

A. STICKNEY.  
Corn Sheller.

No. 18,361.

Patented Oct. 6, 1857.

Fig. 1.

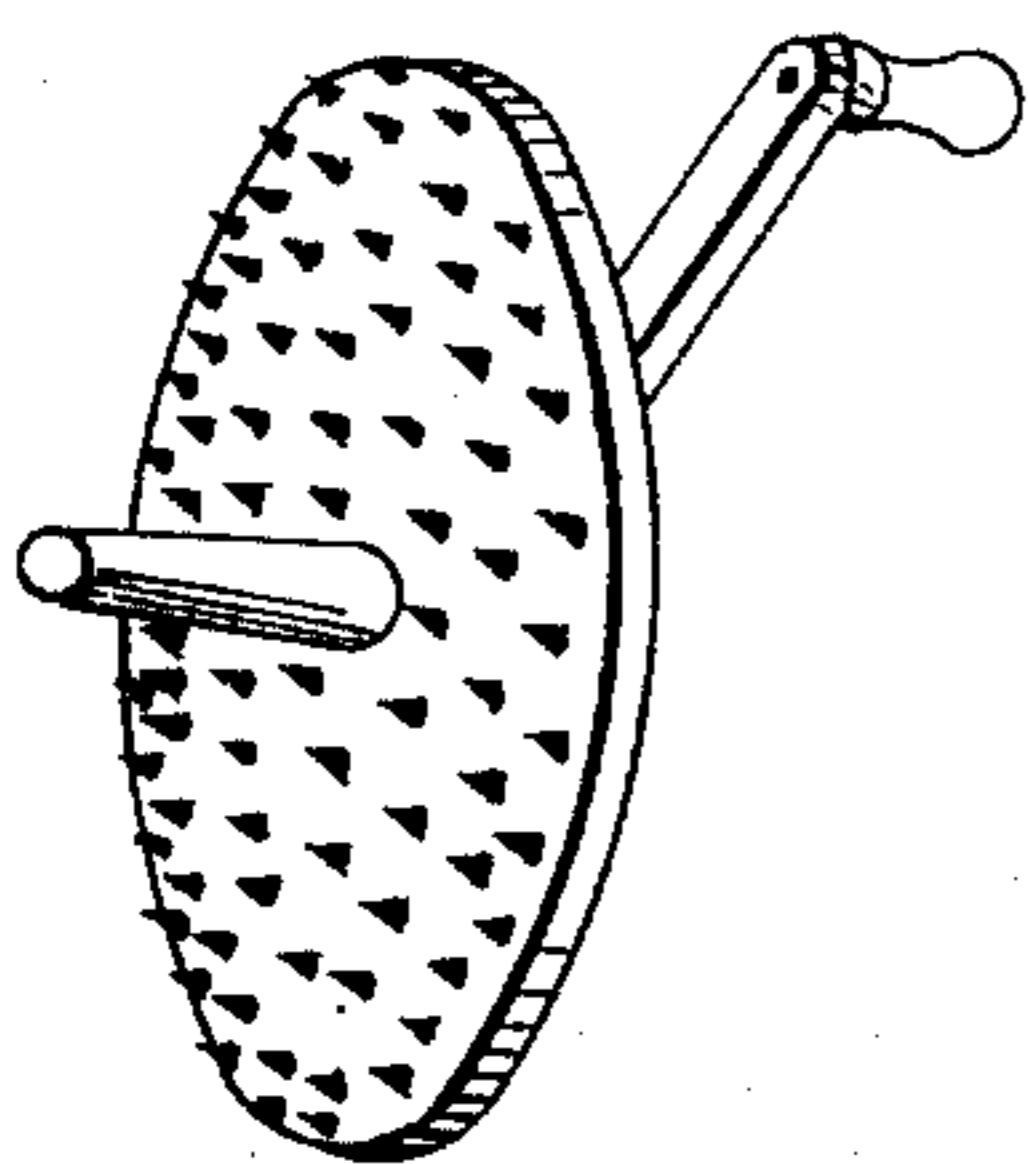


Fig. 2.

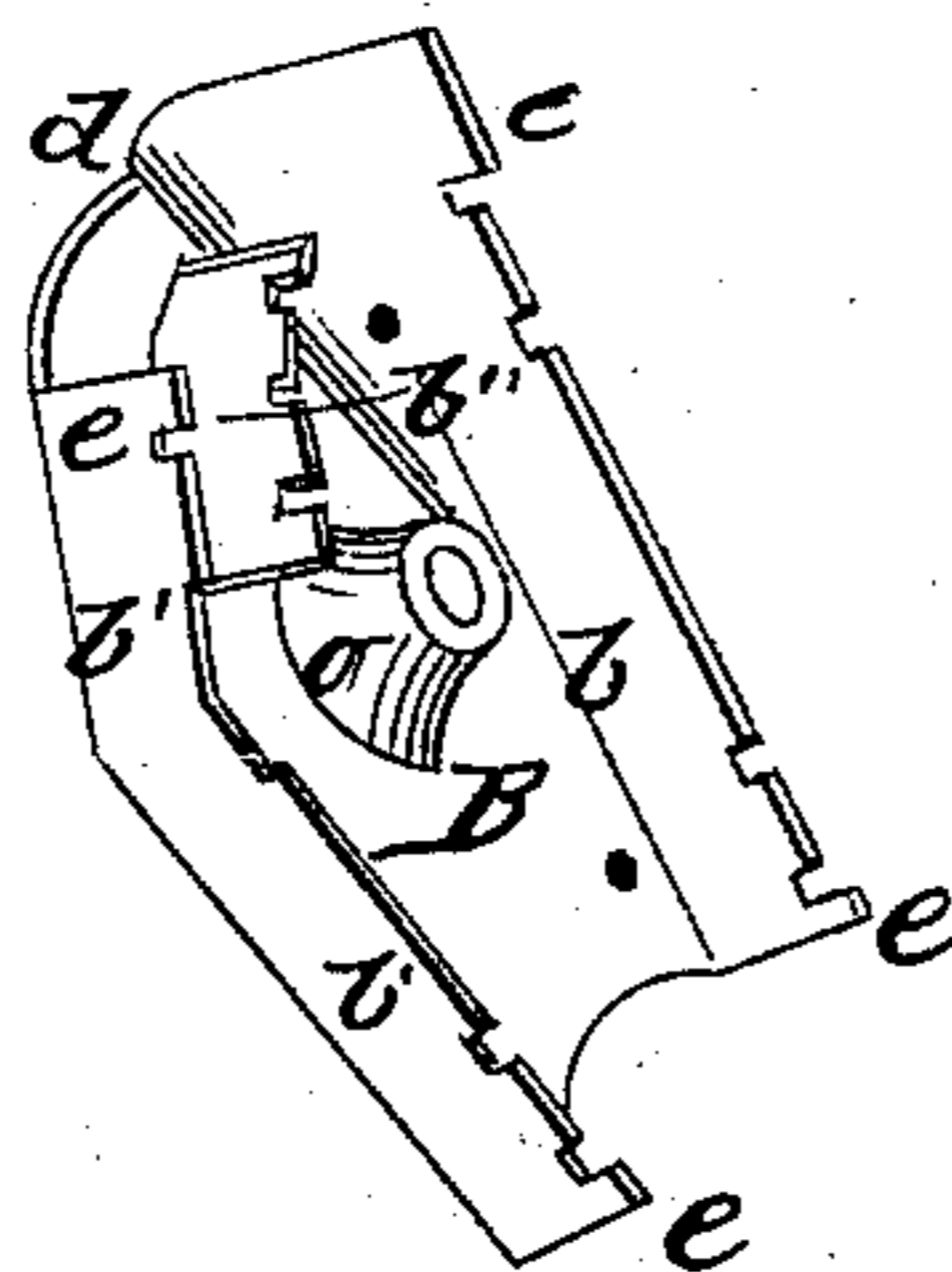


Fig. 3.

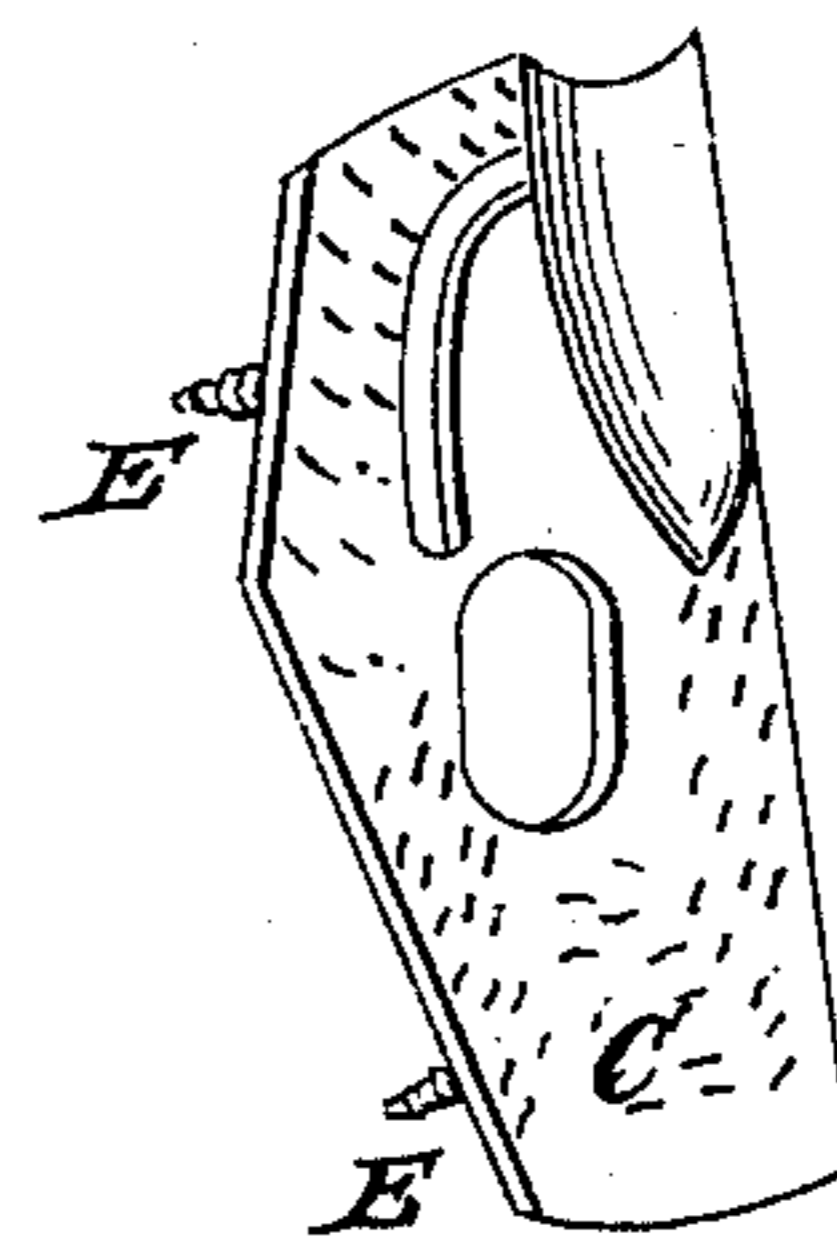


Fig. 4.

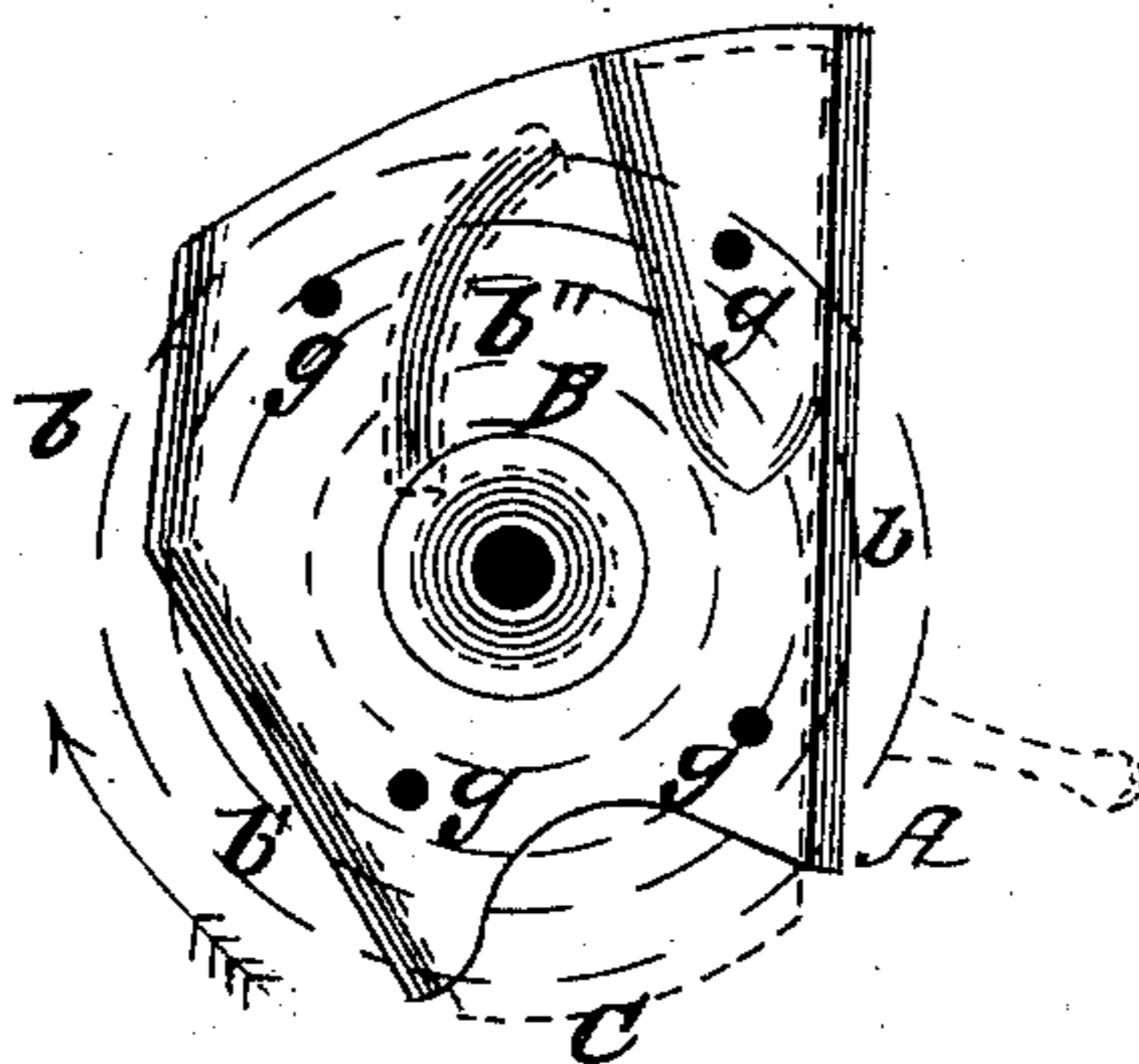
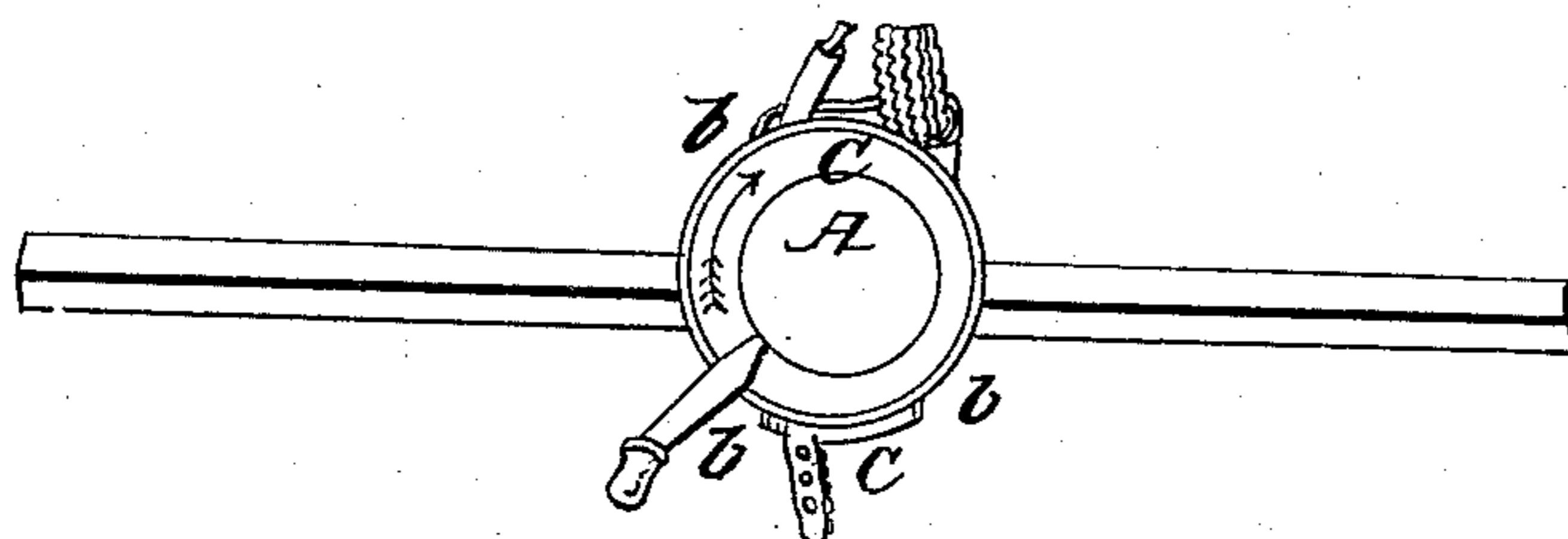


Fig. 5.



# UNITED STATES PATENT OFFICE.

ANCIL STICKNEY, OF CONCORD, NEW HAMPSHIRE:

CORN-SHELLER.

Specification of Letters Patent No. 18,361, dated October 6, 1857.

*To all whom it may concern:*

Be it known that I, ANCIL STICKNEY, of Concord, in the county of Merrimack and State of New Hampshire, have invented a new and Improved Mode of Shelling Corn; and I do hereby certify that the following is a full and exact description thereof, reference being had to the accompanying drawings and the letters of reference marked thereon.

My invention consists in an improvement on the corn-sheller patented to J. D. Briggs on the 14th of June 1845.

Figure 1 represents the wheel of my machine, it is solid, one piece of casting, has a crank proceeding from its outer face and five equidistant rows of teeth, and a stem or axis projecting from its inner face. The wheel is about eight inches in diameter. The dimensions of the other parts of the machine are governed by the size of the wheel.

There is a stationary piece (B.) of irregular shape, being one piece of casting, which holds the wheel and upon which the wheel turns. This stationary piece is represented by Figs. 2 and 4. Fig. 2 being an angular view and Fig. 4 a front view. Near the center of this stationary piece is an elevated bearing (o) for the stem of the wheel and, through which, when the machine is put together, the stem is inserted. Projecting forward (about two inches) from this stationary piece, and forming a part of it, are the flanches *b*, *b'* and *b''*. These flanches are arranged with reference to the teeth on the wheel as represented by Fig. 4, the circular red lines representing the lines described by the teeth of the wheel.

When the wheel is in place, the surface of the wheel between the teeth comes in contact with the edges of the flanches and the teeth pass through notches cut in the flanches as shown by Fig. 2. The wheel is fastened in this position by a pin through the stem, back of the stationary piece. The flanches serve as guides to steady the wheel both by their contact with its face and by lips *e*, *e*, *e*, raised up by its edge. There is also a movable piece (movable laterally) C. Fig. 3. This piece is a thin plain piece of casting so shaped as to go in between the outside flanches and fit down upon the bed of the stationary piece. It has an oblong irregular shaped opening in it, through which the wheel bearing and the flanch *b''* project. The dotted lines of Fig. 4 show the outlines

of this piece when in place. This movable piece has teeth on its front face and four posts projecting from its back face (E. E.) with spiral springs upon them. These posts go through orifices (*g. g.*) in the stationary piece (B.), and serve as guides to keep C in place.

The springs rest against the stationary piece and keep the movable piece pressed forward toward the wheel. Its motion forward is limited by pins through the posts back of the stationary piece, allowing the teeth of C, to come within, say,  $\frac{1}{2}$  inch of the teeth of the wheel. The springs are such as to allow a depression of all parts of C. toward P. of, say,  $1\frac{1}{4}$  of an inch. By this application of separate and independent springs to C. it admits of a rocking motion, *i. e.* one side of it may be depressed without materially depressing the other side. This susceptibility of C, inasmuch as the corn is shelled between the teeth of C. and the teeth of the wheel, is important to adapt the machine to the shelling of two or more ears at once.

The upper corners (*d*) of B and C are curved back so as to form a tunnel shaped mouth for the reception of the corn. The little piece (*e*) Fig. (5) of sheet iron is put on to complete the mouth and prevent scattering.

The machine being put together as described above, the whole may be fastened to any convenient support in any convenient way.

Operation: Insert an ear of corn tip first in the mouth of the machine: As the wheel is turned in the direction of the arrow, (Figs. 4 and 5) the ear is carried down (with a rolling motion at same time) by the side of flanch *b*. till the head of the ear gets below the center of the wheel, when it rolls across to flanch *b'*, the tip meantime projecting from the bottom of the machine, and then is carried up by side of flanches *b'* and *b''* and escapes from the machine at the top.

My improvement is applicable only to the particular kind of corn sheller patented by J. D. Briggs in 1845.

The advantages gained by my improvement are 1st greater speed in shelling, as it is enabled to operate on two ears at once; 2d greater convenience in the transportation of the machines for sale, inasmuch as the iron part can be put together complete of itself independent of the wood part, and its

attachment to any sufficient support is so easy and simple that it is only necessary to manufacture the irons for sale and leave the purchaser to attach them to some support.

5 What I claim as my invention and desire to secure by Letters patent of the United States, is,

The combination of the rocking piece C,

with the flanged piece B, and wheel A, the whole being arranged substantially as described and for the purpose specified. 10

ANCIL STICKNEY.

In presence of—

LUTHER TRACY.

JOHN C. BRIGGS.