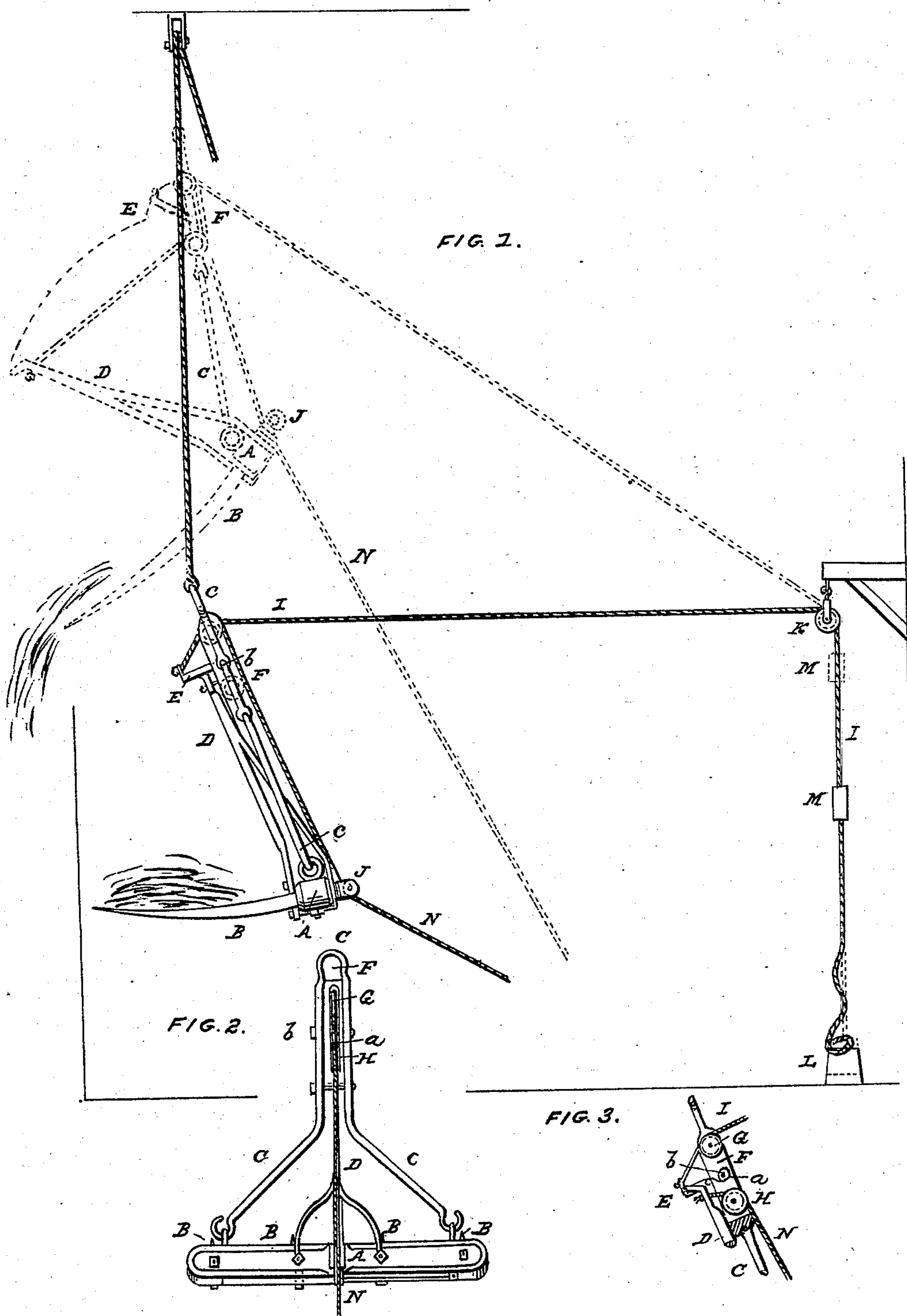


T. T. JARRET  
Hay Elevator.

No. 10,989.

Patented May 30, 1854.



# UNITED STATES PATENT OFFICE.

THOMAS T. JARRETT, OF HORSHAM, PENNSYLVANIA.

## IMPROVEMENT IN HAY-ELEVATORS.

Specification forming part of Letters Patent No. 10,989, dated May 30, 1854.

*To all whom it may concern:*

Be it known that I, THOMAS T. JARRETT, of Horsham, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in what are known as "Hay-Elevators," for elevating hay or any other product of a similar nature to which they are applicable; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 shows side views of an elevator having my improvements, the position of the parts in carrying up the load being shown in black and in discharging the load in red color. Fig. 3 is a detached view of the disengaging-gear for unloading.

Similar letters of reference indicate corresponding parts in each of the several figures.

This invention consists in certain means by which the discharge of the elevator can be effected when it has reached any desired elevation.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The elevator, apart from its improved adjustments and appendages, resembles in its general character the elevators in common use.

A is the head, which receives the prongs B, which are rigidly secured. The head is suspended by a bail, C, on which it hangs, so as to be capable of swinging freely when not held in a fixed position by the tongue or lever D, which is attached rigidly to it, and whose end is received in a loop-catch, E, which hangs on a pin, b, near the top of the bail. The loop-catch is so operated upon by a spring, a, between the sides of the bail as to be always thrown down, when not otherwise influenced, to a position seen in black part of Fig. 1, and also in Fig. 3, where it will catch the end of the tongue when the latter is brought to a suitable position close to the bail or to a block, F, which is secured to form part of it, and the bail is then caused to be rigidly connected with the head A.

Between the sides of the bail there is secured the block F, which receives two pulleys, G and H, over the upper one, G, of which

passes a rope, I, connected with the end of the catch E, and over the lower one passes a rope, N, connected with the tongue D. The latter rope also passes inside a pulley, J, attached to the back of the head A.

The elevator is suspended at the top of the bail from a rope, which is shown in the drawings, to pass over a pulley at or near the top of the barn or other place in which it is used, its position being close in front of the hay-mow, which is boarded up nearly as high as the elevator is raised, to prevent the prongs catching in their ascent. The last-named rope is supposed to pass round another pulley or pulleys to conduct it to a convenient place for attaching a horse for the purpose of drawing it up. The rope I passes over a pulley, K, attached to some suitable place, and has two weights attached—viz., the one, L, which is heavy enough to raise the catch E from the tongue, and another, M, nearer the pulley K, which is only heavy enough to take up the slack in the rope to prevent its incommoding the operation. The rope N hangs down to a convenient place to be held by the operator in charge.

The operation of the elevator is conducted in the following manner: In order to load it, the tongue D is secured by the catch, when it may be loaded in the same way as the common elevator, and the horse being started, it commences ascending. The operator takes the rope N, but lets it slip loosely through his hands during the ascent. The rope I is slack below the weight M until the elevator has reached the desired height, being of such length that it is tightened to take the weight of L just at that time. The effect of the weight L is to raise the catch E and set the tongue D free. The weight of the hay or of the elevator itself is sufficient to tip it quickly to the position shown in red in Fig. 1, and the load is thus discharged. The operator then pulls the rope N, as the lowering of the elevator commences, to pull it from the mow, and in so doing it draws the tongue D back till it is caught by the catch E, which by that time will have become free from the influence of the weight L. The elevator is now ready for a new load when it reaches the proper place to take it up.

The height at which the elevator is made to unload is regulated by the length of rope be-



tween it and the weight L, the height being increased by lengthening the rope and decreased by shortening it.

It may seem that securing the rope to some fixed object might have the same effect as attaching the weight L, which is true; but in that case there would be great danger of the rope breaking in consequence of the horse drawing the elevator too high. This danger is obviated by the weight L, which is made only just heavy enough to raise the catch.

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

Setting the catch E free when the elevator reaches any desirable height by connecting the said catch with a weight, L, by a rope, I, whose length is adjusted in proper relation to the height, as described, to make the weight operate on the catch precisely when the elevator reaches such a height.

THOMAS T. JARRETT.

Witnesses:

CHARLES PALMER,  
SAMUEL GILKESON.