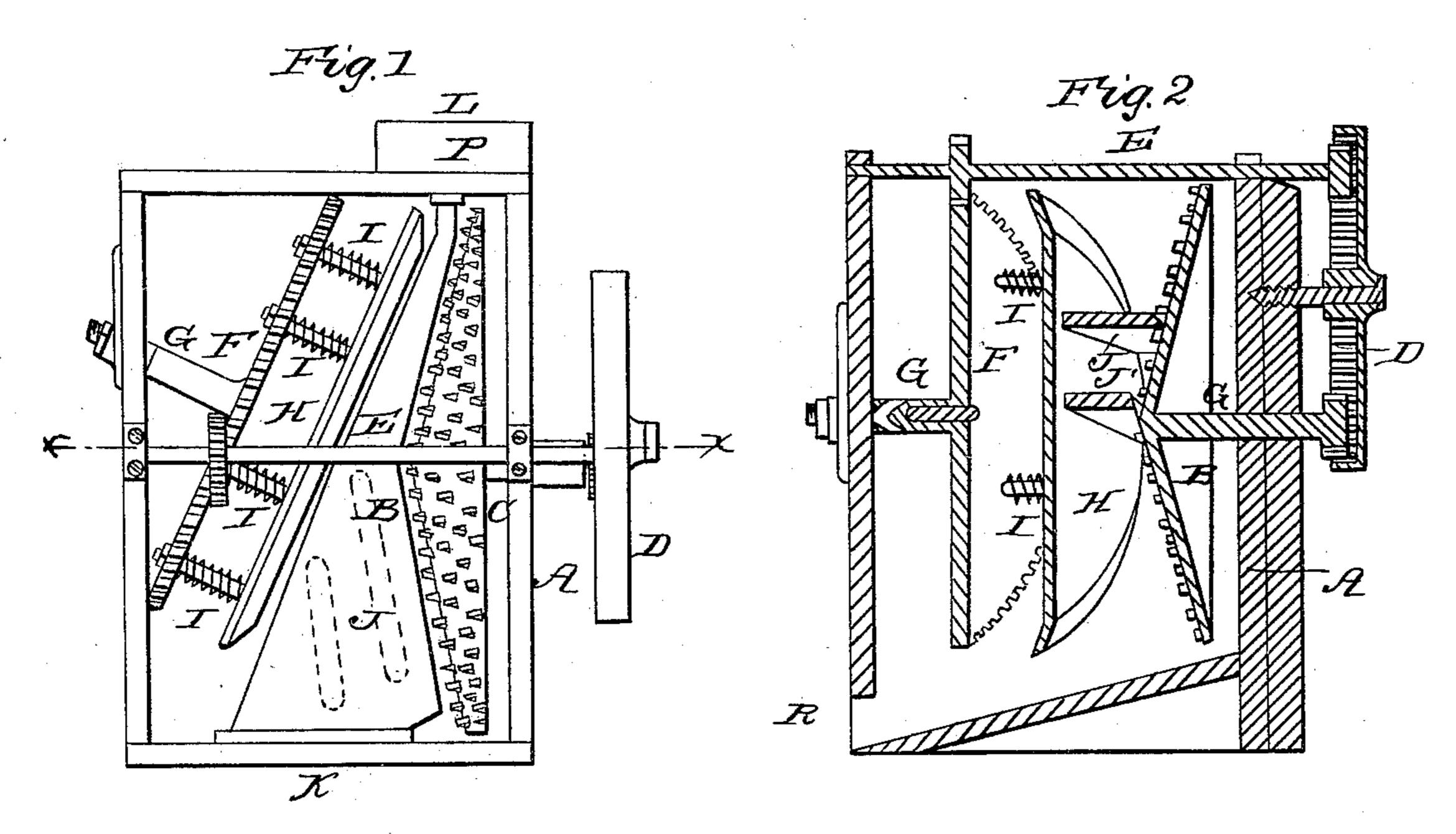
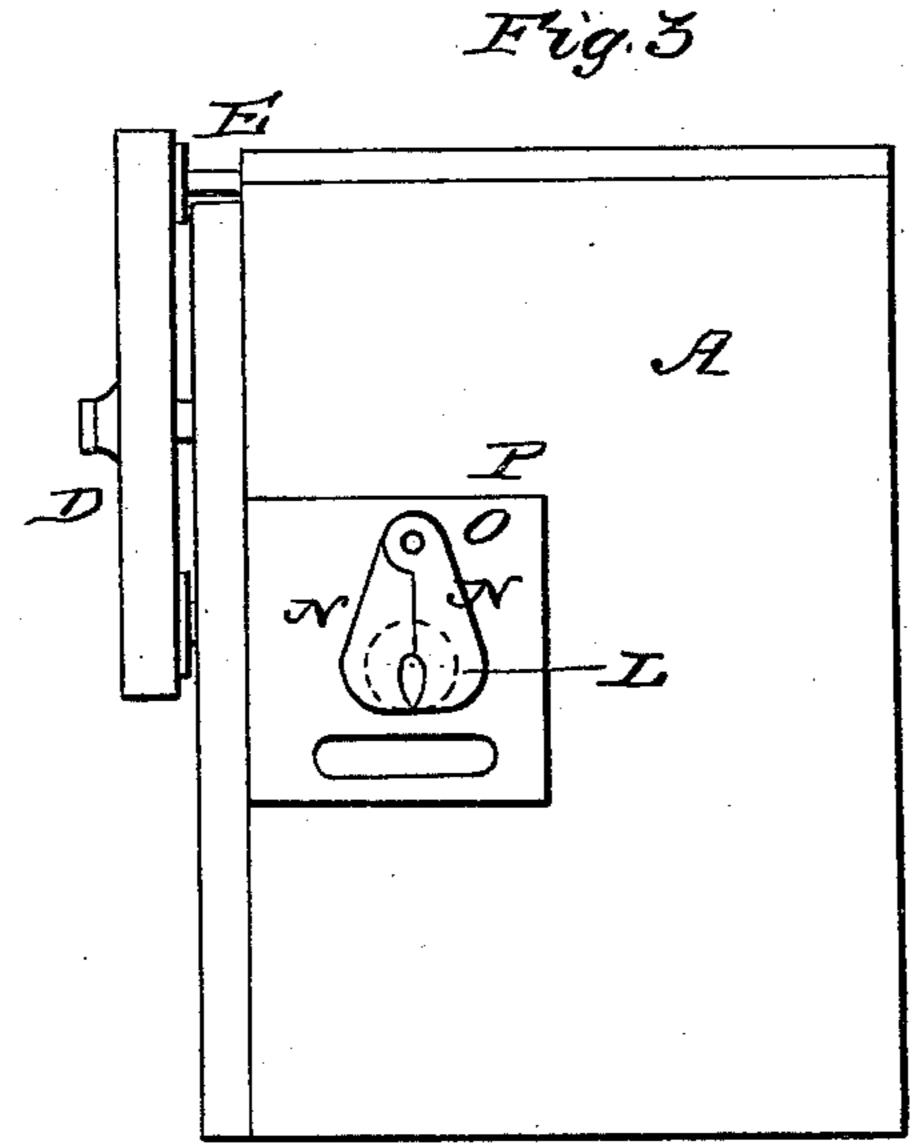
VANT & COOK.

Corn Sheller.

No. 22,595.

Patented Jan'y 11, 1859.





-George. K. Tafk-Le arreler Hollrook. Artemis Bant. Arton M. Cook.

UNITED STATES PATENT OFFICE.

A. B. VANT AND A. M. COOK, OF MILFORD, MASSACHUSETTS.

CORN-SHELLER.

Specification of Letters Patent No. 22,595, dated January 11, 1859.

To all whom it may concern:

Be it known that we, ARTEMAS B. VANT and ARLAN M. Cook, of Milford, in the county of Worcester and State of Massachu5 setts, have invented certain new and useful Improvements in the Construction of CornShellers; and we hereby declare the following to be a full, clear, and exact description of the construction and operation of the
10 same, reference being had to the accompanying drawings, in which—

Figure 1 is a view from above with the top open. Fig. 2 is a vertical section through X X Fig. 1. Fig. 3 is a view of the back showing the discharging aperture, the same letters indicating the same parts in all.

A is the case or frame.

B is a convex wheel having teeth on its convex surface and turning with the shaft of the convex surface and turning with the shaft of the convex motion from D, D also gives motion to the shaft of the shaft of the convex wheel turns on a bearing or stud at G and is placed obliquely so as to incline the side toward the convex wheel.

H is a circular plate connected to the wheel F by four studs or arms I which pass through and have springs on them between 30 F and H whose action is to press up toward the wheel B.

J J' are two guiding plates the lower one being made with slots or apertures to allow

the corn to fall through.

K is the feeding aperture and L the discharge at the latter are two pieces N hung at O and falling partially or wholly over the discharging aperture but beveled on the inner adjacent surfaces so that the cob forces them apart to pass out and they by their friction retain the cob after it has passed the wheel B thus closing the hole effectually until the next cob forces the first out.

P is a case around these pieces to catch any kernels that may pass between the cobs and by its sloping bottom leads them through the aperture at its bottom back into A. These pieces N may have a flexible collar at O extending down to cover their

opening above the cob or they may be made with overlapping lips to serve the same purpose. The lower plate J' is placed according to the state of the corn higher or lower with regard to the wheel B but is al- 55 ways so placed that the first action of the wheel B is to draw in the corn and cob or in other words the motion of the wheel corresponds with that of the ear and as the ear passes along J' the motion of B finally 60 strikes across it or at right angles thereto to perform the shelling complete, the plate H securing motion from the wheel F (by its arms) in a contrary or opposite direction to B its action is both to press the ear against 65 B and by its circular motion to assist in turning the ear or cob, the springs on its arms I yielding to accommodate the sizes, the corn being shelled falls to the bottom and is delivered at the aperture R.

The distinguishing features of our invention are first in bringing the ear in contact with that part of the convex wheel where motion corresponds to that of the ear placing the lower plate J' for this purpose 75 higher or lower across the wheel to give more or less velocity to the ear, as it is plain that the nearer the center of the wheel it passes the slower it will be forced along, thus doing away with the use of a separate driving or feeding wheel to drive the ear and cob as now used on plate ma-

chines; secondly in making the spring pres-

sure plate H to assist in turning the ear or

cob by giving it a circular motion contrary 85 to that of the wheel B, and thirdly is closing the discharging aperture for the cobs by means of the pieces N retaining the stripped cob until it is forced through by the next or in case it comes with sufficient velocity 90 or force to pass clear through them, they will fall once and close or nearly close said aperture.

It is evident that some variations of form or proportion of parts will be necessary 95 in making different sized machines and can easily be made without substantially departing from the principles of our invention.

We do not claim a convex wheel as such, 100

as a somewhat similar one has been used, but operating in a different way from ours, but

What we claim as new and desire to secure

5 by Letters Patent is—

We claim the combination and arrangement of the smooth revolving pressure plate or wheel H with the convex toothed wheel B, and guard plates i and j when constructed and operating substantially in the

manner and for the purposes above set forth and described.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

ARTEMAS B. VANT. ARLAN M. COOK.

Witnesses:

GEORGE H. TAFT, LEANDER HOLBROOK.