

(No Model.)

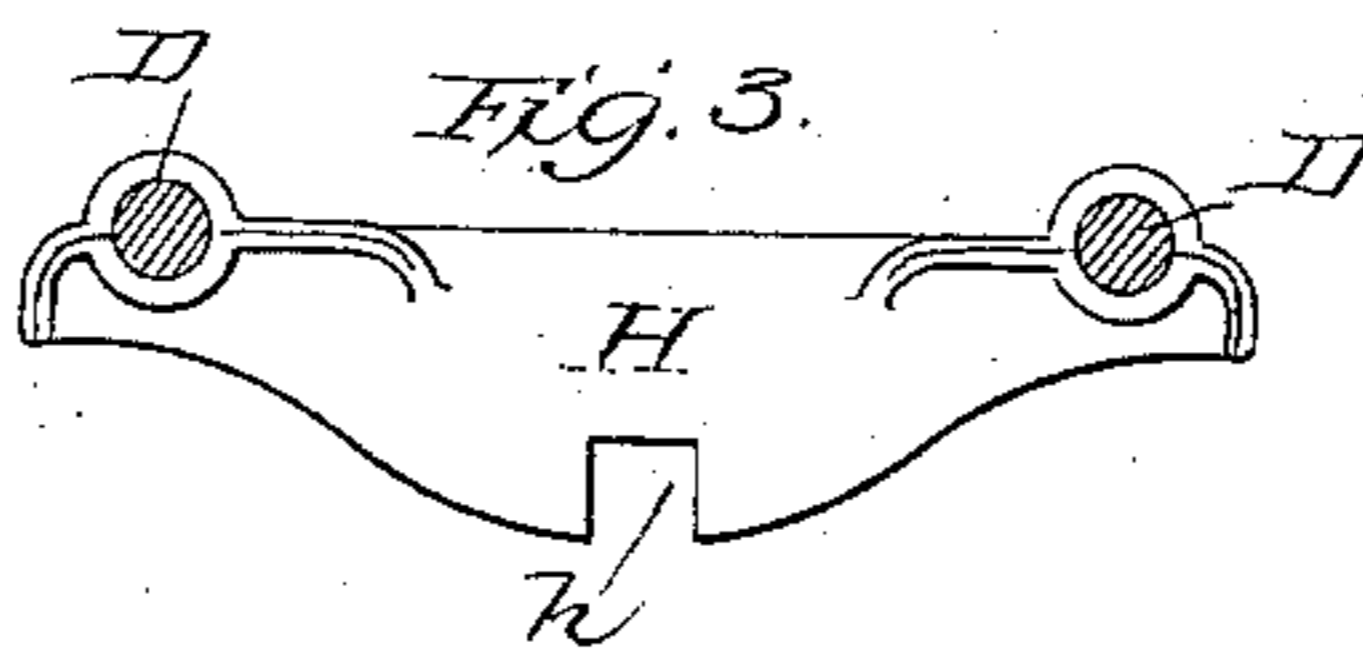
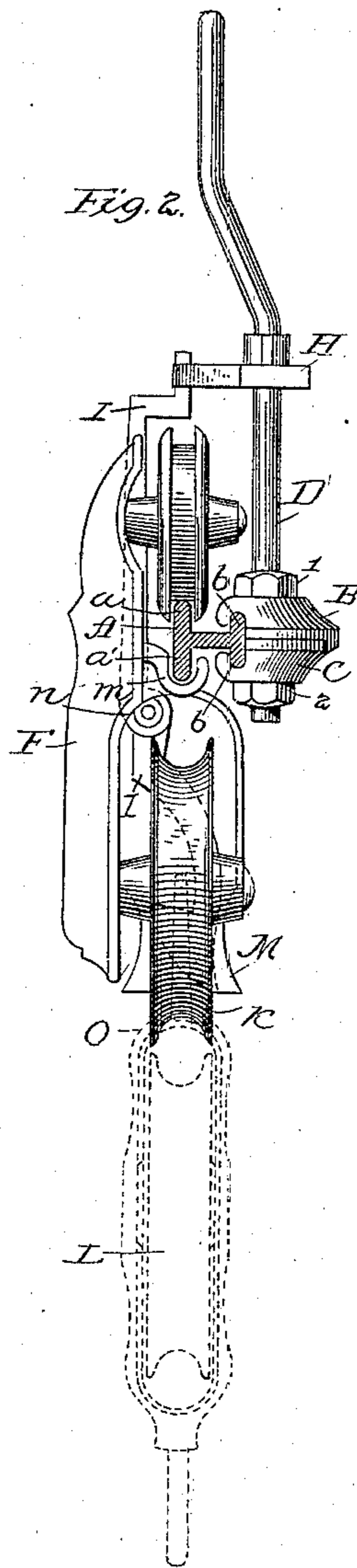
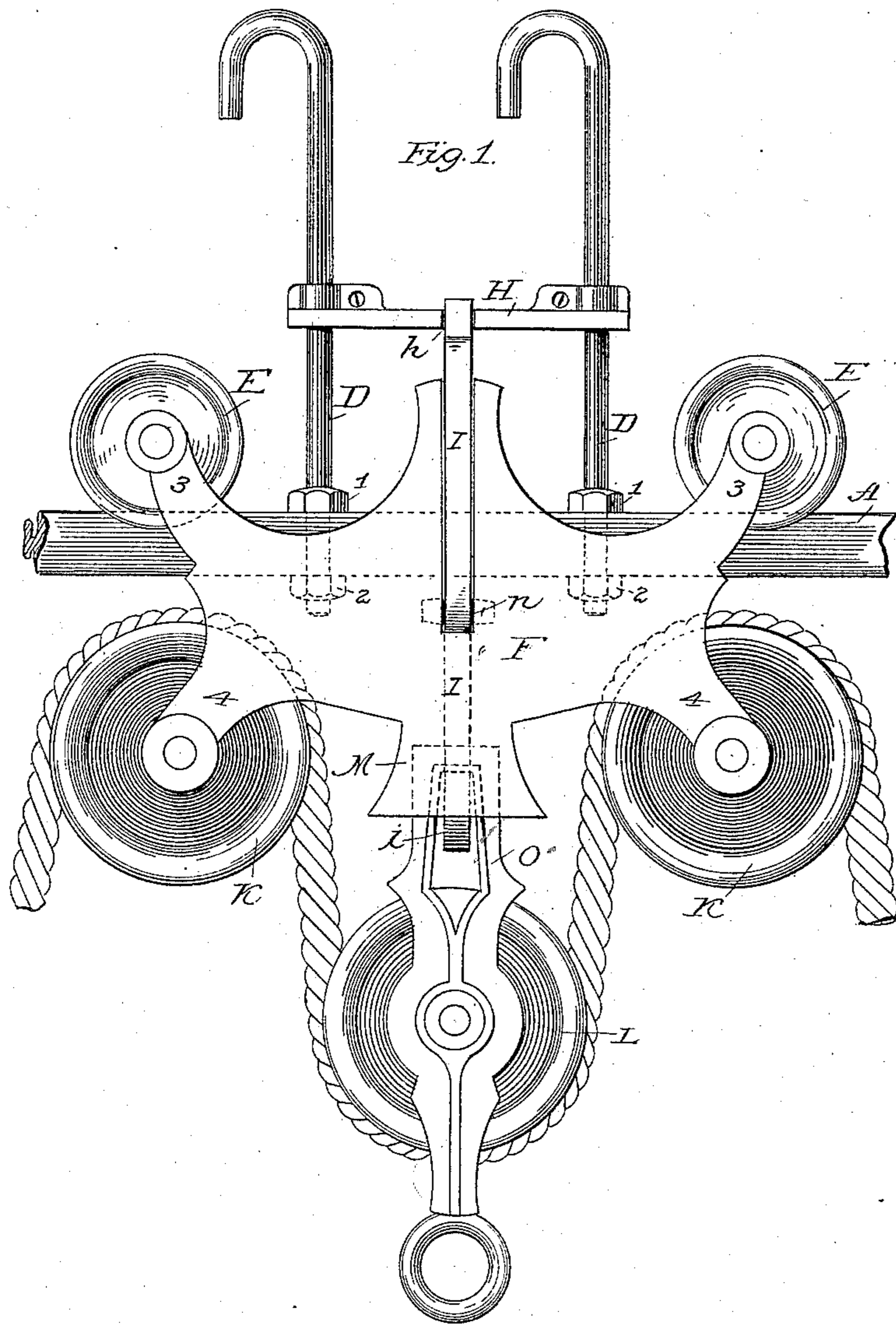
2 Sheets—Sheet 1.

P. A. MYERS.

HAY CARRIER.

No. 307,725.

Patented Nov. 4, 1884.



Attest:

J. L. Middleton

Walter Donaldson

Inventor

Philip A. Myers
by Joyce & Spear

Attys.

(No Model.)

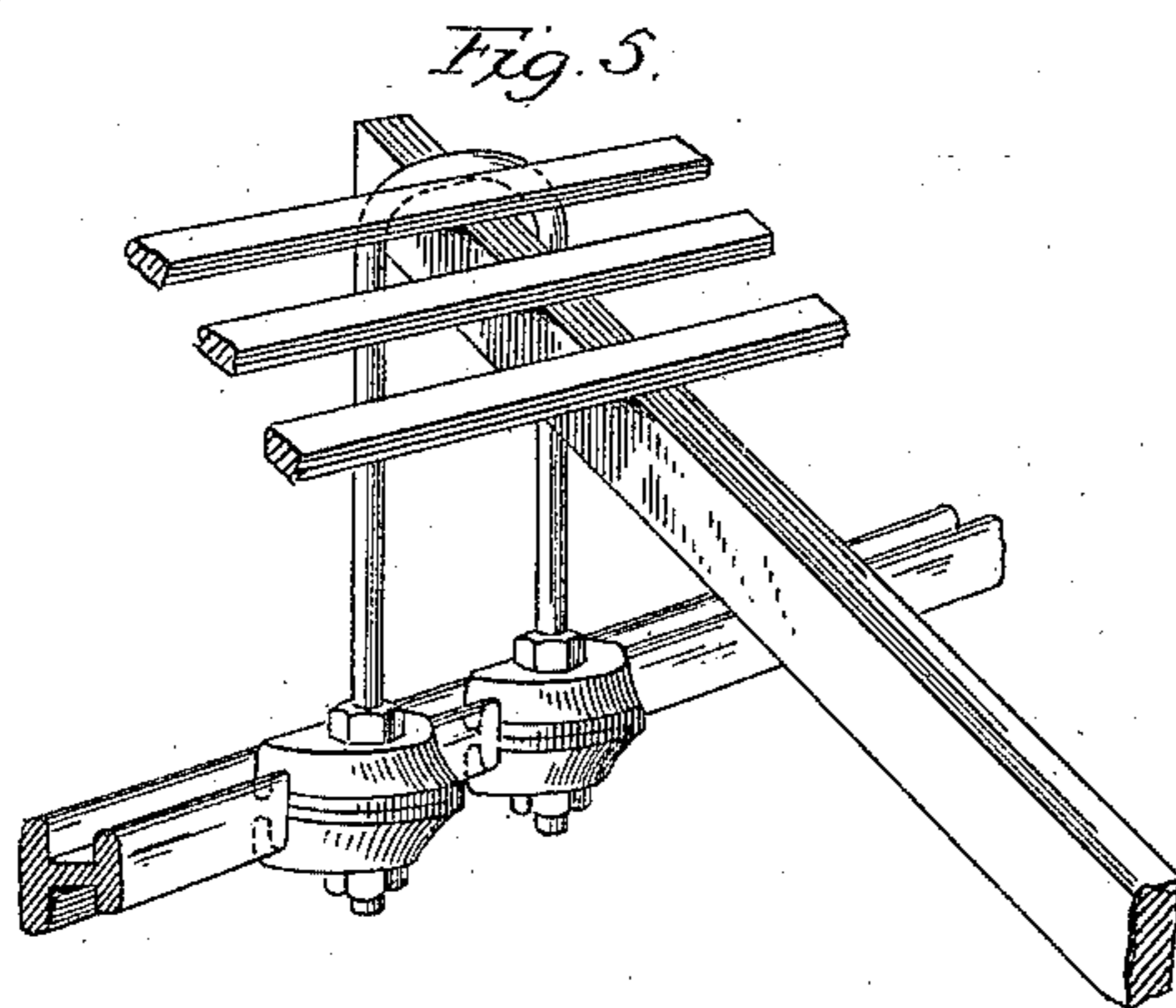
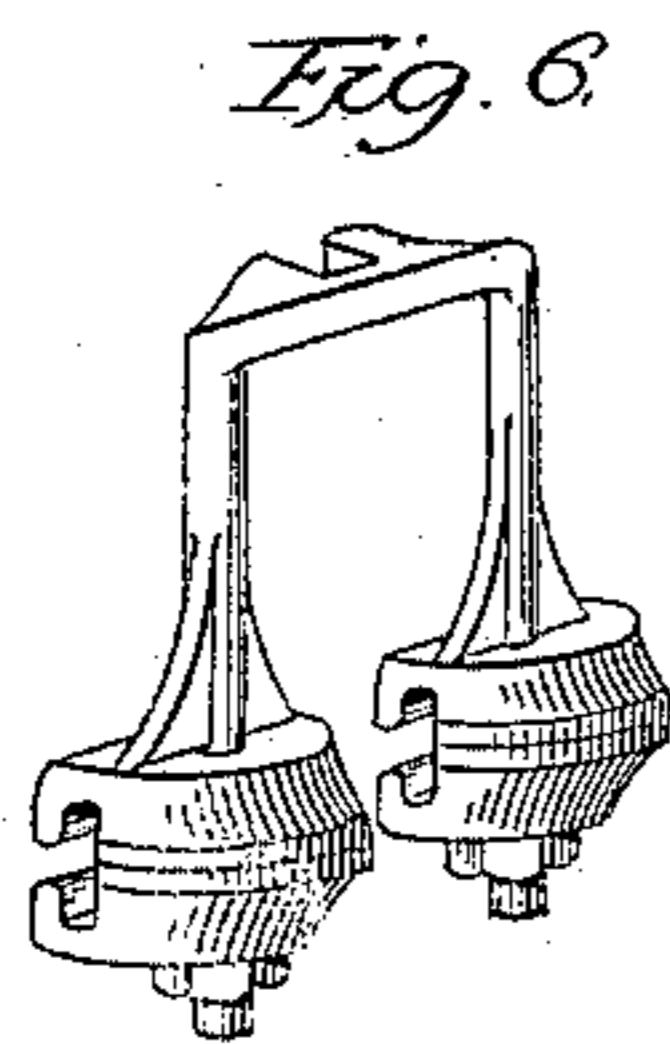
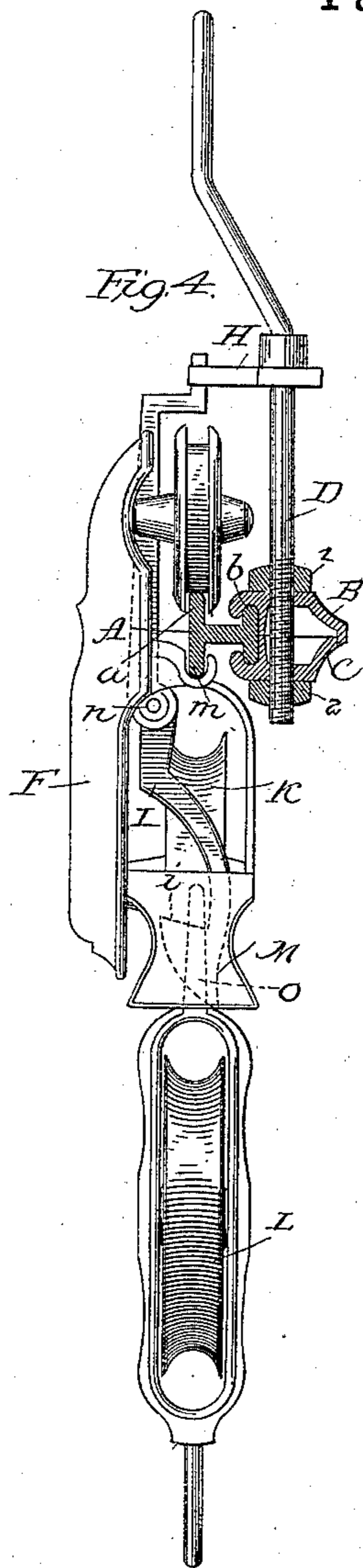
2 Sheets—Sheet 2.

P. A. MYERS.

HAY CARRIER.

No. 307,725.

Patented Nov. 4, 1884.



Attest:
F. L. Middleton
Walter Malden

Inventor
Philip A. Myers
by J. A. & S. P.
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UNITED STATES PATENT OFFICE.

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

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 307,725, dated November 4, 1884.

Application filed May 22, 1884. (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 is an improved hay-carrier and an improved track therefor. The object sought in the carrier is to simplify the stop and trip mechanism, and in respect to the track the object is to put the metal in the form in which it will best sustain the given amount of weight, the connection with the means for supporting it being such that they may be put up without the aid of a skilled workman.

In the accompanying drawings, Figure 1 is a side elevation of the carrier and track. Fig. 2 is an end elevation of Fig. 1. Fig. 3 is a plan view of the stop-piece. Fig. 4 is an end elevation of the carrier, with one of the pulleys omitted to better illustrate the invention. Figs. 5 and 6 show modification of the hanging hooks.

In these drawings the track is represented at A. It is in the form of an ordinary double T-beam, with the flanges in vertical plane. The flanges *a* form the track, and the flanges *b b* are clamped to the suspending-rods.

The clamps B C are shown clearly in Figs. 2 and 4. They are preferably of cast-iron, having jaws fitted to grasp the flanges, and with holes adapted to receive the threaded end of the suspending-rod D. They are clamped on the bolt between nuts 1 and 2, whereby they may be made to grip the flange firmly. The suspending-rods are bent, as shown clearly in Fig. 2, so as to bring the hooks directly over the bearing of the track.

The track or rail A may be made in section of any suitable length, and at the point of junction of the ends of the section the clamps are made wider, so as to form splices or couplings for the rail-section. The precise form of the clamp is not essential, it being necessary only that it should be provided with jaws to grip the flanges of the rail upon one side and leave the flange on the other side clear from the track of the carrier; that the two parts should be clamped suitably together

and be provided with connections for the suspending-rods; but, clamps at the junction of the rail, to act as supports, may be used without the suspending-rods, if desired. The body or frame of the carrier may be composed of a single casting, F, having arms 4 4, for the rope-sheaves K K. The wheels E E are pivoted on journals set firmly in the arms 3 3, projecting to one side, and the rope-sheaves K K are on similar journals in the projections 4 4 in line with and directly underneath the carrier-wheels E E. This construction gives an open-side carrier running alongside the track with a load, but conveniently placed thereon. A guard or guards, *m*, curved under the lower flange, *a'*, prevents the wheel from leaving the track.

In line with the rope-sheaves, and on the lower part of the main frame, is a socket, M, adapted to receive the loop O of the hoisting-sheave L, the loop being adapted to enter the socket when the load is raised sufficiently. The loop is caught and held by the hook *i* on the end of the trip-lever I. This trip-lever extends above the track, and is pivoted at N, so as to oscillate in the plane at right angles to the track, above the frame of the carrier; and in line parallel with the track is a stop-piece, H, formed with a notch, *h*, adapted to receive the upper end of the trip-lever. The edge of this piece inclines backward from the notch on both sides, as shown in Fig. 3, so that when the carrier is approaching the notch from either direction the upper end of the trip-lever will strike against the incline and will be thrown forward, so as to release the lower end from the loop and allow the fork to drop to receive its load. When the end of the lever reaches the notch, it falls into it, and this acts as a stop to arrest the carrier, while the hook assumes a position adapted to receive and catch the loop when it rises with the load.

I have shown the piece H as clamped to the supporting-rod D; or it may be supported upon a bracket or brackets clamped to the edge of the rail in the same manner as that shown in connection with the supporting-rods; or it may be made in the form shown in Fig. 6, in which the stop-piece is cast with legs, which pass through the clamps, and are secured thereto

by nuts underneath. The supporting-rods are formed with hooks for connecting them to the rafters at any convenient point, and it may be desirable to support the piece H upon supporting-brackets, in order to bring it at the point from directly over the load of hay.

As above stated, the carrier may approach the stop-piece from either direction. This renders the track available on both sides of the road, and, in fact, serves for two carriers; and when the load is lifted the loop striking against the incline hook releases the upper end from the notch and allows the carrier to be drawn in either direction. A symmetrical construction of the carrier with its two pulleys, K K, also allows the rope to be drawn in either direction.

The form of the suspending-rods may be modified, as shown in Fig. 5, in which the hook end is extended to form a loop or staple, both ends of the loop being connected to the clamps. This allows the loop to be passed from the rafter either at the comb of the roof or at any other point, and with either of the forms of the suspending devices.

The track may be put up without the aid of a carpenter and without nailing up any extra strips or supports.

Obviously, this form of track may be made of rolled or cast metal, and is adapted to any form of open-side carrier.

Although the form of the trip is especially adapted to the carrier in both directions, and a stop adapted to that purpose, yet the construction of the trip is simple and equally desirable for a carrier intended to move to one side only. I do not limit myself to the precise form.

I claim as my invention—

1. A track for a hay-carrier formed of double T-iron, with the flanges arranged in vertical plane, one flange being adapted to serve as the track and the other combined with clamps and suitable supporting-rods, substantially as described.

2. The combination of the rail A, the clamps B C, the supporting-rod D, and the nuts 1 and

2, the clamps being adapted to support the rails and connect the joint, substantially as described.

3. In combination with a flanged track supported upon one side, an open-side carrier having the wheels E E on one side, and the rope-sheaves K K directly underneath them, with the hook and trip mechanism located between the sheaves, substantially as described.

4. The carrier-frame with its wheels and sheaves, combined with the trip-lever I, having a hook, *i*, working in connection with the socket, loop, and upright, substantially as described.

5. In combination with the track and carrier, the trip-lever I, pivoted upon the frame of the carrier and adapted to oscillate at right angles to the track, and the piece H, having a notch, *h*, and one or more inclines, substantially as described.

6. In combination with the frame and its wheel and with the flange *a'*, the track A, and guards *m*, substantially as described.

7. A hay-carrier having sheaves K K, fork-sheave L, central socket and hook, combined with the track extending from a point over the load in both directions, and with a double-incline piece adapted to operate the trip-lever in both directions, substantially as described.

8. In a hay-carrier, a trip-lever pivoted to oscillate in a plane at right angles to a track, adapted to receive and hold the loop of the hoisting pulley, and to be moved by the said loop out of its notch, substantially as described.

9. A track for a hay-carrier having flanges *b b*, combined with clamps and suspending-rods, as described, and a flange, *a*, serving as a track for the carrier, 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:

B. S. GROSSCUP,

C. P. LEFEVRE.