

(No Model.)

J. ANDERSON.
HORSE HAY RAKE.

No. 321,472.

Patented July 7, 1885.

Fig. 1

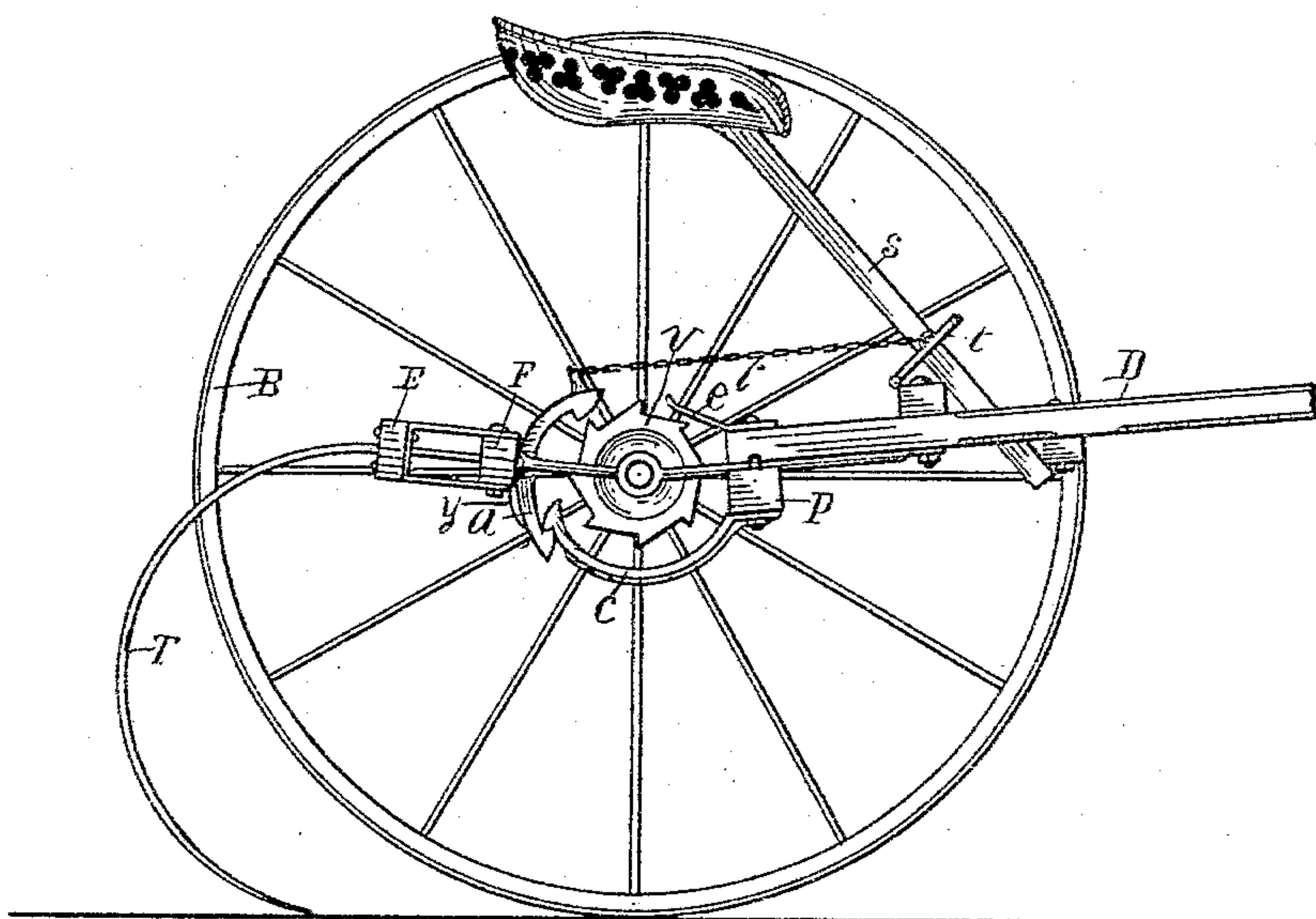


Fig. 4e

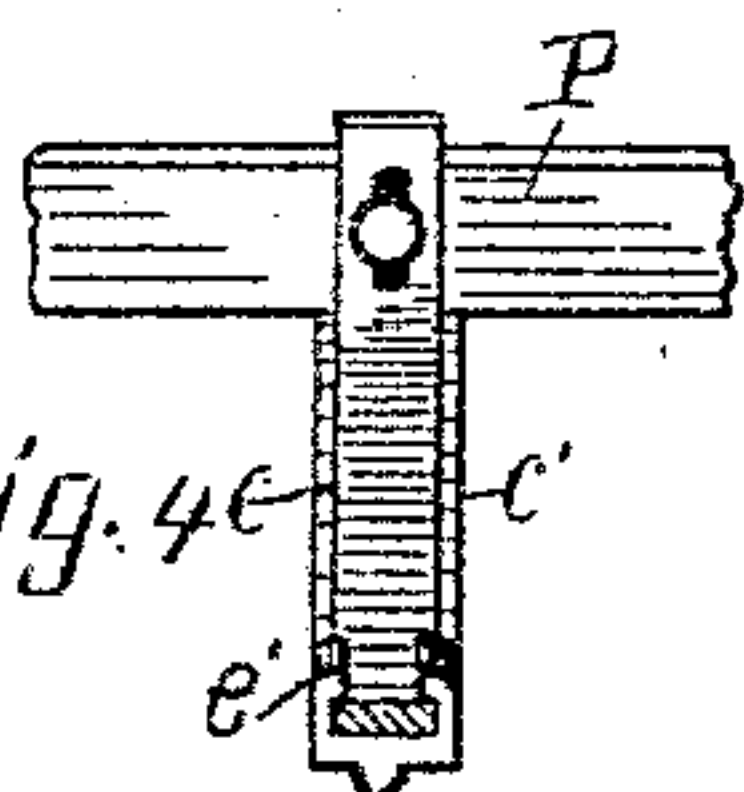


Fig.2

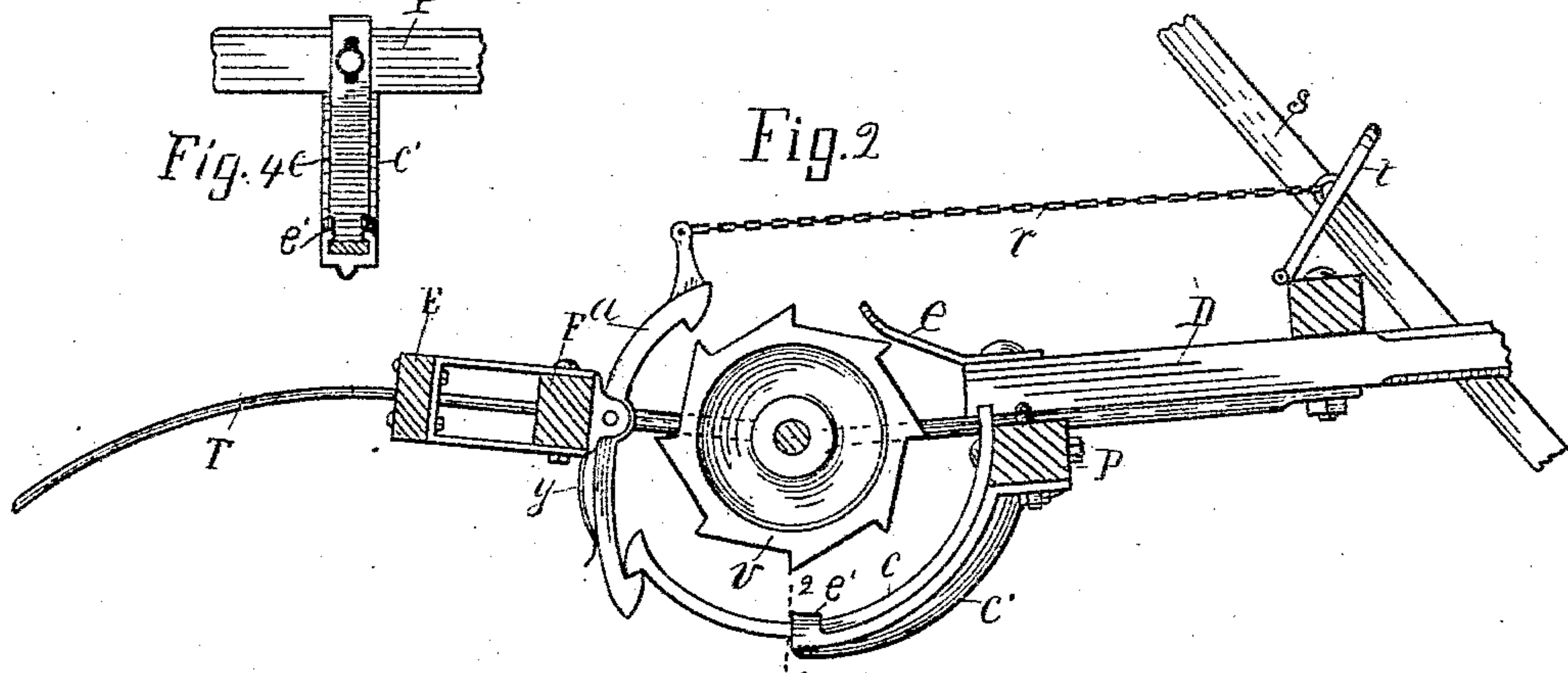
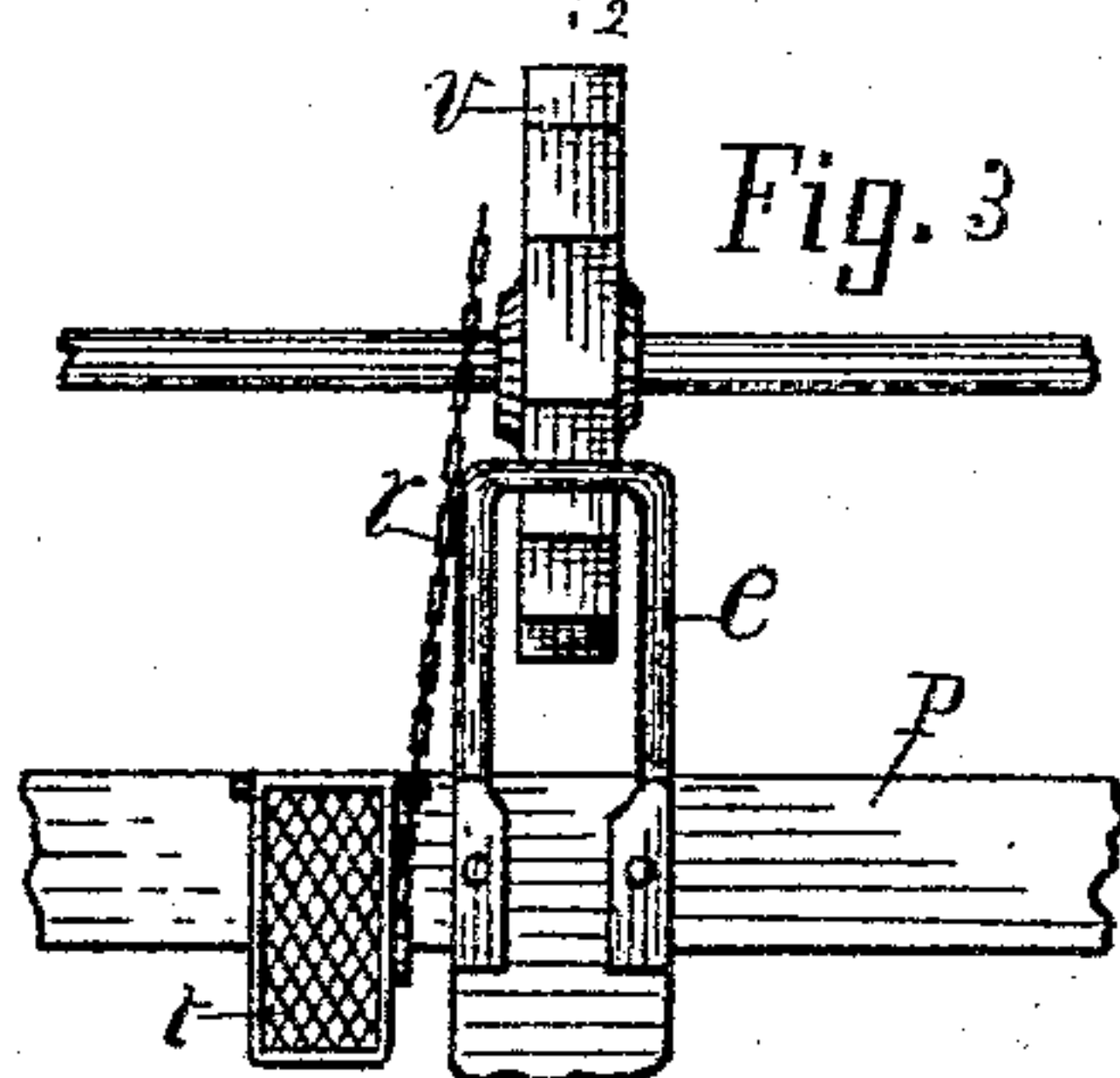


Fig. 3



Witnesses.

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Inventor.

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Army--

UNITED STATES PATENT OFFICE.

JAMES ANDERSON, OF OSHTEMO, MICHIGAN.

HORSE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 321,472, dated July 7, 1885.

Application filed August 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES ANDERSON, a citizen of the United States, residing at Osh-temo, county of Kalamazoo, State of Michigan, have invented a new and useful Improvement in Horse Hay-Rakes, of which the following is a specification.

This invention has for its object a construction whereby the teeth of a sulky hay-rake are locked in their used position.

The invention is especially applicable to the style of self-dumping rakes herein illustrated.

In the drawings forming a part of this specification, Figure 1 is a side elevation of a rake embodying the invention; Fig. 2, a vertical section of parts enlarged. Fig. 3 is a top view of portions of Fig. 2, and Fig. 4 is a vertical section of portions in Fig. 2 on line 2 2.

The head E F of the rake-teeth T is connected, in the usual manner, to the axle of the rake. Centrally located is a ratchet-wheel, *v*, secured to the axle. In the rear of the wheel *v* is a pawl, *a*, pivotally connected with the beam F of the rake-head. The upper end of the pawl *a* is adapted to engage the teeth of the wheel *v*. A chain, *r*, connects the upper end of the pawl *a* with a foot-treadle, *t*. A bar, *c*, is secured to the rake-frame P, and terminates in a hook in a position to engage with the lower hooked end of the pawl *a*.

Y is a spring to cause the pawl *a* to engage the hook of bar *c*.

In the operation, by pressing down on the foot-treadle *t*, the upper end of the pivoted pawl *a* is brought into position to engage the teeth of the wheel *v*, which causes the rake-teeth to dump or rise up and pass over the windrow, as in prior devices; but when the foot-treadle *t* is released, after passing the windrow, the rake-teeth fall to their used position, and are locked in said position by the engagement of the lower end of the pawl *a* with the hooked end of the lock-bar *c*, as before stated.

If desired, the lock-bar may be made adjustable to govern the degree of the pressure of the teeth on the ground. This is illustrated in Figs. 2 and 4. A support or bracing casting, *c'*, is secured to the frame P, and pro-

vided at the lower end with a loop, *c'*, through which the lock-bar *c* is passed. The upper end of the lock-bar is slotted, and in said slot the securing-bolt *a'* is located. Thus by loosening said bolt and slipping the bar *c* the position of said bar may be changed. The object of thus locking the teeth in their used position is to obviate the necessity of holding them down by manual effort. A trip-bar, *e*, is secured to the frame in a position to engage with the upper end of the pawl *a*, to disengage said pawl from the ratchet-wheel *v* after dumping the rake.

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

1. In a self-dumping rake, the combination of the rake-head, a hooked spring-actuated pawl pivoted to the head, a trip-bar connected to the rake-frame in position to trip the pawl, a lifting-ratchet secured to the rake-axle, and a lock-bar connected to the rake-frame and adapted to lock with the pawl when the teeth fall to their used position, substantially as set forth.

2. In a self-dumping rake, the combination of the ratchet secured to the wheel-axle, a spring-actuated pawl centrally pivoted to the rake-head and having a hook at each end, and a hooked lock-bar secured in position to lock with the lower end of the pawl, substantially as set forth.

3. A rake provided with a hooked pawl connected with the rake-head and a hooked lock-bar adjustably secured to the frame in position to lock with the pawl when the teeth fall to their used position, substantially as set forth.

4. The combination of the spring-actuated lock-pawl connected with the rake-head, the slotted adjustable lock-bar, and the brace-casting adapted to receive and support the lock-bar, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

JAMES ANDERSON.

Witnesses:

LEVI HARRIS,
EUGENE HORTON.