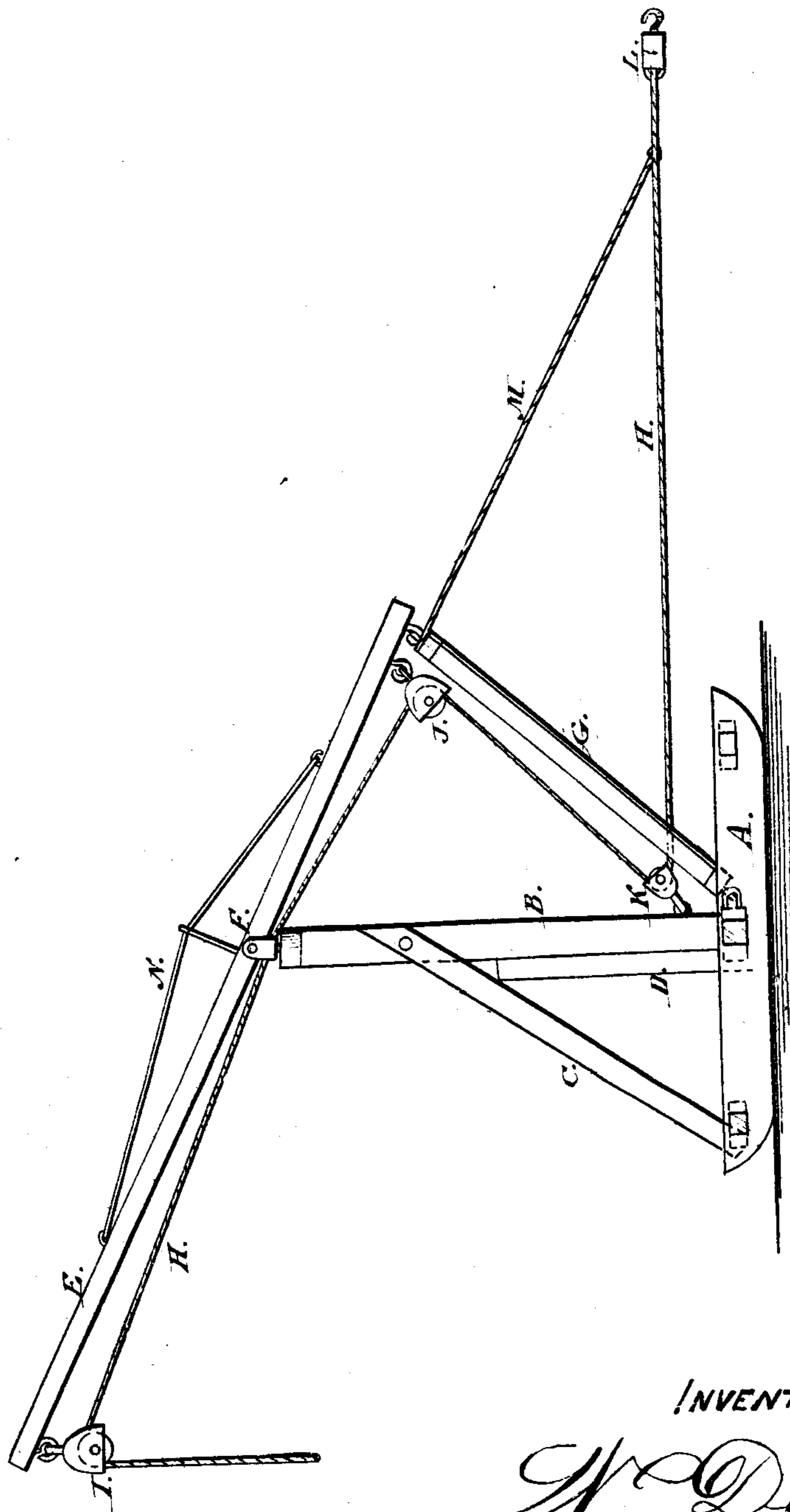


W. Denton,

Hay Derrick.

No. 95439.

Patented Oct. 5. 1869.



WITNESSES:

Jno. E. Brooks.
Alex. F. Roberts.

INVENTOR.

W. Denton,
per.
M. M. L.
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United States Patent Office.

WINFIELD DENTON, OF IOWA CITY, IOWA.

Letters Patent No. 95,439, dated October 5, 1869.

IMPROVED HAY-DERRICK.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WINFIELD DENTON, of Iowa City, Johnson county, State of Iowa, have invented a new and useful Improvement in Hay-Derrick; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in derricks or loaders for loading hay, and consists in the construction and arrangement hereinafter described.

The accompanying drawing represents an elevation of the derrick.

A represents the base, which consists of a pair of runners, connected together by transverse slats, the middle of which supports the standard B. This standard is properly supported in an upright position by the braces C and D.

E is the derrick-beam, which is secured to the top of the standard B by a swivel-clevis, as seen at F.

The short end of the beam E is connected with the base A, near the lower end of the standard B, by the rod G, which is jointed to the beam and to the base, so that it will accommodate itself to the position of the beam, as the latter swings around to bring the fork over the stack.

H is the hoisting-rope, which is connected with the hay-fork.

This rope passes over the self-adjusting pulley I, which is suspended from the elevated end of the beam. From this pulley it passes through the swivel-clevis at F, over the top of the standard, and from thence over the self-adjusting pulley J, which is suspended from the lower end of the beam.

From thence the rope descends, and passes around

another self-adjusting pulley, K, attached to a point on the standard, near the bottom end.

From this pulley the rope extends parallel with the ground, when extended as when in use.

The single-tree L is attached to its end, to which the power is applied for hoisting.

M is a guide-rope, by which the hoisting-rope H is connected with the upper end of the rod G.

The beam E is supported over its bearing A F, by means of the brace-rod N.

By this arrangement of the hoisting-rope, with the aid of the rod G, the derrick is quite self-supporting, while, by the direction given the horse, or the horizontal portion of the hoisting-rope, the load suspended from the beam may be swung over the centre of the stack and dumped.

The arrangement and operation are so plainly shown in the drawing, that further description is deemed unnecessary.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the base A and standard B, the beam E, rod G, pulleys J and K, and rope M, whereby, by means of the hoisting-rope H, and rod G, the derrick is made self-supporting and self-adjusting, substantially as and for the purposes described.

2. In combination with the hay-derrick, constructed as described, the hoisting-rope, the guide-rope M, and the arrangement of the self-adjusting pulleys J and K, substantially as described.

WINFIELD DENTON.

Witnesses:

ROBT. DENTON,
A. T. McELWAIN.