

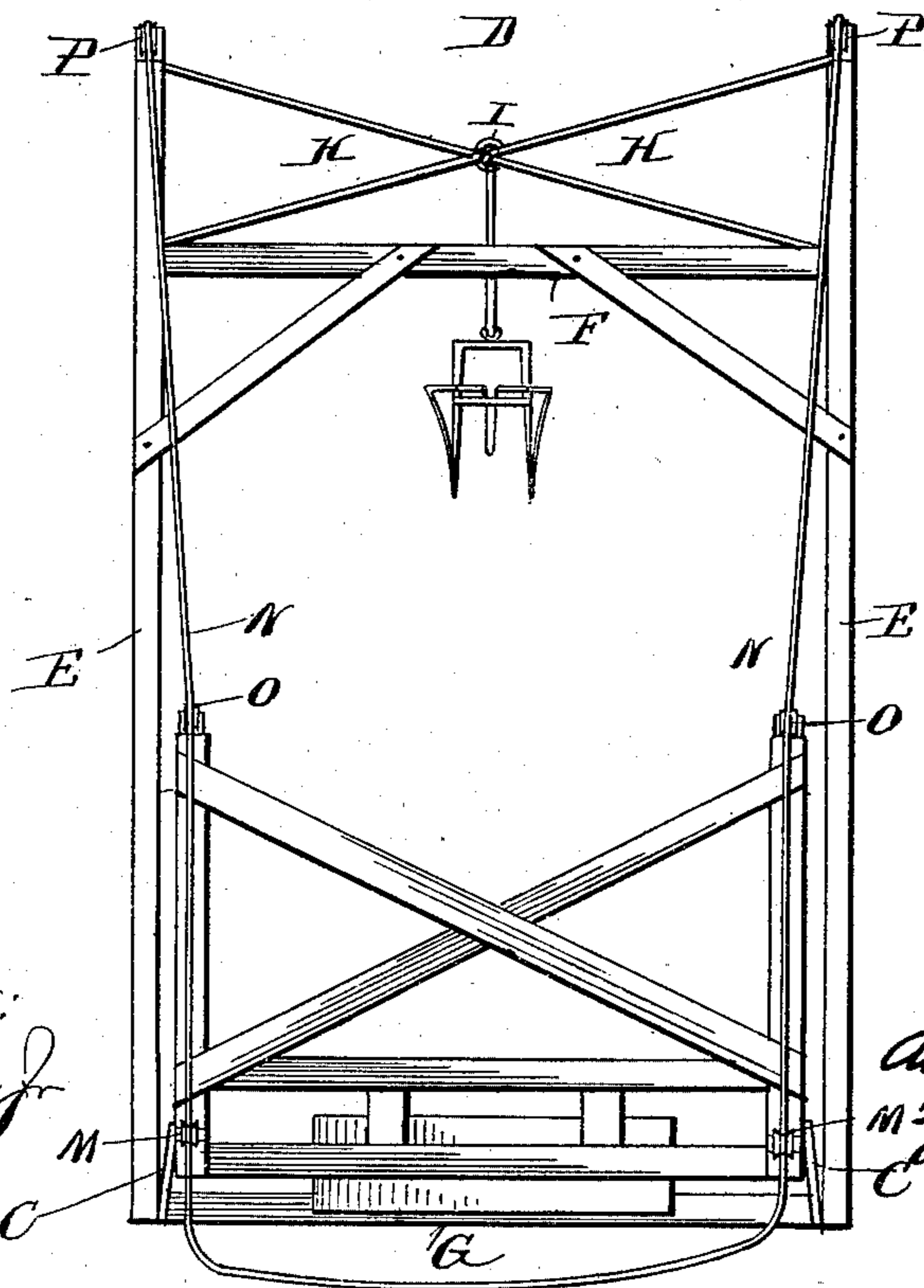
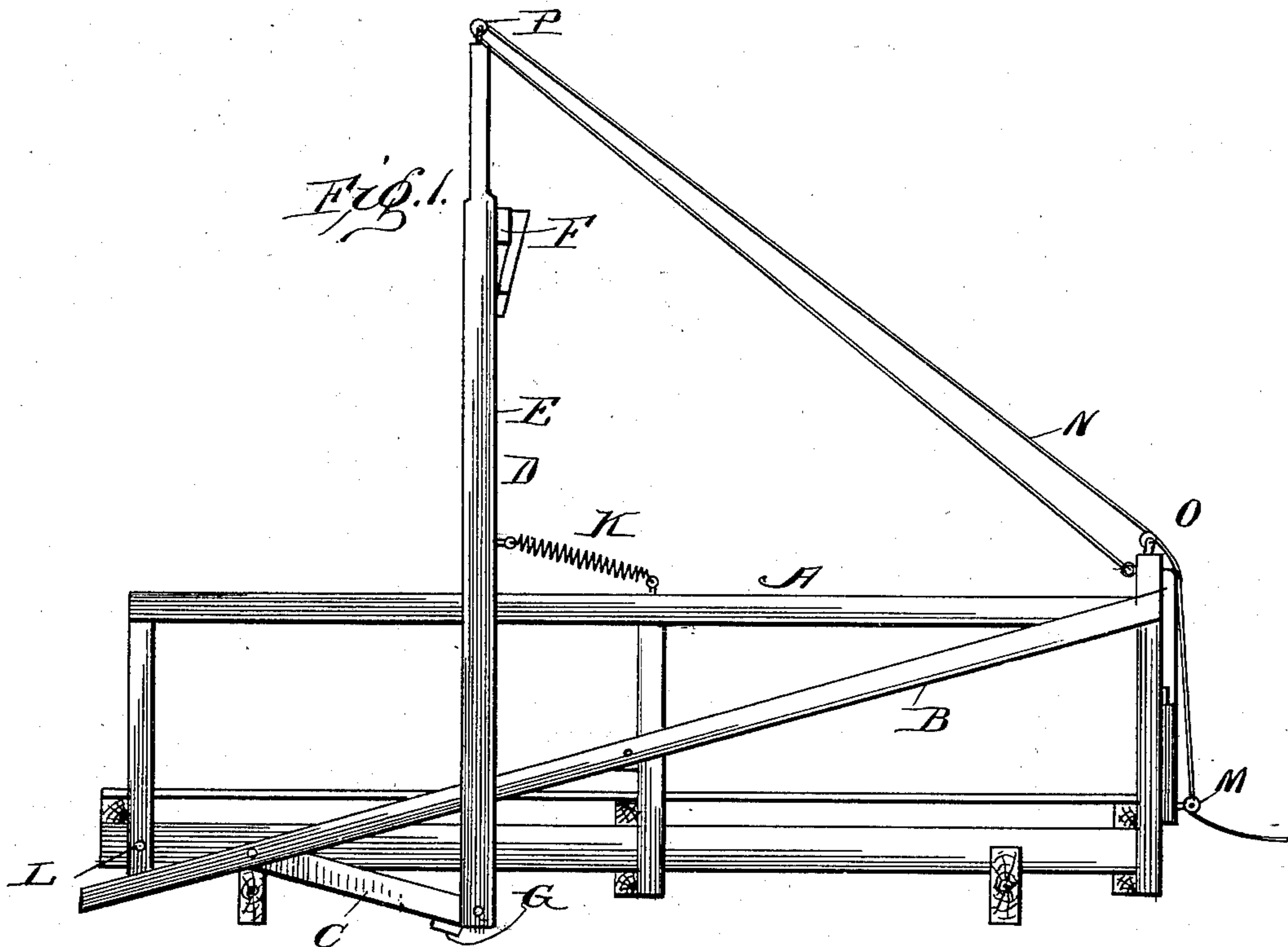
No. 656,330.

Patented Aug. 21, 1900.

A. E. SMITH.
HAY LOADER.

(Application filed Mar. 27, 1899.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE

ALBERT E. SMITH, OF POTWIN, KANSAS.

HAY-LOADER.

SPECIFICATION forming part of Letters Patent No. 656,330, dated August 21, 1900.

Application filed March 27, 1899. Serial No. 710,636. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. SMITH, a citizen of the United States of America, residing at Potwin, in the county of Butler and State of Kansas, have invented a certain new and useful Improvement in Hay-Loaders, of which the following is a specification.

This invention relates to hay-loaders, and more particularly to that class adapted to be attached to a wagon-body.

The object of this invention is to provide a hay-loader which is exceedingly cheap and simple in its construction, one that can be easily and quickly attached to or removed from the wagon, and will efficiently perform all of its intended functions.

For the attainment of the several objects my invention consists, in brief, in certain details of construction, arrangement, and combination of parts, all of which will be more fully described hereinafter and the specific points of novelty in which will be designated in the appended claim.

In the drawings forming a part of this specification, Figure 1 is a side elevation of a wagon-body or hay-frame with my improved hay-loader attached. Fig. 2 is an end view of the same.

Referring by letters to the drawings, A represents the usual wagon-body or hay-frame, having secured thereto in any desirable manner braces or strips B, which extend diagonally across the sides. Pivotaly secured to these braces at the rear end of the body are correspondingly and oppositely disposed arms C, which are substantially braced by the cross-bar G. These arms are pivoted to the lower end of the frame or arch D and are of a sufficient length to allow the pivoted ends of the arch to rest upon the ground when in use and serve to support the same. The arch is constructed of two corresponding runners or sides E, connected approximately near the top by a brace F, and is adapted to straddle the wagon-body or hay-frame. These sides are provided with rods or chains H, secured to the free ends and extending diagonally toward the center and upper portion of the arch, where they are connected by a ring I, which also connects the rods or chains J, secured to the sides of the arch integral with respect to the aforesaid rods or chains. The ring I is adapted to

support an ordinary hay-fork, such as is now in general use in loading and unloading hay. Secured to the upper brace approximately near the sides of the arch are coiled or spiral springs K, which are attached to the wagon-body or hay-frame. These springs replace the arch after it has deposited its load on the wagon and prevent the jar of the arch when it comes in contact with the stops L.

The front of the wagon-body or hay-frame is provided with oppositely-disposed pulleys M, through which the ends of the rope N are passed, thence upward through the pulleys O, secured in the top of the sides E, thence rearward through the pulleys P in the ends of the frame or arch, and thence forward and are secured to the aforesaid standards.

Mode of operation: The wagon is first backed up to the shock of hay which it is desired to load, after which the fork is forced into the hay, the horses hitched to the loop in the rope and started forward, drawing the arch up to a vertical position where it is desired to deposit the hay, and then the fork is tripped. The pivoted ends of the arch engage the ground when it is drawn forward, and thus prevents the wagon from moving. As soon as the fork is tripped the arch is returned by the coil or spiral springs.

Changes in form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the various features of my invention, what I claim as new, and desire to secure by Letters Patent, is—

A hay-loader consisting of a wagon-body having strips secured diagonally across its sides, an arch composed of side and cross pieces, arms pivoted to the strips near the rear end of the wagon-body and to the lower end of the arch, the said arch having suitable braces, one of which is adapted to support a hay-fork, of spiral springs connecting the arch and wagon-body, and of suitable rigging secured to the said arch and wagon-body for operating the arch, substantially as shown and described.

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