

H. A. ADAMS.

Improvement in Corn-Shellers.

No. 132,128.

Patented Oct. 15, 1872.

Fig. 1.

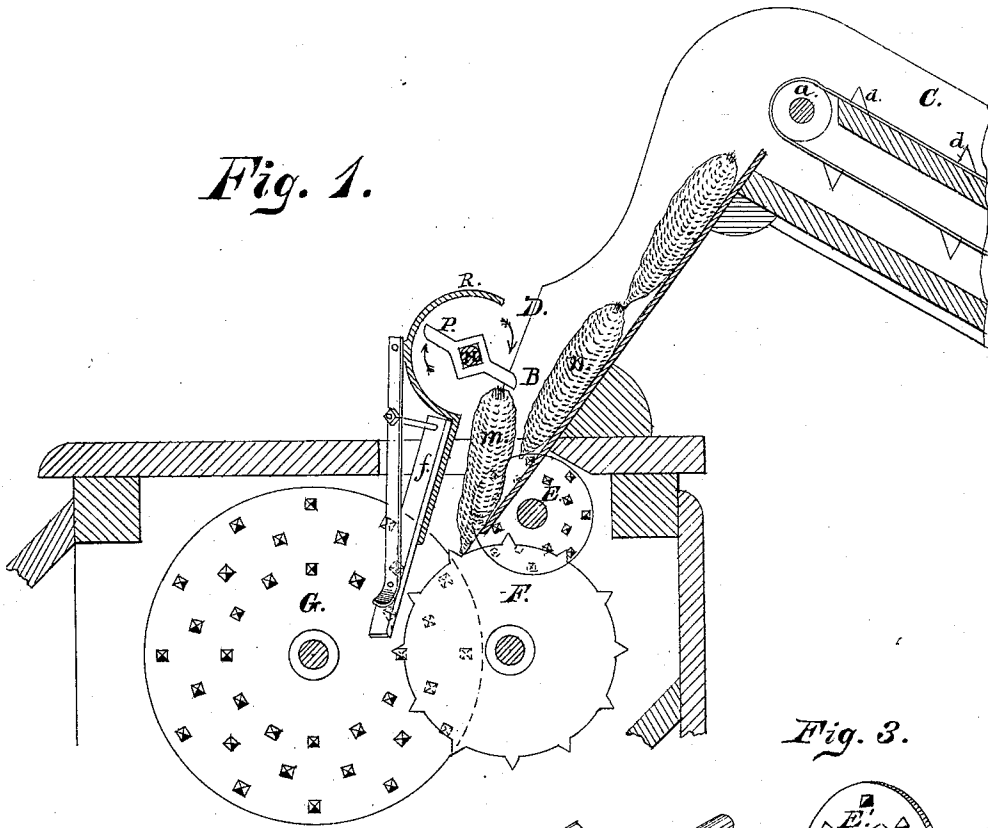


Fig. 2.

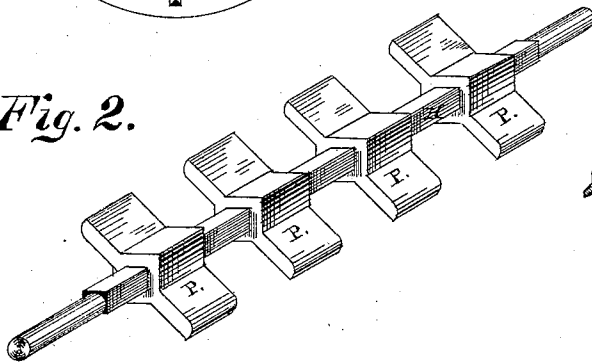
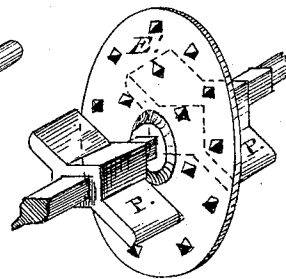


Fig. 3.



WITNESSES:

Henry F. Brown.
R. H. Munday

INVENTOR:

Henry A. Adams
by Cohen & Munday.

UNITED STATES PATENT OFFICE.

HENRY A. ADAMS, OF SANDWICH, ILLINOIS.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 132,128, dated October 15, 1872.

To all whom it may concern:

Be it known that I, HENRY A. ADAMS, of Sandwich, in the county of De Kalb and State of Illinois, have invented certain Improvements in Corn-Shellers, of which the following is a specification:

Nature of the Invention.

This invention relates to an improvement upon the corn-sheller patented by Augustus Adams, as described in his Letters Patent No. 54,659, dated May 15, 1866. In said patented corn-sheller a winged shaft is placed above the openings into the sheller, and is revolved oppositely to the direction of the entering corn, in such manner that the said wings strike the upper ear, if two ears attempt to enter the throat at once, and throw said upper ear back into position to descend properly; but I have discovered that the ear so thrown back retards the feed, inasmuch as the following ears are likely to override the ear so thrown back and the difficulty is thus continued. In the present invention I propose to overcome this objection by forcing all the ears, as they approach the throat, to pass rapidly out of the way into the sheller, by means presently specified; and to this end I arrange a shaft above the throat, with a series of wings, wheels, or projections, to revolve in the same direction as the entering corn, so as to force the corn rapidly forward into the sheller, which is capable of shelling all the corn that can be forced through the throat. By this means I avoid any chance of clogging the feed under ordinary circumstances.

In the accompanying drawing, which forms a part of this specification—

Figure 1 is a sectional view of a sheller constructed with my invention; Fig. 2 is a perspective view of the winged shaft; and Fig. 3 is a perspective view, showing a portion of said winged shaft, and the manner of applying the disks with toothed faces.

Like letters of reference made use of in the several figures indicate like parts.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with particularity, making use in so doing of the aforesaid drawing by letters of reference thereto.

General Description.

O is the elevating device for delivering the corn to the throats B of the sheller; E F G

are the shelling-wheels; and *f* is the yielding portion of the throat. A is the band or belt of the elevator supplied with the usual cleats or retaining strips *d*. All of these various parts are similar to those in use heretofore. D are the partitions between the throats of the sheller. H is a shaft which may be surrounded by the hood R. This shaft carries the beaters or wings P, arranged to revolve in the direction of the arrows shown at Fig. 1 of the drawing. Space enough is left between the revolving wings and the bottom of the throats B to allow of a single ear, as at *n*, to pass freely beneath without contact, but sufficiently near to strike an overriding ear, as at *m*, and force it, and other ears in contact therewith or in the road thereof, ahead rapidly into the sheller, clearing the passage for the corn following. It is evident that the form or shape of the beaters or projections upon the revolving shaft may be varied in many ways and the result accomplished; I therefore do not limit myself to the form shown. Disks E', similar to the shelling or feeding disks E and toothed upon both sides, may be applied to the shaft H in lieu of the beaters, and they may be applied in combination with said wings or beaters, being arranged between each pair of wings; in which case the partition D should be partially cut away at that point to receive said disks. When so employed these disks, revolving with the shaft H, assist by means of their toothed faces, acting, laterally, in conjunction with the beaters to urge the corn along into the sheller.

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

1. The combination, with a corn-sheller, of a series of wings, wheels, or projections, so arranged on a shaft as to revolve in the same direction as the corn is running, and so placed relative to the throats as to force into the machine all misplaced or hesitating ears, substantially as specified.

2. The combination and arrangement of the alternating wings P and disks E' upon a shaft, H, placed before the throats of a corn-sheller, and operating as specified.

HENRY A. ADAMS.

Witnesses:

AUGUSTUS ADAMS,
HUBERT S. HILLS.