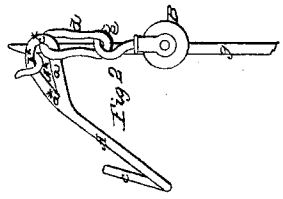
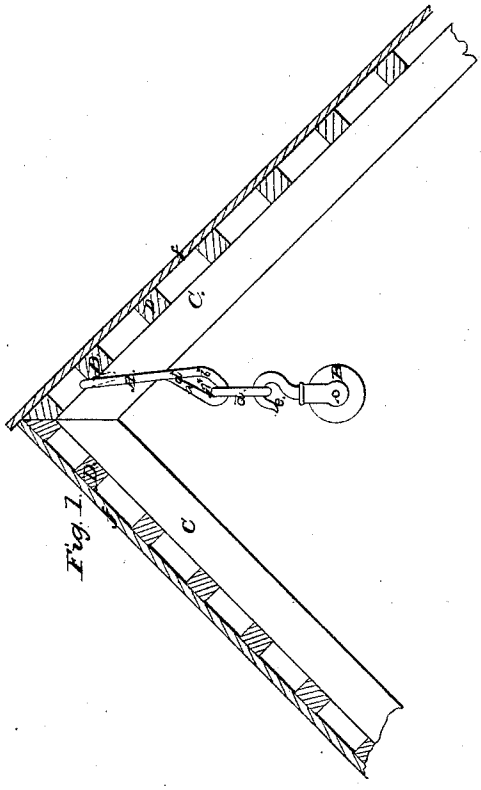
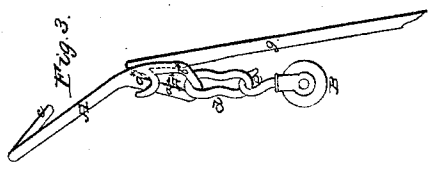
# E. Hicks,

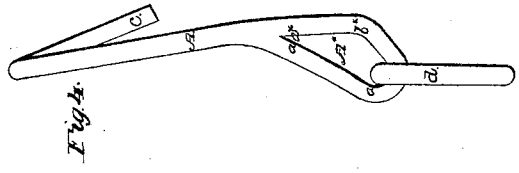
## Hay-Fork Grapple.

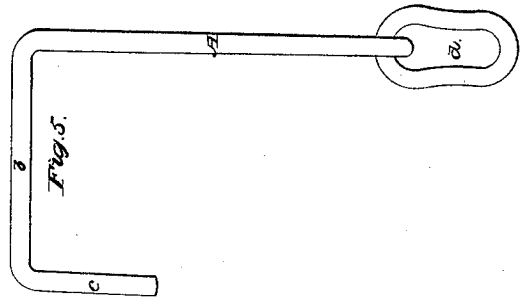
No. 69,434. Patented Oct. 1, 1867.




Witnesses:

J. M. Coombs.

G. W. Reed

Inventor:

Edmund Hicks

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

# United States Patent Office.

EDWARD HICKS, OF NORTH HEMPSTEAD, NEW YORK.

*Letters Patent No.* 69,434, *dated October* 1, 1867.

## IMPROVEMENT IN SUSPENSION-HOOKS FOR 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, EDWARD HICKS, of North Hempstead, in the county of Queens, and State of New York, have invented certain new and useful Improvements in Suspension-Hooks for Horse Hay-Forks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which-

Figure 1 is a vertical transverse section of a roof having my improved suspension-hook attached thereto.

Figures 2 and 3 are detached views, showing the manner of manipulating the hook in attaching it to the roof.

Figure 4 is an edge view of the hook on an enlarged scale.

Figure 5 is a side view of the same, also on an enlarged scale.

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

The object of this invention is to enable the suspension-hook to be attached to the rafters of a barn or building with greater facility than is found possible with the comparatively imperfect ones hitherto in use.

The invention consists in the construction of the hook with its holding-prong arranged at an angle to its shank, in such manner that the hook, when held in a suitable position, may be readily passed between the rafter and the roof-boards.

The invention further consists in a novel construction of the eye of the hook, whereby the said hook, when attached to a suitable pike-pole, may be readily brought and held in the position requisite to insure its proper passage over the rafter.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

The straight shank of the hook is marked A in the drawings, and is furnished at its lower end with an eye, A*. One side of this eye is made nearly or quite straight, as shown at *a*, while the remaining sides thereof are formed with three corners or notches, represented respectively at *a**, *b**, and *c**. The upper part, *b*, of the hook is placed at right angles to the shank just mentioned, and is furnished at its outer extremity with a downwardly extending prong, *c*, the office of which is to hold the hook in its place upon the rafter, and which is situated at a moderate angle to the shank, as shown in figs. 2, 3, and 4. It is intended that the eye A* be furnished with a link, *d*, into which may be hooked the hook *e* of a suitable pulley, B.

In the drawings the rafters of the roof are marked C, and the longitudinal ribs which support the roof-boards or shingles *f*, are shown at D. When in use the hook is placed with its upper portion upon the upper side of the rafter, between two of the slats D, with the prong *c* projecting downward upon that side of the rafter opposite that at which the shank is situated, the position of the hook when thus in use being represented in fig. 1. In passing the hook upon the rafter it is placed upon the hook-shaped end of a pike-pole, indicated at *g*, and of any requisite length. In those cases in which it is desirable that the hook should be held in a nearly upright position when raised to the rafter, the hooked end of the pike-pole is placed in the notch or corner *a**, as shown in fig. 3, but in those cases where it is required that the said hook shall be inclined downward, as shown in fig. 2, the hook end of pike-pole is placed in the corner *b**, the hook being retained in either position upon the pike-pole by the counterbalancing action of the link *d* and pulley B which depend from the notch or corner *c**. Inasmuch as the prong is situated at angle to the shank of the hook, as hereinbefore explained, the said prong may be passed between the rafter and the roof-boards, when the shank is situated at a greater or less angle to the side of the roof, whereas if the prong were parallel with the shank considerable difficulty would be experienced from the striking of the shank against the roof in the said operation, the manipulation of the hook in attaching the same to the rafter being by these means rendered facile and convenient.

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

1. The hook, constructed with its prong *e*, situated at an angle to its shank A, substantially as and for the purpose specified.

2. The eye A* of the hook, constructed with the angles or corners *a** *b** *c**, substantially as and for the purpose herein set forth.

EDWARD HICKS.

Witnesses:

J. W. COOMBS,

G. W. REED.