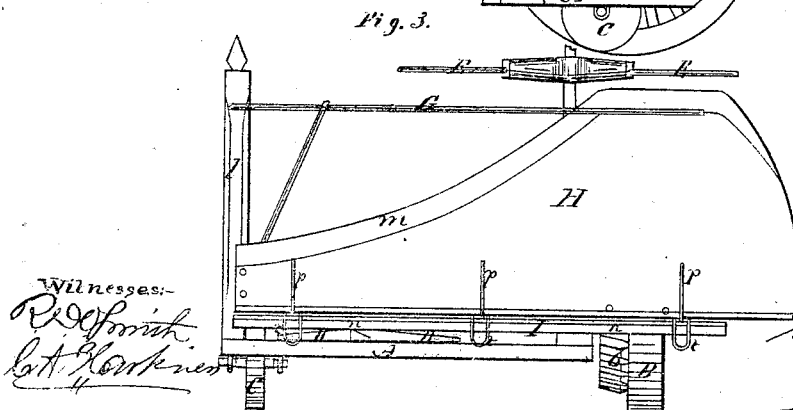
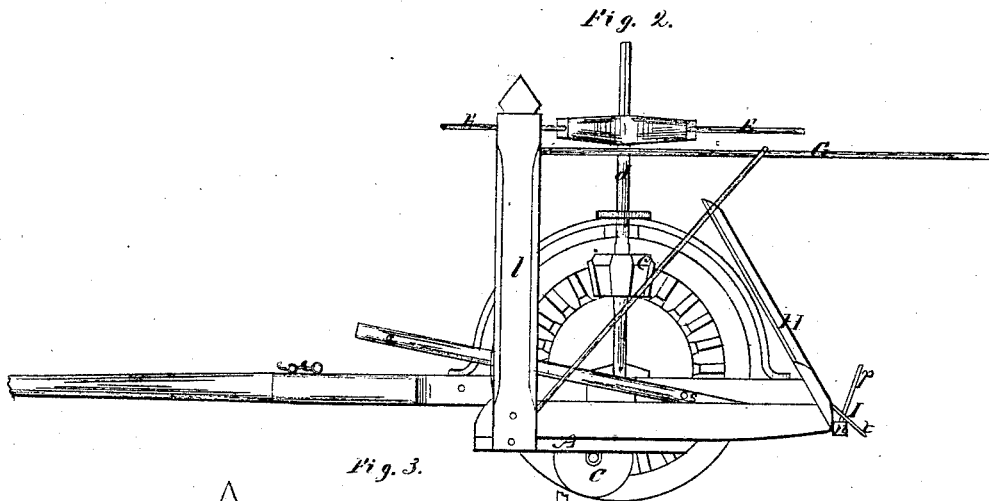
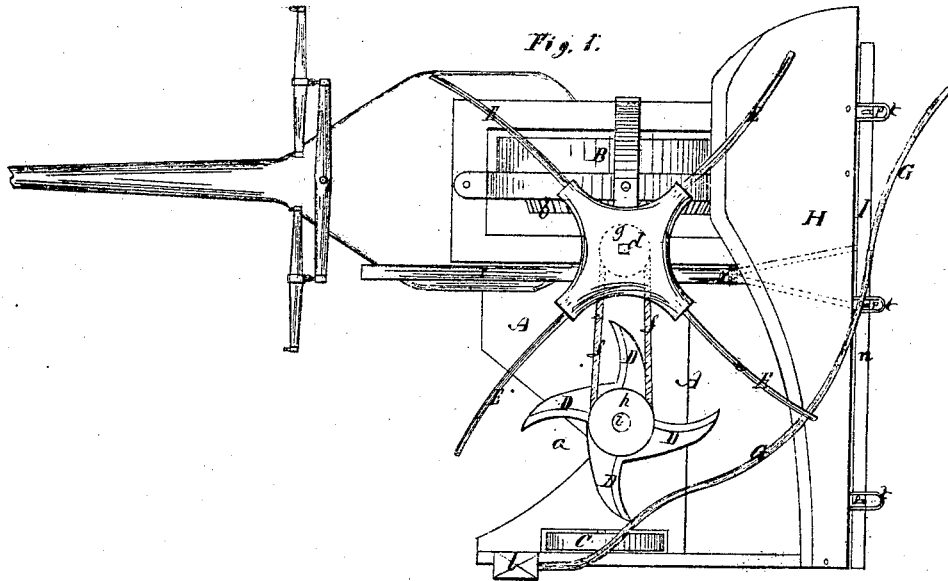


*C. S. Stull,*  
*Corn Harvester.*

*No. 112,191.*

*Patented Feb. 20, 1871.*



Witnesses:  
*R. S. Smith*  
*Chas. H. Harkness*

*Oliver Smith Stull*  
*By his atty,*  
*J. S. Brown.*

# UNITED STATES PATENT OFFICE.

CLEMENT SMITH STULL, OF POOLESVILLE, MARYLAND.

## IMPROVEMENT IN CORN-HARVESTERS.

Specification forming part of Letters Patent No. **112,191**, dated February 28, 1871.

*To all whom it may concern:*

Be it known that I, CLEMENT SMITH STULL, of Poolesville, in the county of Montgomery and State of Maryland, have invented an Improved Machine for Cutting and Harvesting Indian Corn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, making part of this specification—

Figure 1 being a top view of the machine; Fig. 2, a side elevation thereof; Fig. 3, a rear elevation of the same.

Like letters designate corresponding parts in all of the figures.

Let A represent the platform of the machine; B, the driving-wheel near one side of the platform, and C a small wheel or caster to support the other side of the platform.

The machine is drawn by means as represented, or the equivalent thereof, the line of draft being nearly through the driving-wheel.

I notch the front edge of the platform A at *a*, to gather the stalks of corn and direct them to the cutters, in connection with concavely-curved or equivalent form of knives D D, revolving in a horizontal plane close over the platform, so as to sweep across the inner angle of the said notch and cut off the stalks gathered therein.

The upper edges of the sides of the notch are or may be of steel and sharp, so as to produce a shearing cut, in connection with the revolving knives.

The knives D D receive their motion from the driving-wheel B by means of a bevel cog-wheel, *b*, on the face thereof, gearing into a bevel-pinion, *c*, on a vertical shaft, *d*, and by a belt or band, *f*, passing from a pulley, *g*, on the said shaft *d* to a pulley, *h*, on the shaft *i* of the knives; or any equivalent means may be employed.

Upon the vertical shaft *d* is a set of gathering-arms, E E, preferably concavely curved on their front sides, and revolving over the knives D D, so as to sweep the corn-stalks backward as fast as they are cut off by the knives. I arrange these arms in combination

with a guide rod or bar, G, which is secured to a standard, *l*, on the front outer edge of the platform, and extends therefrom in a curved direction backward and across the rear side of the platform, in a position nearly concentric with the gathering-arms E E, substantially as represented in Fig. 1, so that the said arms will sweep the corn-stalks backward, and at the same time, with the aid of the guide-rod, will lay them down in parallel positions across the rear part of the platform.

I employ a receiving-board, H, inclined backward upon or over the rear edge of the platform A, so as to receive the stalks as they are swept backward and laid transversely across the same by the gathering-arms E E and guide-rod G, this inclined board acting, in combination with a rack or set of teeth, I, which project upward from behind the said inclined board, to retain the corn-stalks thereon till a bunch or gavel of desired size has been gathered, and then, on lowering the rack out of the way, the stalks slide off from the board, which has sufficient inclination to cause them to slide down by their own gravity.

The inclined board is concave, and lower on its upper edge, *m*, at one end than at the other end, substantially as shown, to allow the corn-stalks to readily fall over the same upon its back surface, and yet hold them all thereon.

The rack I is composed of a head or bar, *n*, with upwardly-projecting teeth or pins *p p*.

The head or bar *n* is attached to a handle or lever, *r*, which is pivoted at *s* to the platform or other stationary part of the machine, so that the driver or attendant, by raising or lowering the front end thereof, can lower or raise the rack.

When the front end of the lever is held down the rack-teeth *p p* project upward behind the inclined board H, and retain the corn-stalks in place thereon; but on raising the front end of the lever the rack-teeth are lowered out of the way to let the corn-stalks slide off from the inclined board.

Loops or rods *t t* project backward from the inclined board or the platform to embrace

the teeth *p p*, as shown, and clear the corn-stalks from the teeth when the rack is lowered.

The machine may be duplicated, so as to cut two rows of corn at once.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the gathering-arms *E E*, guide-rod *G*, receiving-

board *H*, and discharging-rack *I*, substantially as and for the purpose herein specified.

Specification signed by me this 9th day of May, 1870.

CLEMENT SMITH STULL.

Witnesses:

I. T. FLETCHALL,  
ROBERTUS TRUNDLE.