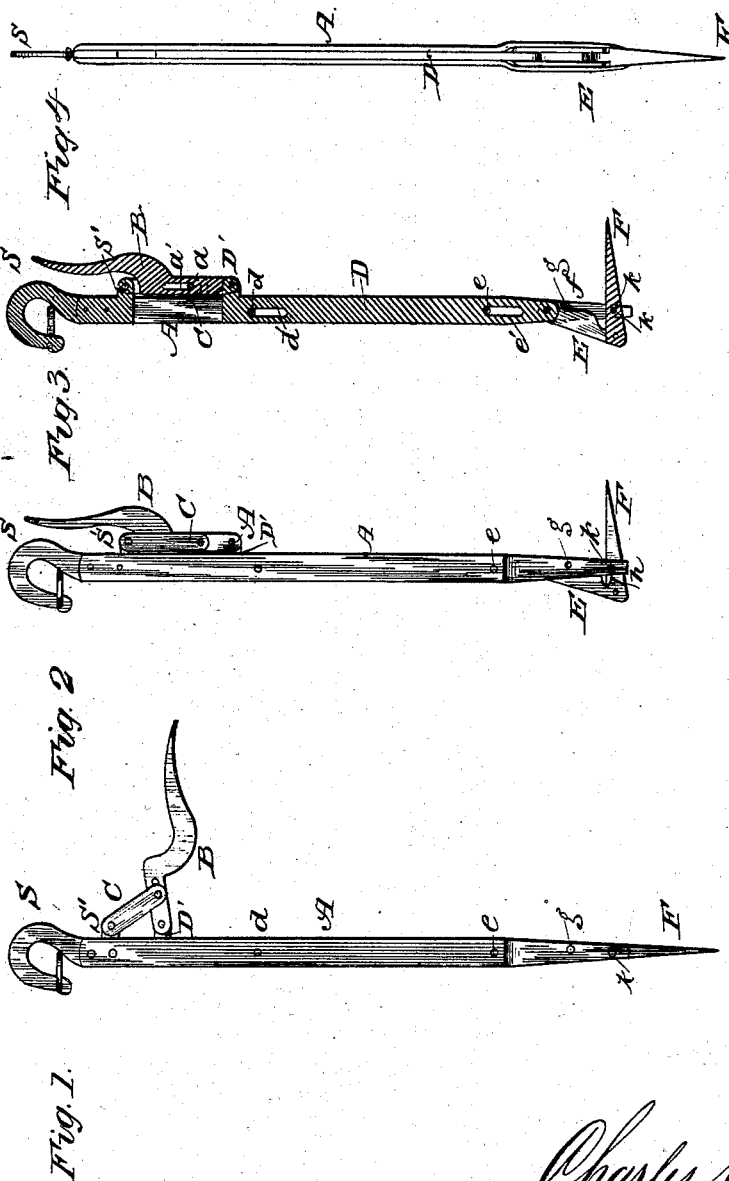


(No Model.)

C. E. FRIEL.  
HORSE HAY FORK.

No. 261,699.

Patented July 25, 1882.



WITNESSES:

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INVENTOR,  
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# UNITED STATES PATENT OFFICE.

CHARLES E. FRIEL, OF FREDERICTON, NEW BRUNSWICK, CANADA.

## HORSE HAY-FORK.

SPECIFICATION forming part of Letters Patent No. 261,699, dated July 25, 1882.

Application filed June 2, 1882. (No model.) Patented in Canada November 12, 1881, No. 13,688.

*To all whom it may concern:*

Be it known that I, CHARLES ERNEST FRIEL, of Fredericton, in the Province of New Brunswick and Dominion of Canada, have invented certain new and useful Improvements in Horse Hay-Forks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of my improved horse hay-fork ready for insertion into a load of hay. Fig. 2 is a similar view, showing the fork in its position after insertion into the load, with the point or prong turned to one side to grasp and hold the load. Fig. 3 is a longitudinal sectional view of the fork with its parts in the same position as in Fig. 2, and Fig. 4 is an edge view with the parts in the position shown in Fig. 1.

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

My invention has relation to so-called "horse hay-forks;" and it consists in an improved construction and combination of parts of a single-pointed harpoon-fork, as hereinafter more fully described and claimed.

In the accompanying drawings, A A represent the parallel side bars, which are bolted together at *d*, *e*, and *k*, and form the shaft or stock of the fork. Between these parts works a sliding bar, D, which has oblong slots at *d'* and *e'*, through which pass the bolts *d* and *e*. Upon the lowermost bolt, *k*, is pivoted the solid point or tine F, to the heel of which is pivoted the slotted locking-link E, which is made with two notches, *f* and *h*, for the purpose hereinafter set forth. The upper end of link E is pivoted to the lower end of the sliding bar D, the upper end of which has a short projecting arm, D', in which is hinged the lever-trigger B, to the outer end of which the rope or chain for tripping the fork is attached. Lever B is connected by an oblong slot or eye, *a'*, and bolt *a* to a link, C, the upper end of which is

hinged in the short arm S', which projects from the hook S, bolted securely and rigidly to the top part of the stock.

From the foregoing description, taken in connection with the drawings, the operation of my improved harpoon-fork will readily be understood. The solid point F, being in the position shown in Fig. 1, is inserted into the load of hay a sufficient depth, when lever B is turned up into the position shown in Figs. 2 and 3, which throws the point at right angles, or approximately so, to the stock, so that it will hold the hay while it is being lifted. To drop the load lever B is brought down at right angles to the stock, as shown in Fig. 1, when the hay will readily slip off the fork by its own weight. The notches or recesses *f* and *h* in the locking-link E, which connects the lower end of the sliding bar D with the heel of the point F, by striking against a bolt, *g*, inserted transversely through the stock limit the play of said link and the upward and downward stroke of bar D, and also operate to interlock link E with the stock of the fork, so that the point cannot become accidentally unlocked and lose its grasp while the load of hay is being lifted.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a horse hay-fork, the combination of the longitudinally-slotted stock A A, having bolts *d*, *e*, *g*, and *k* and fixed hook S, sliding bar D, having oblong slots *d'* and *e'* and projecting arm D', trigger-lever B, link C, locking-link E, having notches *f* *h*, and solid point F, pivoted on bolt *k*, all constructed and combined substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CHARLES ERNEST FRIEL.

Witnesses:

ALONZO STAPLES,  
J. T. McMURRAY.