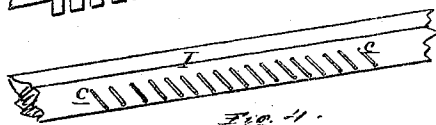
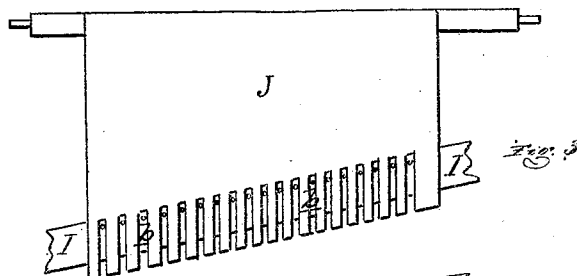
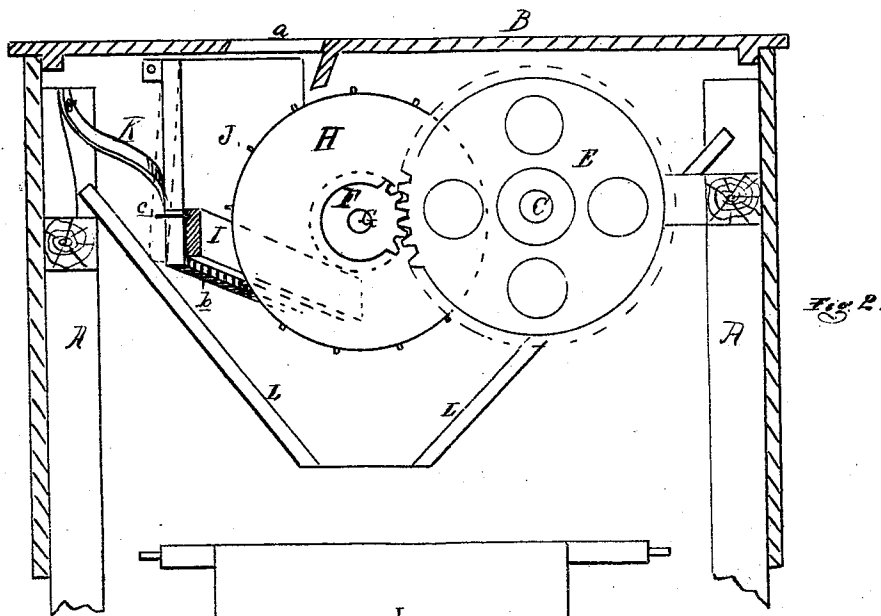
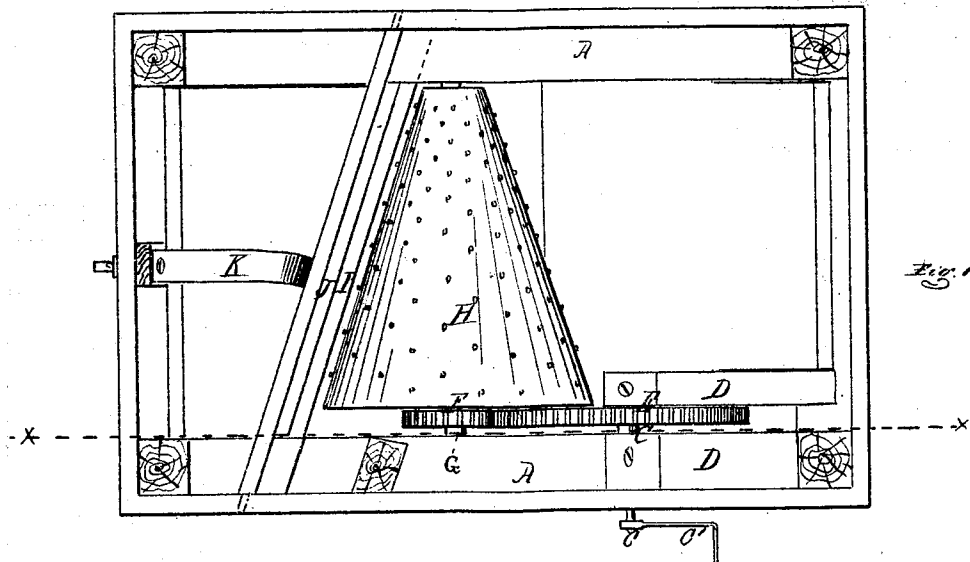


J. R. CADWELL.
Improvement in Corn Shellers.

No. 123,676.

Patented Feb. 13, 1872.



WITNESSES:
Myron A. Church
J. S. Sprague

INVENTOR:
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UNITED STATES PATENT OFFICE.

JASON R. CADWELL, OF ONONDAGA, MICHIGAN.

IMPROVEMENT IN CORN-SHELLERS.

Specification forming part of Letters Patent No. 123,676, dated February 13, 1872.

To whom it may concern:

Be it known that I, JASON R. CADWELL, of Onondaga, in the county of Ingham and State of Michigan, have invented a new and useful Improvement in Corn-Shellers; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, in which—

Figure 1 is a plan of my corn-sheller with the top removed. Fig. 2 is a longitudinal vertical section on the line *xx* in Fig. 1. Fig. 3 is an elevation of the shelling-shield from the outer side; and Fig. 4 is a perspective view of the central part of the inclined abutment.

Similar letters of reference indicate corresponding parts in the several figures.

The nature of this invention relates to an improvement in the construction of machines for shelling corn, whereby the operation of the sheller is rendered more effective and certain; and it consists in the novel and peculiar construction and arrangement of its several parts, as more fully hereinafter set forth.

In the drawing, A represents the framework of the machine, inclosed by a suitable casing and provided with a cover, B, in which there is a diagonal slot, *a*, Fig. 2, for the introduction of the ears of corn. C is a short driving-shaft, journaled in brackets D within the casing, through which one end projects to receive a crank, C'. E is a spur-gear, secured on the shaft C, and meshes with a pinion, F, on a second shaft, G, which carries the conical sheller H, which is armed with short studs spirally disposed about it. I is an abutment, rigidly secured to the frame-work, reaching across the interior parallel with and so near the edge of the sheller that the smallest cob will not pass down between them. The abutment is inclined from the base of the cone toward the apex of the sheller, to facilitate the discharge of the cobs through a hole in the casing at the lower end of the abutment. J is a shield, pivoted at its upper corners to the

upper part of the casing, its lower edge resting against the outer side of the abutment, which is armed with a series of projecting pins, *c*, the shield having corresponding slots, *b*, through which said pins pass, allowing the shield to lie flat against the abutment, against which it is pressed by a spring, K.

Motion being communicated to the sheller through the crank and gearing, and the cobs fed in at the top, they fall on the sheller at its upper and larger end, whence they are carried down in the rotation of the sheller to the abutment, which holds or prevents them from passing further, but allows them to roll while the studs on the shelling-cone tear off the grains, which fall through and are discharged by the apron L below. While the ear of corn is being stripped of its grain it passes along down the abutment toward the discharge, but not without being acted upon by the shelling-studs as long as there is a grain adhering to it, for the reason that the arrangement of the studs on the cone is such that a given stud does not become tangent to and release it until the following one of the next row engages with it, thus insuring perfection in the shelling process.

The yielding shield accommodates itself to the varying sizes of ears, and the pins with which it is provided prevent, in the case of a very large one, its passing down behind or lodging between the abutment and its shield.

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

The combination of the conical sheller H, rotated by proper means, the abutment I, provided with pins *c*, the hinged shield J, provided with slots *b*, and the spring K, the several parts being constructed, arranged, and operated substantially as described and shown, for the purposes set forth.

JASON R. CADWELL.

Witnesses:

E. W. SMITH,
J. E. POTTER.