

(No Model.)

T. C. McNICHOLS.

HAY CARRIER.

No. 310,700.

Patented Jan. 13, 1885.

Fig. 1

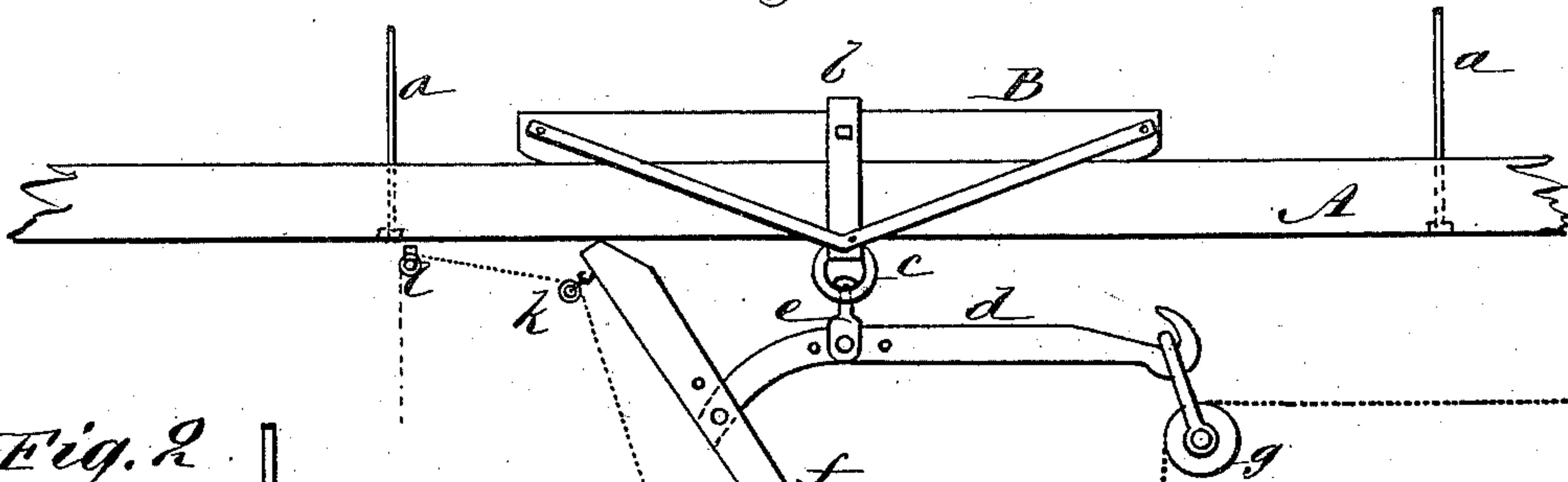


Fig. 2

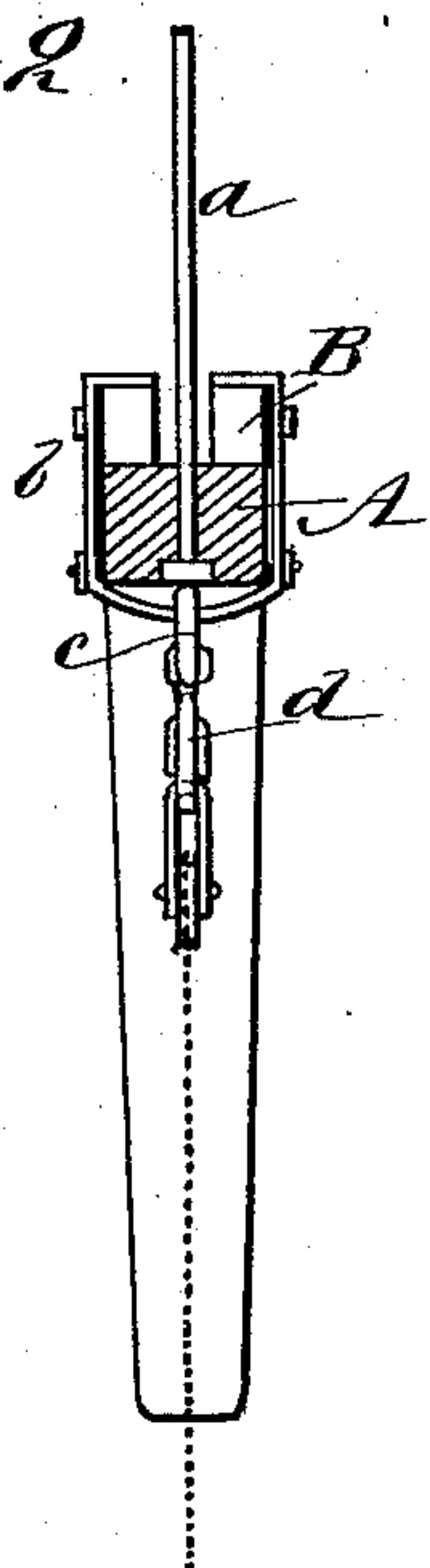
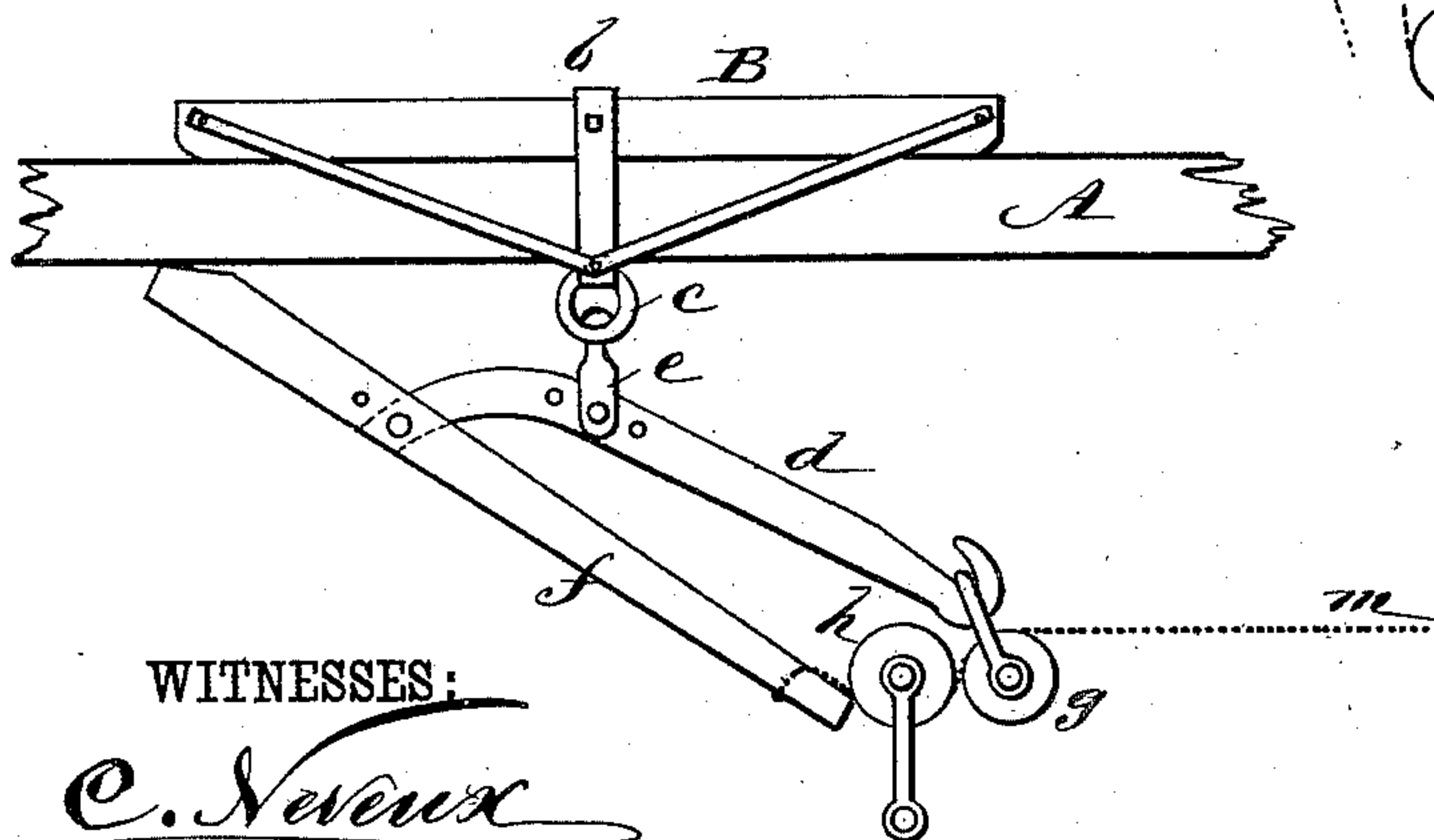


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS C. McNICHOLS, OF BELMONT, OHIO.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 310,700, dated January 13, 1885.

Application filed November 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. McNICHOLS, of Belmont, in the county of Belmont and State of Ohio, have invented a new and Improved Hay-Carrier, of which the following is a full, clear, and exact description.

The object of my invention is to provide a simple and convenient carrier that can be reversed so as to be operated in either direction from any point of the track.

To that end I provide a self-acting brake for retaining the carrier in place at any desired point while a load is being raised or discharged, and by a combination of levers the brake is made self-regulating in its action, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation representing a track with my improved carrier. Fig. 2 is a cross-section. Fig. 3 is a side view showing the brake mechanism in the position it assumes when the load is fully raised.

The track A will extend the full length of the building, or nearly so, and is suspended by rods a, which have their heads countersunk in the under side of the track, so that they offer no obstruction to the brake. A slide, B, upon the track is provided with a clevis, b, that carries at its lower end a ring, c, and to this ring a lever, d, is attached by a swivel-pin, e. The shorter arm of the lever d is curved downward, and upon it is hung a second lever, f, by a bolt passing through one of several holes which are provided for allowing adjustment of the lever. On the longer arm of the lever d is a pulley, g, over which a rope, m, passes from the point at which the carrier is to be operated, and this rope is connected to the outer end of the lever f, and also carries the pulley h, to which the fork will be hung.

In the position of the parts shown in Fig. 1 the load is partially raised, and its weight acting upon the outer ends of the levers d and f forces the inner end of lever f into contact with the under side of the track, so that

the slide is held firmly at that point upon the track, and the draft upon the rope to raise the load has no effect to release the brake nor move the carrier until the load is fully raised, when the levers assume the position shown in Fig. 3. In this position the longer arm d is drawn downward, and the lever f is drawn upward, so that the pressure of the latter upon the track by its inner end is diminished in consequence of the more nearly horizontal position of this lever, and also by the draft on the rope, which tends to raise both levers with the blocks and move the inner end of the lever f outward from the center of the carrier. In case it is desired to reverse the carrier, it is only necessary to turn the lever d upon its swivel-pin.

I prefer to extend the tripping-rope i of the fork to a sheave, k, upon the inner end of the lever f, and thence over a fixed sheave, l, and downward, so that when the carrier is drawn back by means of the tripping-rope it also acts to keep the brake out of contact. If the fork is a light one and will not descend, the sheave k may be removed and the trip-rope i passed over sheave l, and its end fastened to the hook at the inner end of brake f.

I do not limit the use of this carrier for elevating hay. It may also be used for loading or unloading heavy articles from wagons, and for other purposes of a similar nature.

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

1. In a hay-carrier, a self-acting brake-lever made operative by the weight of the load, and released by the movement of the lever with the load when the latter is fully raised, substantially as herein described.

2. In a hay-carrier, the combination of a suspended lever and a brake-lever hung thereon, provided with pulleys and a rope, substantially as described, whereby the weight is suspended from the ends of the two levers for regulating the pressure of the brake according to the position of the load, substantially as herein described.

3. In a hay-carrier, the combination of the suspended lever d, the slide B, the brake-

lever *f*, the pulleys *g h*, and the rope *m*, with the track A, substantially as described, for operation as specified.

4. In a hay-carrier, the lever *d*, hung from the slide B by the swivel *e*, so that it may be reversed, substantially as and for the purpose specified.

5. In a hay-carrier, the combination, with

the brake-lever *f* and the suspended lever *d*, of the rope *i* and pulley *k*, as and for the purpose set forth.

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Witnesses:

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JOHN J. HAESKETT.