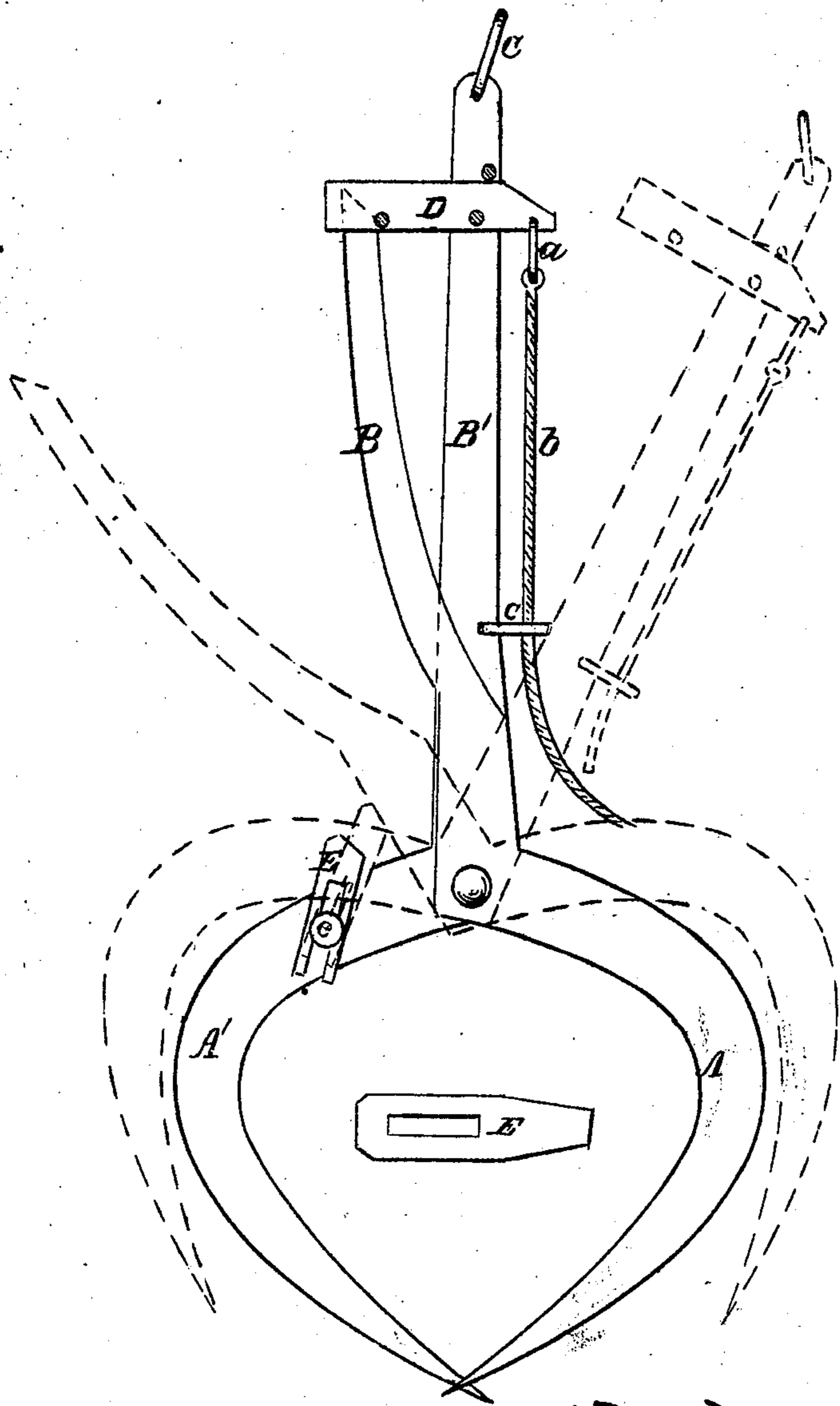


*J. A. Miller,
Hay Fork.*

No. 98,397.

Patented Dec. 28, 1869.



Witnesses
deposed at
Hay Fork

Inventor
John A. Miller
per *Alexander Mason*
Atty

United States Patent Office.

JOHN A. MILLER, OF SHIPPENSBURG, PENNSYLVANIA.

Letters Patent No. 98,397, dated December 28, 1869; antedated December 18, 1869.

IMPROVEMENT IN HORSE HAY-FORKS.

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, JOHN A. MILLER, of Shippensburg, in the county of Cumberland, and in the State of Pennsylvania, have invented certain new and useful Improvements in Hay-Forks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and general arrangement of a "hay-fork," as will be hereinafter fully set forth; also, in the combination with a hay-fork of an adjustable gauge, so that the prongs or tines of the fork may open only to a certain extent.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which represent a side elevation of my fork closed, showing it, also, open in red.

A A' represent two prongs, somewhat semi-elliptical in shape, with handles B B', like smiths' tongs, working on a rivet or screw, like a pair of scissors.

In the top of the handle B' is a ring, C, for the rope, extending to the horse-power.

Near the top of this handle is pivoted a bar or loop, D, which, on one side of the handle, is provided with a ring, a, to which the trip-rope b is attached, said rope passing through another ring, c, farther down on the handle, so that when the fork swings around, the rope will not get foul, but be always ready to operate on the trigger.

The other end of the loop D extends farther beyond the handle B', consequently making it the heaviest. It is of such length, that when the prongs of the fork are closed it will fall down around the upper end of the handle B, and thus hold the fork together while the hay is being hoisted.

To release the hay, it is only necessary to pull on the trip-rope b, which releases the loop D from the

handle B, when the weight of the hay will at once cause the prongs to separate.

On the prong A' is secured a gauge, E, consisting of a metal bar, of suitable length, slotted longitudinally, as seen in the drawing.

A screw, d, is passed through said slot into the prong A', which holds the gauge in any position it may be placed.

The lower end of the slot in the gauge may be open or closed, as may be desired.

The upper inner edge of the gauge is bevelled, so that when the fork is open, the edge of the handle B will strike square against this bevelled edge, and the gauge thus preventing the fork to open any farther.

The bar D may be pivoted on one side of the handle, by means of a bolt running through a hole in the middle of it, or at an equal distance from each end of said bar, with a ring in one end, near the edge of the handle, on which to tie the trip-rope, and a loop on the other end, so that when the fork is closed it will fall down, or can be gently pushed down over the handle, and, if need be, turn the bar of the bolt on which it is pivoted, and it will hold it fast until the horse draws.

Having thus fully described my invention,

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

1. In combination with a hay-fork of any description, the gauge E, constructed substantially as described, and operating in the manner and for the purposes herein set forth.

2. The arrangement of the semi-elliptical prongs A A', gauge E, handles B B', loop D, and cord b, all the parts constructed and operating substantially as set forth.

In testimony that I claim the foregoing, I have hereunto set my hand, this 20th day of April, 1869.

JOHN A. MILLER.

Witnesses:

W. F. MORROW,
J. O. M. BUTTS.