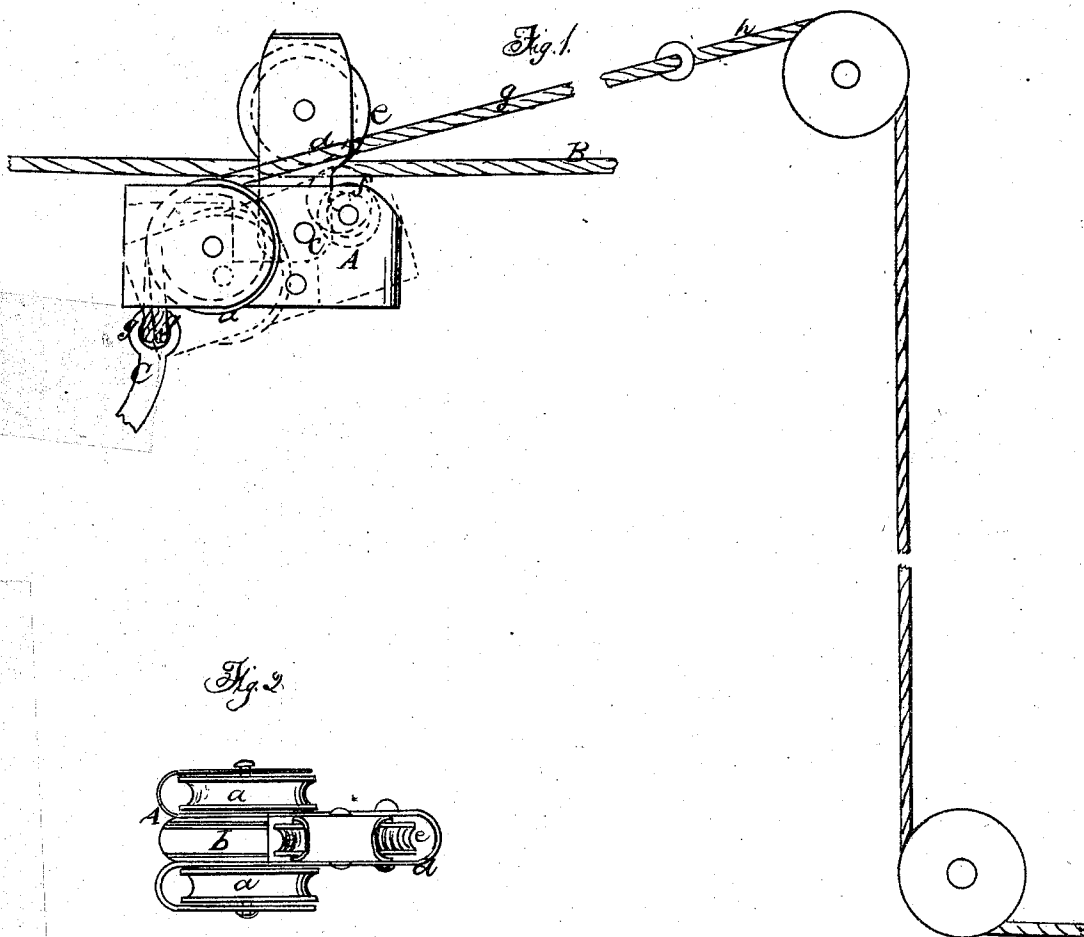


D. L. Miller.
Hoisting Appr.

Nº 75,946.

Patented Mar. 24. 1868



Witnesses
E. H. Fischer
Wm. F. Brown

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D. L. MILLER, OF MADISON, NEW JERSEY.

Letters Patent No. 75,946, dated March 24, 1868; antedated March 20, 1868.

IMPROVEMENT IN PULLEYS FOR HOISTING-APPARATUS.

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, D. L. MILLER, of Madison, in the county of Morris, and State of New Jersey, have invented a new and useful Improvement in Pulleys for Hoisting-Apparatus; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and useful improvement in operating horse hay-forks, and it consists of a clutch-pulley, and a horizontal way-rope, constructed and arranged in such a manner that the loaded fork may be elevated by the horse, and then drawn over the desired spot where its load is to be discharged, the device being clutched with and unclutched from the way-rope automatically, as hereinafter fully shown and described. In the accompanying sheet of drawings—

Figure 1 is a side view of my invention.

Figure 2 a plan or top view of the same.

Similar letters of reference indicate like parts.

A represents a block, in which there are fitted two pulleys *a*. This block may be constructed of a plate of metal, bent in loop-form, and having its ends bent or doubled, to form recesses to receive the pulleys *a*, the space in the loop between the two pulleys being filled with wood or other suitable material. In the upper part of this space there is secured, by a pivot-bolt, *c*, a loop, *d*, in which a pulley, *e*, is fitted, and in the space below the pulley *e*, a small pulley, *f*, is placed, the pulley *e* being on the top of the way-rope B, and the small pulley *f* underneath it, as shown in fig. 1. The loop *d* is allowed to work on its pivot-bolt *c*, and the hay-fork has two ropes, *g g*, attached, which pass over the pulleys *a a*, and are connected to the horse-rope *h*, which pass over fixed pulleys, arranged as usual, so that the fork will be elevated as the horse moves outward from the fork, or in the direction indicated by the arrow. When the fork is being raised, the weight of its load will cause the pulleys *e f* to clutch the way-rope B, and hold the device stationary under the pull of the horse. When the top or upper end of the fork, designated by C, comes in contact with the block A, underneath the pulleys *a a*, that portion or end of the block will be thrown upward, and the opposite end, in which the pulley *f* is placed, thrown downward, so as to release the block or disconnect it from the way-rope, and the device is then, under the pull of the horse, drawn along on the way-rope, until the fork is brought over the spot where the load is to be discharged, and the horse is then stopped, and the load discharged from the fork, which may be provided with the usual or any proper trip-arrangement. The horse is then backed, and the fork lowered, unloaded, and raised, as before.

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

The pulley-block, provided with the pulleys *a a f*, and having a loop, *d*, pivoted to it, containing a pulley, *e*, all being arranged and operating as described, for the purpose specified.

Witnesses:

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