T. ARKELL.

PEA SHELLING MACHINE.

No. 176,767. Patented May 2, 1876.

Fig. 1.

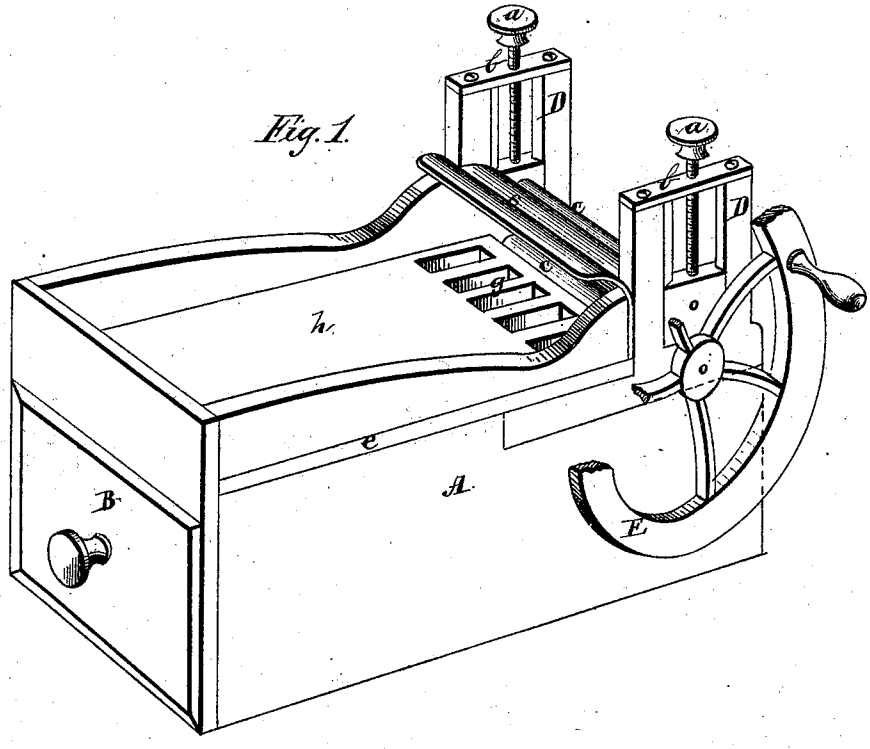
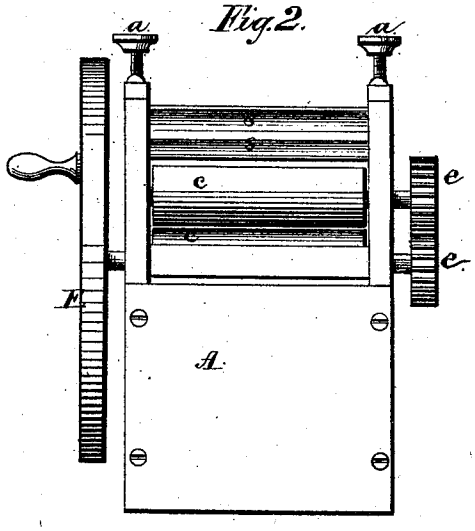


Fig. 2.



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UNITED STATES PATENT OFFICE.

THOMAS ARKELL, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PEA-SHELLING MACHINES.

Specification forming part of Letters Patent No. **176,767**, dated May 2, 1876; application filed November 12, 1875.

To all whom it may concern:

Be it known that I, THOMAS ARKELL, of the city of Brooklyn, county of Kings and State of New York, have invented an Improved Machine for Shelling Pease, of which the following is a specification, the accompanying drawings making a part of the same.

Figure 1 is a perspective view of the machine embodying my invention. Fig. 2 is an end view.

My invention relates to the following combination: A, Fig. 1, is a case of suitable size and form, containing a drawer, B, rollers C C, stands D D, removable screen S, and driving-wheel E, arranged in a proper manner for the purpose herein set forth.

The rollers C C are constructed in the following manner, viz: One roller is provided with some hard, rough substance, with which it is covered, (a piece of thick canvas saturated with shellac being preferred by me,) for the purpose of more readily drawing the pod containing the pease between the same and the counter-roller in the process of shelling. The counter-roller is covered with some elastic material, rubber being the most satisfactory for that purpose. The diameter of the rollers should be such as to allow their surfaces to approach each other near the line where they are most closely contiguous at an obtuse angle, so that, while the pods are drawn through between the rollers the pease will be pressed out of the pods, and prevented from passing through by the opposing surfaces of the rollers. I therefore make the rollers usually from one-half an inch to an inch in diameter. They are also provided with bearings, made to work in boxes fitted in the stands D D. The bottom boxes are made fast to the stands, so as to keep the bottom roller in the same position. The boxes carrying the top roller are movable, so that the pressure of the rollers upon each other is regulated by set-screws *a a* passing through caps *b b*, secured to the top of the stands D D. The rollers are also provided with pinions *e e*, Fig. 2, for the purpose of imparting a uniform motion to the same. A crank or wheel, E, to which the power is applied, is attached to the opposite end of the lower roller. The stands D D, containing the rollers C C, are made fast upon one end of the case A, the case having a cover fitted within it, so that the surface of the same shall be a little below the top of the bottom roller. A netting or grate, *g*, is fitted into the end of the cover nearest to the rollers, through which the shelled pease drop into the drawer B contained in the case A. The top of the case A is provided with a hopper, *h*, in which the pease are placed that are to be shelled. A removable screen, S, is inserted between the stands D D and the railing surrounding the hopper *h*, and projects over the grate *g*, so as to prevent the pease from flying out of the box while being pressed from the pod as they are passed between the rollers.

I do not broadly claim such a machine as is shown in the patent to Gelston Sandford, October 3, 1865, No. 50,278; but

What I claim is—

The improved pea-shelling machine, consisting of the rollers C C, wheel E, box A, having the cover *e'* and grating *g*, stands D D, and a removable screen, S, substantially as and for the purposes set forth.

THOMAS ARKELL.

Witnesses:

CHAS. F. SINCLAIR,

CHARLES ARKELL.