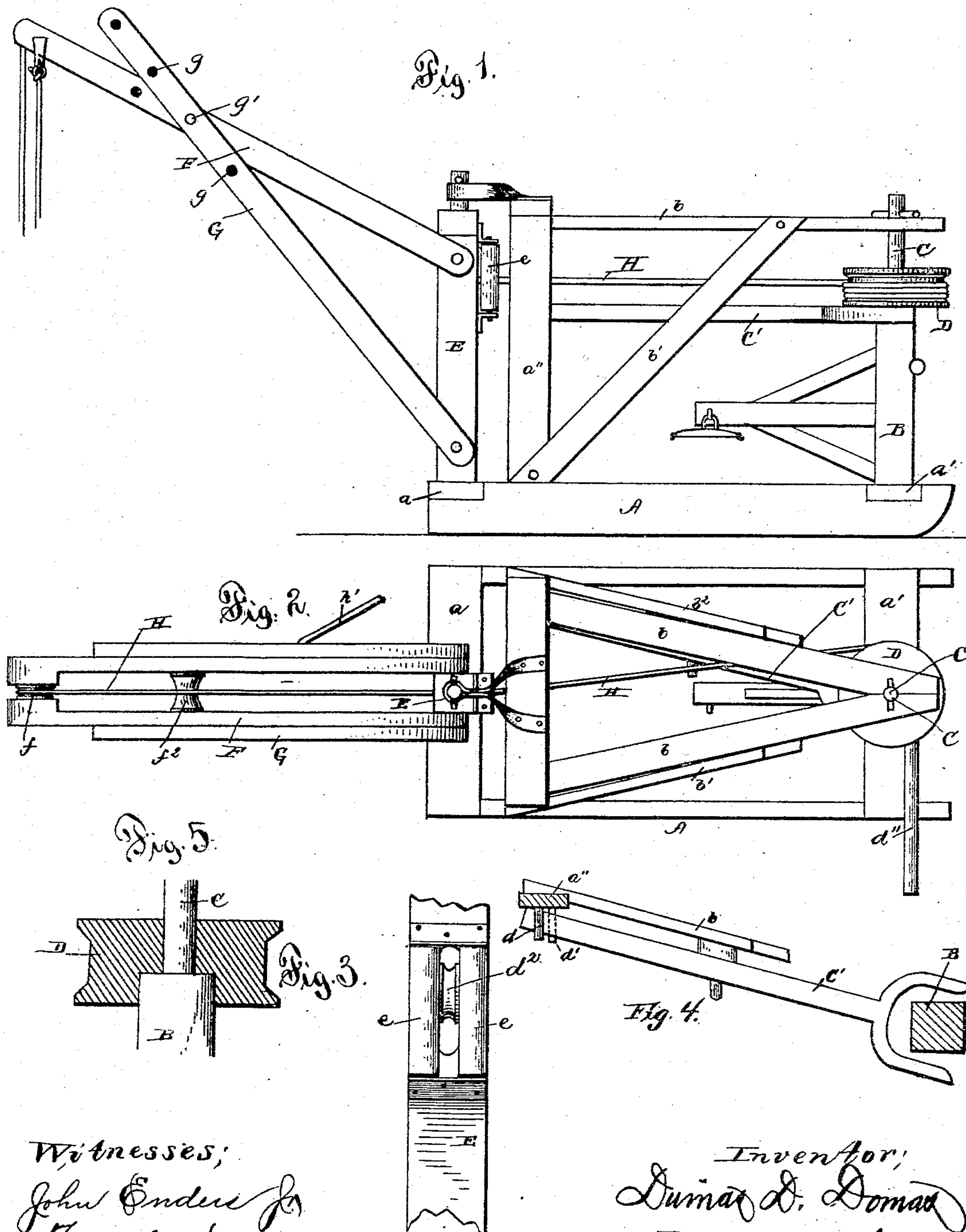


D. D. DOMAS.
HAY STACKER.

Patented Sept. 6, 1887.



Witnesses;
John Enders Jr.
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UNITED STATES PATENT OFFICE.

DUMAS D. DOMAS, OF RURAL, SHELBY COUNTY, ILLINOIS.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 369,324, dated September 6, 1887.

Application filed June 1, 1887. Serial No. 239,989. (No model.)

To all whom it may concern:

Be it known that I, DUMAS D. DOMAS, a citizen of the United States of America, residing at Rural township, in the county of Shelby and State of Illinois, have invented certain new and useful Improvements in Hay-Stackers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in hay-stackers; and it consists in the detailed construction, combination, and arrangement of the parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation of my invention. Fig. 2 is a plan view thereof. Fig. 3 is a detail. Fig. 4 is a sectional detail view showing the lever, and Fig. 5 is a similar view of the drum or grooved wheel.

In carrying out my invention I employ frame A, the side bars of which are connected by cross-bars $a\ a'$, and to the sides of these side bars are secured uprights or posts $a''\ a'''$, to the cross-bar of which are connected the forward ends of bars b , suitably braced in position by inclined brace-bars $b'\ b''$. Within an aperture in the rear cross-bar, a' , is disposed the lower bolt-like end of a square turning post, B, to the upper end of which is secured one end of a rod, C, which projects through an aperture in the connected ends of the bars b , and said rod C is secured by a pin passed transversely through its projecting portion.

D is a drum or grooved wheel having a square-shaped aperture in its lower side and a circular aperture through which projects the rod C, the lower square-shaped aperture being designed to fit on the upper end of the square-shaped post B. In under this drum or wheel projects the forward forked end of a lever, C', fulcrumed at its center on one of the inclined brace-bars of the frame A and extended to one of the uprights a'' , where it is secured by a stationary pin, d , and a removable pin, d' . By means of this lever the drum or grooved wheel D can be raised from its seat on post B and thus held by pressing on the rear end of said lever until it is desired to reseat the same, when the same is accomplished

by releasing the hold on said lever, allowing the drum to return to its former position. To a projecting braced bar of this turning post is secured a whiffletree for attaching thereto the draft-horse, (not shown,) and to this post is also secured a leader-bar, d'' , to which said horse is designed to be tied.

E is a second square-shaped turning post, with its lower end secured in an aperture of the forward cross-bar, a , and its upper end is secured by brace straps or plates to the cross-bar of the uprights a'' . In an aperture in this post is disposed a small pulley, d^2 , and between projecting flanged plates on the rear side of said post are secured vertical rollers $e\ e$, a narrow space being between the same, as shown in Fig. 3. To this post are secured the rear ends of side bars of an adjustable frame, F, between the outer ends of which is secured a small grooved pulley or roller, f , a second pulley or roller, f^2 , being also secured between said side bars at or near the center thereof.

Two corresponding brace-bars, G G, are pivotally secured at their lower inner ends to the lower portion of the post E, and have apertures g formed therein, corresponding with apertures in the frame F, through which is passed a securing pin or bolt, g' , whereby the frame F can be held at any desired angle, ranging from a horizontal plane, as may be required in the construction of the stack.

A rope, H, is connected at one end to and wrapped around the drum or grooved wheel D, and is passed between the vertical rollers $e\ e$ and in under the pulley d^2 and up over the pulley f in the forward end of the frame, after which it is secured to a suitable grappling-fork. (Not shown.)

The operation is as follows: The attendant standing at the forward end of the frame A, adjoining the end of the lever C', secures said end of lever between the stationary and removable pins, so as to cause the drum or grooved wheel to fit snugly on the upper end of the square post, and by grasping a strap, h' , secured to one of the inclined brace-bars, the frame F, together with said bars, can be brought around to the desired point by reason of the turning post E. After the hay is grasped by the fork the draft-horse is made to move around the rear turning post and in under that

end of the frame until the grappling-fork, together with its load, reaches the desired point, the same being accomplished by the winding of the rope H on said drum. When it is desired to lower the fork to receive a second load or supply, the attendant removes the lower removable pin and presses downwardly on the forward end of the lever, causing the elevation of the drum or grooved wheel on the rod C, disengaging it from contact with the upper end thereof, so as to permit the wheel to turn freely, and thus effect the unwinding of the rope and lowering of the fork, after which the frame is brought to the desired point and there retained by securing the end of the strap on a pin projecting from one of the inclined brace-bars.

From what has been said, it will be seen that my invention comprises means for elevating hay to any desired point, and the same is readily accomplished by means extremely simple in construction.

I claim as my invention—

1. The herein-described hay-stacker, comprising the frame, the square turning post having a rod-like extension, the drum or grooved wheel, the forward post, the adjustable frame pivoted thereto, the brace-bars, the

securing-pin, and the rope for carrying the grappling-fork, substantially as shown and described.

2. The combination, with the frame, of the square-shaped turning post, the drum or wheel having the square-shaped opening, the lever having the forked end, the adjustable frame, and the operating-rope, substantially as shown and described.

3. The combination, with the frame, the turning post, and the drum or grooved wheel, of the forward turning post, the adjustable frame, the pulleys and rollers, and the rope, substantially as shown and described.

4. The combination, with the frame, the post, the drum, and the forward turning post, of the frame pivoted to said post, having apertured sides, the inclined brace-bars, and the securing pin or bolt, all substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

DUMAS D. DOMAS.

Witnesses:

DELMAS M. DOMAS,
EUGENE A. MALHIOT.