(No Model.)

P. E. ERICKSON.

STALK CUTTER.

No. 434,773. Patented Aug. 19, 1890.

Fig: 1.

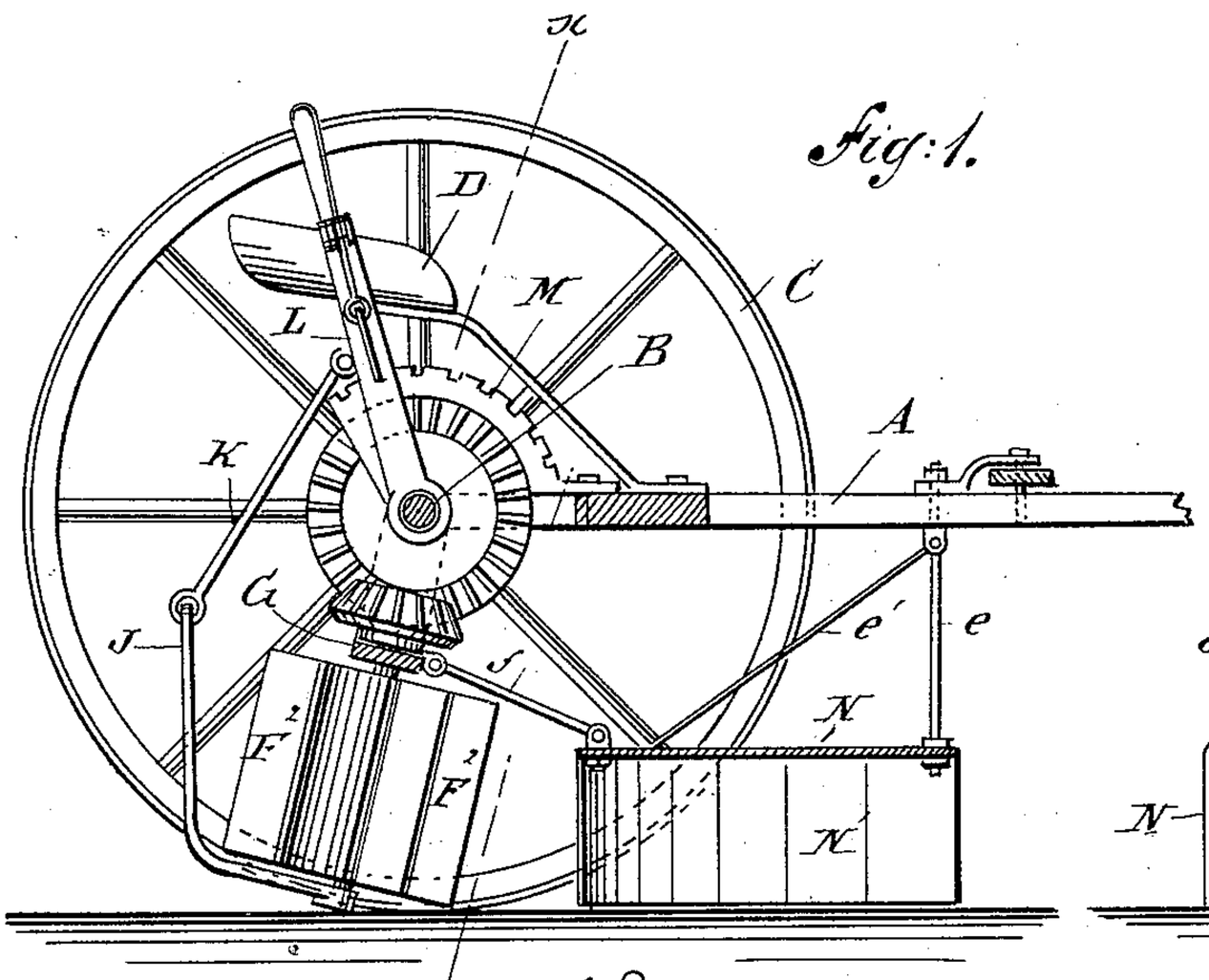


Fig: 4.

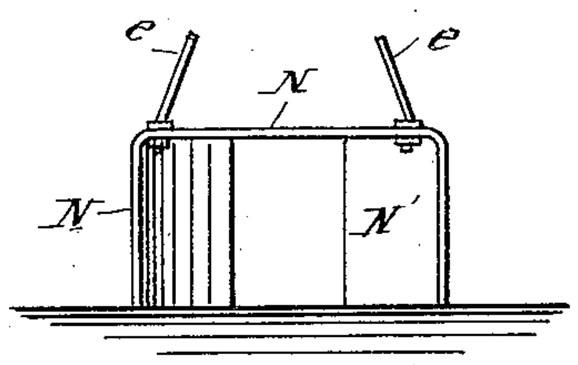


Fig: 2.

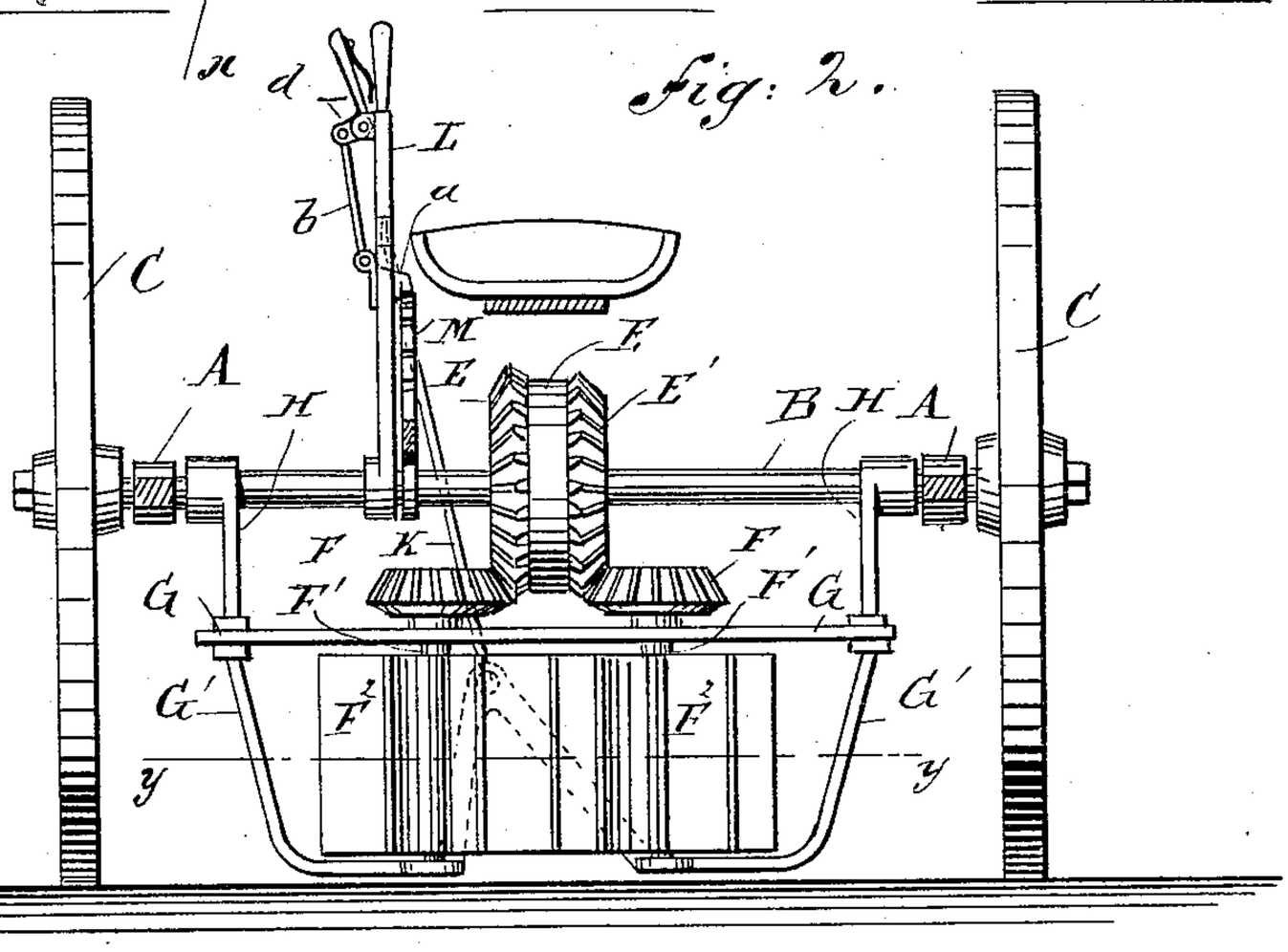
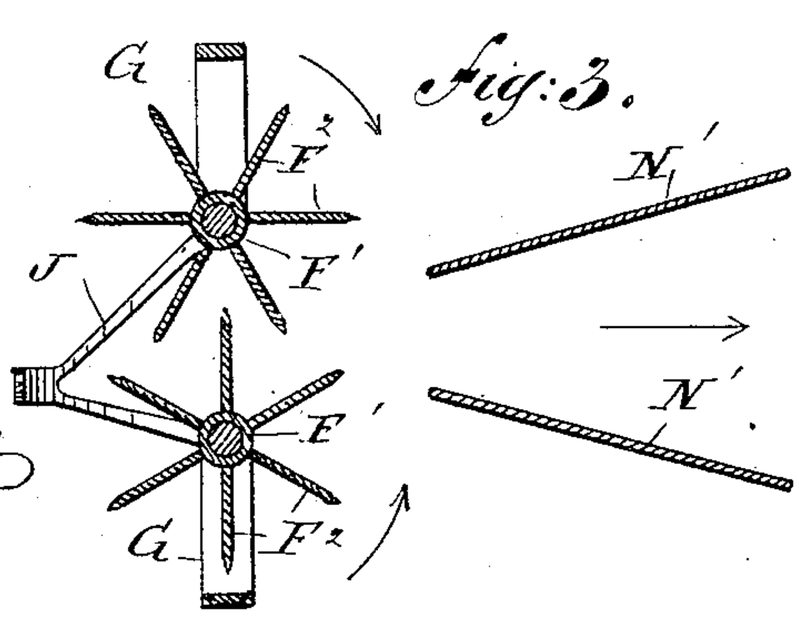


Fig: 3.



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PAUL E. ERICKSON, OF SCANDIA, KANSAS.

STALK-CUTTER.

SPECIFICATION forming part of Letters Patent No. 434,773, dated August 19, 1890.

Application filed April 19, 1890. Serial No. 348,651. (No model.)

To all whom it may concern:

Be it known that I, PAUL E. ERICKSON, of Scandia, in the county of Republic and State of Kansas, have invented a new and Improved Stalk-Cutter, of which the following is a full, clear, and exact description.

My invention relates to improvements in cornstalk-cutting machines; and the object of my invention is to produce a machine of simple construction that will rapidly and efficiently cut the standing stalks in a field in such a manner that they may be easily plowed under.

To this end my invention consists in a cornstalk-cutter constructed and arranged substantially as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical longitudinal section of the machine. Fig. 2 is a transverse section on the line $x\,x$ of Fig. 1. Fig. 3 is a horizontal section on the line $y\,y$ of Fig. 2, and Fig. 4 is a front elevation of the gatherer.

The machine is provided with a suitable tongue or pole A, to which a team may be attached, with an axle B mounted to revolve in said tongue, and with suitable wheels C, which are fixed to the axle. The machine is also provided with a suitable seat D, which is supported on the tongue A. Centrally fixed to the axle B is a double gear-wheel E, having on its opposite sides bevel-gears E′, said gears meshing with the horizontal bevel-pinions F, which are fixed to the upper ends of the vertical shafts F′, said shafts being mounted in the frame G.

The shafts F′ are each provided with cutters consisting of radially-extending knives F^2, which are fixed to the said shafts so that when the shafts are revolved the knives will mesh and thus cut the stalks which may be forced between them. The frame G is pivoted to and supported from the axle B by the arms H, which depend from the axle and which are of such a length that the lower portion of the frame will be brought nearly to the level of the earth. The frame G is also provided with a rearwardly-extending bent arm J, which is pivotally attached to a rod K, said rod being pivoted to an eye on the back of the lever L.

The lever L is pivoted to the axle B and extends upwardly to a point where it may be conveniently reached from the seat D, and pivoted thereon is a latch a to engage the toothed rack M, which is supported upon the axle B and tongue A. The latch a is connected by a rod b with the bell-crank d, which is pivoted on the upper portion of the lever L, so that by actuating the said crank the latch a may be raised and lowered, and when the latch is in engagement with the teeth of the rack M the position of the lever L will be thereby fixed. It is obvious that by moving the lever L the rod K and arm J will be actuated and the position of the frame G and the knives mounted therein will be correspondingly changed. Arranged in front of the knives F^2, so as to horizontally align with the central point between the said knives, is a suitable gatherer, consisting of a horizontal plate N, having depending side flanges N′, said gatherer being open at the bottom and at each end. The gatherer is widest at its forward end and gradually narrows toward the rear, and is supported from the tongue A by the braces e and e', which are pivotally connected to the tongue A and connected with the plate N of the gatherer.

Pivotally connected with the rear end of the gatherer is a rod f, which is also pivoted to the upper portion of the frame G, so that when the position of the frame G is changed the position of the gatherer will be correspondingly changed.

To operate the machine, it is drawn lengthwise of a row of cornstalks, which will be gathered by the gatherer N N′, thus bending the stalks and crowding them in a compact mass, and as the stalks pass through the rear end of the gatherer they will be caught between the knives F^2 and chopped into small pieces.

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

1. A cornstalk-cutter consisting, essentially, of a carriage having a gear-wheel fixed to the axle thereof, a pair of vertically-rotat-

ing intersecting cutters mounted in a suitable frame suspended from the axle, said cutters being rotated by said gear-wheel, a lever mechanism for fixing the position of the cutter-frame, and a gathering device suspended from the carriage in front of the said cutters, said gatherer being pivoted to the carriage and to the cutter-frame, so that its position will be regulated by the position of the cutter-frame, substantially as shown and described.

2. The combination, with the axle B, having the gear-wheel E fixed thereto, of the frame G, pivotally suspended from the said axle, the vertical shafts F′ mounted in said frame and provided with gear-wheels to mesh with the wheel E, and with rotary intersecting knives F^2, and means, as bent arm J, rod K, lever L, toothed rack N, latch *a*, rod *b*, and bell-crank *d*, for fixing the position of the knife-frame, substantially as described.

3. The combination, with the frame G, having the knives F^2 mounted therein, and means, as shown, for fixing the position of the said frame, of a gatherer consisting of the plate N, having depending convergent sides N′, said gatherer being pivotally connected by means of the rod *f* to the frame G, and being pivotally suspended from the tongue A, substantially as described.

PAUL E. ERICKSON.

Witnesses:
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