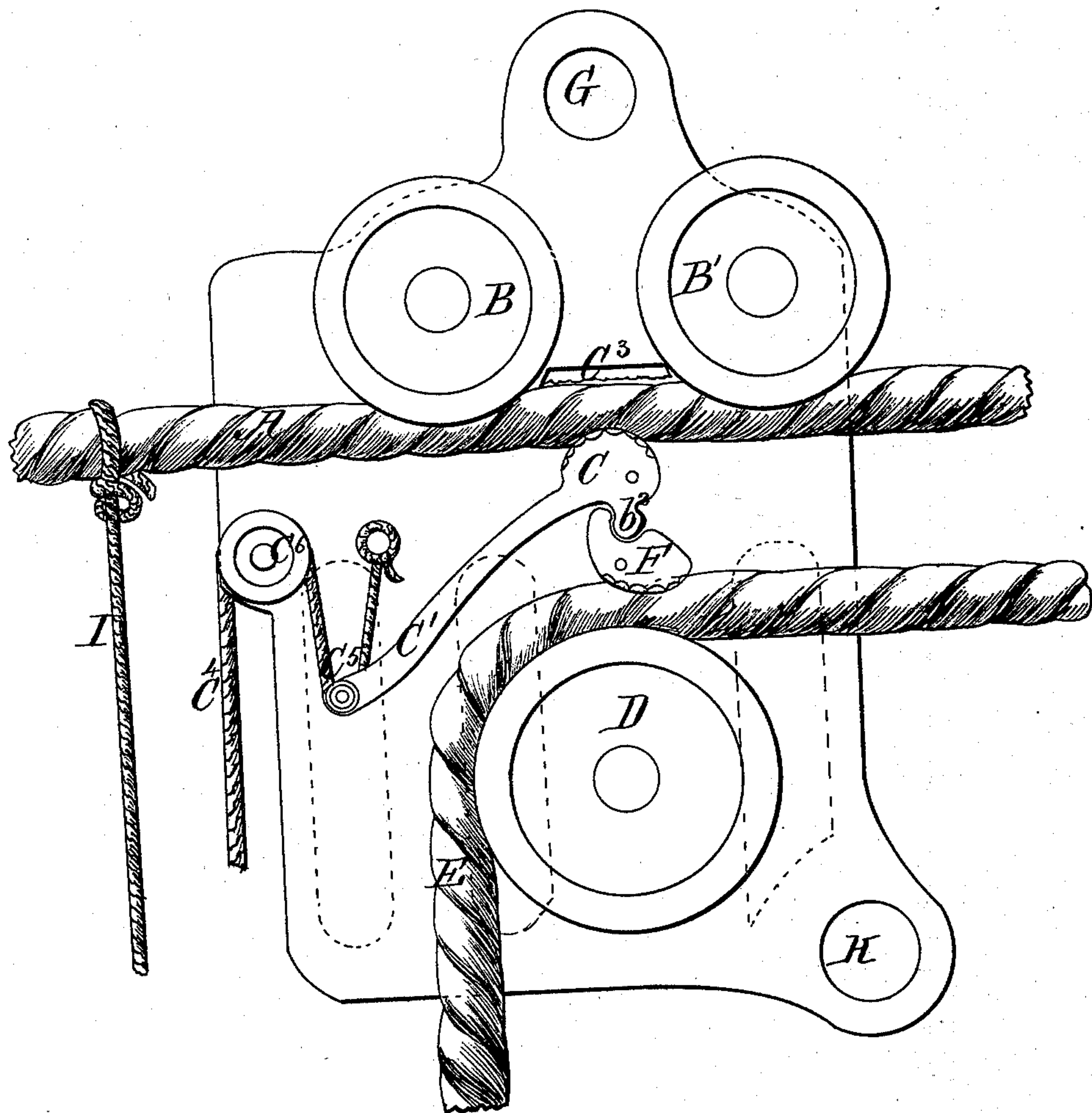


W. H. Hawley,
Hay Elevator,
No 68,874, Patented Sep. 17, 1867.



Witnesses
N. Mulbury
John G. Crocker

Inventor;
Wm H Hawley

United States Patent Office.

WILLIAM H. HAWLEY, OF UTICA, NEW YORK.

Letters Patent No. 68,874, dated September 17, 1867.

IMPROVEMENT IN ELEVATING-BLOCK.

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, WILLIAM H. HAWLEY, of Utica, Oneida county, New York, have invented a new and useful Improvement in Elevating-Blocks; 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 drawing, which represents a front view of the invention, with the front side of the casing removed.

A is the track-rope; B and B' are two traversing pulleys which run thereon; C is a stop for governing their travel on the track-rope; C¹ is the arm or lever thereof; C² is the point or arm for moving the other stop, F; C³ is a shoulder, against which the track-rope is pressed by the stop C; C⁴ is a cord to operate the stops; C⁵ and C⁶ are pulleys, around which the cord C⁴ runs; D is a pulley, over which the draught-rope E runs; F is a stop to govern the motion of the draught-rope; G and H are eyes in the casing. The frame or casing is formed of two sides cast together, with the eye G at the top and H at the right-hand corner. G serves to hang up the apparatus by when it is used, as it may be, as a single pulley, and to H may be attached the end of the draught-rope, and thus, with a single pulley between such eye and the pulley D, power may be gained. The pulleys B and B' are ordinary pulleys, and so arranged between the sides of the case, and in the upper part thereof, that when placed on the track-rope the apparatus will hang plumb below. The pulley D is hung in the same plane and centrally below B and B', so that the motion of both may be in the same direction and the load always be directly under the centre of the track-rope. The stop C is grooved and cross-furrowed where it touches the track-rope, and so hung that when pressed against the track-rope it will press the rope up against the shoulder C³ on the casing. The stop F is grooved and furrowed in the same manner, and is pressed against the draught-rope by the stop C operating through its point or arm C² and the weight of its arm C¹, or a spring may be used to press down on the front of F. Both stops are operated by the cord C⁴, attached to the arm C¹ and passed over the pulley C⁶, or the cord may be attached to the case and around a pulley, C⁵, in the arm C¹, before passing around C⁶, as seen in the drawing.

The mode of operation is as follows: The track-rope, after being passed through the case, under the pulleys B and B', (which rope should be sufficiently stout, and correspond with the grooves of the pulleys,) is suspended in the barn or other place where it is to be used, at the proper height and in the direction the load is to be carried. The draught-rope is then passed through the casing, between the stop F and pulley D. The lower end of this rope is attached to the hay-fork or load to be raised, and the other end, after being passed over suitable pulleys, has the draught-horse or power attached to it. By drawing on the cord C⁴, the stop C presses the track-rope against the shoulder C³ and holds the apparatus firmly to track-rope. At the same time the stop C, by means of its point or arm C², raises the stop F from the draught-rope, and now, if the horse be started, the load may be raised vertically as high as desired and the track-rope will permit. When so raised to the desired height, if the cord C⁴ is let go, the stop C falls back by the weight of its arm C¹ and releases the apparatus from the track-rope, and at the same instant the weight of the arm C¹ presses down F on the draught-rope and against the pulley D, and holds it firmly there, and the load moves off in the proper direction. The load may be discharged in the usual way, by pulling the discharge-cord attached to the fork, or the apparatus may be stopped on the track and the load lowered to the ground by drawing on the cord C⁴, when the stop C will hold it to the rope, and at the same time cause the draught-rope to be released from the stop F, when, if the horse is backed up or turned about, the load will descend to the ground, or it may be arrested in its descent at any point by again slackening cord C⁴. When the load has been discharged, the apparatus may be brought back to the proper point by drawing on the cord I, which depresses the track-rope at the point where it is attached thereto, and if the stop C is detached, the apparatus will run back from its own gravity, when it may be arrested at any point by the stop C, as described, and the draught-rope being relieved from the stop F, as described, the fork will descend to be reloaded.

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

1. The arrangement of the pulleys B and B' and D in the same plane, with the two first above the other, substantially as described.
2. The mode, substantially as herein described, of governing the motion of the apparatus and the draught-rope by means of the stops C and F.
3. The track-rope pulleys B and B' and the stop C in combination, substantially as described, and for the uses and purposes mentioned.
4. The draught-rope, stop F, and pulley D in combination, substantially as described, and for the uses and purposes mentioned.

WM. H. HAWLEY.

Witnesses:

H. HURLBURT,
JOHN G. CROCKER.