(No Model.) 4 Sheets—Sheet 1.

W. GUTENKUNST.

CORN HUSKING MACHINE.

No. 584,777. Patented June 22, 1897.

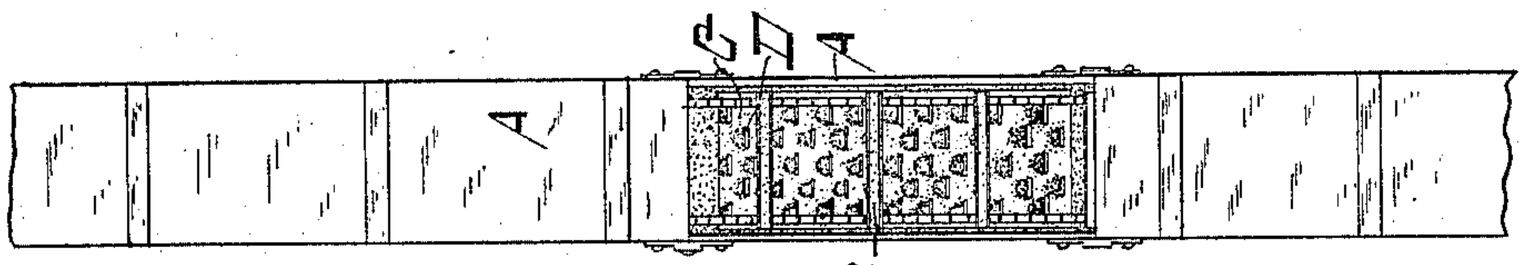

Fig. 3.

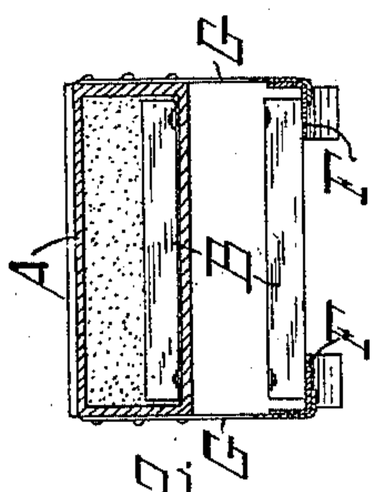

Fig. 2.

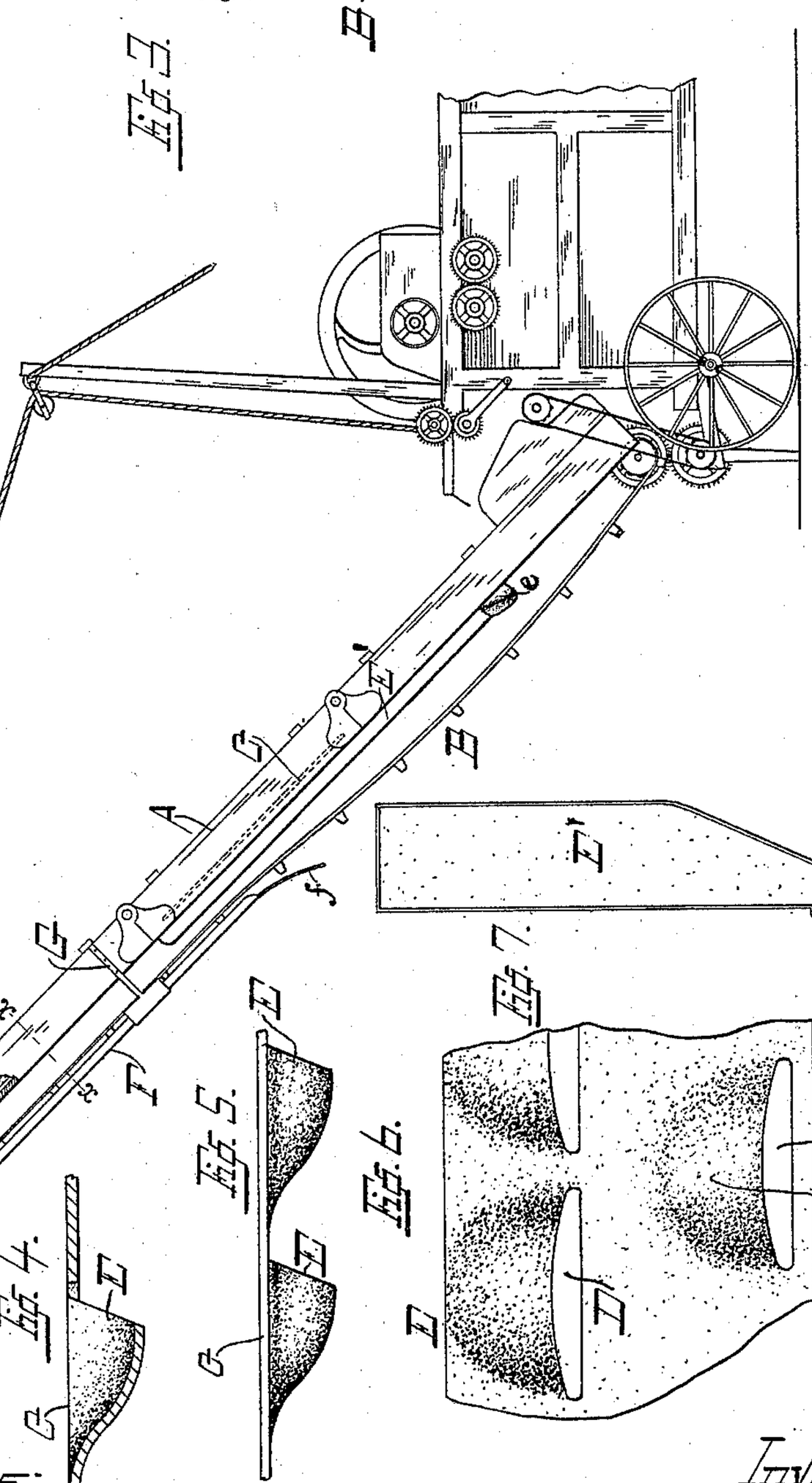

Fig. 1.

Fig. 7.

Fig. 6.

Fig. 4.

Fig. 5.

Witnesses:
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Winnifred Tinkler

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W. GUTENKUNST.

CORN HUSKING MACHINE.

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Fig. 6.

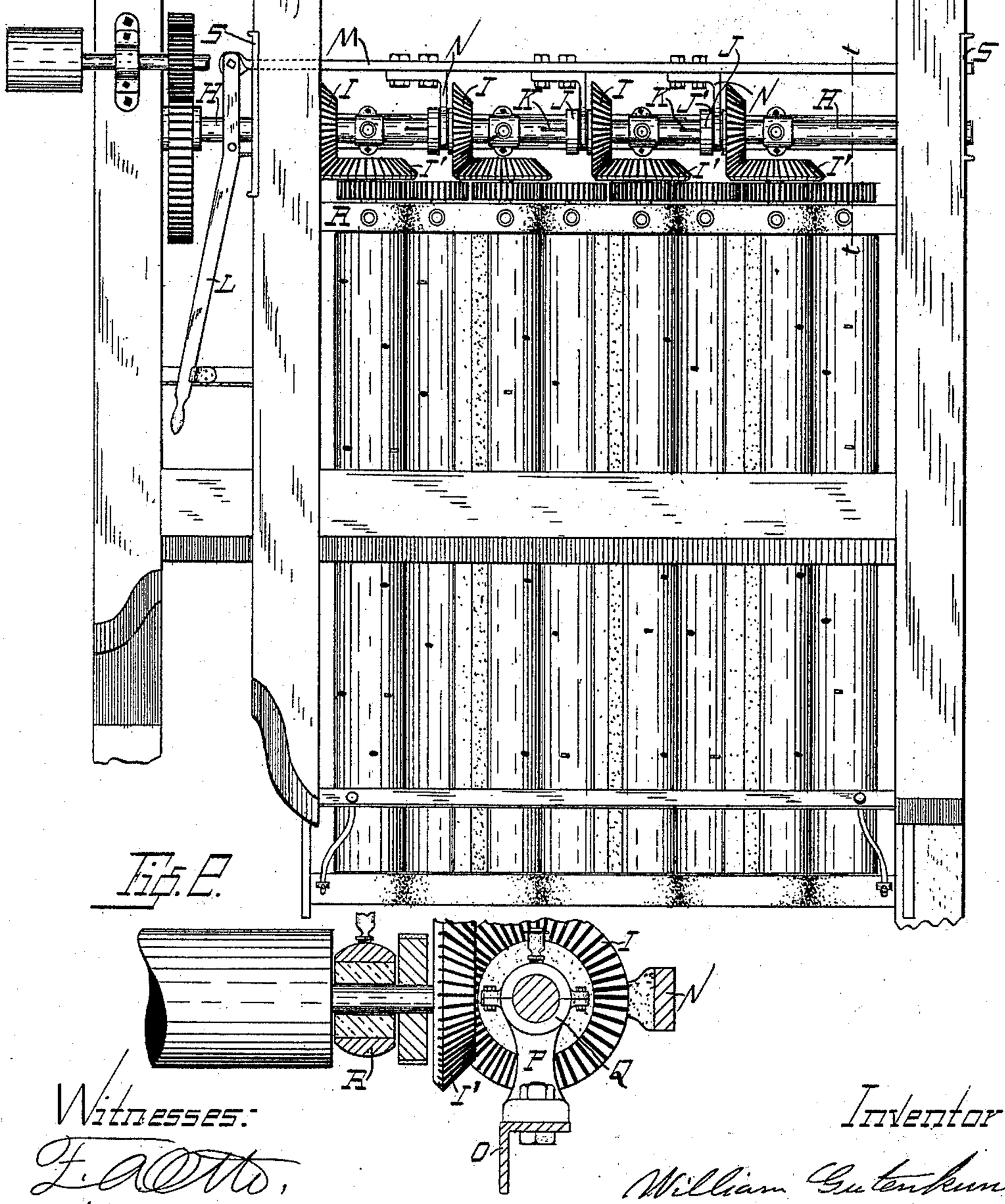

Fig. 5.

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W. GUTENKUNST.

CORN HUSKING MACHINE.

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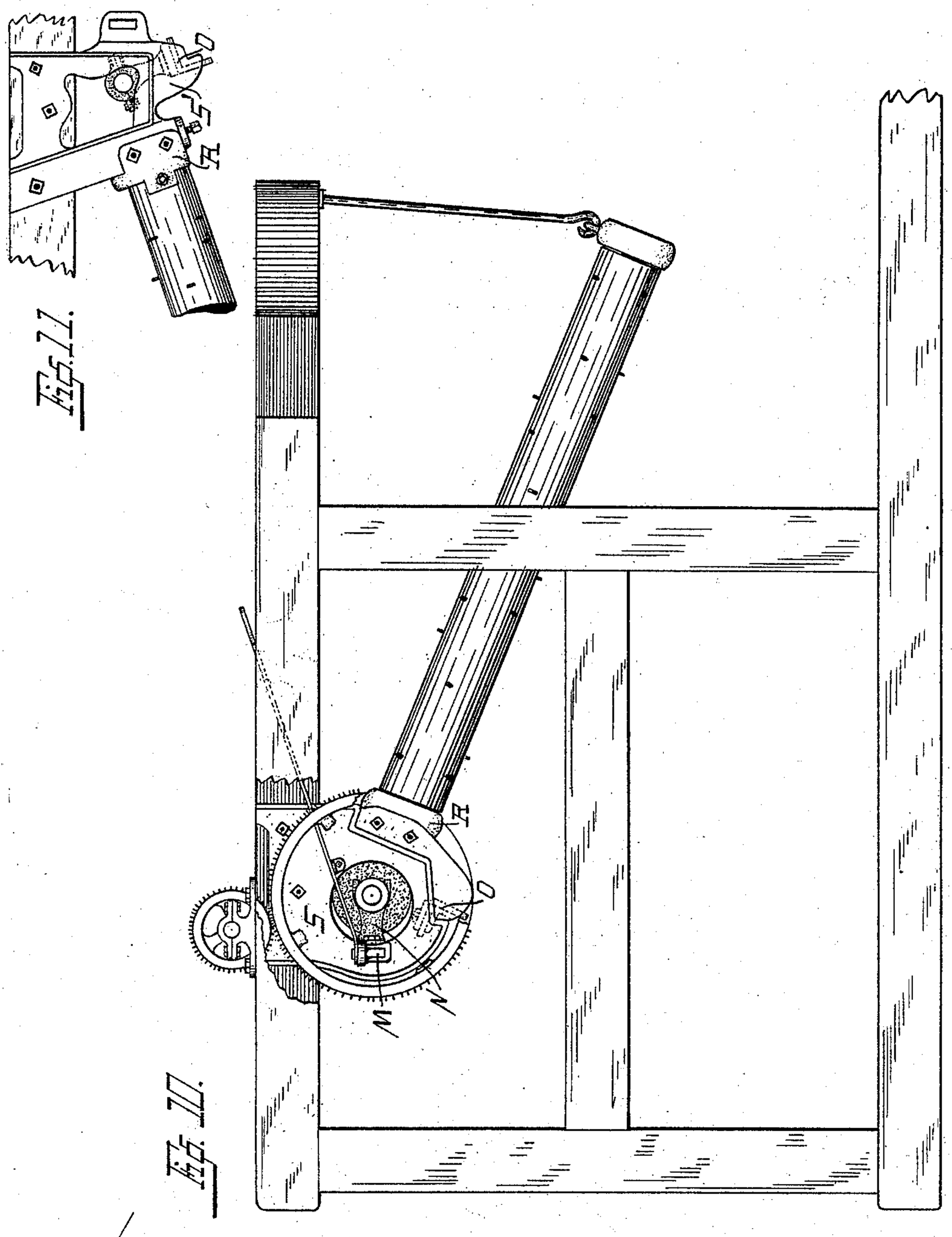

Fig. 1.

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CORN HUSKING MACHINE.

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Fig. 12.

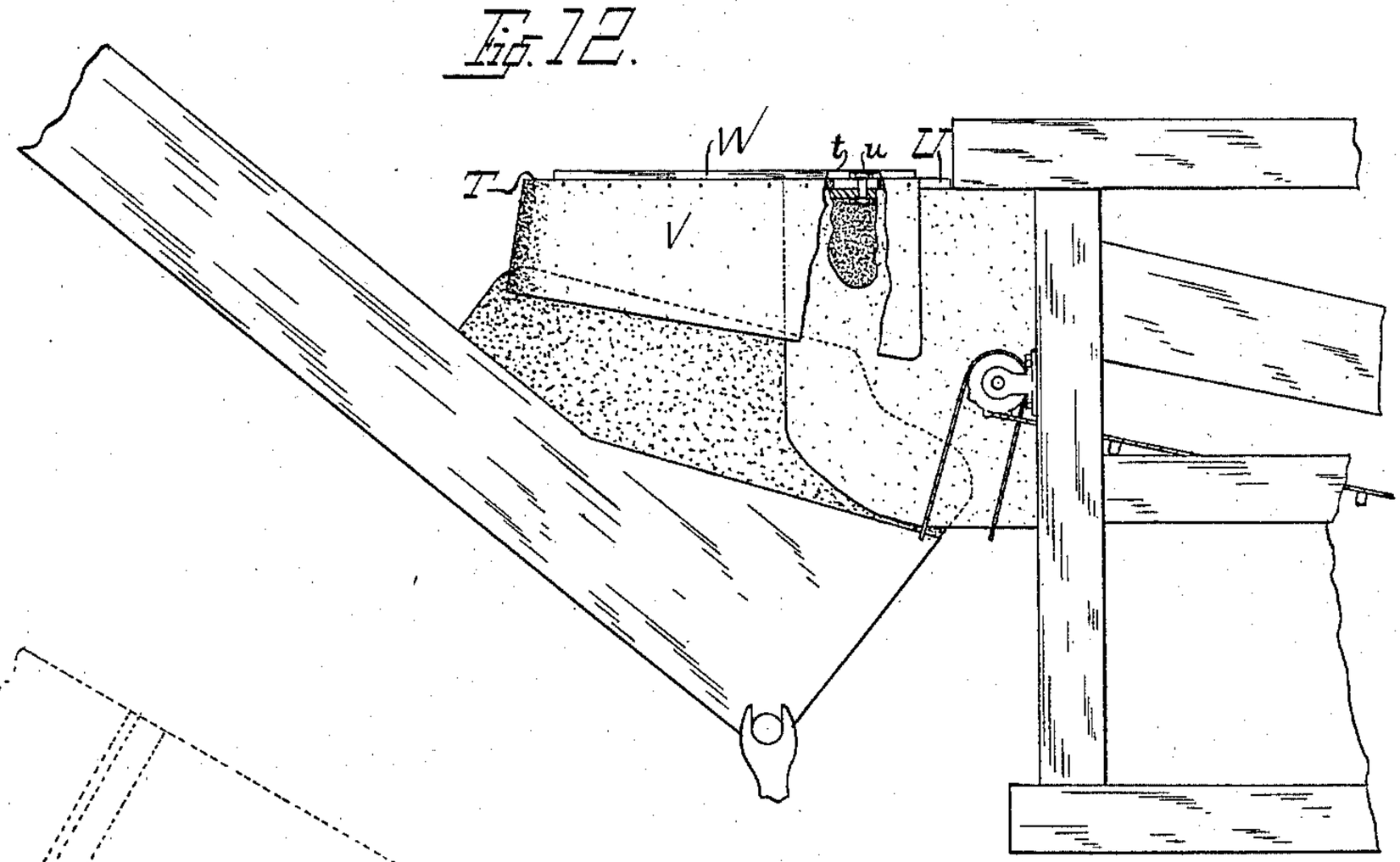
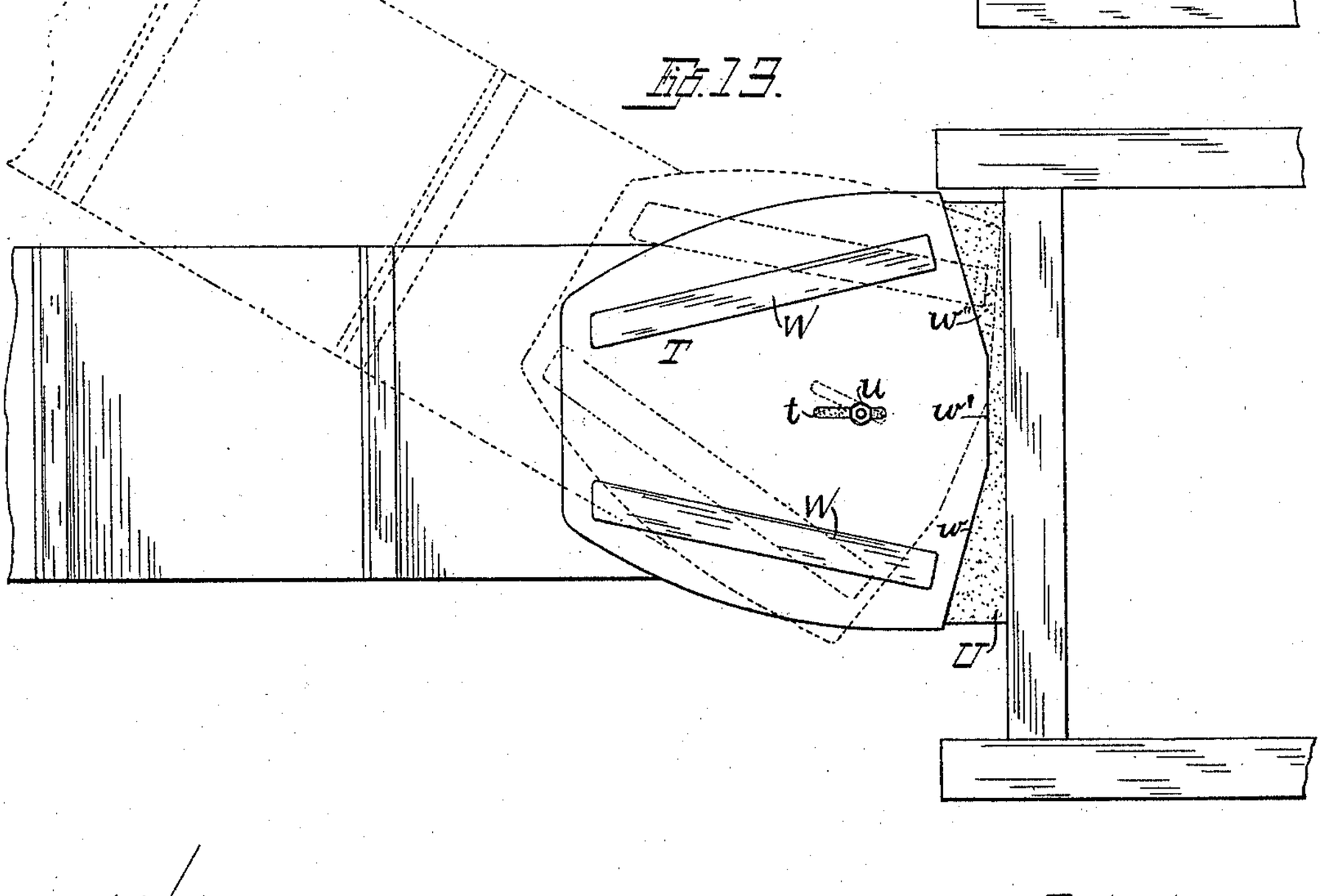


Fig. 13.



Witnesses.
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Winifred Tinslin.

Inventor
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UNITED STATES PATENT OFFICE.

WILLIAM GUTENKUNST, OF MILWAUKEE, WISCONSIN.

CORN-HUSKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 584,777, dated June 22, 1897.

Application filed April 23, 1896. Serial No. 588,793. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GUTENKUNST, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Corn-Husking Machines, of which the following is a specification.

My invention relates to improvements in corn-harvesters, and pertains, first, to the construction of the carrier or conveyer for the stalks and husks, whereby the shelled corn is permitted to escape through the carrier and is thereby saved; second, to the construction of a device for supporting the carrier belt or chain on the under side of the carrier-box; third, to certain specific improvements in the construction of the gear-supporting frame and gearing of the husking-rollers, whereby the motion of the driving mechanism is communicated more directly to each of the several pairs of husking-rollers and also whereby the sliding coupling-joints heretofore used are dispensed with, and, fourth, to the combination, with the rear end of the machine, of an adjustable wind-guard covering the discharge-opening for the stalks and husks.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is a side view of the carrier, showing also a portion of the husker. Fig. 2 is a cross-section view drawn on the line X X of Fig. 1. Fig. 3 is a top view of the carrier-box with the sieve exposed. Fig. 4 is a cross-section view drawn through one of the sieve-openings. Fig. 5 is a side view of a portion of the sieve. Fig. 6 is a detail top view of a portion of the sieve. Fig. 7 is a top view of the corn-collecting box. Fig. 8 is a top view of the husking-rollers and gearing therefor. Fig. 9 is a view of the main section, drawn on the line *t t* of Fig. 8. Fig. 10 is a side view of the husking-rollers, showing the end-supporting castings for the bearing-shaft and head, viewed from the side of the gear-lever. Fig. 11 is a detail view of the casting at the opposite side of the machine from that shown in Fig. 10. Fig. 12 is a detail side view of the adjustable wind-guard located at the discharge-opening for the stalks and husks. Fig. 13 is a top view of the same.

Like parts are identified by the same reference-letters throughout the several views.

A is the carrier-box, adapted to discharge the stalks and husks at some distance from the machine.

B is an endless-belt carrier of ordinary construction.

In the bottom of the carrier-box I have located a screen C, formed from a flat plate of metal and having therein a series of short transverse slots D, with the metal bent downwardly on the upper side of the slot to form a trough E, in which the loose corn escapes from the carrier into a corn-collecting box or chute E′, the latter being preferably formed to taper or slant laterally at its lower end to a suitable discharge-opening *e*.

It is evident that by the peculiar construction of the screen-openings I have provided a free escape for the loose corn, while permitting the stalks and husks to pass freely over the openings without getting caught therein, thus avoiding the clogging which would be incident to the use of an ordinary form of screen.

On the under side of the carrier-box I have arranged bars F, supported from the box by hangers G and adapted to support the belt carrier B on the return side, thus preventing it from sagging, breaking, or from interfering with the pile of fodder. The ends of the bars are curved downwardly, as at *f f*, to prevent them from catching on the carrier or carrier-bars.

Within the machine I have provided mechanism for throwing the husking-rollers into and out of gear, my invention being in this respect an improvement over the construction shown and described in my former patents, No. 440,826, dated November 18, 1890, and No. 460,336, dated September 29, 1891, and No. 566,310, dated August 25, 1896, for combined feed-cutters and corn-huskers.

In my present invention each pair of husking-rollers is independently actuated from a line-shaft H by means of bevel gear-wheels I and I′, the initial gear-wheels I being provided with a hub J, having a key K engaged and adapted to slide in a channel K′ in the shaft H. The gear-lever L is connected with and actuates a sliding rod M, upon which are mounted bifurcated clutch-arms N, which

project into annular channels J′ in the hubs J. It is evident that the movement of the lever L is simultaneously communicated to all of the wheels I to engage or disengage them from the gear-wheels I′ and that the strain is therefore evenly distributed to each pair of husking-rollers.

In order to properly support the shaft II, I have provided a bar or beam O, preferably formed of angle-iron, upon which are located the standards P, provided with bearings or boxes Q between the several gear-wheels, thus preventing the shaft from springing or vibrating.

The shaft H, as well as the head-block R, which provides the bearings for the husking-rollers, the sliding gear-rod M, and the beam or angle-iron O are all supported at their respective ends by the castings S and S′, attached to the side of the frame.

It will be observed that I have greatly improved the construction shown in my Patent No. 566,310, of August 25, 1896, in providing the beam O and in supporting said beam, together with the shaft and head-block, from the casting S and S′, as well as providing shifting-gearing upon the shaft to dispense with the clutches shown in my former patent; but I attach special importance to the use of the end castings and the additional supporting-beam O, for in this manner I greatly strengthen the construction and prevent the parts from that springing and vibrating of the shaft which is common in corn-husking machines and which rapidly destroys the gearing.

Referring to Fig. 13, it will be observed that the carrier-box is of that class which is arranged to swing laterally in order to distribute the stalks and husks, and it is common to provide a fixed wind-break or hood at the discharge-opening of the machine to prevent the stalks and husks from being blown away from the carrier before entering the box; but I have found that when the carrier-box is adjusted to a lateral position a fixed hood becomes of little service, as it does not then cover the opening, and I have therefore provided a hood formed of a swinging board T-slotted at *t* and supported upon a platform U by means of a bolt *u*. V is a depending shield of sheet metal attached to the edges of the board. T and W are strengthening-strips attached to the upper side of the board. The rear edge of the board is cut angularly to form the edges *w*, *w′*, and *w″*, which engage against the rear end of the machine when the board is adjusted with the bolt *u* in the front end of the slot, thus preventing the hood from jarring out of place. It is obvious that by this construction the hood may be easily adjusted to cover the inlet of the carrier-box at all desirable angles in which the latter may be located.

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

1. In a corn-husking machine, the combination with the carrier-box and carrier, of a horizontally-extending platform attached to the rear end of the machine-frame, a board adjustably secured to said platform by a pivot-bolt, and a depending shield attached to the edges of said board, substantially as described.

2. In a corn-husking machine, the combination with the carrier-box and carrier, of a horizontally-extending platform attached to the rear end of the machine-frame, a slotted board supported on said platform, and provided with angularly-cut rear edges, a pivot-bolt passing through the platform and the slot in said board, and a depending shield secured to the side edges of said board, substantially as described.

3. In a corn-husking machine, the combination with the head-block, and the husking-rollers journaled therein, a line-shaft provided with movable gearing feathered thereto, and arranged to be brought into temporary engagement with the gearing of the husking-rollers, a gear-lever and a sliding rod provided with clutch-arms engaging in grooves in the hubs of said movable gear-wheels to actuate the latter upon the shaft, together with a supporting-beam provided with bearing-standards for supporting the shaft between the gear-wheels, and end castings attached to the side of the machine-frame for rigidly uniting and supporting the head-block of the husking-rollers and the supporting-beam of the line-shaft, substantially as described.

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

WILLIAM GUTENKUNST.

Witnesses:
JAS. B. ERWIN,
CHAS. A. GUTENKUNST.