

J. M. YATES.
Hoisting-Machines.

No. 143,214.

Patented September 23, 1873.

Fig. 1.

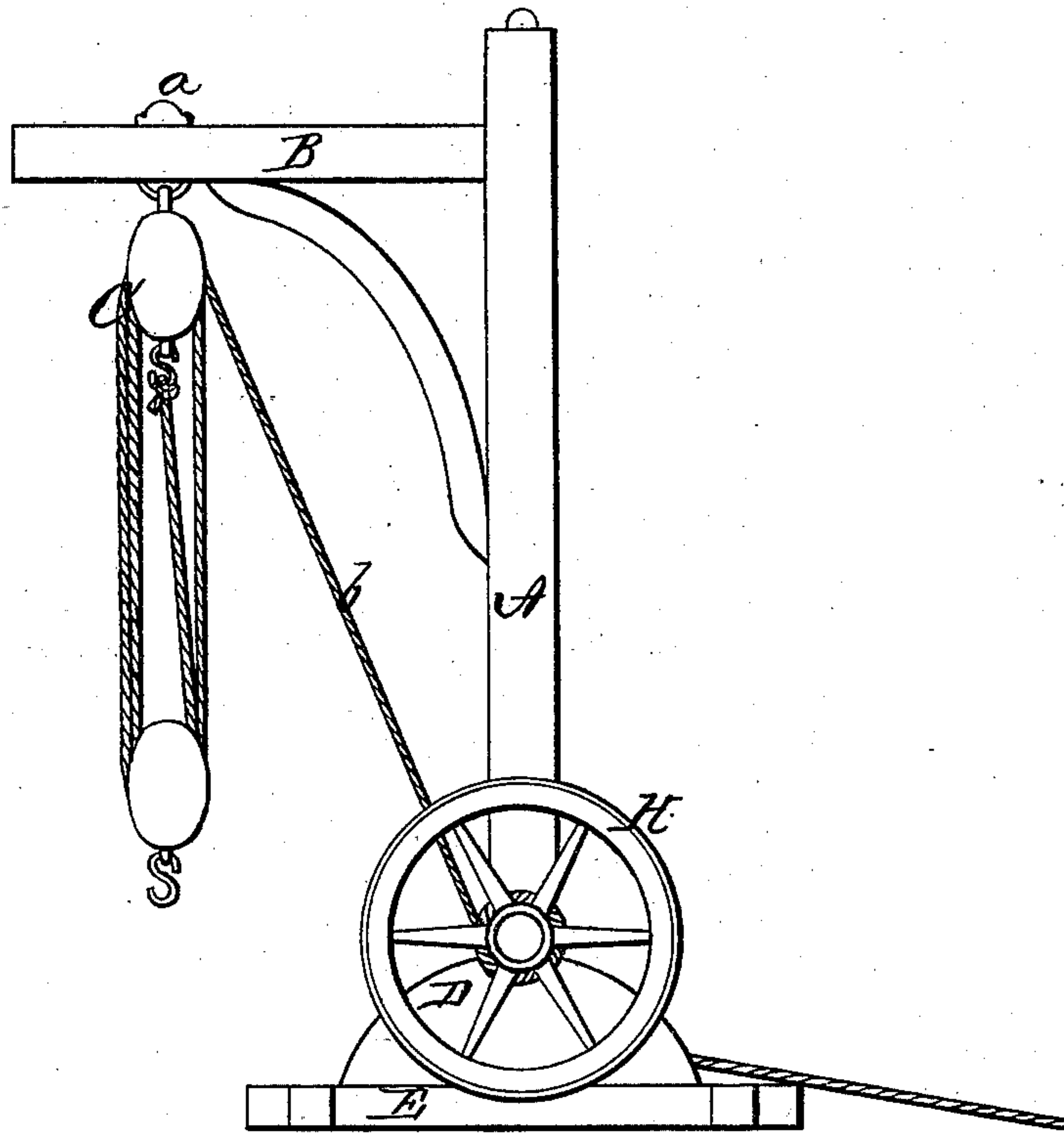
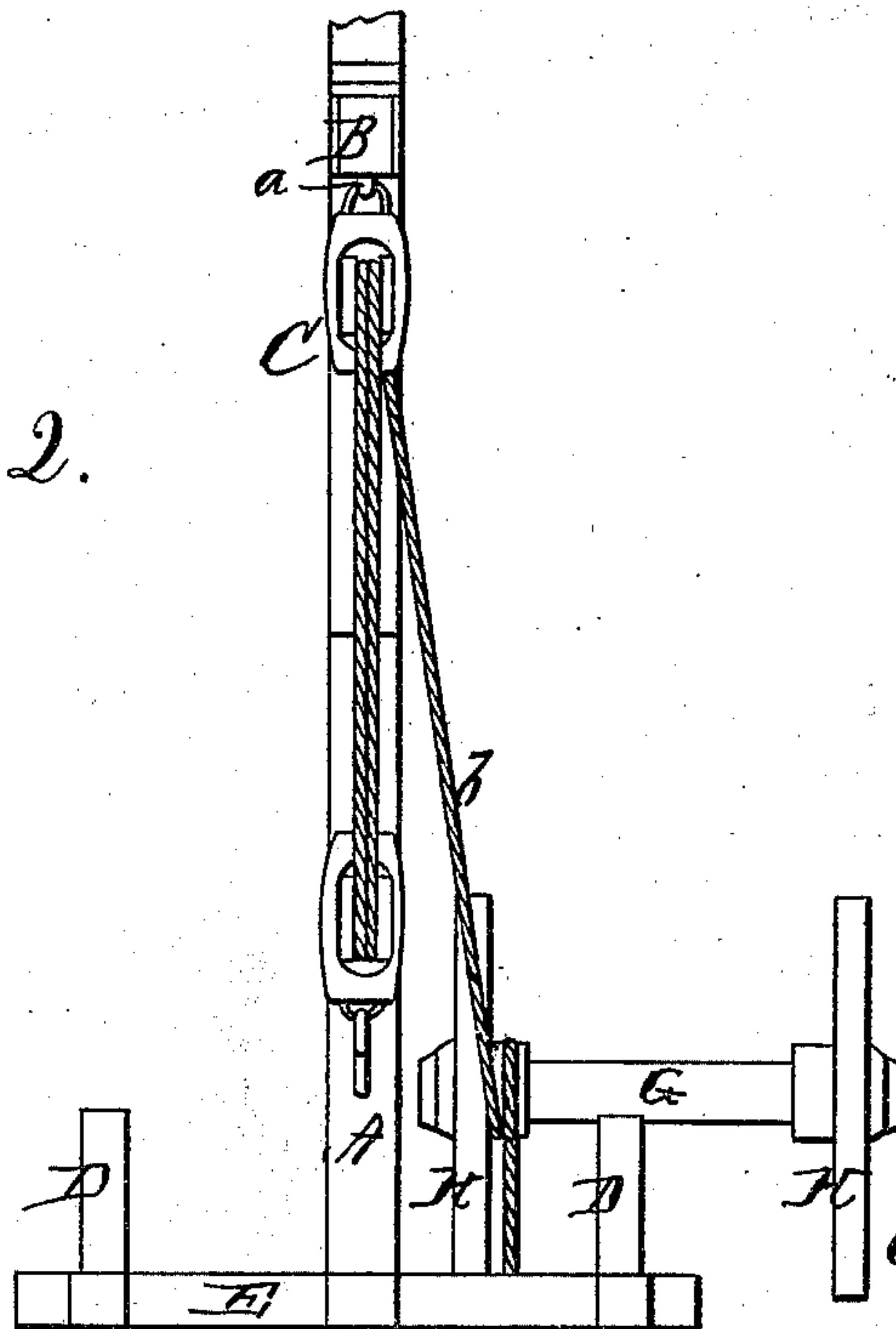


Fig. 2.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN M. YATES, OF PRINCEVILLE, ILLINOIS.

IMPROVEMENT IN HOISTING-MACHINES.

Specification forming part of Letters Patent No. **143,214**, dated September 23, 1873; application filed August 9, 1873.

To all whom it may concern:

Be it known that I, JOHN M. YATES, of Princeville, in the county of Peoria and State of Illinois, have invented a new and valuable Improvement in Hoisters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my invention in side elevation, and Fig. 2 is a front view of the same.

My invention relates to machines for elevating grain and other materials, and hoisting loaded wagon-beds or sacks; and it consists in using the wagon-wheel as a lever-power while the wheel is upon the wagon; also, in the combination of the crane, trestle, and block and tackle, as will be hereinafter more fully set forth.

Like letters of reference indicate corresponding parts.

A represents the upright post, and B the horizontal arm of an ordinary crane or derrick. The outer end of this arm is slotted, and in the same is placed a slide, *a*, which may be moved out or in, as occasion may require. From this slide *a* is suspended the usual block and tackle C, of which *b* is the hoisting-rope. On each side of the post A is an inclined or curved trestle, D, erected upon the same platform or bed E upon which the post A stands. G represents the hind axle of a wagon with wheels H H. The wagon is

driven up on either trestle D until the hind axle drops in a recess in the top of the same, or a platform may be so arranged as to allow the hind axle to rest on the platform, and the hind wheel drops into an opening or mortised hole cut through the platform. In either case it allows the hind wheel H to revolve on its axis. The rope *b* is then passed around the hub of the wheel H, and the spokes and rim of the wheel become a hand-lever, by the aid of which any material may be elevated or hoisted.

The uses to which this invention may be applied are so numerous that they need not or cannot be enumerated here.

For farmers it is especially valuable and useful.

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

1. In a hoisting or elevating machine, a trestle arranged to support the hind axle of a wagon for the purpose of allowing the hind wheel to be used as the lever-power of the machine, substantially as herein set forth.

2. The combination of the crane A B, slide *a*, block and tackle C, trestle D, and the hind wheel and axle of a wagon, as and for the purposes herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN M. YATES.

Witnesses:

L. W. JAMES,
WM. KELLOGG.