C. D. READ.

CORN-SHELLING MACHINE.

No. 193,130. Patented July 17, 1877.

Fig. 1

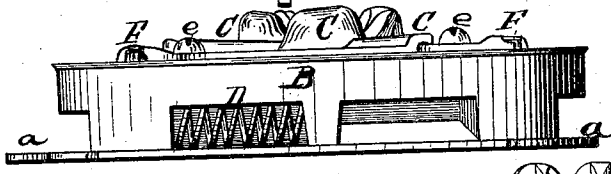


Fig. 4.

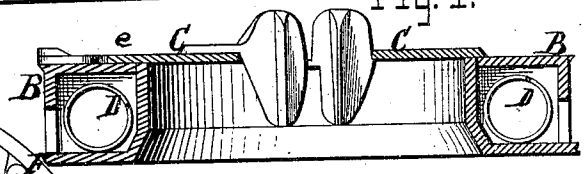


Fig. 2.

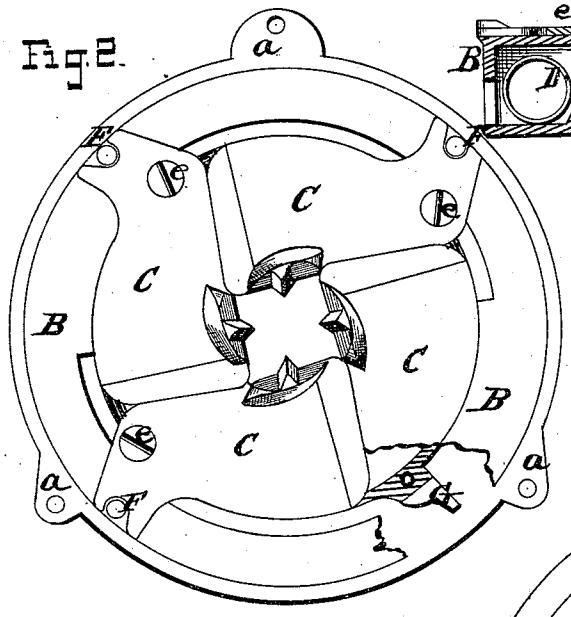
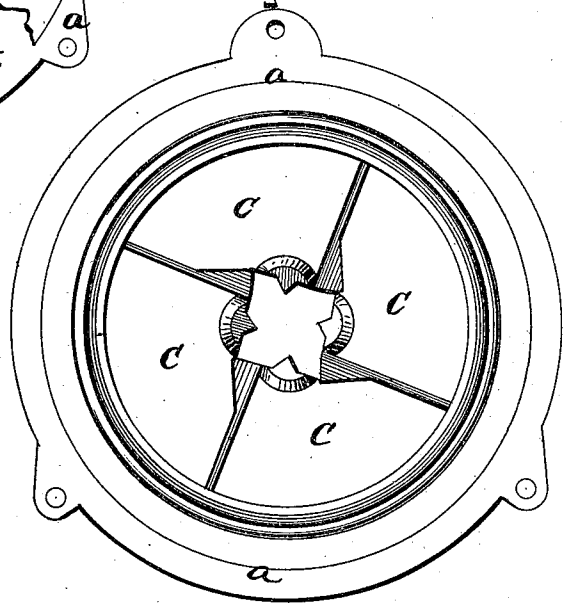


Fig. 3.



WITNESSES

E. McGallaher.

M. Gardner.

By

INVENTOR,

Calvin D. Read,

J. S. Brown, Attorney.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CALVIN D. READ, OF AYER, MASSACHUSETTS.

IMPROVEMENT IN CORN-SHELLING MACHINES.

Specification forming part of Letters Patent No. **193,130**, dated July 17, 1877; application filed May 12, 1876.

To all whom it may concern:

Be it known that I, C. D. READ, of Ayer, county of Middlesex, State of Massachusetts, have invented a new and useful Improvement in Centering Device for Corn-Shellers, or for any similar purpose for which entering to a center is the desired object, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings—

Figure 1 being a side view of the centering device; Fig. 2, a top view, the ring partially broken away to show the lugs G; Fig. 3, a bottom view, looking upward; Fig. 4, a central vertical section thereof.

Like letters designate corresponding parts in all of the figures.

The special purpose of my invention is to be applied to corn-shellers, and more especially to the one patented by C. D. and E. D. Read, July 27, 1875, No. 166,142.

The nature of my invention consists in various improvements in the construction and functional parts of the device, and I will set forth the said improvements one by one in succession.

First, in the construction of the hopper or body on which the several working parts are mounted, the hopper or body *a* thereof consists of a short upright cylindrical flanged casting, with lugs G cast on its outer circumference for the guidance of ring B, and the support of the wing-plates C C C C and coiled springs D D, the wing-plates being pivoted thereto on the screws or pivots *e e*.

Ring B is cast with downward projections, resting on the flange of hopper *a*, and an inward flange and short studs F F F F on the upper side. The inward flange of ring B rests against shoulders on the guide-lugs of hopper *a*, to hold it in position and to allow it to move freely, it being pressed back and held in position by the two coiled springs D D.

The four wing-plates are pivoted to the hopper by the screws or pivots *e e*, and are slotted at their outer ends to connect with the movable ring by the upward-projecting studs F F F F, and are provided with upward, inward, and downward projections, with inclined V's on the inner surface of the projections, to prevent the ear from turning, and allow it to enter with greater ease. These wing-plates are pressed toward one another, and the central space between them, by means of the coiled springs D D, resting on their ends against the lugs G of hopper *a*, and corresponding projections cast on the inside of ring B, or any equivalent of springs may be employed; and in order that these wing-plates may press equally and move simultaneously with equal motion, so as to keep the middle space between them always central, I provide them with a slot in their outer ends, and connect them to the corresponding studs on ring B, so that neither wing-plate can move without acting by said slot and stud to move the ring B, and thereby moving the others equally and simultaneously.

The object of my invention is to enter centrally the ear of corn in a corn-sheller, guiding it direct to the shelling-points, and holding it with the assistance of the shelling arms and rolls below in a vertical position until it has passed through.

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

1. The hopper *a*, formed with a short upright cylinder, with lugs G cast on its outer circumference, and a circular bottom flange arranged for the support of ring B and wing-plates C C C C, substantially as and for the purpose specified.

2. The movable ring, with its upward-projecting studs F F F F, or their equivalents, connecting with the wing-plates C C C C, in combination with the coiled springs D D, substantially as specified.

3. The wing-plates C C C C, pivoted to the hopper *a*, and connected by their slotted ends to the movable ring B, and provided with upward, inward, and downward projections, with inclined V's on their inner surfaces, constructed and arranged to operate substantially as and for the purpose herein specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

C. D. READ.

Witnesses:
J. A. READ,
S. W. SMITH.