Joseph H. Mullin E' Horse-Hay-Fork
Sig. 1. Sig. 2. PATENTED FEB 11 1868 74405

Anited States Patent Pffice.

JOSEPH H. MULLIN, OF SCHELLSBURG, PENNSYLVANIA.

Letters Patent No. 74,405, dated February 11, 1868.

IMPROVEMENT IN HORSE HAY-FORKS.

The Schedule referred to in these Wetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Joseph H. Mullin, of Schellsburg, in the county of Bedford, and State of Pennsylvania, have invented a new and useful Improvement in Horse Hay-Forks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 represents a view in elevation of my improved fork.

Figure 2, a similar view of the same, taken at a right angle to the former one; and

Figure 3, a view of the sliding bar detached.

The red lines in the figures show the position of the parts when lifting the hay.

In order to carry out the objects of my invention, I form a longitudinal slot, a, in the shank A of the fork, and provide a bar, B, to slide endwise longitudinally therein in suitable guides b. The lower end of this slide-bar is guided by a slot, b, which permits the slide-bar to traverse on a pin, c, passing transversely through the shank. Two link-bars C, are likewise pivoted at one end on this pin, so as to play vertically, their lower ends being connected to similar bars C, the lower ends of which are pivoted, at b, to the lower end of the slide-bar B. The lower portion of the slide-bar is made thinner than the upper part, in order to allow room for these links to play freely when the bar is down, and has a flange, C, on it, for the support of the links when enclosed in the shank. A loop, E, is secured firmly to the upper end of the shaft, and may be provided with a ring, e, for the attachment of the hoisting-rope E'. An eye, B, on the top of the slide-bar, also receives a draw-rope, B. The upper end of this bar is slotted to receive a locking-bolt, F, pivoted to play vertically in the shank, and held in contact with the slide-bar by a spring.

The operation is as follows: The slide-bar B being shoved down in its sheath as far as it will go, in which position the links C C¹ are enclosed in the sheath, the hoisting-rope E' is loosened, and the fork descends into the hay. The locking-rope B² is then drawn so as to lift the slide-bar, and thus expand the links C C¹ into the position shown in red in fig. 2, by which time the upper slot f comes opposite the locking-bolt F, which is forced by its spring f' into the slot f, and thus locks the slide-bar in position. The apparatus is then lifted by drawing on the hoisting-rope E'. The projecting prongs C of the links bring up the hay as they rise. The hay is then swung over the place of deposit and dropped by pulling the tripping-rope F', which releases the latch F, and allows the slide-bar to descend, and straighten out the links C C¹, when the hay drops. The fork is then

swung over the hay to be lifted, and the above operation repeated.

It will be observed that the loop encloses and protects the latch and spring from injury, while the sheath protects the links.

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

The combination, substantially as described, of the shank, the loop E, the slotted sliding bar, and the spring-latch, for the purposes set forth.

In testimony whereof, I have hereunto subscribed my name.

Witnesses:

WILLIAM J. MULLIN, John A. Snively. JOSEPH H. MULLIN.