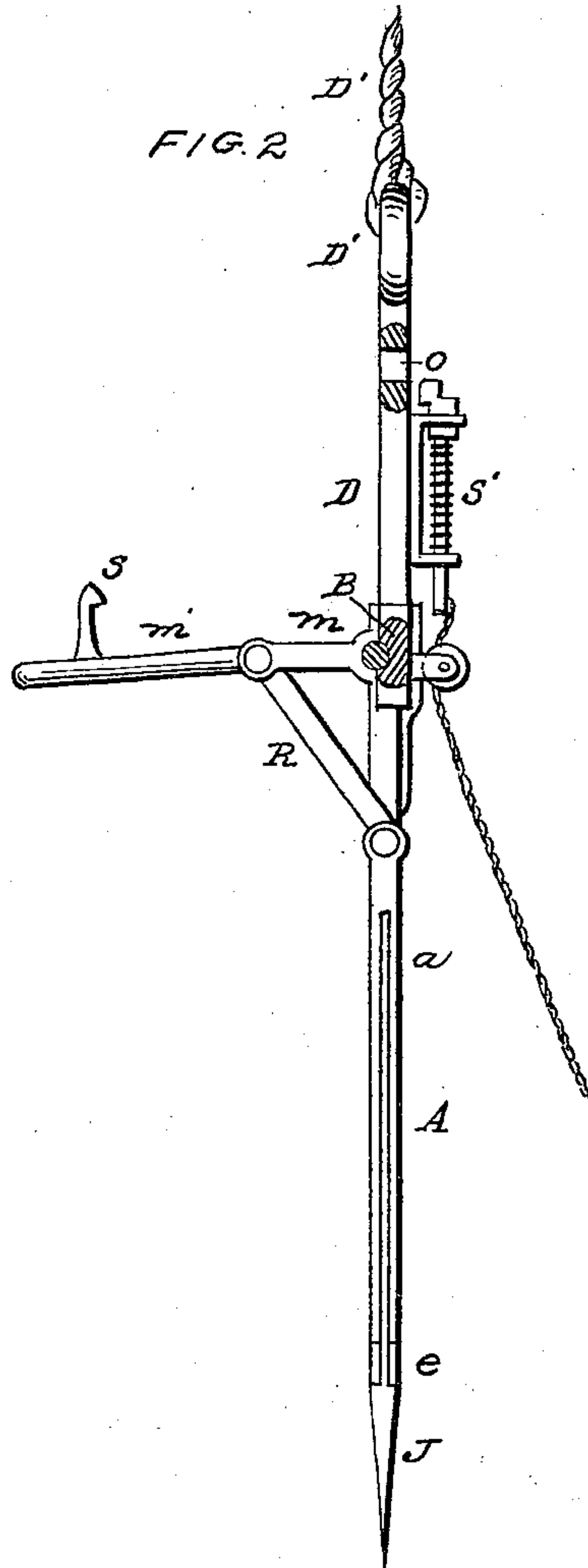
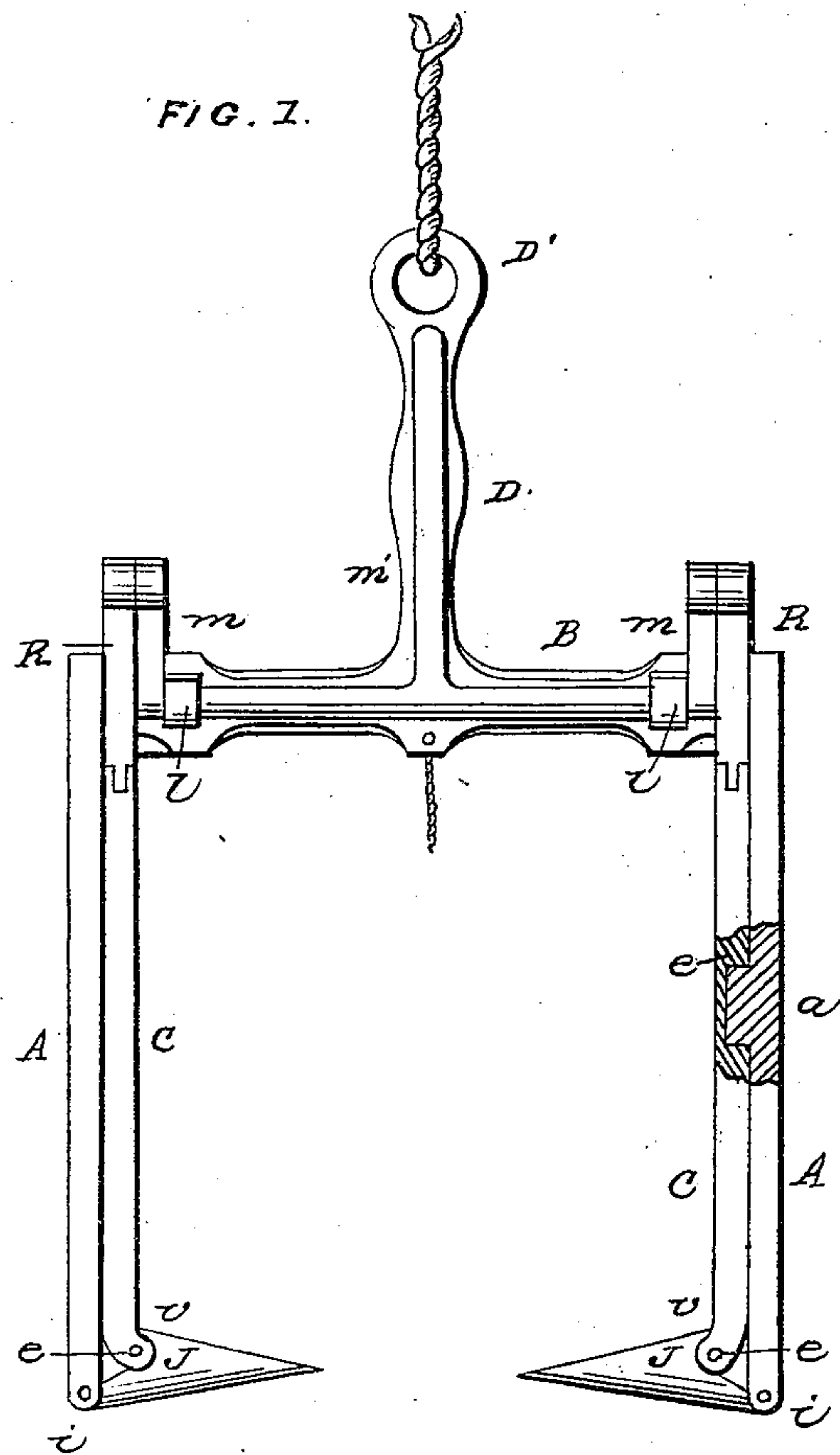


J. GILMORE.
Horse Hay Fork.

No. 72,837.

Patented Dec. 31, 1867.



WITNESSES.

S. C. Kemmer
J. K. Ellsworth

INVENTOR.

John Gilmore
By M. H. H. H.
Attorneys.

United States Patent Office.

JOHN GILMORE, OF PHOENIXVILLE, PENNSYLVANIA.

Letters Patent No. 72,837, dated December 31, 1867.

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 GILMORE, of Phoenixville, in the county of Chester, and State of Pennsylvania, have invented a new and improved Horse Hay-Fork; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation of my invention, and

Figure 2 is a view of the same when standing with its edge towards the spectator

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

In this invention a new device is employed for opening, closing, and locking the jaws of the instrument, whereby greater convenience and efficiency of operation are secured.

In the drawings, A A represent the sides of the instrument, and B a bar, which unites them at their top, the whole forming three sides of a rectangle. D is a handle attached to the middle of the bar B, and provided at its upper extremity with a ring, D', by which to fasten a cord or chain to it. Two jaws J J are jointed to the lower ends of the side pieces A A, by pivots *i i*, in such a manner that the jaws can be brought into the position shown in fig. 1, and also that shown in fig. 2. Two sliding-rods, C C, work up and down, one on the inner side of each piece A, being held in position by a tongue, *a*, projecting from the side pieces into a long slot, *c*, in the sliding bars. The tongue may, if desired, project from the sliding bar into a slot in the side pieces. The lower ends of the sliding bars are bent slightly inward, fashioned into a nearly circular form, and at the centre of such circular projection pivoted to the inner edge of the jaws J J, inside of the pivots *i i*. The circular projection designated as *e* in the drawings, is countersunk in the surface of the jaws, or the jaw may be cut away at that point on each side, and the middle portion that is left be inserted into a gain or recess in the end of the rod C, and pivoted to the rod by a pin driven through it. For convenience in manufacture, the slot *c* might be extended to the lower end of the sliding rod, and the projecting edge of the jaw be inserted in it, as shown in the drawings, the circular projecting lugs *e e* being countersunk in the jaw on both sides, so as not to catch in the hay and interfere with the operation of the fork. Along the side of the top bar B extends a rocking-shaft, M, bearing in lugs *l l*, and provided with two arms or cranks, *m m*, one at each extremity, and a longer central arm, *m'*, extending in the same direction as the cranks *m m*, and having a barbed hook or snap, *s*, on its inner side, which passes through an aperture, *o*, in the handle D, when the arm *m'* is turned up against the handle, and engages with a spring-slide *s'*, on the opposite side. Short rods, R R, connect the outer ends of the arms *m m*, and the upper ends of the sliding rods C C in such a manner that by rocking the shaft M by means of the arm *m'*, the rods C C shall be caused to slide up and down, alternately drawing the jaws J J up into the position shown in fig. 1, or extending them into the position shown in fig. 2. When the jaws are drawn up, as shown in fig. 1, they may be securely locked in that position by means of the snap *s* and slide *s'*. The width of the jaws J J, at their upper end, is exactly equal to the width of the side A and slide C together, and their thickness also corresponds, so that when the jaws are extended, as in fig. 2, the prongs of the fork shall present a smooth surface, tapering to a point at their extremities. The lower edges of the countersinks in the sides of the jaws are made circular, curving round the lower side of the lugs *e e*, and rising on the inner side of the jaws to a point, *v*, where the shoulder of the countersink rests upon the curved lug *e* in such a manner that, were the pin that connects them to become broken by any casualty, the jaw would not drop and discharge the hay from the fork, but would be held up by the shoulder *v* and lug *e*, operating together as described.

The operation of such an instrument is like that of others of a similar general character; it is extended, as shown in fig. 2, thrust into the hay, and then brought into the position shown in fig. 1, and secured in that position by the locking-device above explained.

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

1. The combination of the jaws J J, sides A A, sliding rods C C, connecting-rods R R, cranks *m m*, shaft M, arm *m'*, snap *s*, spring-slide *s'*, and handle D, when the said parts are constructed, arranged, and combined substantially in the manner and for the purposes specified.

2. In a horse hay-fork of the within-described construction, the projecting curved lugs *e*, in combination with the sliding rods C C and jaws J J, the latter having the shoulder *v* so formed that, when the jaws are retracted, it will rest upon the upper side of the lugs and support the jaws J J independently of their pivot, substantially in the manner described.

JOHN GILMORE.

Witnesses:

P. G. CAREY,

A. B. THOMSON.