A. Barker,

Hay Elevator.

No. 78,566. Patented June 2, 1868.

Fig. 1.

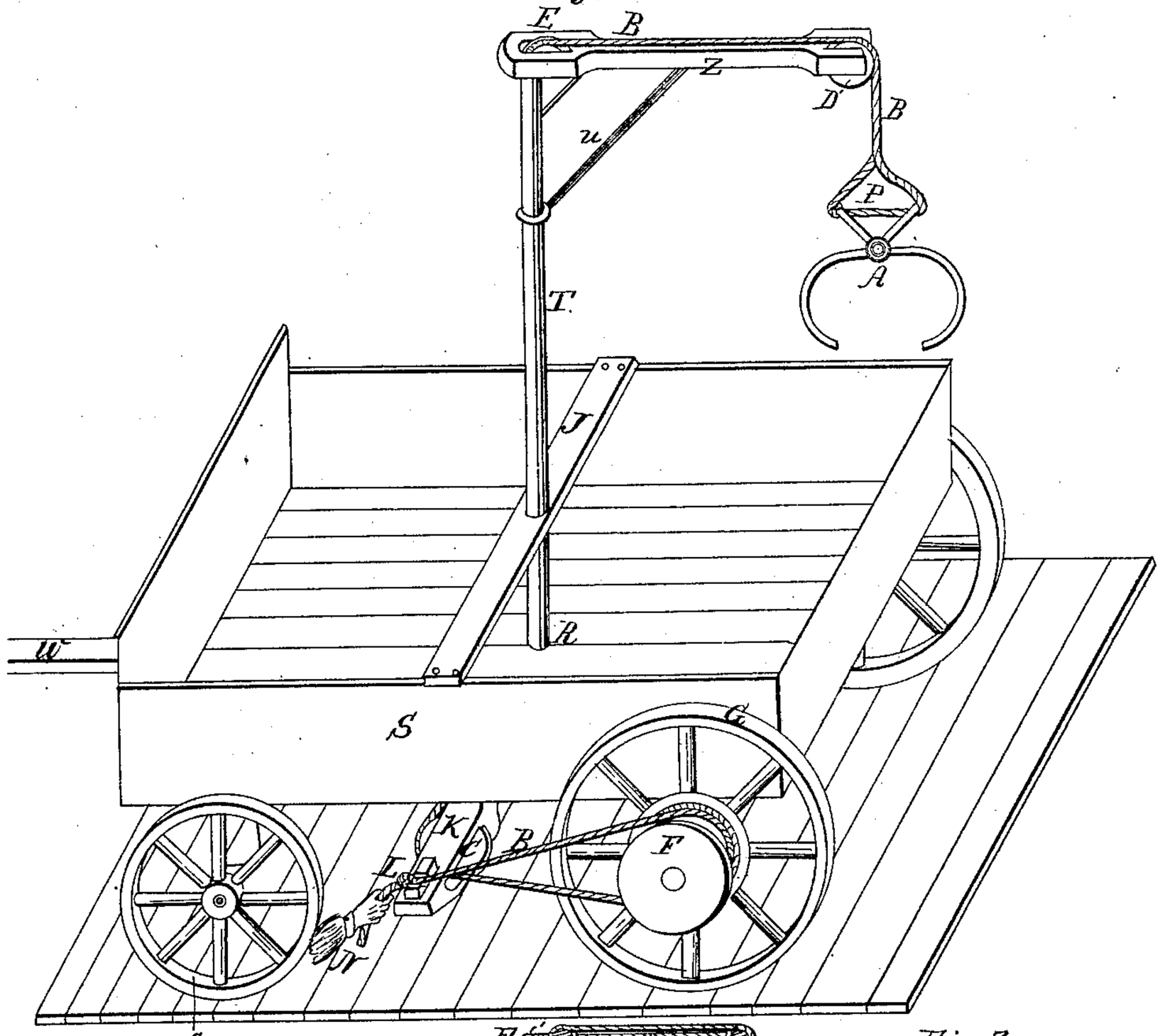
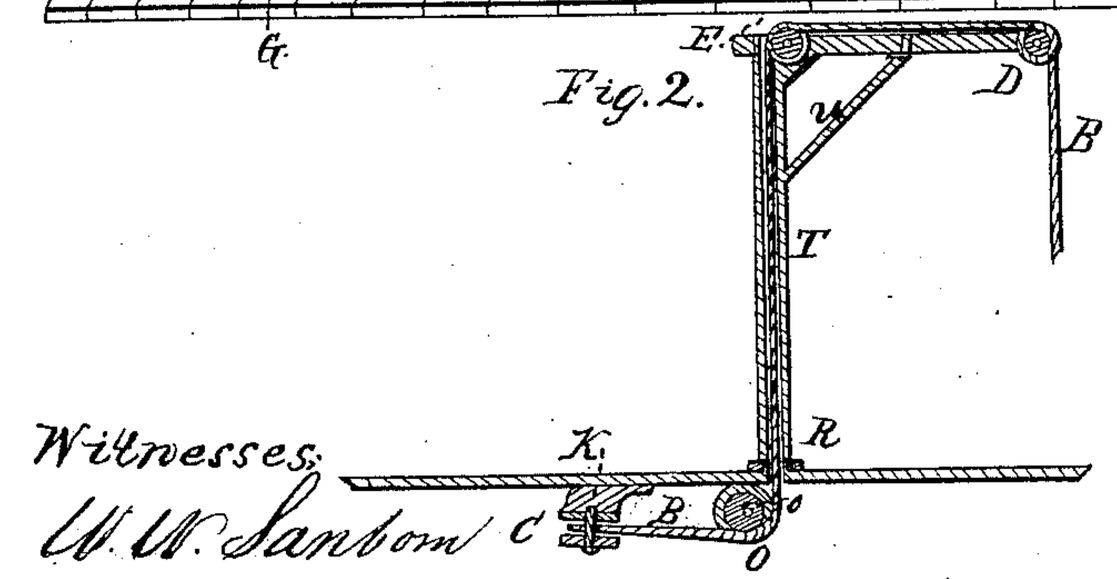
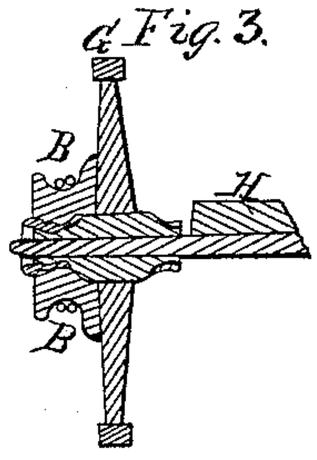


Fig. 2.



G. Fig. 3.



Witnesses:

W. W. Sanborn C

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Inventor;

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ADDISON BARKER, OF CAMANCHE, IOWA.

Letters Patent No. 78,566, *dated June* 2, 1868.

IMPROVEMENT IN HAY-LOADERS.

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, ADDISON BARKER, of Camanche township, Clinton county, Iowa, have invented a new and useful Improvement in Loading Hay and Grain; 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 accompanying drawings, and to letters of reference marked thereon.

The nature of my invention consists in so arranging a crane or derrick on a wagon, and adjusting the ropes, blocks, and sheaves, that the moving of the wagon will raise the weight to the requisite height to put it on the wagon, thereby avoiding the tedious and laborious operation of pitching the hay and grain, or any other thing desirable to load.

To enable others to make and use my invention, I will proceed to carefully describe its construction and operation.

Figure 1 represents a perspective view of the device.

Figure 2 represents a sectional view, showing hollow post and sheaves.

Figure 3 represents the drum-wheel in section.

In the various figures the same letters refer to the same parts.

A represents the tongs, or grappling-irons, or fork.

B represents the rope or cord.

C, D, E, and O, represent the sheaves for rope to pass over.

F represents the drum on wheel.

G G G represent the wheels of wagon.

H represents the axle-tree to wagon.

J, cross-beam to hold post T.

K represents a piece bolted to bed of wagon, to hold sheave *c* and stop L.

L represents stop to hold the rope B.

N represents hand grasping rope to hold it taut on drum F.

O, in fig. 3, represents sheave under the bed of wagon, directly under the tube or hole in post T.

P represents a loop in rope B, passing through the arms of grapplings A.

R, step for post T.

S, body of wagon.

T, hollow post to enclose rope and sustain arm Z.

U, brace to sustain arm.

W, tongue.

Now, the operation of my invention is as follows: Take an ordinary wagon and construct what I call a friction-drum, attaching it to the near hind wheel in any convenient but firm manner. Construct a hollow standard or post of wood or metal. To the top of this post attach an arm, firmly bracing it, and fit two sheaves in it, one directly over the aperture or tube in post T, the other in end of arm, as at D. Set the post T at or near the centre of the wagon, in a hollow step, so it will be firm, yet turn easily, and fit a sheave on the under side, so the rope, as it comes through the tube in post T, will pass over it.

Now, fit and fasten a block firmly to under side of wagon-bed, letting it project on near side in this block, marked K in drawing. Have a sheave, C, also on this block. Have a stop in drawing marked L.

Then attach the rope to the fork or tongs, and pass it over the sheaves D and E, down through the tube in the post T, and over the sheaves O and C; then twice around the drum F, and through the notch in stop L. In this end of rope have a knot, so as to prevent the end from passing through the notch, and have the length of rope so that as the knot brings up against stop L the tongs, fork, or grappling-iron will just reach the ground.

Now, to use this device, open the tongs or grappling-irons, and insert them in a cock of hay or shock of grain. Grasp the end of the rope at L; hold firm enough to prevent the rope from slipping on drum F. Start the team, and as the wagon moves along, the turning of the wheel will raise the weight to the requisite height.

The man on wagon grasps it, and swings the crane or arm Z so as to bring the weight into the place wanted. He gives notice to the operator on the ground, who releases his hold on the rope, which at once renders on the drum F, the weight dropping at once just where wanted, thus saving the labor of pitching or rolling to load.

This device may be used to raise weights of any kind on to a wagon.

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

The drum F, arranged outside of the wheel G, in combination with the sheaves C and O and stop L, for taking in the slack of the rope B, essentially as shown and described.

ADDISON BARKER.

Witnesses:

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