J. W. FINGAR.

Corn-Sheller.

No. 198,878. Patented Jan. 1, 1878.

Fig., 1.

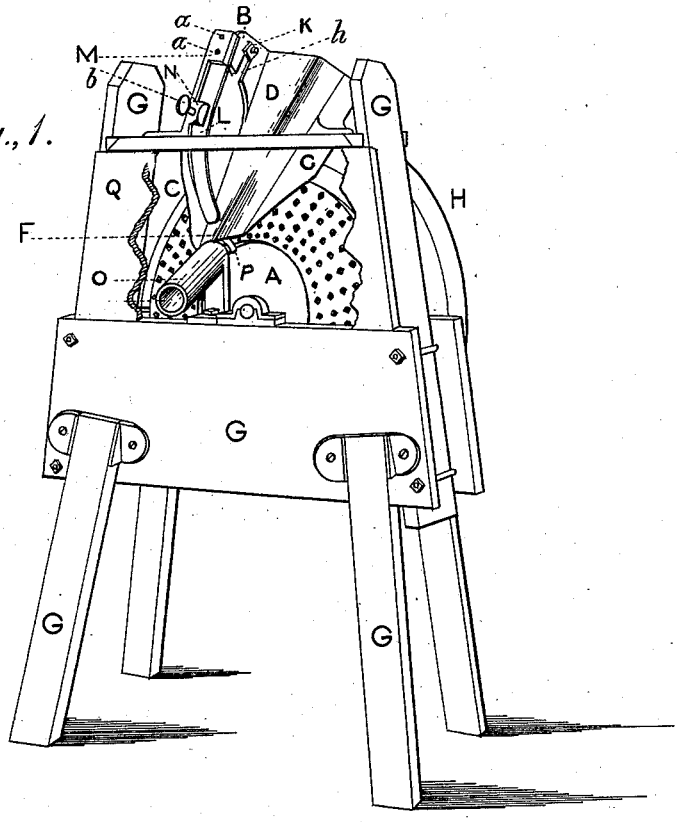


Fig., 2.

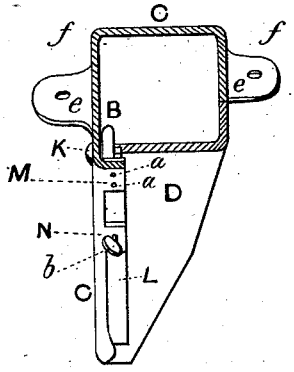


Fig., 3.

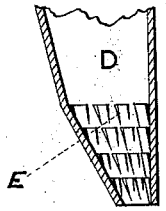


Fig., 4.

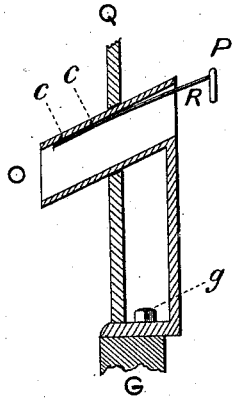
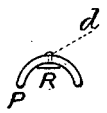


Fig., 5.



WITNESSES:

Charles L. Adams

Frank R. Rathbun

INVENTOR:

Jacob W. Fingar

UNITED STATES PATENT OFFICE.

JACOB W. FINGAR, OF AUBURN, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES L. ADAMS, OF SAME PLACE.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. **198,878**, dated January 1, 1878; application filed August 21, 1877.

To all whom it may concern:

Be it known that I, JACOB W. FINGAR, of Auburn, in the county of Cayuga and State of New York, have invented a new and useful Improvement in Corn-Shelling Machines, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, of which—

Figure 1 is a perspective view of my invention, and Figs. 2, 3, 4, and 5 are detailed drawings of the same.

The object of my invention is to rapidly and effectually shell and separate kernels of maize or corn from the cob by means of a self-adjusting section of the hopper, for receiving the same, and a tube for conducting the cob, when stripped, into a separate receptacle, or away from the corn-kernels.

To accomplish this design, I construct the hopper in two sections, as seen at C and D in Fig. 2. The section C is provided with flanges *e e* for fastening it to the frame-work G by means of screws passing through the holes *f f*, and is thus secured at an angle corresponding to that of the spurred surface of the cone A. This section C is also furnished with projections or lugs M and N, (the use of which I will presently describe,) and extends downward, forming a stand-post and guide upon which the section D may work. The section D is furnished with a slotted ear, B, and at its lower end with spurs or cogs E.

O is a tube and stand, which is adjusted to the frame-work G by means of a screw-bolt, *g*. L is a flat, bent steel spring, fastened to the lug M by rivets *a a*, and impinging against a fulcrum-point, *b*, which passes through the projection N, and presses with its lower end upon the movable section D. R is a flat spring, fastened to the interior of the tube O, as shown, by the rivets *c c*, and is furnished at the end with a semicircular and rounded casting, P, which catches and controls the cob while being stripped.

Having thus set forth the principal points of my invention, I will describe its operation. The section of the hopper D is held freely against the stand-post of the section C by means of a slot-pin and nut, K, on which works the slot *h* of the ear or hook B. As the ears of corn are fed into the hopper they pass over the ordinary toothed cone A, and receive a rotary motion consequent upon its revolutions, the corn being stripped from the cob, the point of which is caught and controlled by the semicircular piece P, which accommodates itself to any sized cob by the flexibility of the spring R, and at the same time conducts the cleaned cob through and out of the tube O. Meanwhile the spurs E, at the lower end of the sliding section D, strip any remaining kernels from the butt of the ear. As the ears vary in diameter the section D accommodates itself thereto by rising, being guided at the top by means of the slot *h*, and is at the same time pressed down, at its lower or discharging point, by the action of the spring L, thus enlarging the space for the convenience of the ear, the whole operation being speedily and effectually performed, the kernels falling in one place or receptacle, while the cobs are conducted through the tube O, and separated therefrom.

I claim—

1. The combination, with the conical or tapering sheller-wheel A, of the section D, having the slotted ear B, and controlled by the spring L bearing against the fulcrum-point *b*, substantially as described.

2. The tube O, provided with the spring R and curved controlling-piece P, substantially as described and set forth.

JACOB W. FINGAR.

Witnesses:
CHARLES L. ADAMS,
FRANK R. RATHBUN.