J. K. O'Neil.
Hay Fork.

No. 59,633. Patented. Nov. 13. 1866.

Fig. 1.

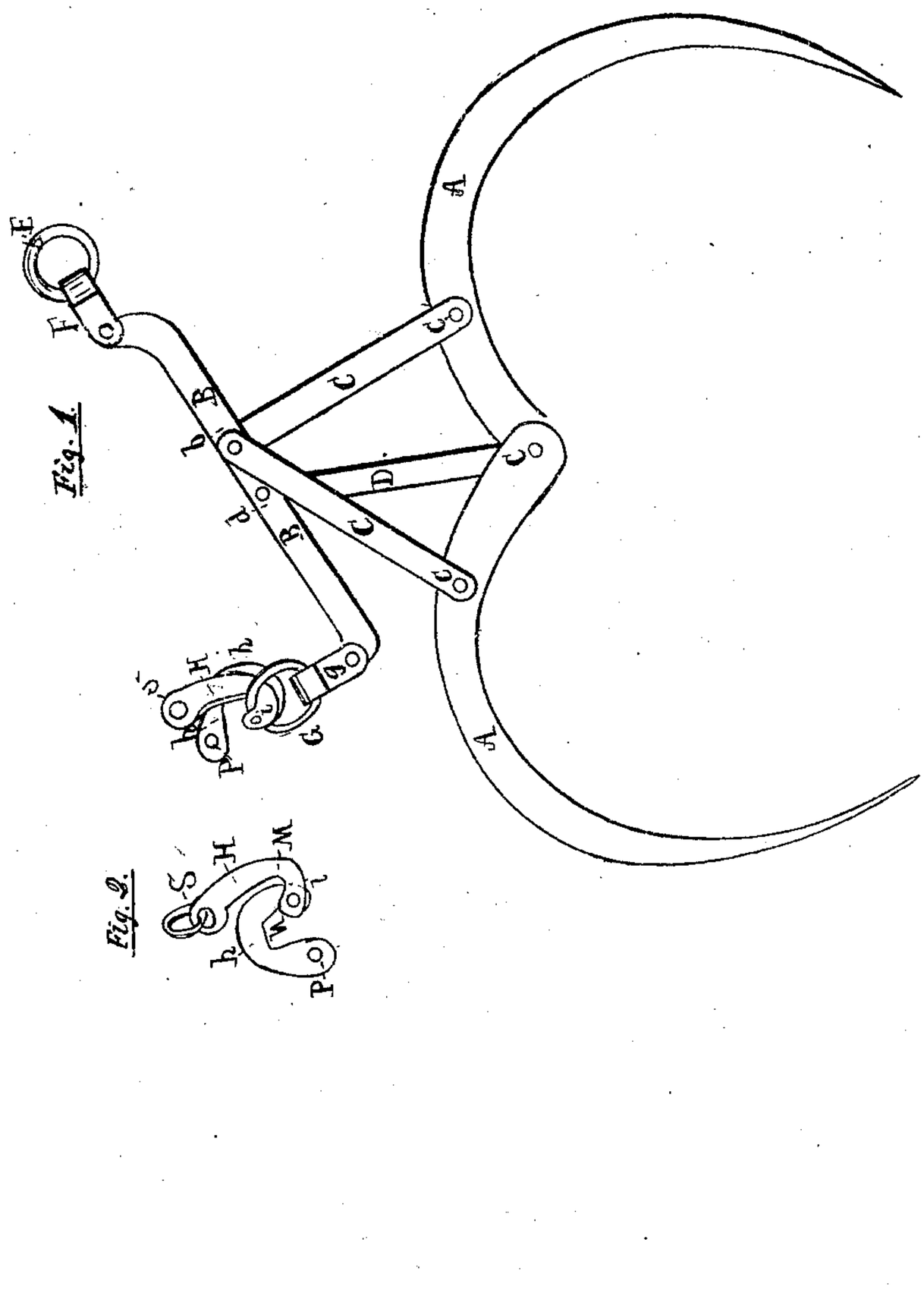

Fig. 2.

Witnesses:-

Thomas F. Parker
Thomas C. Smith

John K. O'Neil,
By his atty.,
J. L. Brown.

UNITED STATES PATENT OFFICE.

JOHN K. O'NEIL, OF KINGSTON, NEW YORK.

IMPROVEMENT IN HORSE HAY-FORKS.

Specification forming part of Letters Patent No. **59,633**, dated November 13, 1866.

To all whom it may concern:

Be it known that I, JOHN K. O'NEIL, of Kingston, in the county of Ulster and State of New York, have invented an Improved Hay-Elevator, or Horse Hay-Fork; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a side view of the improved instrument; Fig. 2, a side view of the tripping-hook as in the act of tripping the fork.

Like letters designate corresponding parts in all of the figures.

The improvement on the elevator is applied to that class which has two grasping-hooks, A A. These hooks are pivoted together at *a*, and at the same place a lifting-bar, D, is pivoted, the upper end of the bar being pivoted at *d* to the operating-lever B, which is a straight or simple lever. The point *d* of this attachment is a little nearer to one end of the lever than to the other, and at a point, *b*, about as near to the other end of the lever are pivoted two opening-bars, C C, whose lower ends are respectively pivoted to the hooks at *c c*, substantially as shown.

The distance between the points *b* and *d* of the attachments of these bars to the lever B is such that by suspending the lever from the ring, or its equivalent, E, at one end, as in Fig. 1, the hooks will be opened, ready to grasp the hay, and when the lever is suspended by the ring G at the other end the hooks will be closed and sustain the hay. The vertical position of the lever brings the two points *b d* nearly in the line of suspension and locks the hooks together. The rings E and G may be attached to the lever by links *f* and *g*, respectively.

My improved tripping-hook H is so shaped that the ring, hook, or rope which it suspends by will hang well up to the shank *m* of the hook, as shown, and a tripper, *h*, is pivoted to the hook at the points of both, as at *i*, and the tripper has such a form as to allow the hook to suspend its load firmly when the tripper is in the position shown in Fig. 1, but will unship the load when it is drawn over into the position shown in Fig. 2.

The suspension-rope is so arranged that when suspending the fork by the hook H it will suspend the lever B at one end, and when the hook is tripped it will suspend the fork by the other end, and thus shift the fork.

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

1. Suspending the lifting-bar D and opening-bars C C by the same straight or direct lever B, all operating in combination substantially as and for the purpose herein specified.

2. The tripping-hook H, provided with the tripper *h*, pivoted thereto at their points *i*, constructed and operating substantially as and for the purpose herein set forth.

The above specification of my improved hay-elevator signed by me this 14th day of July, 1866.

JOHN K. O'NEIL.

Witnesses:

J. S. BROWN,

WM. F. BROWN.