C. GODDARD.

CORN-SHELLER.

No. 186,830. Patented Jan. 30, 1877.

Fig. 1.

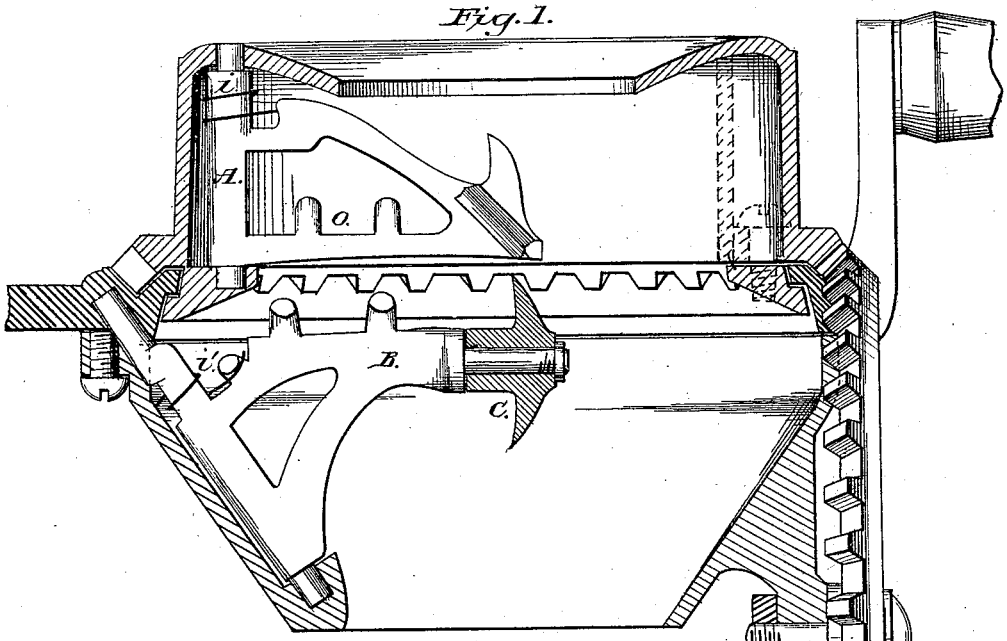


Fig. 4.

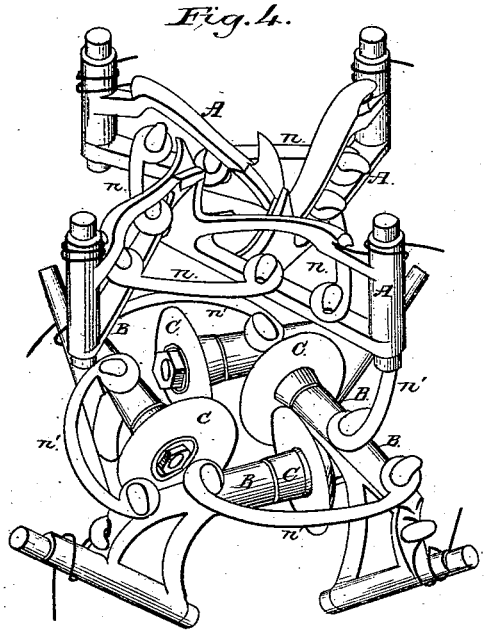


Fig. 2.

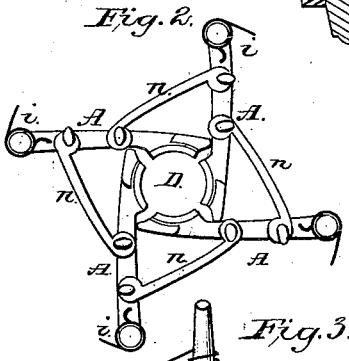
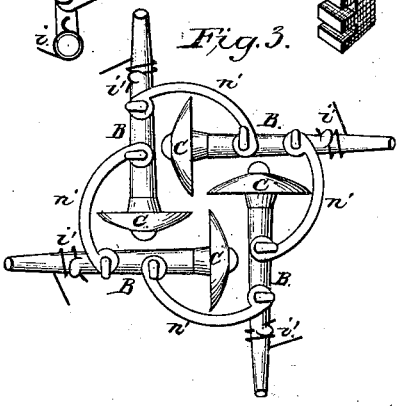


Fig. 3.



Attest:

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Inventor:

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UNITED STATES PATENT OFFICE

CURTIS GODDARD, OF ALLIANCE, OHIO.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. **186,830**, dated January 30, 1877; application filed June 14, 1876.

To all whom it may concern:

Be it known that I, CURTIS GODDARD, of the town of Alliance, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Corn-Shellers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is, by means of a compact, simple, and effective machine, to facilitate the shelling of corn.

The machine consists mainly of two parts. The upper part contains the device for shelling the corn from the cob, and is turned horizontally upon the lower part, (which contains the device for holding the cob from turning while the corn is being shelled from its upper part,) by means of bevel-gear around the upper part, and on a wheel having a crank-handle, and being pivoted to the lower part of said machine. Each part has a metal casing, to the inside of which are hinged four, more or less, vibrating arms, which are held to the cob or ear by springs, and are made to move (in being adjusted to the taper and different size of cobs) simultaneously by means of four, more or less, pivoted braces or ties from one to another of said arms, as shown in the accompanying drawings and explanations, where the machine is illustrated more in detail.

Figure 1 is a vertical sectional view of the casing of the machine, showing an elevation of one of the vibrating arms A, and one of the vibrating arms B, a section of one of the edged or toothed wheels C, and the manner of connecting the upper and lower part of the machine, so that one may turn upon the other, as represented.

Fig. 2 is a plane view (at O in Fig. 1) of the device for shelling the corn from the cob, showing the manner and place of attaching the pivoted braces or ties *n n n n* to the swinging arms A A A A, so that the ends of said arms, near the center D, shall preserve an equal distance, or nearly so, from said center in vibrating; also, the springs *i i i i*, for holding the vibrating arms to the cob. On the side nearest the center D of the inner end of each of the vibrating arms A is a V-shaped rib, inclined and concaved to fit and act like a screw on the cob in drawing the ear downward. The upper part of the inner end of each of the said arms A is armed with a hook or spur, which tears the corn from the cob as the upper part of the machine is revolved.

Fig. 3 is a plane view of the device in the lower part of the machine, for holding the cob from turning, showing the pivoted braces or ties *n' n' n' n'* attached to the vibrating arms B B B B, and the edged or toothed wheels C C C C, journaled to said vibrating arms, so as to roll longitudinally along the cob. The wheels C may be secured to their journals with burrs and screws by riveting or by drilling, then putting a bolt with a head upon it through the wheel, then casting the arm upon said bolt or journal. The length of said arms B may be such that the edge of the wheel C may be one-fourth of an inch, more or less, beyond the center of the casing from the side to which its arm is hinged, so that the tendency of the cob to turn will draw the wheels inward, thus holding the cob more firmly from turning. The braces or ties *n* and *n'*, pivoted to the vibrating arms A or B, may be adjusted, as to length, so that said arms may move simultaneously toward or from the center far enough to adjust themselves to the different size of cobs, thereby keeping the cob in the center as it passes down through the machine. The braces *n'* should be curved, so as to clear the wheels C. Said ties or braces *n* or *n'* may be secured to the vibrating arms by hook-shaped pins or pivots, so that by inclining the brace and putting it on, then bringing it to a horizontal position, the hook holds the brace from coming off; or this object may be effected by any equivalent device.

Fig. 4 is a perspective view of the interior arrangement of the machine, the two parts being separated from each other in the drawing, for the sake of clearness. The upper or revolving part contains the vibrating arms A, with segments of screw and shelling-spurs, the pivoted braces *n*, and springs *i*. The lower part includes the swinging arms B, pivoted braces *n'*, edged wheels C, and springs *i'*, for holding the cob from turning; at the same time allowing it to pass through in the process of shelling.

I claim as my invention—

1. The combination, in a corn-sheller, substantially as described, of the vibrating arms B B B B, with the pivoted ties or braces n' n' n' n', and the edged or toothed wheels C C C C.

2. The combination of the vibrating arms A A A A and the pivoted braces or ties n n n n, substantially as described, and for the purposes set forth.

CURTIS GODDARD.

Witnesses:
M. M. KING,
C. B. HAINES.