(No Model.)

H. ROBERTS.

CORN HARVESTER.

No. 340,365. Patented Apr. 20, 1886.

Fig. 1.

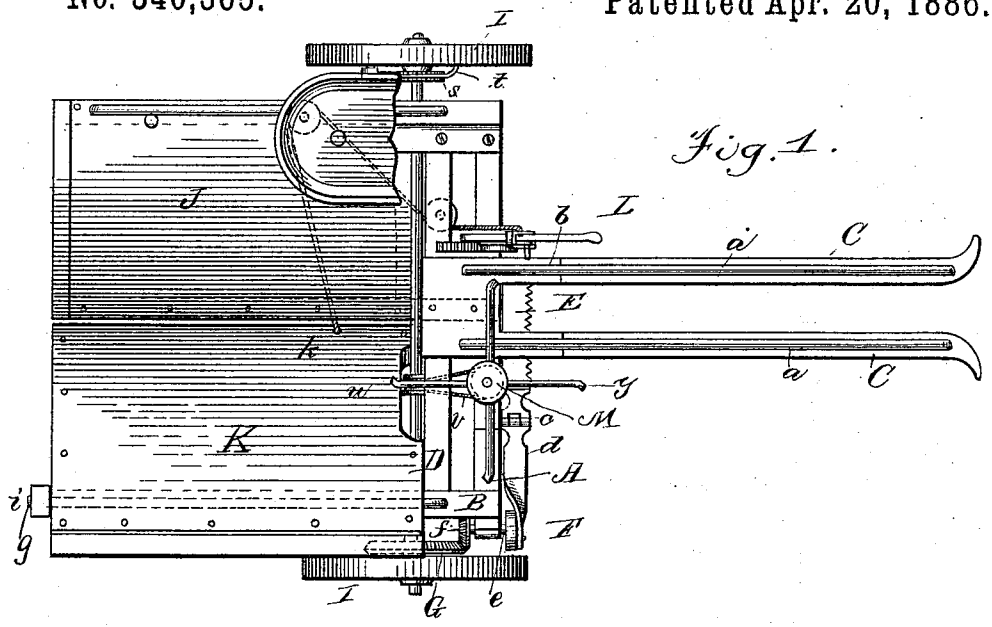


Fig. 2.

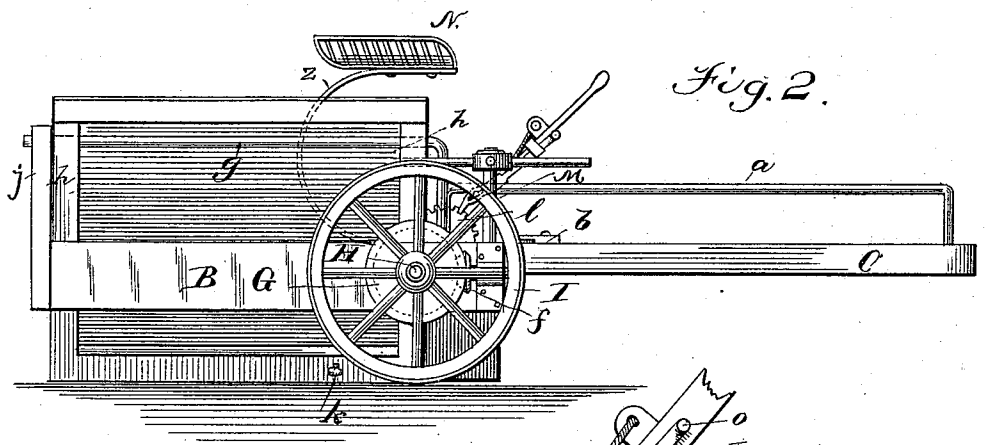
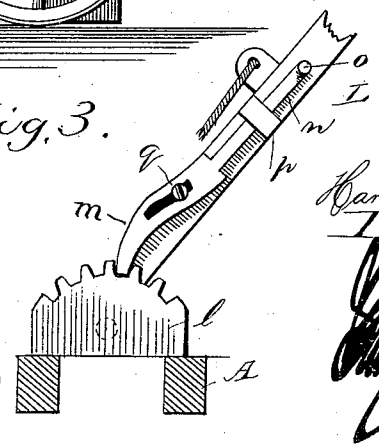


Fig. 3.



Attest;

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UNITED STATES PATENT OFFICE.

HARRISON ROBERTS, OF BRANDENBURG, KENTUCKY, ASSIGNOR OF ONE-THIRD TO JAMES A. HARRIS, OF SAME PLACE.

CORN-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 340,365, dated April 20, 1886.

Application filed February 14, 1884. Serial No. 120,686. (No model.)

To all whom it may concern:

Be it known that I, HARRISON ROBERTS, a citizen of the United States of America, residing at Brandenburg, in the county of Meade and State of Kentucky, have invented certain new and useful Improvements in Corn-Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention has reference to corn-harvesters; and it consists in the improvements hereinafter described, and set forth in the claims, whereby the corn is rapidly and expeditiously cut so as to fall on a platform capable of being tilted to drop the corn.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view, Fig. 2 is a side view, and Fig. 3 is a detail view.

A is the front and B B are the side bars composing the supporting-frame of the machine. Two horizontal parallel bars, C, are secured at their rear ends at or about the center of the front bar, A, and are provided with guard-rails *a*. A second rail, D, secured within the frame parallel with the rail A, serves as a re-enforce for the several parts. A saw-blade or cutter-bar, E, plays transversely across the space between the bars C in a slot formed beneath plates *b*, and is provided at one end with a loop, *c*, to which is pivotally attached one end of a pitman, *d*, the other end of which is secured eccentrically on a disk, F, rigidly mounted on a shaft, *e*, turning in a bearing bolted on the front end of the bar B, and having keyed on its other end a bevel-pinion, *f*. The said pinion *f* meshes with a bevel gear-wheel, G, turning with the axle H, on the ends of which and turning therewith are the carrying-wheels I.

The platform consists of a rigid section, J, secured at its upper side to one of the cross-bars B, and inclining downward toward the center. The other section, K, of the platform is pivoted at or near its upper side by a rod, *g*, embedded at its front end in one of the bars B, and passing through bars *h* of the section K, and then secured by a nut, *i*, to the upper end of an arm, *j*, extending from the end of the bar B.

The section K, though inclining toward the lower side of the section J, normally tends to drop by gravity away from said section, so as to leave an opening between the two. This tendency is overcome and the opening closed by a cord or cable, *k*, which is secured at one end to the lower portion of section K, then passes around a pulley journaled in the section J, (dotted lines, Fig. 1,) and then around a second pulley journaled on the under side of the bar D, and thence up and secured to a hand-lever, L, pivoted at its lower end to a toothed segmental plate, *l*, secured to the bars A D. A detent, *m*, Fig. 3, has a shank, *n*, provided with a handle, *o*, the said shank playing vertically in a sleeve, *p*, formed on the lever L, while the lower end is slotted to receive a pin, *q*, of said lever, to guide the lower end of said detent. A ratchet-wheel, *s*, secured on one end of the axle H, is adapted to engage a spring-pawl, *t*, secured on the carrying-wheel when the machine is moving forward, but permits said carrying-wheel to revolve in turning without communicating motion to said axle H. A pulley, *u*, keyed on the axle, communicates motion by a belt, *v*, to a pulley, *w*, secured on the lower end of a vertical shaft, M, which has a series of radial arms, *y*, at its upper end. The draft devices are connected to the front bar, A, at each side of the bars C, so that the horses move between the rows of corn. A curved standard, Z, secured to the bars A D, carries at its upper end a seat, N. As the machine moves forward, the row of corn occupies a position in the space between the bars C, the reciprocating saw E cutting it off, while the arms *y*, revolving rearwardly, throw the cut corn backward onto the platform, the inclination of which causes it to drop at the point where the lower edges of the sections J K meet. When sufficient corn has been deposited on the platform to form a bundle, the handle-lever L is manipulated to cause the pivoted section K to drop under the weight of the corn and slide the same to the ground.

I claim—

1. The combination, in a corn-harvester, of

a rectangular supporting-frame, main axle bearing transversely therein and provided with the carrying-wheels, a stationary and pivoted platform, J K, secured in an inclined converging position in the said main frame at the rear of the shaft, detent devices located on the front of said frame and connected to the pivoted platform by a cord or cable, parallel bars C C, extending forward from the center of the frame, a horizontal saw or cutter-bar located in transverse guides at the rear of the bars C C, and devices located in the front of the frame for reciprocating said cutter-bar, substantially as set forth.

2. The combination, in a corn-harvesting machine, of a main frame mounted upon the shaft and carrying wheels, inclined stationary and pivoted platforms secured at their upper ends to each side of the frame and converging downwardly to the center of the frame, lever and detent devices located on the front of the frame and connected to the pivoted platform by a cord and cable, a transverse horizontal saw or cutter-bar, and parallel guide-bars C C, located centrally on the front of the frame, devices for operating said saw, and a vertical shaft bearing at the front of the frame and provided with a series of radial arms, and devices actuated from the axle for revolving said arms above the cutter-bar, substantially as set forth.

his
HARRISON × ROBERTS.
mark.

Witnesses:
J. F. WOOLFOLK,
J. K. DITTO.