

B. F. WALTERS.
Peanut Cleaning and Polishing Apparatus.
No. 220,450. Patented Oct. 7, 1879.

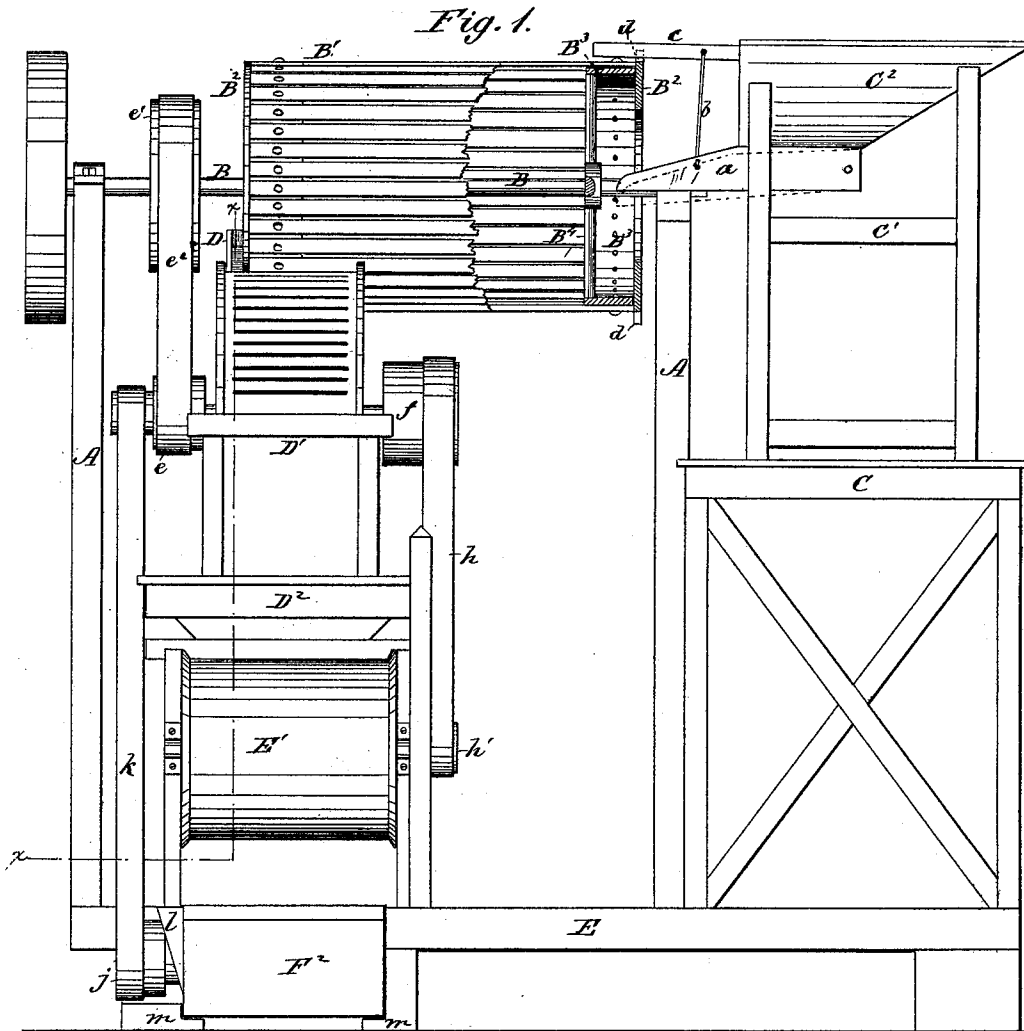
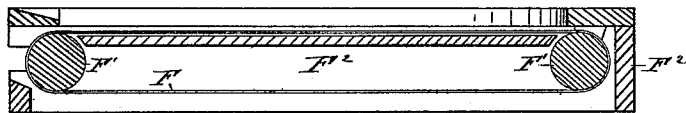


Fig. 3.



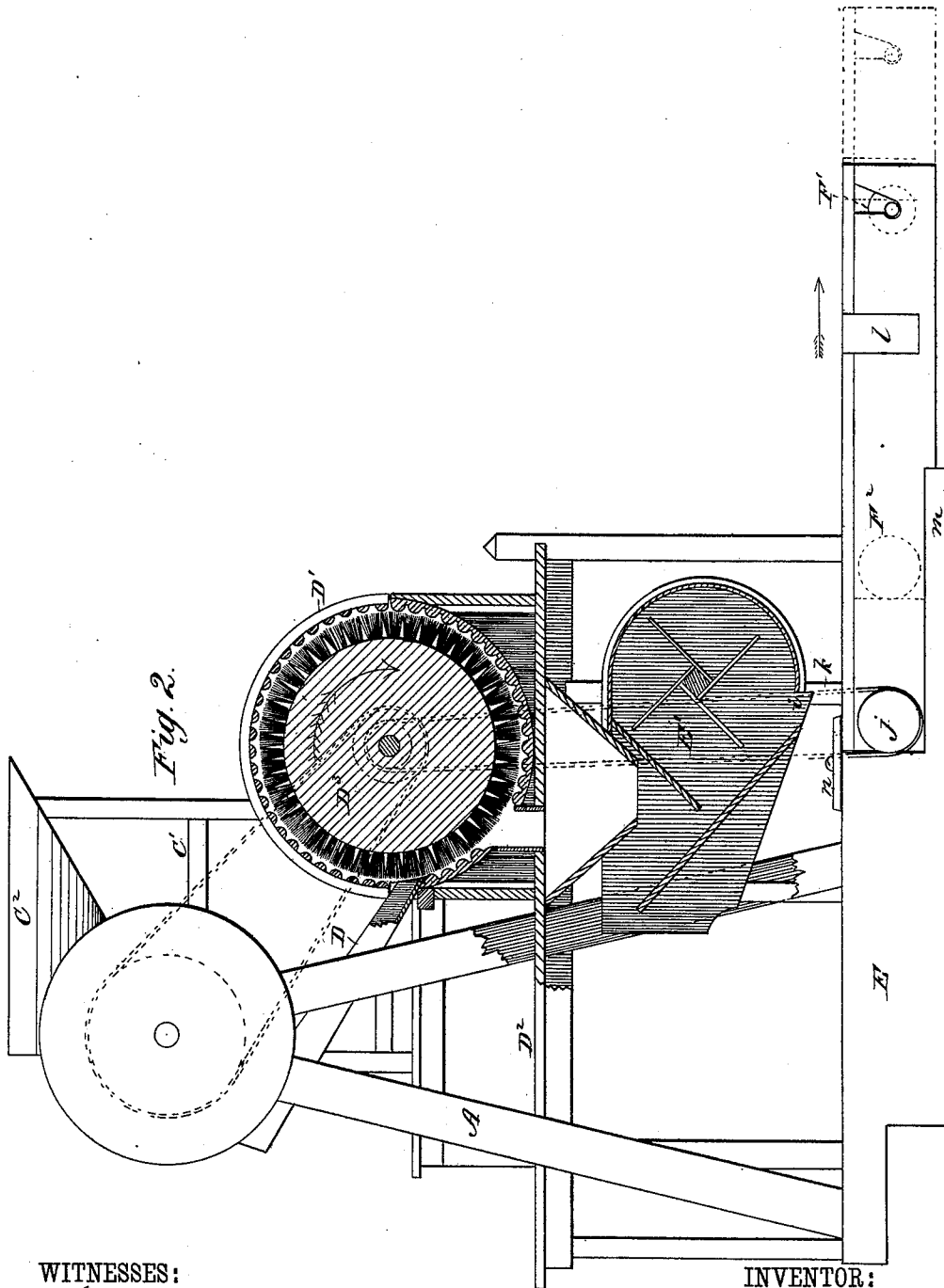
WITNESSES:

W. W. Hollingsworth
Edw. W. Byrn

INVENTOR:

B. F. Walters
BY *Reverend G.*
ATTORNEYS.

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UNITED STATES PATENT OFFICE.

BENJAMIN F. WALTERS, OF NORFOLK, VIRGINIA.

IMPROVEMENT IN PEANUT CLEANING AND POLISHING APPARATUS.

Specification forming part of Letters Patent No. **220,450**, dated October 7, 1879; application filed July 8, 1879.

To all whom it may concern:

Be it known that I, BENJ. F. WALTERS, of the city and county of Norfolk, and State of Virginia, have invented a new and Improved Machine for Cleaning and Polishing Peanuts, Coffee, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation with a portion of the cleaning-cylinder broken away. Fig. 2 is a sectional end view, the section being taken through line *x x* of Fig. 1. Fig. 3 is a detail sectional view of the detachable picking-belt.

My invention relates to an improved construction of machine for removing the stems, particles of dirt, and other adhering impurities from the nuts, and for polishing and assorting them for the market; and for this purpose it consists, chiefly, in the peculiar construction and arrangement of a polishing-brush, and in the peculiar means for rendering a picking-apron detachable from the discharge end of the separator, as hereinafter fully described.

In the drawings, A represents an elevated frame-work, in bearings in the upper end of which is journaled a shaft, B, carrying the cleaning-cylinder B¹, whose periphery is made of longitudinal bars spaced so as to leave openings, through which the impurities drop as they become detached. This cylinder is provided with annular heads B² B³, which are attached to the shaft by radial arms. At one end of this cylinder are erected an elevated platform, C, and frame-work C¹, which support a hopper, C², into which the peanuts are dumped to be fed to the cylinder. This feeding is effected by the agitation of the loosely-connected spout *a*, which are connected by a rod, *b*, to the shaker-bar *c*. This bar is jointed to the hopper, and its other end rests upon the periphery of the cylinder, which latter is provided with a series of tappets, *d*, which in the rotation of the cylinder alternately lift the shaker-bar and allow it to fall, so as to give the necessary agitation to the spout to secure the uniform feeding of the nuts.

Just below the discharging end of the cylinder is arranged a chute, D, which carries the partially-cleaned nuts to a polishing device.

This polishing device is sustained upon a platform, D², and consists of a circular case, D¹, having a detachable semicircular slotted cover, and containing a brush, D³, fixed to a shaft carrying pulleys *e* and *f*. Of these pulleys, *e* is connected with a pulley, *e*¹, on the cylinder-shaft by a belt, *e*², so that the brush derives rotary motion from said cylinder-shaft.

Just below the polisher, upon a lower platform, E, is the separator E', which receives the polished nuts from the discharge-opening *g* of the polisher. This separator is in the nature of a fan, and serves to blow out and separate the fine particles and dust which have been removed by the polisher, and also the light, faulty nuts. This fan is rotated by a belt, *h*, connecting the pulley *f* of the polisher with the pulley *h*' on the fan-shaft.

As the nuts are discharged from the separator they pass through an opening, *i*, in the lower platform, and are delivered upon an endless apron, F, passing around two rollers, F¹ F¹, and to one of which rollers motion is communicated through a pulley, *j*, and a belt, *k*, connecting said pulley with a face on the pulley *e* of the polishing device. The rollers carrying this endless apron F are journaled within a hollow case, F², so that the apron forms the top of the same, and said case and apron are extended horizontally from the rest of the apparatus, so that the apron forms a receiver for the peanuts from the separator, and carries said nuts to a position where hands pick out the dark and broken nuts from the apron as it moves along. For the convenient separation of these faulty nuts pockets *l* are arranged beside the picking-apron, which lead to separate receptacles, into which pockets the pickers drop the faulty nuts, while the good ones are allowed to pass over the end of the apron and be discharged into a suitable receptacle.

Having thus generally described my invention, I will now proceed to point out the features which I conceive to be new.

With respect to the brusher, I would state that two brushes have been used in connection with each other for the same purpose, as shown in my prior patent No. 128,515; but my present construction of a single brush with an inclosing-case having a ribbed interior surface secures a better rotation of the nuts, and causes

the latter to revolve, so that the brush can act on all sides of the same, and also, by direct impact against the rigid ribs, are freed of the closely-adhering lumps or cakes of earth, which the brush alone cannot dislodge.

I am aware, also, that a single brush revolving on a vertical axis has been used in an interiorly-ribbed case for cleaning rice; but when comparatively large and heavy bodies like peanuts are to be cleaned, this vertical arrangement would not do, for the reason that they would fall directly to the bottom down the vertical grooves. I therefore not only arrange my brush on a horizontal axis, but locate the feed-chute near a horizontal line passing through the center of the brush, so that the peanuts are caught by the brush, carried up to the highest point of the brush, thence all around the circumference of the case at right angles to the ribs, and are finally discharged near the point of entrance, which action secures a very thorough cleaning and polishing of the nuts.

With respect to the picking-apron F, this I do not claim, broadly, as it has heretofore been used for the same purpose, and has for a long time been a common expedient for taking bricks from a brick-machine, and for analogous purposes whenever such a carrier was required. As this endless apron is made quite long, to allow a sufficient number of pickers to get around the same, it occupies much floor-space; and to economize this when the machine is not at work, I make the case F², rollers F¹ F¹,

and apron F together detachable from the base E, so that it may be set out of the way. For holding it in place it is run in ways *m m*, and to resist the upward-pulling tendency of the belt K this end of the case is slipped beneath an overhanging ledge, lip, or cleat, *n*. While this cleat then resists the lifting action of the belt, the guideways *m m* preserve the proper plane of rotation of the picking-apron pulley *j* to the drive-belt and pulley on the brush-shaft, so that the readjustment of the detachable apron is always true and the drive-belt does not run off.

What I claim is—

1. The brush D³, arranged to revolve on a horizontal axis, in combination with a circular inclosing-case, D¹, slotted in its upper half and having a ribbed internal surface, an inlet in the plane of the brush near the horizontal line, and an outlet near the point of entrance, whereby the peanuts are carried first up and then around the greater part of the circumference of the case before being discharged, substantially as set forth.

2. The detachable picking-apron having pulley *j*, in combination with the separator, the drive-belt, and the platform or base-frame E, having guides *m m* and cleat *n*, substantially as and for the purpose described.

BENJ. F. WALTERS.

Witnesses:

J. F. THUMM,
MATHEW RYAN.