No. 712,557. Patented Nov. 4, 1902.

# J. F. LEEPER.

## CORN HARVESTER.

(Application filed Jan. 24, 1902.)

(No Model.) 2 Sheets—Sheet 1.

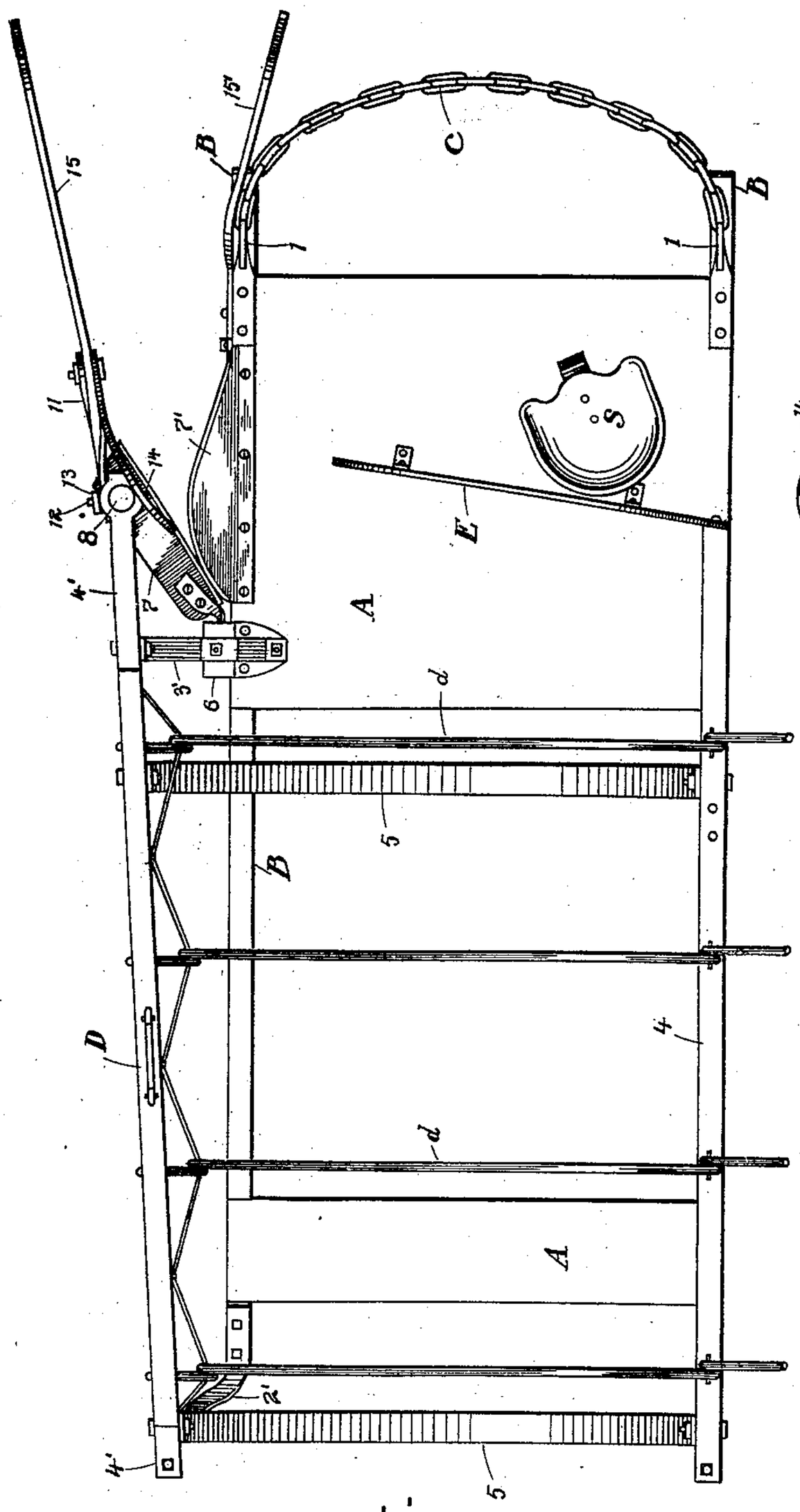


FIG. 1.

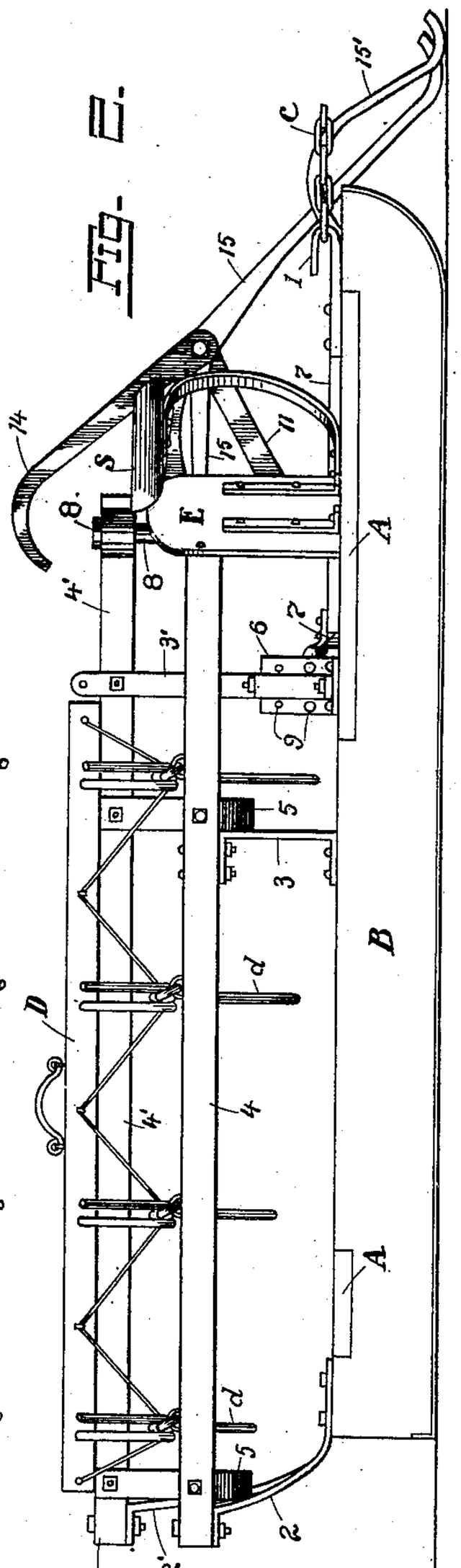


FIG. 2.

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## CORN HARVESTER.

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(No Model.) 2 Sheets—Sheet 2.

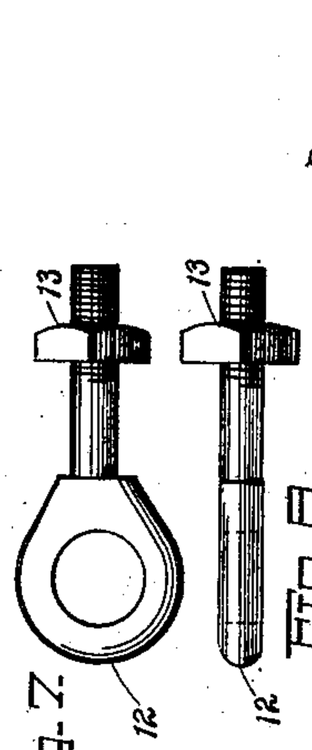


FIG. 7.

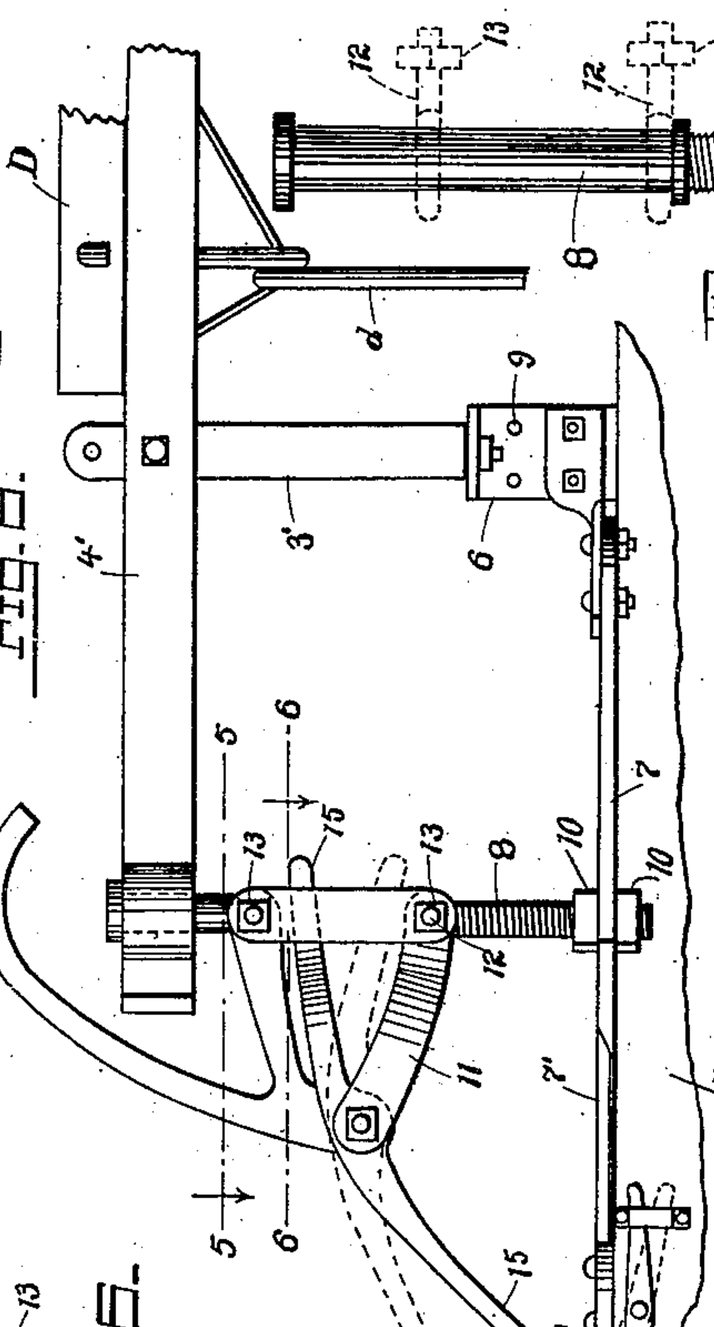


FIG. 8.

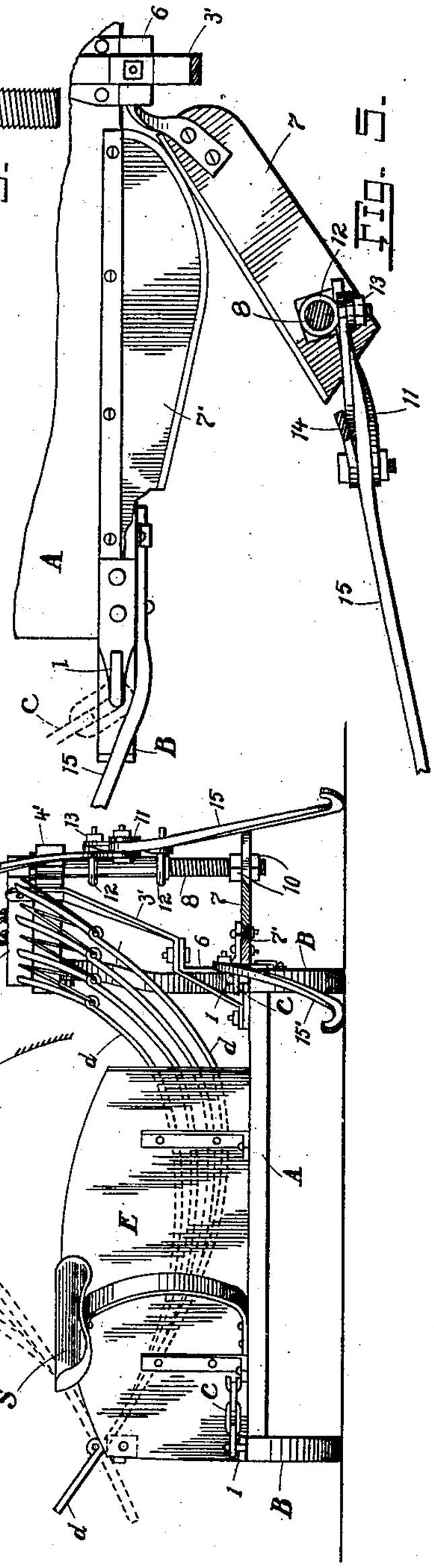


FIG. 4.




FIG. 6.


FIG. 5.

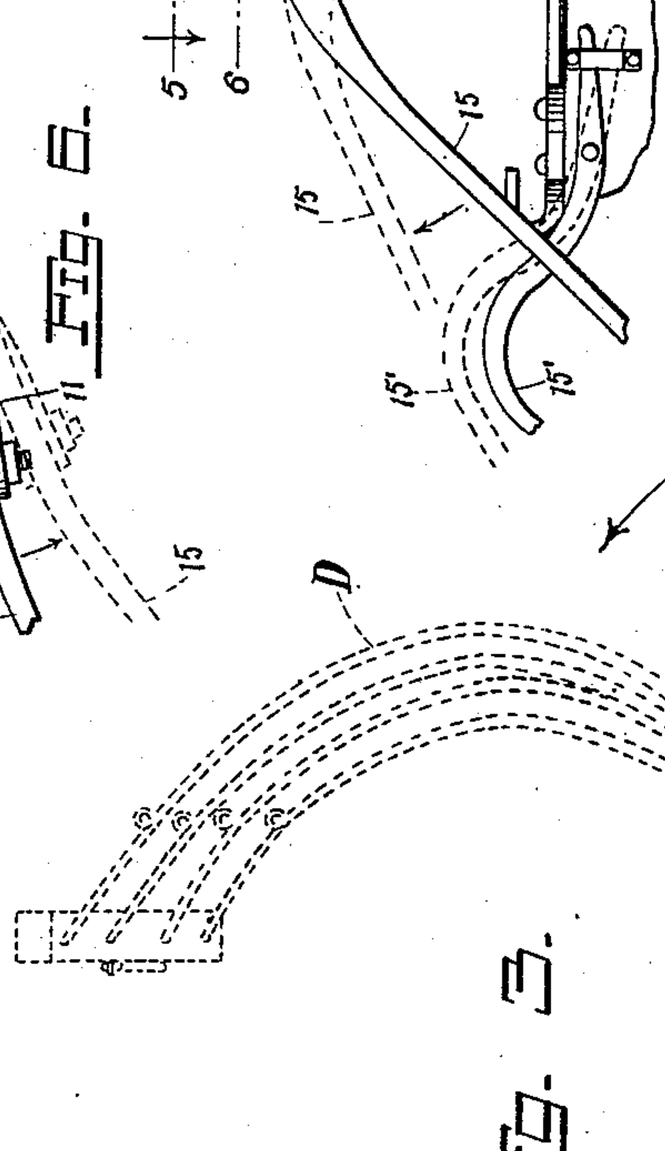


FIG. 3.

Witnesses
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# UNITED STATES PATENT OFFICE.

JOHN F. LEEPER, OF ALTON, ILLINOIS.

## CORN-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 712,557, dated November 4, 1902.

Application filed January 24, 1902. Serial No. 91,064. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. LEEPER, a citizen of the United States, residing at Alton, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Corn-Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in corn harvesters or cutters; and it consists in the novel arrangement and combination of parts more fully set forth in the specification and pointed out in the claims.

In the drawings, Figure 1 is a top plan of the machine. Fig. 2 is a side elevation thereof. Fig. 3 is an end view showing by dotted lines the dumping position of the cradle. Fig. 4 is a detail elevation of the gathering-hooks. Fig. 5 is a top plan thereof, as well as of the cutters or blades. Fig. 6 is a sectional detail on line 6 6 of Fig. 4, showing by dotted lines the adjustable position of the outer gathering-hook. Fig. 7 is a plan of the eyebolt by which the oscillating bracket carrying the outer gathering-hook is secured to its post. Fig. 8 is an edge view of Fig. 7, and Fig. 9 is an elevation of the post on which the gathering-hook bracket is secured.

The object of my invention is to construct a harvester which will not only effectively cut the cornstalks as the machine is drawn through the field, but will deposit them automatically on a suitable dumping-frame, from which they can be dumped from time to time, entailing thereby a minimum amount of work and consuming a minimum amount of time.

A further object is to provide means for effectively gathering in each and every stalk in the path of the machine, so that no stalk remains uncut after the machine has once passed a given point.

A further object is to construct a machine possessing sundry and other advantages, better apparent from a detailed description of the invention, which is as follows:

Referring to the drawings, A represents a platform mounted on runners (or wheels) B, adapted to be drawn between two adjacent rows of corn. At the forward end the same is provided with draft-hooks 1 for the attachment of a chain C, to which the draft-animals are attached. Disposed above the platform A is a frame, composed of suitable straps or braces 2 2′, brackets 3 3′, and lateral bars 4 4′, the bar 4 being disposed substantially parallel to the line of draft and to the adjacent longitudinal edge of the platform A. The bar 4′, on the other hand, is disposed at an angle to the bar 4, receding from the latter at the front of the machine and extending approximately to a point in line with the continuation of the forward edge of the platform, said bar 4′ being also slightly elevated above the plane of the bar 4, thereby giving the curved cross-braces 5 5, by which the bars 4 4′ are connected, a dip toward the bar 4 and giving to the frame as a whole a taper rearward.

Secured adjustably to a bracket 6, in connection with the bracket 3′, is one end of an outwardly-inclined blade 7, whose forward end is secured at the base of a post 8, connected to the bar 4′, the vertical adjustment of the blade referred to being effected at the rear end by changing its position with reference to the openings 9, formed in the bracket 6, and at the front end by shifting the position of the securing-nuts 10 at the base of the post 8, between which nuts the said front end of the blade is held. Rotatably adjustable about the post 8 is a bracket 11, which is secured to the post by means of eyebolts 12 and nuts 13, the latter being firmly clamped when once the bracket has been deflected to the proper angle. Forming an integral part of said bracket (or secured thereto) is a guide-arm 14 for guiding the stalks to the blades or cutters, and pivotally mounted at the forward end of the bracket is a gathering hook or prong 15, the same being free to tilt in a vertical plane to conform to the roughness of the ground passed over and having a curved front lower end to better ride over clots of earth which the same may encounter.

Pivotally mounted at the end of the adjacent side of the platform is an inner gathering-hook 15′, likewise adapted to oscillate in a vertical plane, the two hooks being variably inclined to one another according to the amount of deflection given to the bracket 11, in which the outer hook 15 is mounted.

Coöperating with the outer inclined blade or cutter 7 is the inner curved blade 7′, the shearing or cutting edges of the blades con-

verging at their bases and at a point immediately adjacent to the edge of the platform, so that the moment the stalk is cut it may immediately topple over and be deposited over the frame. The frame does not in my present improvement directly receive the cut stalks, the latter being deposited on a dumping-cradle D, which is hinged along the bar 4 of the frame, the cradle being formed of a series of transverse concave bows *d*, which extend slightly beyond the hinge-line and beyond the adjacent side of the platform, so that the cradle when tilted can readily deposit its contents alongside the machine. (See Fig. 3.)

By tapering the frame and cradle, as seen in the drawings, and by giving them the inclination as previously outlined the cut stalks are not only effectively gathered as the machine advances, but each stalk as it is taken up gravitates toward the lower side of the frame, resulting in a compact load when the cradle is full. To prevent the stalks from working forward, I interpose a vertical shield E directly behind the seat S, as shown.

Having described my invention, what I claim is—

1. In a harvester, a suitable platform, a depositing-frame mounted on the same, a pair of blades vertically adjustable to one another whereby they are adapted to be disposed in different horizontal planes, said blades being carried at the forward end of the platform, and gathering-hooks capable of angular adjustment relatively to one another, located in advance of the blades, said hooks being yielding in vertical planes, substantially as set forth.

2. In a harvester, a suitable platform, a frame carried by the same, angularly-disposed blades vertically adjustable to one another whereby the same are adapted to be disposed in different horizontal planes, said blades being carried at the forward end of the platform, a pivoted gathering-hook located in advance of the blades, a bracket capable of horizontal oscillation or deflection carried at the forward end of one side of the frame, a pivoted gathering-hook mounted in said bracket, a guide-arm secured to said bracket, and means for clamping the bracket when once swung to its adjusted position, substantially as set forth.

3. In a harvester, a suitable platform, a rearwardly-converging frame carried by the same, one side of the frame being lower than the opposite side, a corresponding depositing-cradle hinged to the lower side of the frame and adapted to deposit its contents along the side of the machine, and means for automatically depositing the cut stalks upon said cradle, substantially as set forth.

4. In a harvester, a suitable platform, a rearwardly-converging frame carried by the platform, one side of the frame being lower than the opposite side, a cradle hinged to the lower side of the frame and adapted to tilt and dump its contents in the direction of said lower side, the cradle extending beyond the hinge-line outwardly to a point substantially at the same elevation as the opposite side of the frame, and a vertical shield mounted on the platform in advance of the cradle, substantially as set forth.

5. In a harvester, a suitable platform, a hinged dumping-cradle mounted above the same, a pair of blades vertically adjustable to one another whereby they are adapted to be disposed in different horizontal planes, said blades being located at the end of one side of the platform and opposite the hinge-line of the cradle, and pivoted gathering-hooks located in advance of the blades and tilting in a vertical plane according to the character of the surface passed over, substantially as set forth.

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

JOHN F. LEEPER.

Witnesses:
EMIL STAREK,
NELLIE ARKEBAUER.