J. B. DRAKE.

Improvement in Carriers and Hay-Forks.

No. 130,286. Patented Aug. 6, 1872.

Fig 1.

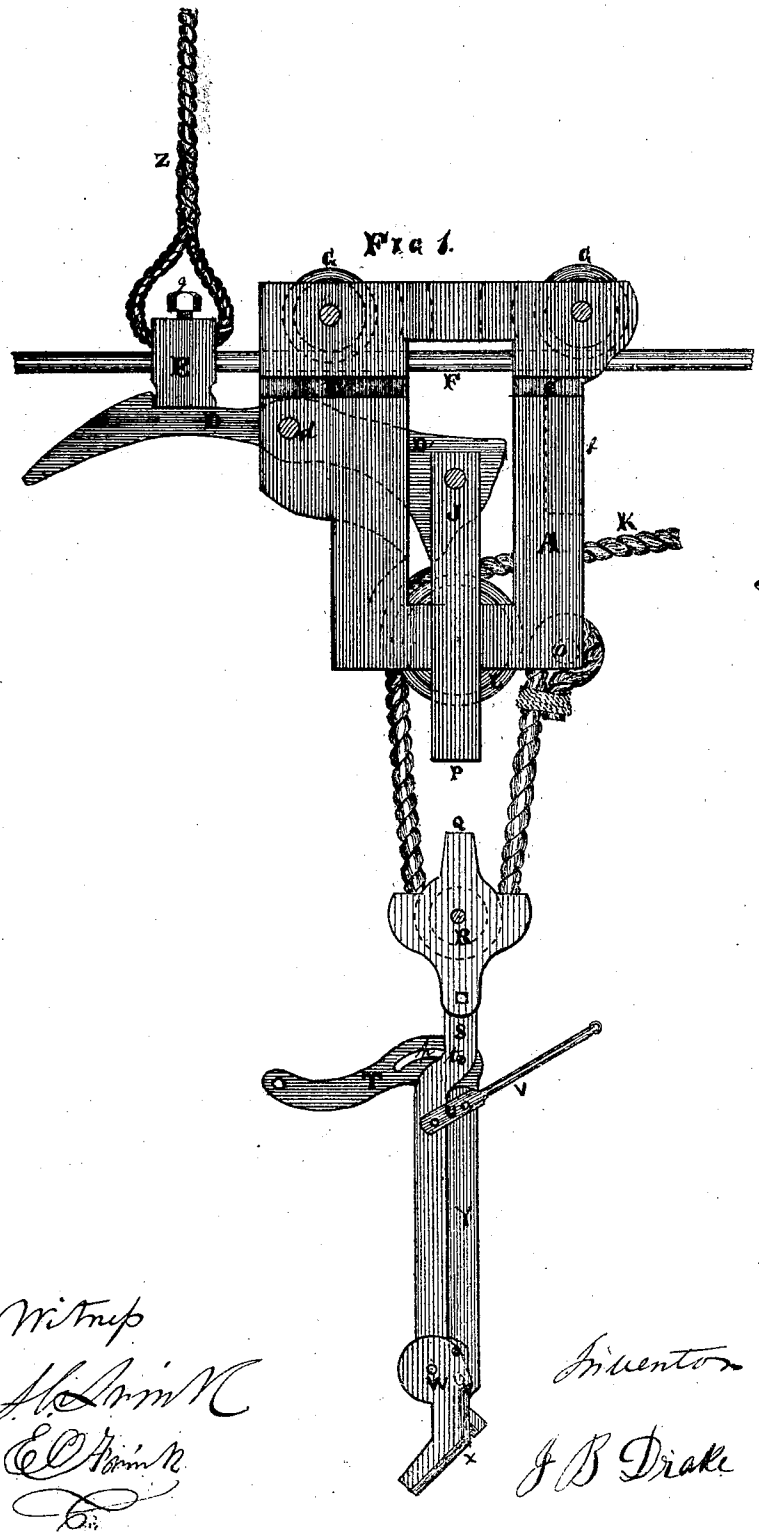
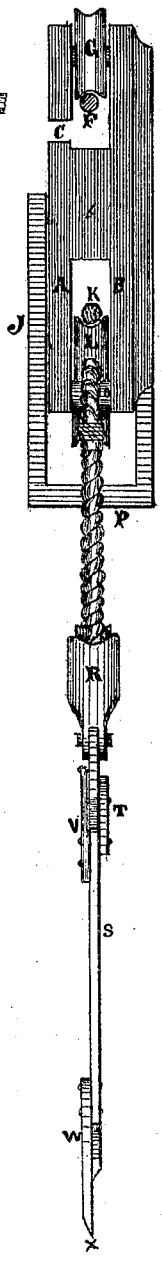


Fig 2.



Witnesses

Inventor

J B Drake

AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

JAMES B. DRAKE, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN CARRIERS AND HAY-FORKS.

Specification forming part of Letters Patent No. **130,286**, dated August 6, 1872.

Specification describing certain Improvements in Combination Hay Fork and Carrier, invented by JAMES B. DRAKE, of Indianapolis, county of Marion and State of Indiana.

My improvement consists in having the frame-work of the carrier cast in one piece, and cored out so that the sheaves, pawls, and hooks can be placed between the sides of the frame. By this arrangement the carrier can be placed on the guide-rod without loosening the rod at the ends. The sheave-block that is attached to the fork is made fast, so that it cannot get out of position.

Figure 1 represents a side elevation of a combination hay-fork and hay-carrier embodying my improvement. Fig. 2 is an edge elevation of the same.

A B is the frame of the carrier, and is made of cast-iron, cored out on the inside so as to form the proper places for the sheaves and catch-pawl. C C are openings through the side of the frame A, so arranged as to let the carrier-rod F enter. D D is a hook-pawl, pivoted at *d* between the frames A B. The end of the hook D′ is heavier than the other, and is used as a pawl to hold the rope K from running back over the sheave until it is lifted. J is a trip, that is pivoted to the heavy end D′ of the hook D, and hangs down below the frame A B far enough to allow the top of the sheave-pulley R to lift it and the pawl D′ when required. E is a sliding stop, that is attached to the rod F and secured in its proper place by a set-screw, *g*. This stop has a rope or rod, Z, attached to it, and made fast at the roof of the loft or stable, and by means of one or more of these stops the rod F is supported. G G are sheaves placed between the frames A B, and set far enough up so that the rod F, after entering the openings C C, cannot slip out, as shown in Fig. 2. K is a rope, one end of which is secured on the stud O, between the frames A B, and passing from these through the sheave-block R of the fork, and back over the sheave L, and then to the power applied. R is a sheave-block, provided with a projection, Q, and its top, and is secured to one bar of the fork S. Y is the sliding bar of the fork, and is connected to the stationary bar 3 at the top by the binding-lever U V, and at the bottom by the knife W. T is a trip, that is secured to the upper end of the sliding bar Y, and has a circular slot, *p*, in one end, and a stud, *t*, passing through it and secured to the stationary bar 3 of the fork. W is a knife that is also pivoted to the lower ends of the stationary and sliding bar of the fork. X is the cutting-edge of the knife.

The operation of my improvement is as follows: After the carrier-rod F has been placed in position in the loft the stop E is adjusted on the rod at the place where the load is to be taken from, and the carrier A B is placed on the rod by means of the openings C C, and when the hook D engages the stop E the pawl-end D′ is lifted from the rope K and sheave L and the fork runs down, when the knife W is forced into the hay, and the trip T is raised and the sliding bar Y is forced down; this causes the knife to assume a horizontal position, and the binder U V, being forced down upon the hay, holds it in its proper place. Now, if the rope K is drawn over the sheave L until the fork with its load of hay is elevated sufficiently high to cause the projection Q of the sheave-block R to engage and lift the trip J, this causes the hook D to become disengaged from the stop E, and as the carrier leaves this stop the pawl-end D′ drops and holds the rope K on the sheave L, and the load is carried to its place in the loft and dropped by pulling the trip T. The carrier is then returned to the stop E, when the fork is again disengaged and falls, ready to receive another load.

Claims.

I claim as my invention—

1. The openings C C in the side A of the carrier, substantially as and for the purpose set forth.

2. The combination of the slotted trip T, bar U V with the fork S Y, substantially as set forth.

3. The movable stop E, in combination with the brake-hook D and trip J, substantially as set forth.

4. The combination of the fork S Y with the sheave-block R, slotted trip T, lever U V, and V-shaped knife W, substantially as and for the purpose hereinbefore set forth.

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

JAMES B. DRAKE.

Witnesses:

S. C. FRINK,

C. R. ANDERSON.