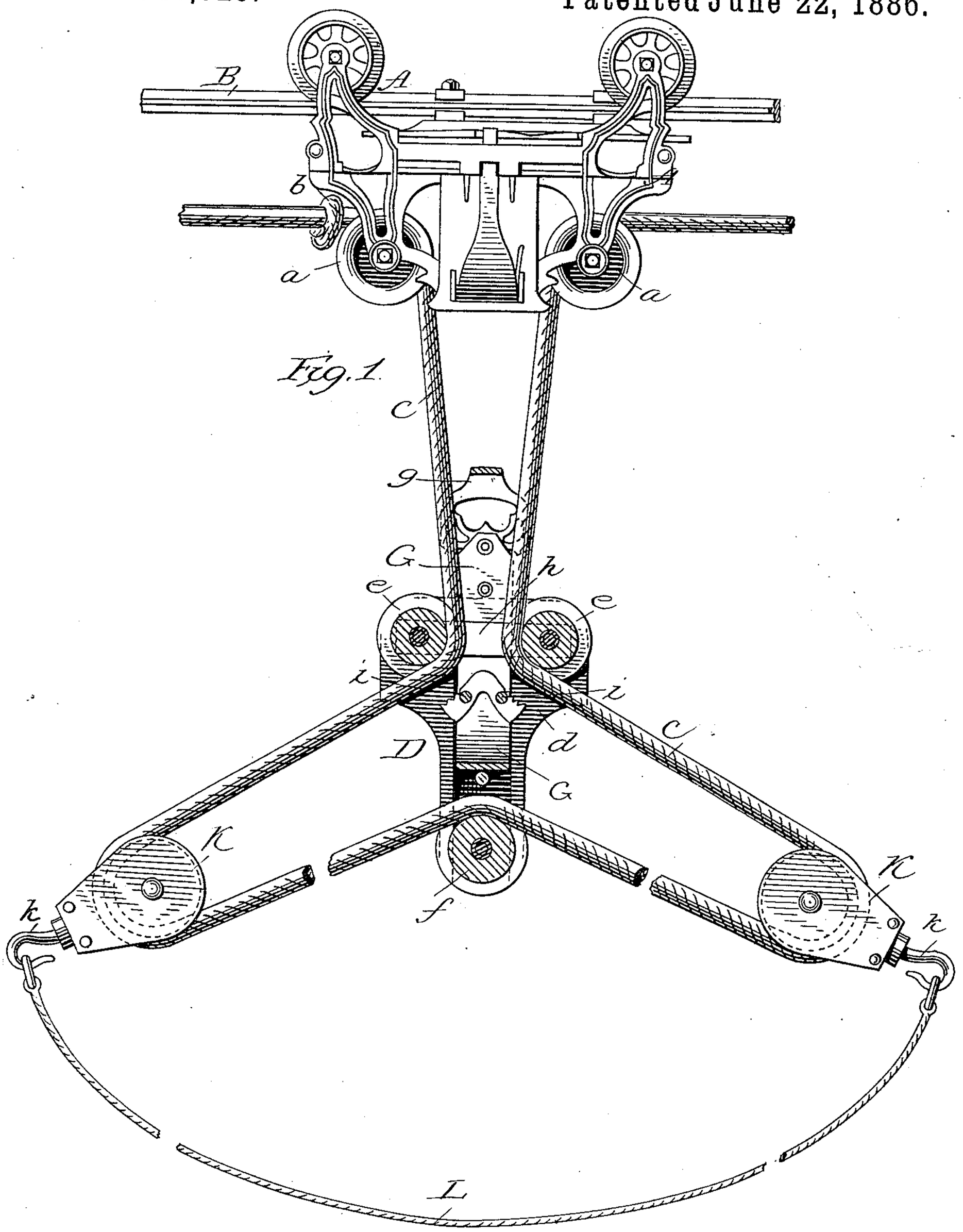

Fig. 1.

Attest:

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

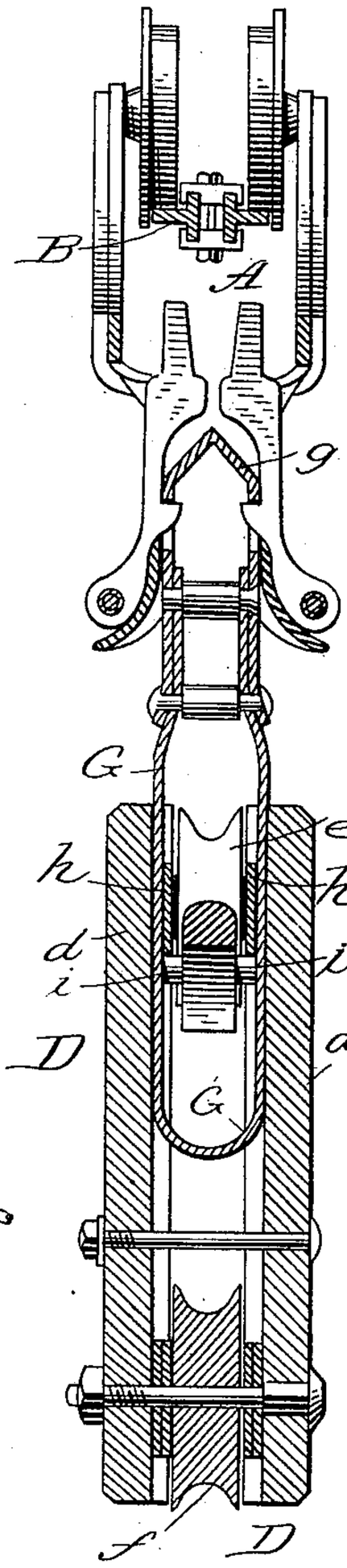
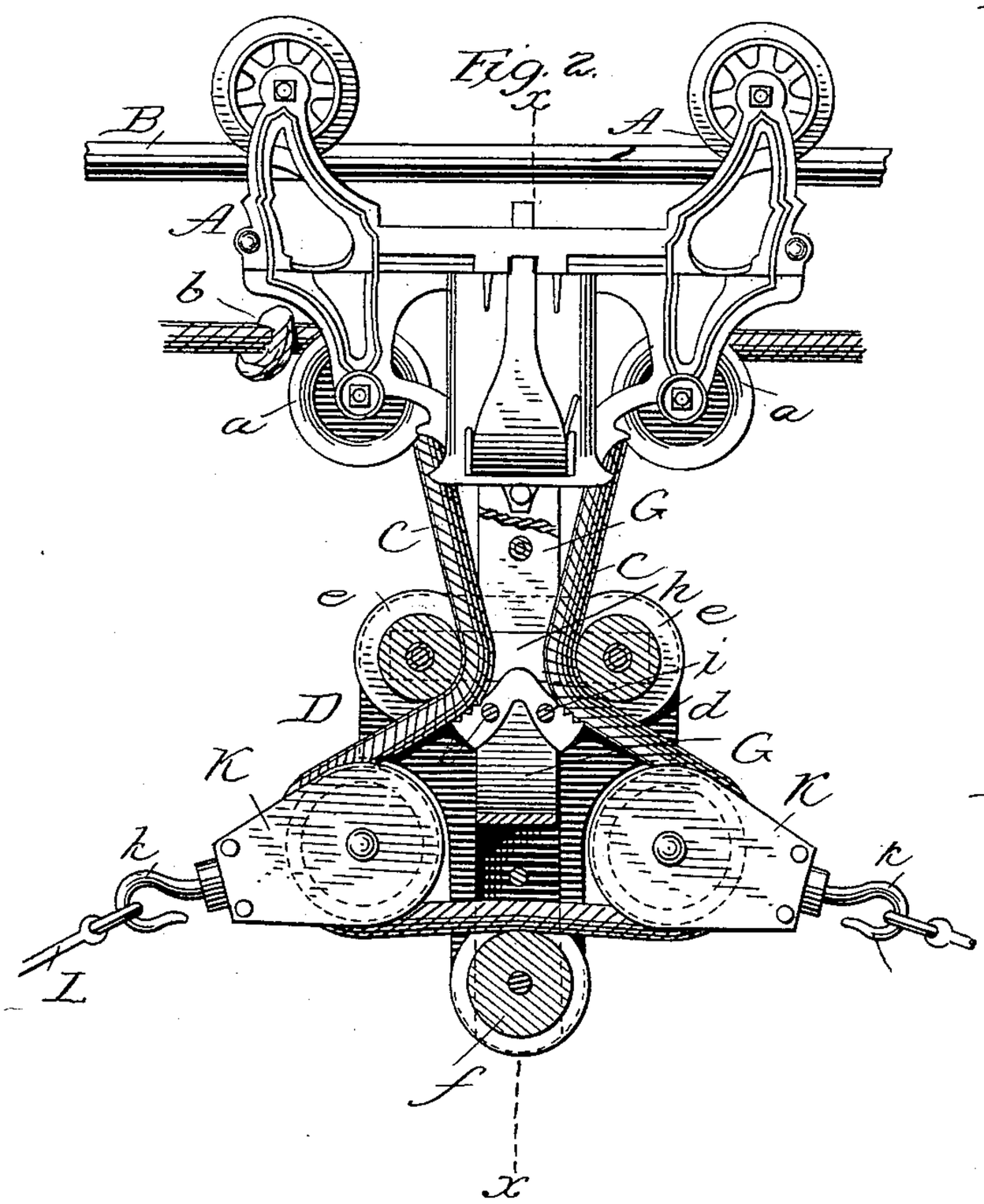


Fig. 2.



Attest:
Miller Braidson
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UNITED STATES PATENT OFFICE.

PHILIP A. MYERS, OF ASHLAND, OHIO, ASSIGNOR OF ONE HALF TO F. E. MYERS, OF SAME PLACE.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 344,325, dated June 22, 1886.

Application filed February 8, 1886. Serial No. 191,163. (No model.)

To all whom it may concern:

Be it known that I, PHILIP A. MYERS, of Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Improvement in Hay-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to hay-carriers.

It consists of an improved attachment to be used in connection with a sling, whereby the sling is adapted to an ordinary hay-carrier. Heretofore these slings have been used in connection with carriers especially adapted to the slings, and could not be used with ordinary hay-carriers.

In the accompanying drawings, I have shown the device adapted to be used in connection with the carrier shown in Letters Patent granted to P. A. Meyers on the 4th day of November, 1884; but it is adapted to be used in connection with any carrier of its class.

In the drawings, Figure 1 represents the carrier with its attachment in side elevation. In this figure the attachment is shown as brought down to the load with the movable blocks attached to the sling, ready to compress the bundle. Fig. 2 represents the attachment in its hoisted position. Fig. 3 is a transverse section on line *x x* of Fig. 2.

The carrier A is the same as that shown in the aforesaid Letters Patent. It runs upon the track B. The hoisting-rope C runs from the sheaves *a a* in the carrier, which is reversed by drawing the rope in one direction or the other, so that the knot is brought up to bear against the sheave and the carrier-frame at one end or the other, as shown at *b*.

The frame D is composed of two side pieces of wood or metal, *d*, formed broader at the upper part and narrow below, with curved recesses on the sides to receive the movable blocks. The two side pieces of the frame form the shell of a block, and in the space between the two sides are three sheaves. The two upper sheaves, *e e*, are placed side by side on suitable journals in the frame. The other sheave, *f*, is in the lower extension of the frame in vertical line below the space between the two upper sheaves.

In place of the ordinary strap-hook, by which an ordinary block is supported, I have provided an interior strap, G, to the upper part of which is attached the nose *g*, fitted to enter the recess in the carrier and engage therewith. The nose shown is that belonging to the carrier described in the aforesaid patent; but it will be varied according to the kind of carrier used. The strap to which the nose is attached is countersunk into the sides of the frame, and has limited vertical movement in those sides. The sides represented are made with wood, and are provided with transverse strips of thin metal, *h h*, set into the wood over the sides of the strap. The pintles of the sheaves *e e* pass through the ends of these strips, which are thereby held in place and serve also as bearings for the pintles. Between the sides of the strap is placed a grip held by small bolts *i i*, which project through the sides of the strap into vertical grooves in the sides of the frame. The grooves are adapted to the amount of vertical movement required for the strap, this being sufficient to operate the grip, as hereinafter explained. The upper surfaces of the grip are curved on each side to correspond with the periphery of the sheaves *e e*, and are roughened to grip the rope. The rope is looped over the sheaves, as shown in Figs. 1 and 2. Its fold passes on each side between the sheave *e* and the grooved face of the grip. The lower part of the loop passes above the sheave *f*, and between it and the lower end of the strap. The loop on each side includes blocks K, provided with hooks *k*, adapted to hook into the ends of the sling L. Supposing the sling to be placed upon the wagon in the ordinary way, the blocks are drawn apart, enlarging the loop of the rope, and at the same time the frame is brought down to the load. The hooks *k k* are hooked into the ends of the loop. While the frame is in this position, the strap falls by its own weight to its low position in the frame, and the grip is away from the rope. Power being applied to the rope, the first effect is to draw the blocks together, compressing the bundle. The carrier during this operation is locked upon the track as the rope passes between the blocks K, and over the sheave *f* in the lower end of the frame. The frame is held down until the bundle is compressed. If the bundle is suited exactly to the rope, the blocks

are brought up to their bearings to the curved side of the frame. Then the bundle begins to rise. The rope passes freely over the sheaves *e*, the grip remaining in its low position in the frame. The nose is guided accurately to the mouth of the carrier, and when brought into place is caught in the jaws of the carrier, and the carrier is unlocked at the same time. The carrier being released on the track, the load is suspended from the carrier and hangs upon the strap, which brings the grip against the rope and holds it during the movement of the carrier along the track, and until the frame is released from the carrier when the latter is in proper position over the mow. As soon as the nose is released from the carrier the strap drops to its former position and the grip is released. The effect of the grip is the same whether the blocks are brought together or not. Their position will depend upon the relative size of the bundle included in the sling.

It will be apparent that the sling could be made with but one movable pulley K, the other pulley being rigidly connected to the frame. It would still have the capacity to draw together and compress the bundle, though only from one side.

It will be apparent that the operation of this attachment is the same whether the carrier be operating in one direction or the other, its symmetrical construction allowing the rope to pass equally well in either direction.

In some forms of hay-carriers the attachment may be used without the grip or the nose, the sheave *f* being capable of operation for the purpose for which it is intended independently of this device; nor do I limit myself to the particular form, as this may be varied by ordinary mechanical skill.

Instead of the sheave *f*, I may use a single transverse bolt or rivet, connecting the two sides of the frame, and serving as a bearing for the rope to pass over to hold the frame down while the rope is compressing the bundle. As there is little friction on this shaft, the bolt would serve in its place as an equivalent.

I claim as my invention—

1. An attachment for hay-carriers, consisting of a frame having a pair of upper sheaves and a lower sheave, in combination with a block or blocks adapted to a sling, and with a hoisting-rope of a hay-carrier, substantially as described.

2. In combination with a hay-carrier and its hoisting-rope, a frame having a pair of upper sheaves, a strap vertically movable in the frame, with a nose fitted to the carrier on the upper end of the strap, a grip on the strap adapted to grip the rope, and a block or blocks adapted to the sling, operating in connection with the frame, substantially as described.

3. In combination with the hay-carrier and its rope, and the frame having a pair of upper sheaves, *e e*, and a lower sheave, *f*, a block or blocks, K K, adapted to be connected to the ends of the sling and to fit against the sides of the frame, substantially as described.

4. In combination with a hay-carrier and its rope, the frame, the strip having limited vertical movement in the frame, the grip attached to the strap and having a roughened surface corresponding to the periphery of the sheaves *e e*, the block or blocks K, and the sheave *f*, substantially as described.

5. An attachment for hay-carriers, consisting of a frame having the upper guide-sheaves, and a lower sheave or bolt, in combination with block or blocks adapted to be connected with the ends of the sling and with the hoisting-rope, substantially as described.

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

PHILIP A. MYERS.

Witnesses:
P. P. LEFEVRE,
H. A. MYHRANTZ.