

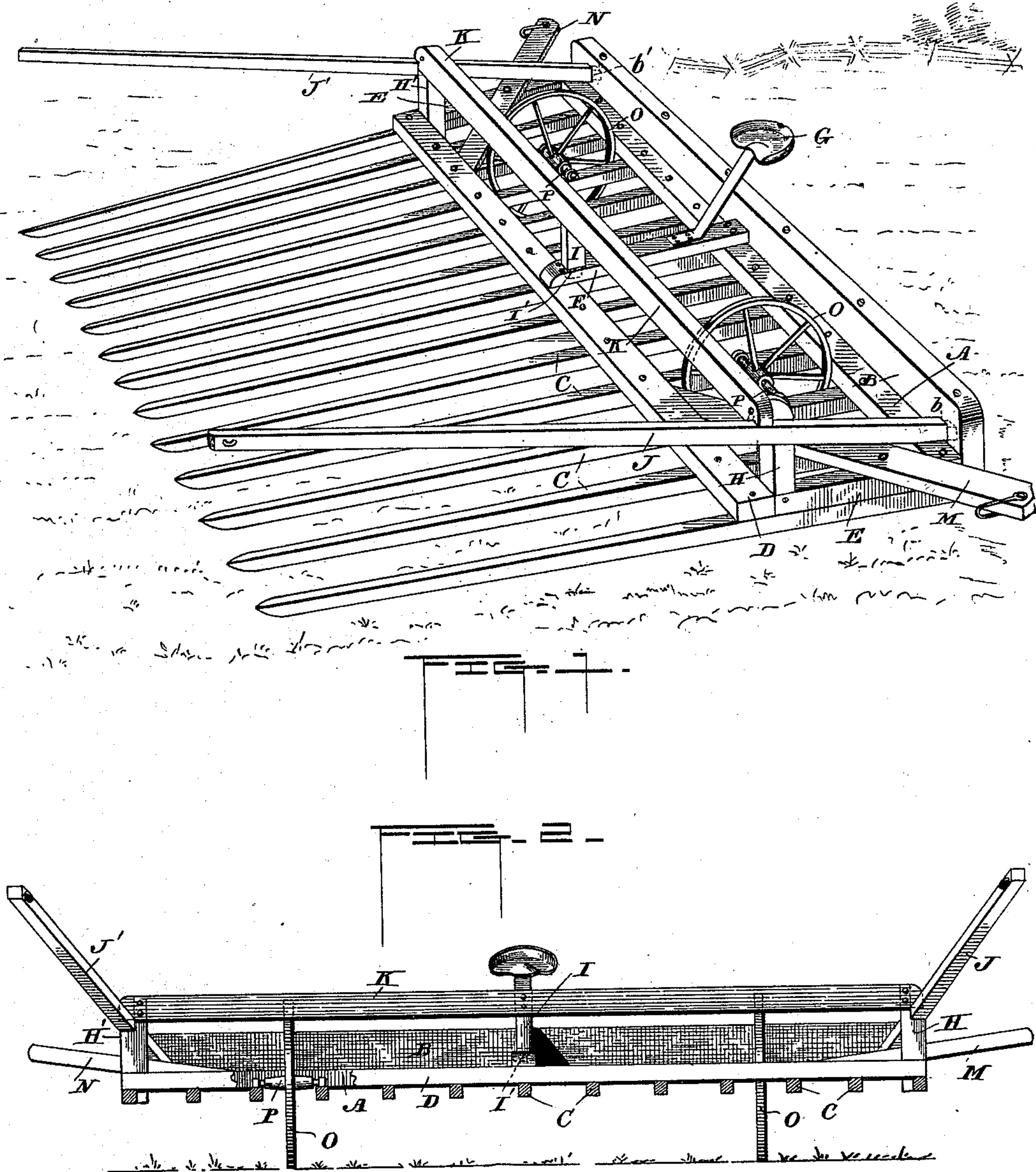
(No Model.)

J. HARRYMAN & G. COOKSEY.

DRAG RAKE.

No. 412,745.

Patented Oct. 15, 1889.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES HARRYMAN, OF HARRIS, AND GEORGE COOKSEY, OF GALT, MISSOURI.

DRAG-RAKE.

SPECIFICATION forming part of Letters Patent No. 412,745, dated October 15, 1889.

Application filed June 18, 1889. Serial No. 314,750. (No model.)

To all whom it may concern:

Be it known that we, JAMES HARRYMAN and GEORGE COOKSEY, citizens of the United States of America, residing at Harris and Galt, respectively, in the counties of Sullivan and Grundy and State of Missouri, have invented certain new and useful Improvements in Drag-Rakes, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to horse hay-rakes, and more particularly to that class known as "drag-rakes."

Our object is to produce a more cheap, simple, and durable rake of this kind than has heretofore been in use.

With these ends in view our invention consists in the peculiar features and combinations of parts more fully described herein-after, and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a perspective view of our complete device, and Fig. 2 a front elevation of the same.

In the drawings the reference-letters A and B denote a pair of beams which extend the full width of the rake, and are securely bolted together, the piece A lying flat, while the piece B is vertical thereto. The teeth C are secured at their rear ends to the beam A, and extend out at a right angle thereto, being also secured to another beam D, which extends the width of the rake. A pair of short cross-pieces E E are interposed between the two beams A and D, at the outer extremities of the same. These cross-pieces rest on the outside teeth of the rake, and their top surfaces lie in the same plane as the top surfaces of the beams A and D. A third cross-piece F connects the beams at their center, and the seat G is secured thereon. Three short upright posts H H' I are secured to the outer ends of these three cross-pieces, respectively. The two outside posts H H' are cut square at their lower ends to bear against the top and side of their respective cross-pieces, and also extend down so as to bear against the two outside teeth of the rake, while the third or middle post I is squared off at the bottom to fit a squared aperture I' in the middle cross-piece F. The upper ends

of the posts H H' are cut out with beveled shoulders, and the tongues or poles J J' bear against these shoulders. These tongues extend on an upward and outward angle to the vertical back piece B, and their rear ends enter apertures b b' cut therein. A cross piece or beam K extends across between the two tongues, and rests at its middle on the post I, while its outer extremities are cut with beveled shoulders which rest on the tongues. One side of this cross piece or beam K also bears against the posts H H', and all these parts are bolted or otherwise securely fastened together. This beam serves the purpose of preventing the hay from falling over onto the wheels and interfering with the same.

M N are the draft-bars, which are beveled on their inner ends to fit against the beam D, to which they are fastened. These bars extend back from said beam D at an angle of about forty-five degrees, and rest on the cross-pieces E E, to which they are secured. Whiffletrees are hung from the outer ends of these bars, and the horses are hitched thereto. The wheels O O are mounted to turn on axles P P, secured across between the teeth.

All the parts just described are securely bolted or otherwise fastened together where they bear against each other, and it will thus be seen that a very strong and durable rake is built, which is at the same time both cheap and simple.

It is evident that many slight changes in the construction of our invention which might suggest themselves to one skilled in the art could be resorted to without departing from the spirit and scope of our invention; hence we do not limit ourselves to the precise construction herein shown.

Having thus described the preferred manner of constructing our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a drag-rake, the combination of a pair of lateral beams, rake-teeth secured to said beams, a vertical back piece erected on the rear lateral beam at right angles thereto, cross-pieces connecting said beams at their middle and outer ends, upright posts erected on said cross-pieces, tongues mortised into

said vertical back piece and resting on the outside posts, respectively, a third lateral beam resting at its middle on the middle vertical post and at its outer ends on the tongues, 5 a seat secured on the middle cross-piece, wheels mounted to turn on axles secured between the rake-teeth, and draft-bars secured to the front lateral beam and extending rearward beneath said tongues and resting on the

outside cross-pieces, respectively, all arranged 10 in the manner and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES HARRYMAN.
GEO. COOKSEY.

Witnesses:

JOHN T. COWHICK,
J. H. WAPLES.