

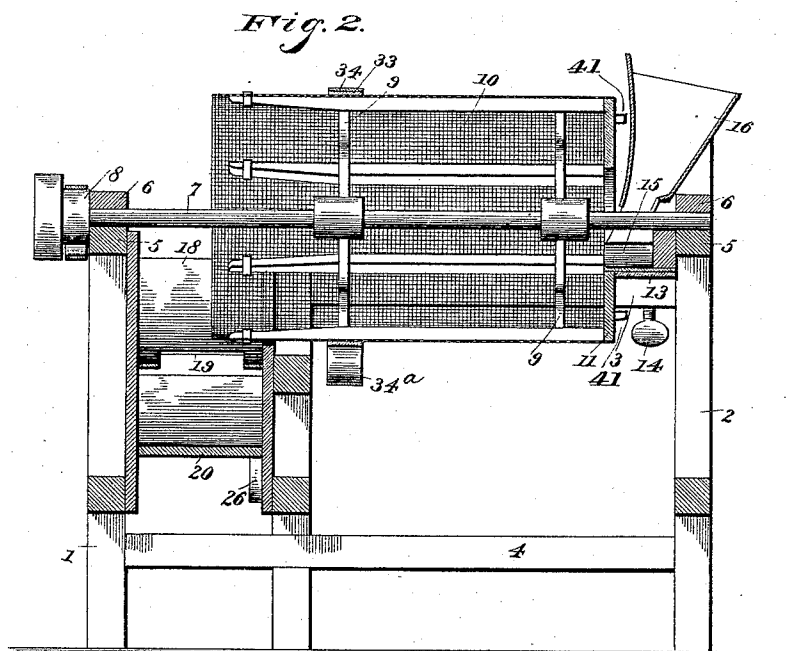
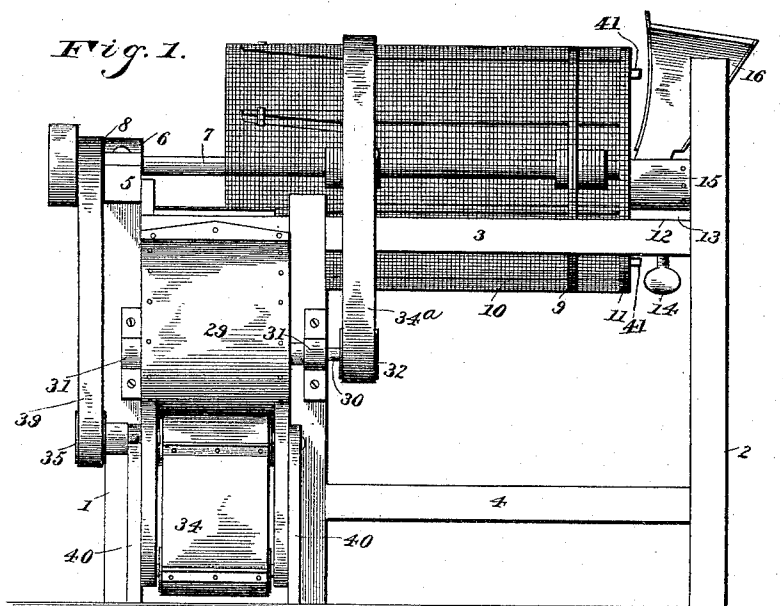
(No Model.)

2 Sheets—Sheet 1.

J. H. & J. L. WOOLARD.
PEANUT CLEANER.

No. 474,893.

Patented May 17, 1892.



Witnesses;

J. M. Wetherill
W. S. Duwall

By their Attorneys,

C. A. Snow & Co.

Inventors,
Jesse H. Woolard &
Josephus L. Woolard,

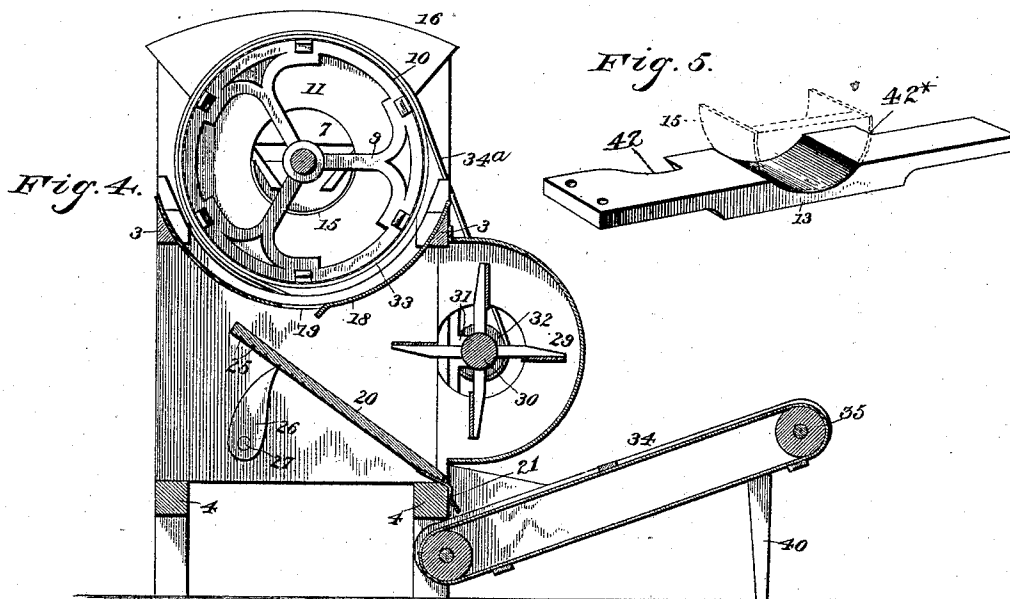
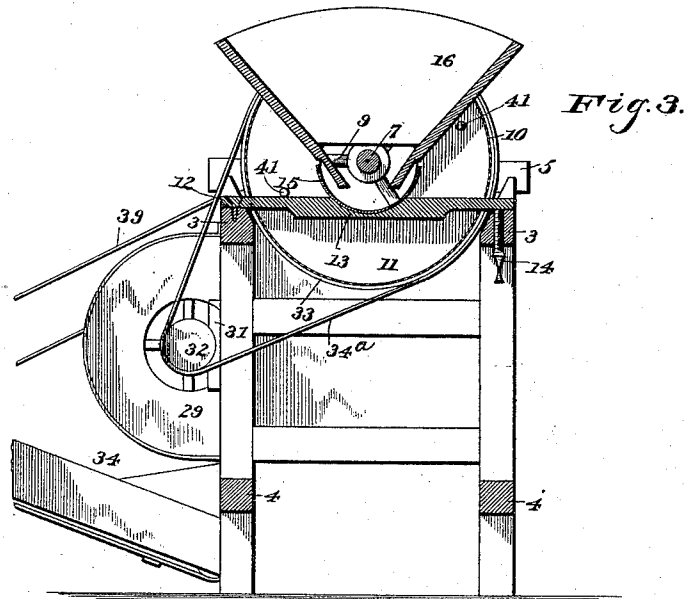
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2 Sheets—Sheet 2.

J. H. & J. L. WOOLARD.
PEANUT CLEANER.

No. 474,893.

Patented May 17, 1892.



Witnesses:

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UNITED STATES PATENT OFFICE.

JESSE H. WOOLARD AND JOSEPHUS L. WOOLARD, OF WILLIAMSTON,
NORTH CAROLINA.

PEANUT-CLEANER.

SPECIFICATION forming part of Letters Patent No. 474,893, dated May 17, 1892.

Application filed September 30, 1891. Serial No. 407,302. (No model.)

To all whom it may concern:

Be it known that we, JESSE H. WOOLARD and JOSEPHUS L. WOOLARD, citizens of the United States, residing at Williamston, in the county of Martin and State of North Carolina, have invented a new and useful Peanut-Cleaner, of which the following is a specification.

This invention relates to improvements in machines for cleaning peanuts; and the objects in view are to provide a cheap and simple machine into which the peanuts may be continuously fed and which will remove therefrom all dirt, empty pods, &c., will polish the shell, and finally deposit or discharge the peanuts into waiting receptacles.

A further object in view is to provide a machine capable of being adjusted so as to retain the peanuts upon the cleaning-table thereof such a length of time as will accord with their condition.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a side elevation of a peanut-cleaning machine constructed in accordance with our invention. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a transverse vertical section through the feed-hopper. Fig. 4 is a similar view through the blower. Fig. 5 is a detail in perspective of the agitating-lever.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing our machine we employ opposite pairs of end posts or standards 1 and 2, the latter being somewhat longer than the former and the pairs connected by upper and lower side bars 3 and 4, respectively, and transverse end bars 5. The transverse end bars 5 are provided at their centers with bearings 6, longitudinally opposite each other, and in the same a shaft 7 is rotatably mounted. The rear end of the shaft extends beyond the rear end of the frame and carries a pulley 8, adapted to be driven by an ordinary belt leading from any suitable motor, and to thus operate the shaft. The shaft is fitted at

suitable points with wheels 9, and the same support a perforated or reticulated cylinder 10, designed to rotate with the shaft 7 and the wheels. The cylinder is open at its rear end and has fitted in its front end a head 11, having a central opening. In front of the head there is loosely connected to the upper side bar 3—in this instance by screws 12—a transverse flexible lever 13, the opposite end of which is supported by inverted set-screw 14, passed through the opposite side bar 3. This lever supports at its center, opposite the central opening of the head, a pan 15, having a semicircular bottom, and above the pan and terminating within the same is a hopper 16, whose upper end is secured between the two vertical standards 2. The hopper is stationary and designed to feed the peanuts into the pan, which latter may be adjusted by the set-screw. Below the rear open end of the cylinder a curved metal bottom 18 is located and has its opposite ends secured to the side bars 3. This bottom is provided at its center with a slot 19, through which the peanuts and empty pods fall upon an inclined table 20, which table has its front end secured by a flexible connection 21 to the upper side bar 4.

The under side of the table is provided with ratchet-teeth 25, in which engages the free end of an adjusting-pawl 26, which is pivoted, as at 27, to the frame-work. By means of this pawl the inclination of the table may be increased or diminished, and hence the opening between the free end of the same and the curved bottom 18 increased or diminished in size.

Secured to the side of the frame-work below the slotted bottom 18 and above the table is a blower or fan 29, the shaft 30 of which is mounted in brackets 31 at opposite sides of the blower, and at its front end carries a pulley 32. Transversely opposite the pulley 32 a metal rim 33 surrounds the reticulated cylinder, and a belt 34 passes around the cylinder at this point and the pulley 32, so that motion from the cylinder is communicated in an increased manner to the blower, which discharges air in blasts over the inclined discharge-table.

The head of the cylinder is provided upon its exterior with a pair of diametrically-opposite studs 41, which, as the head revolves, are successively brought under into contact with and elevate the lever 13. For this purpose the edge of the lever is recessed at each side of the pan it supports, as at 42 and 42^x, the recess 42^x at one side being in the path of the pins 41, and the recess 42 toward the free end being slightly to one side of said path, so that its inner edge is struck by the pins, and hence the lever elevated at intervals and automatically by reason of its own resiliency returned after each pin has passed by. By means of the set-screw 14 the vibrations of the lever 13 may be regulated in severity, so that more or less of an agitation and consequent feed may be secured.

In operation, the machine being set in motion, it is simply necessary to feed the peanuts into the hopper, and they will be automatically and in determined quantities fed from thence by the pan and be delivered to the cleaning-cylinder. The cylinder revolving causes the nuts to rub against each other and over the surface of the cylinder, thus loosening the dirt and sand, which with any other foreign matter sufficiently minute passes through the meshes of the reticulated cylinder and drops to the ground. The agitation of the peanuts and the manipulation of the seed by rubbing together not only loosens the dirt, but also polishes the shells, and the nuts in this condition, together with whatever empty pods there may be among them, pass from the rear open end of the cylinder upon the curved bottom 18, dropping through the opening therein upon the inclined feed-board. This feed-board is adjustable, as heretofore described, and is thus adapted to retain the nuts thereon a period of time desired before discharging them at the lower end thereof. This period of time is determined by the amount of empty pods mixed with the nuts, together with other foreign debris, and, as will be obvious, the longer they are retained upon the table the longer will they be subjected to the blast of air from the rotary blower, and such like bodies as leaves, small sticks, and empty shells or pods will be discharged over the rear end of the inclined table, while the clean and polished nuts thus separated will be discharged over the front end of the table, where they are received by any suitable receptacle.

It will thus be seen that we provide a machine of very great simplicity, which may be adjusted to feed proper quantities of nuts for cleaning and which may be adjusted to maintain them a proper length of time under the action of the cleaning devices, in accordance with the amount of dirt mixed with them, before discharging them.

If desired, we employ an endless carrier or elevator 34, which is located under the discharge end of the table and is adapted to

elevate the nuts as cleaned, and thus discharge the same into waiting receptacles. This elevator at its upper end carries a pulley 35, which communicates motion to the elevator-belt and receives motion from the pulley 8 of the power-shaft 7. The latter pulley is made double for the accommodation of the belt 39, which operates the elevator or carrier. The carrier is provided with a pair of legs 40, that support the same in an inclined position. Although we have herein shown the carrier, we do not limit our invention to its use in that the machine is perfectly operative and adapted to serve its function as well without as with it.

Having described our invention, what we claim is—

1. In a machine of the class described, the combination, with the frame-work, the shaft journaled therein, the wheels upon the shaft, the reticulated cylinder mounted on the wheels, said cylinder being open at its rear end and at its front end provided with a central opening, of a hopper mounted in the frame-work and terminating adjacent to the opening in the head, a vibratory lever secured at one end to the frame-work, a set-screw mounted in the frame-work and supporting the opposite end of the lever, and means for vibrating the same, and a pan located under the hopper and mounted upon the lever and adapted to discharge into the opening in the head of the cylinder, substantially as specified.

2. In a machine of the class described, the combination, with the frame-work, the reticulated cylinder mounted therein, and means for supporting and rotating the same, of an inclined discharge-table located below the rear end of the cylinder, a blower located at one side of the frame-work in front of the table and having its shaft extended at one side of its casing and provided with a pulley, and a belt passing around the pulley and the cylinder, the former receiving motion from the latter, substantially as specified.

3. In a machine of the class described, the combination, with the frame, the cylinder open at one end and provided with a head at the opposite end having a central opening, of a hopper, a bar thereunder, a feed-pan on the same, and pins on the head for tripping the bar, substantially as specified.

4. In a machine of the class described, the combination, with the frame, the cylinder open at one end and provided with a head at the opposite end having a central opening, of a hopper, a resilient lever thereunder, provided at opposite sides with recesses, a feed-pan on the lever, pins on the head for tripping the bar, said pins being adapted to pass downwardly through one recess and to strike against the inner edge of the other, and a set-screw for adjusting one end of the bar, substantially as specified.

5. In a machine of the class described, the

combination, with the screen, of a hopper located at one end thereof, a vibratory lever located under the hopper and provided with a pan leading over the screen, and means for intermittingly operating the lever, substantially as specified.

In testimony that we claim the foregoing as

our own we have hereto affixed our signatures in the presence of two witnesses.

JESSE H. WOOLARD.

JOSEPHUS L. WOOLARD.

Witnesses:

A. T. CRAWFORD,

J. A. TEEL.