A. J. COOK.

Horse Hay Fork.

No. 70,962. Patented Nov. 19, 1867.

Fig. 1

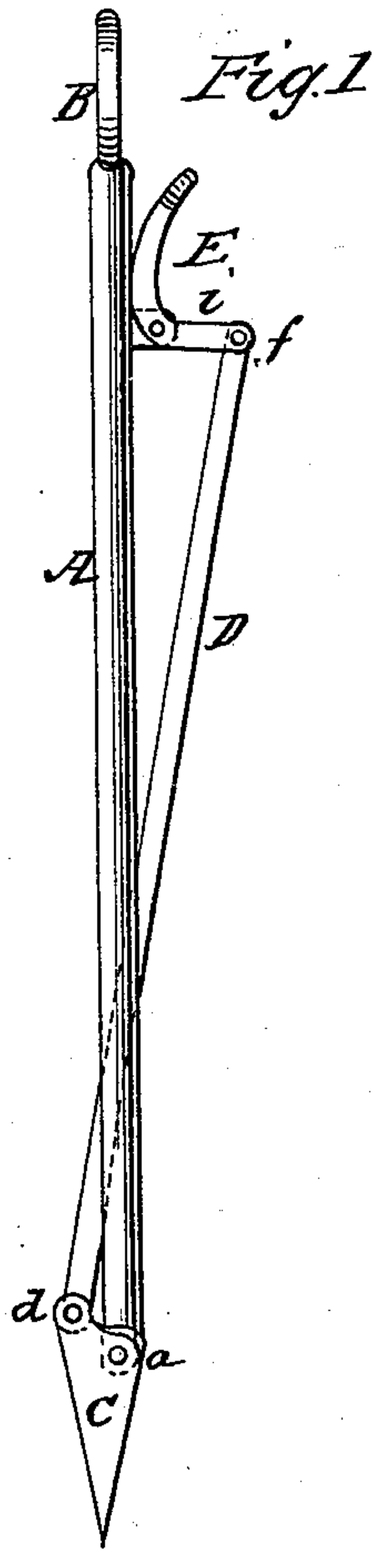


Fig. 2

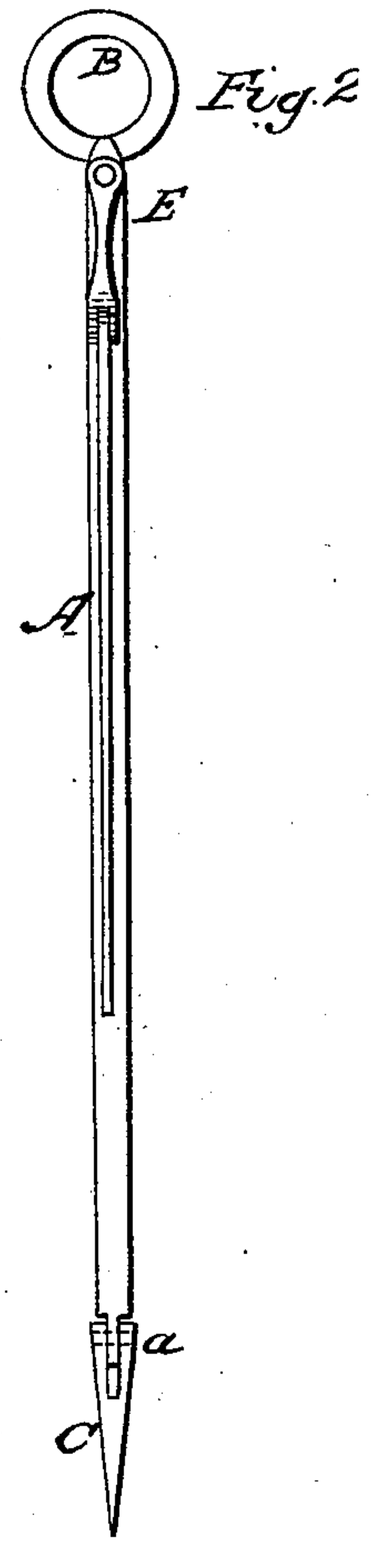
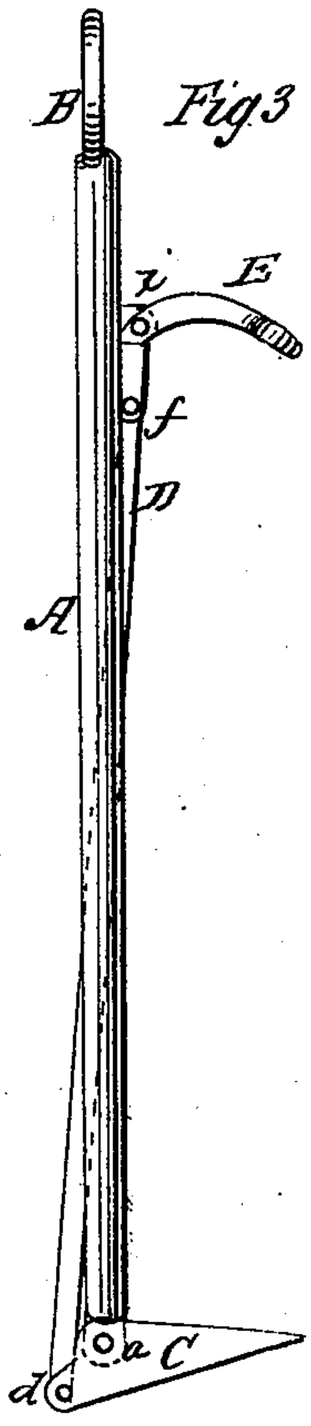


Fig. 3



Witnesses

John A. Shumway

a. J. Tibbitts

A. J. Cook

Inventor

By his Attorney

John E. Earle

United States Patent Office.

A. J. COOK, OF GUILFORD, CONNECTICUT.

Letters Patent No. 70,962, *dated November* 19, 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, A. J. Cook, of Guilford, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Hay-Forks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view with the fork in position to be inserted,

Figure 2, an edge view of the same; and in

Figure 3, a side view, the fork turned up to raise the hay.

This invention relates to an improvement in that class of hay-forks commonly called horse hay-forks, or such as are used for raising large quantities of hay or similar material, and consists in the peculiar construction and arrangement for operating the fork to hold or to release the hay.

To enable others to construct and use my improvement, I will proceed to describe the same as illustrated in the accompanying drawings.

A is a round rod, provided at its upper end with an eye, B, or other means for attaching the lifting apparatus, and has the fork C hinged at its lower end at *a*, and above the fork the rod A is slotted to permit a bar, D, to pass therethrough, the lower end of which is pivoted to the fork at *d*, on one side of the rod, and the bar D extending through the rod is pivoted at its upper end to a lever, E, at F, the said lever E having its fulcrum at *i* on the rod A, and so that by turning the lever from the position in fig. 1 to that denoted in fig. 3, the bar D is thrown down and turns up the fork, as from the position in fig. 1 to that denoted in fig. 3. In this position the bar D is nearly enclosed within the rod A, and the three points *i*, *f*, and *d*, being in line, no amount of weight can turn the fork.

The operation of the fork is as follows: When the lever E is turned up, as in fig. 1, insert the fork into the mass to be raised, and press it down into the mass to the proper depth; then turn the lever E down, as denoted in fig. 3, so as to turn up the fork within the mass; then attach to the hoisting apparatus, and the fork, with the mass clinging thereto, is raised and carried to the required point. Then the lever E is turned up to bring the fork to the position in fig. 1, and the mass readily falls from the fork.

I am aware that it is not new to pivot a fork or prong to the end of a rod, to be turned up at right angles after its insertion into the mass; but in all such forks the rod or mechanism which has operated the prong has been more or less exposed, and so as to interfere with the easy insertion of the fork or the release after raising, but by passing the rod D through the slotted rod A, this difficulty is overcome, and the fork very greatly improved.

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

The combination of the slotted rod A, the bar D, the lever E, and prongs C, when the said bar D extends from the said lever upon one side of the rod, through the rod to the prong upon the opposite side, substantially as and for the purpose herein set forth.

A. J. COOK.

Witnesses:

John E. Earle,

A. J. Tibbits.