

(No Model.)

J. E. OFFUTT.

HORSE HAY RAKE.

No. 329,767.

Patented Nov. 3, 1885.

Fig. 1.

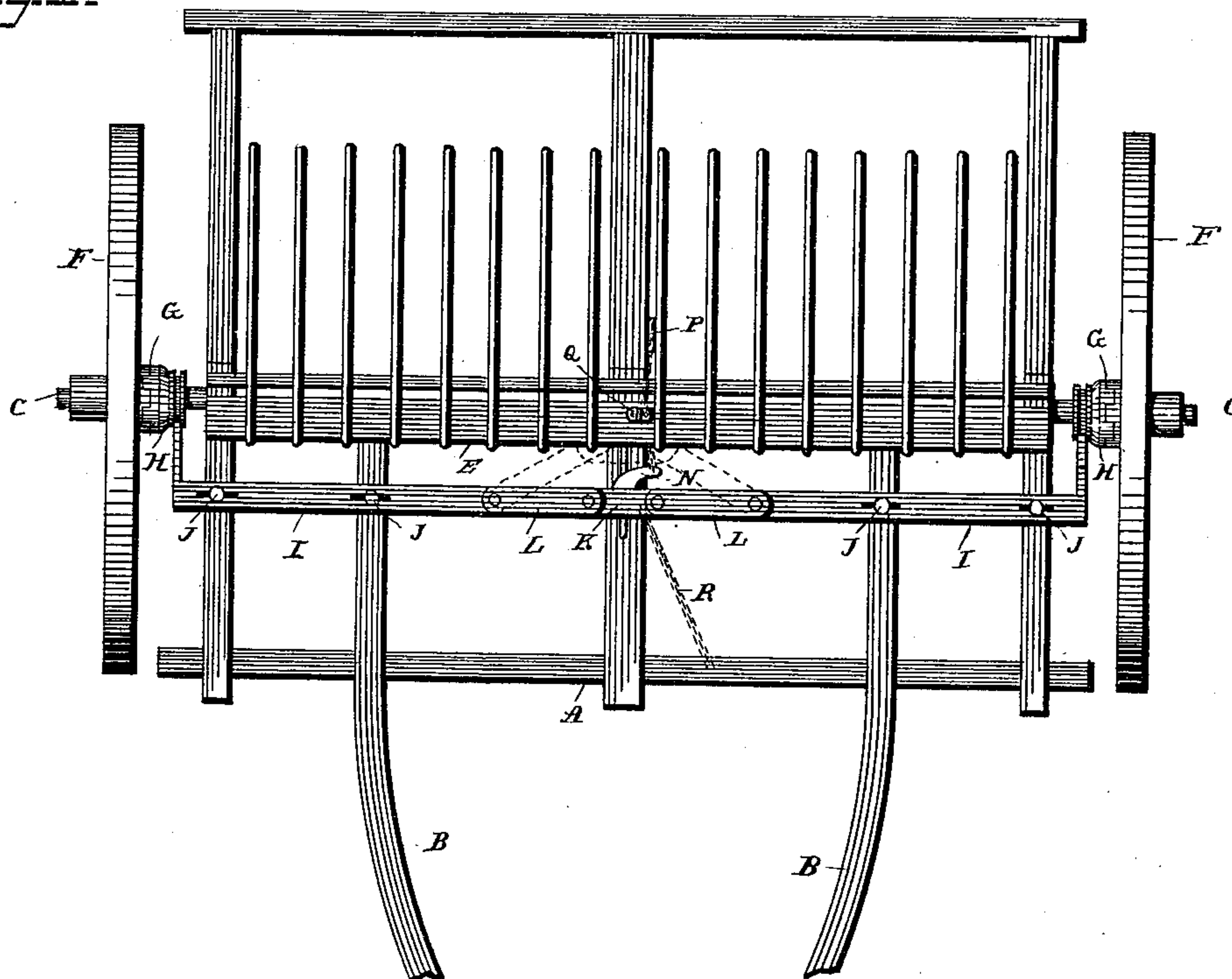


Fig. 2.

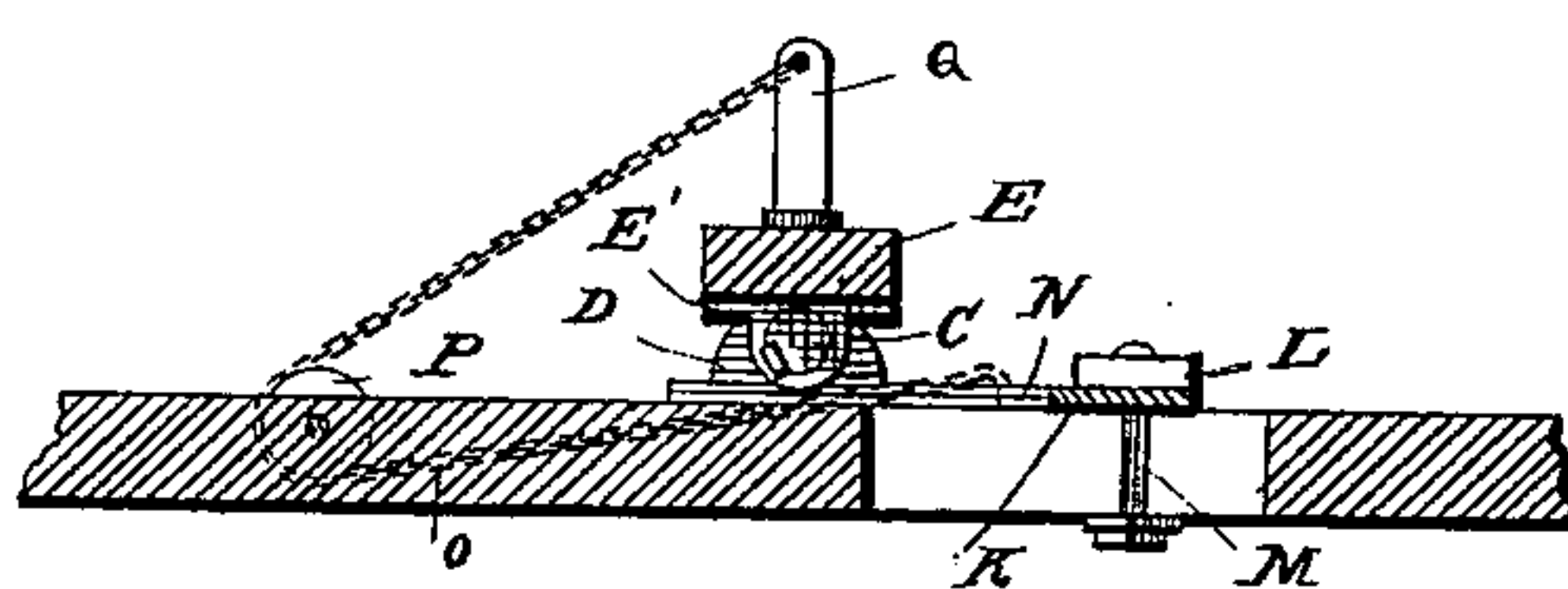


Fig. 3.

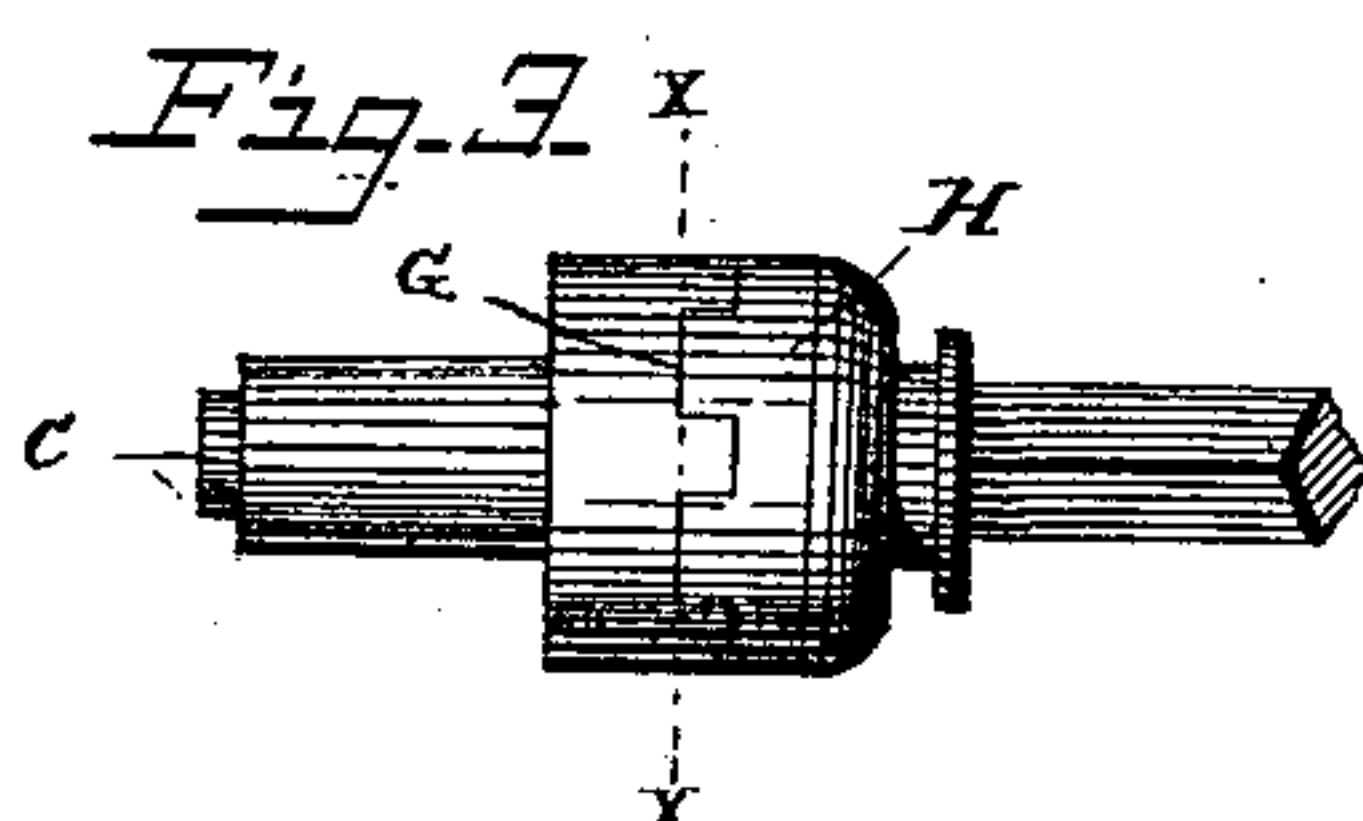
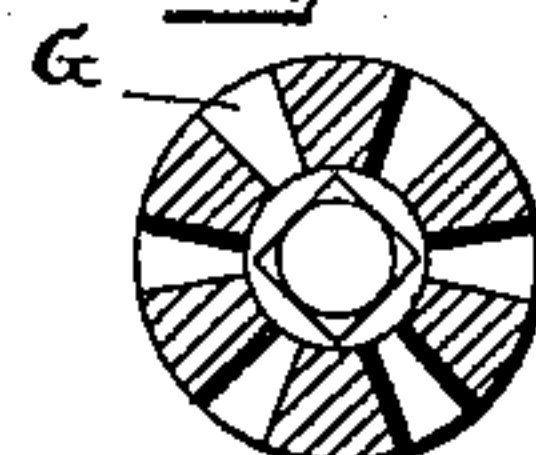


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH E. OFFUTT, OF SPRINGFIELD, OHIO, ASSIGNOR TO JOSEPH W. THOMAS, OF SAME PLACE.

HORSE HAY-RAKE.

SPECIFICATION forming part of Letters Patent No. 329,767, dated November 3, 1885.

Application filed February 9, 1885. Serial No. 155,399. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH E. OFFUTT, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Horse Hay-Rakes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in draft-dumping hay-rakes; and it has for its object to provide means whereby the rake-head, when thrown forward in the act of dumping the collected quantity of hay, will automatically disengage the clutches on the main axle from the supporting-wheels, whereby the tines are permitted to gravitate and return to their work.

In the accompanying drawings, forming a part of this specification, and on which like letters of reference indicate the same or corresponding features, Figure 1 represents a plan view of my improved hay-rake; Fig. 2, a sectional view through the intermediate frame-beam and across the rake-head, showing the means for disengaging the clutches; Fig. 3, a side elevation of the clutches; Fig. 4, a sectional view of the same.

The letter A designates the frame of the machine proper, the same being constructed in any approved manner, and provided with the usual draft-shafts, B. The axle-spindles C pass loosely through the brackets D, which are secured to the side pieces of the frame, and are connected at their inner ends to the rake-head E in any convenient manner, as by blocks E'. These spindles are mounted in the supporting-wheels F, the hubs of which are preferably constructed of metal, and provided on their inner faces with a series of radial projections, G, thereby constituting one member of a clutch. The other member, H, of the clutch is provided with corresponding radial recesses, and is fitted so as to turn with yet reciprocate freely on the spindle C.

The letter I designates two bars, through which pass two studs, J, whereby they are movably connected with the frame proper. These bars terminate at their outer ends in angular extensions, which embrace the sliding members H of the clutches. The inner ends

of these rods are pivotally connected to a slide, K, by means of the links L, and the slide itself is preferably connected with the center beam of the frame by means of the bolt M, which passes through a slot formed in said beam, and which serves as a guide to said slide. Extending rearwardly from the slide K, and by preference slightly to one side of the said center beam, is a stud, N, to which is connected a chain, O, which passes rearwardly around the sheave P, and thence forwardly to the arm Q, extending upwardly from and attached to the rake-head. Thus it will be observed that when the clutches are made to engage by pressing the foot upon the chain R, connected to the forward cross-beam of the frame and to the slide K, the rake-head, being rigidly attached to the spindles, will be thrown forward, and the tines connected thereto elevated, so as to dump the collected quantity of hay. When this head reaches a point where the slack of the chain O is taken up, it actuates the slide K rearwardly thereby, and, through the medium of the links, draws the bars I toward each other and disengages the respective members of the clutches. This arrangement allows the tines to gravitate and return to their work, and by this means the machine is dumped by the draft, and the action of the rake-head is utilized to automatically free itself.

The slot in the center beam of the main frame and the bolt M, which serves as a guide for the slide K, may be omitted, if desired.

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

1. In a hay-rake, the combination, with the rake-head provided with rake-teeth and connected to the axle-spindles, of the clutches, the bars connected with the clutches, having slots and studs by which they are movably connected with the frame, the pivoted links, the slide, and the chain passing over a sheave and connected with the arm extending from the rake-head, whereby the clutches are automatically disengaged.

2. In a hay-rake, the combination, with the rake-head provided with rake-teeth and connected to the axle-spindles, of the clutches,

the bars connected with the clutches and having slots, the studs by which they are movably connected with the frame, the pivoted links, the slide, and the chain passing over a sheave
5 and connected with an arm extending from the rake-head, and the foot-chain connected with the slide and with the frame.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH E. OFFUTT.

Witnesses:

MATT. J. G. DOUGHERTY,
JOSEPH COX, Jr.