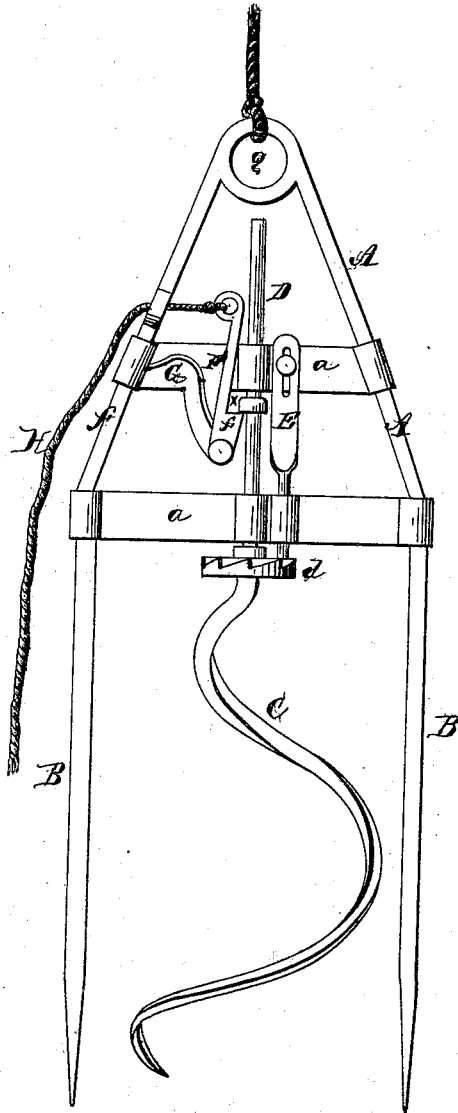


A. SHELLENBERGER.
Spiral Hay-Fork.

No. 166,152.

Patented July 27, 1875.



WITNESSES
Chas. H. Orwand.
Chas. M. Bart

By

INVENTOR
Amos Shellenberger
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Attorney

UNITED STATES PATENT OFFICE.

AMOS SHELLENBERGER, OF VERSAILLES, OHIO, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO JOSEPH Z. LIZIER AND JOHN W. SINGER, OF SAME PLACE.

IMPROVEMENT IN SPIRAL HAY-FORKS.

Specification forming part of Letters Patent No. **166,152**, dated July 27, 1875; application filed April 16, 1875.

To all whom it may concern :

Be it known that I, AMOS SHELLENBERGER, of Versailles, in the county of Darke and in the State of Ohio, have invented certain new and useful Improvements in Spiral Hay-Forks; and do hereby declare that the following is full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements upon the invention set forth in the patent granted to me on the 14th day of June, 1870, No. 104,365, for improvements in hay-forks; and it consists in a strong metallic frame, from which depend two parallel tines having a square section, and a spiral tine having a similar section, the spiral tine being attached to the lower end of a rod journaled in the frame, and capable of a vertical as well as a rotary movement, in combination with certain devices for locking and releasing the same to operate the fork, as will be more fully hereinafter set forth.

The drawing represents a front elevation of my improved fork.

The letter A represents a strong frame of iron, with two dependent parallel tines, B B, square in section and pointed at the ends. C represents the spiral tine, forming part of, or attached to, the lower end of the vertical rod or bar D, extending up through the cross-pieces *a a*, which form part of the frame. Said spiral tine, is also square in section, and pointed similarly to the parallel tines. To the lower end of the rod D, just above the spiral tine, is attached a metallic disk, *d*, provided with an annular ratchet upon its top, and about midway between the two ends of the same is formed a shoulder, the objects of which will be presently explained. E represents a pawl or dog, passing through an aperture in the lower cross-piece of the frame A, and secured by a pin passing through a slot

in its upper end to the upper cross-piece. Said pawl is capable of a slight movement vertically, its lower end resting upon the ratchet on the disk *d* when the rod D is elevated. F represents a latch, consisting of a lever pivoted at its lower end to a projection upon the upper cross-piece of the frame. Said lever extends upward, and is formed with a heel or catch, *f*, which holds the rod D when elevated by catching under the shoulder X on the rod. G' represents a spring for throwing the lever toward the rod to automatically lock the bar D when it is elevated. The fork is secured to the elevating-rope by means of an eye, *g'*, at its upper end, and rope H is attached to the end of the lever F, by means of which it is operated.

The fork is operated by forcing it downward into the hay, the spiral tine turning during the operation until the load is taken and the ratchet forced up against the dog or pawl. When the rod D is fully elevated the lever catches under the shoulder on said rod, and locks the same in position. The load may now be elevated, and when at the desired place is discharged by pulling on the rope H, releasing rod D, allowing the same to drop, and releasing the pawl from the ratchet. This allows the spiral tine to rotate and release the load, which falls by its own weight.

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

In combination with the frame A and parallel tines B B and spiral tine C, the rod D, having a shoulder, X, and capable of a vertical as well as a rotary motion, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of March, 1875.

AMOS SHELLENBERGER.

Witnesses:

B. ENGELKEN,
FRANCIS KUSNICK.