B. MORELOCK.

BEAN SHELLER.

APPLICATION FILED JUNE 23, 1919.

1,419,072.

Patented June 6, 1922.

2 SHEETS—SHEET 1.

Fig. 1.

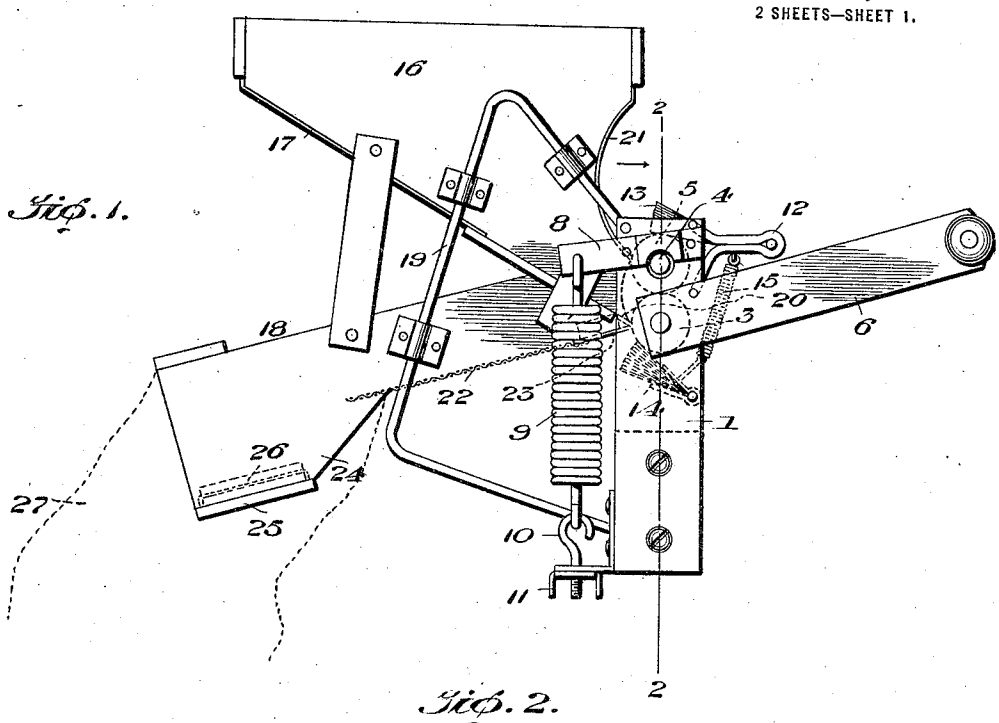
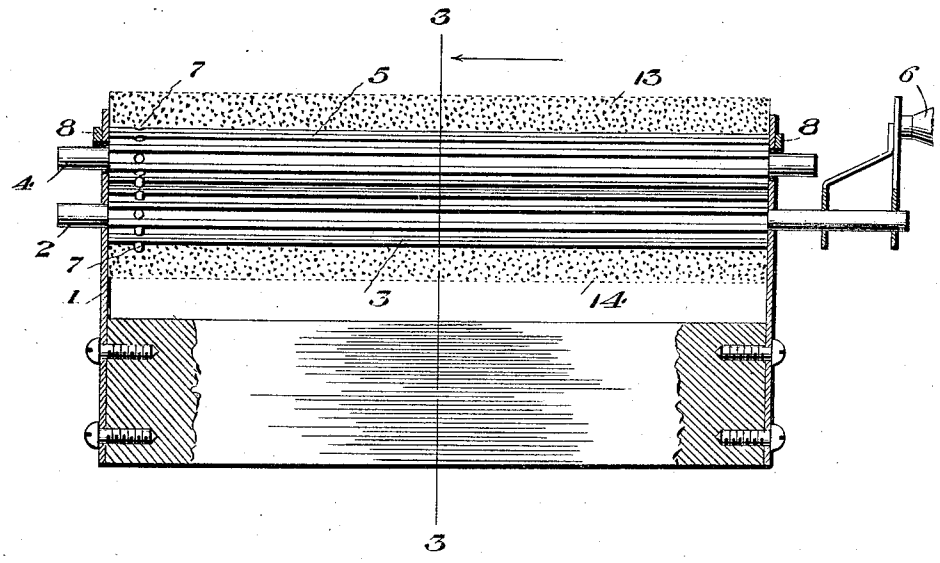


Fig. 2.



WITNESS:

INVENTOR.

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2 SHEETS—SHEET 2.

Fig. 3.

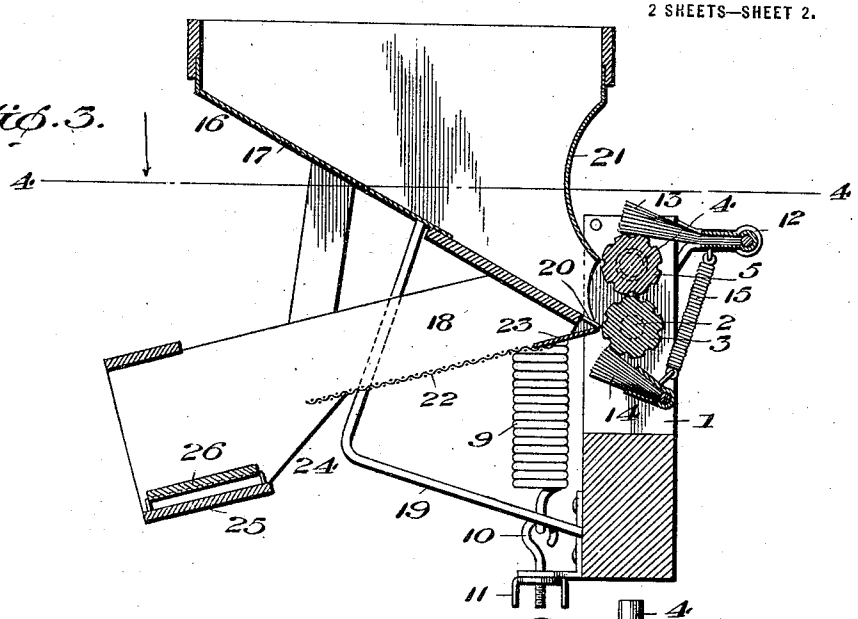
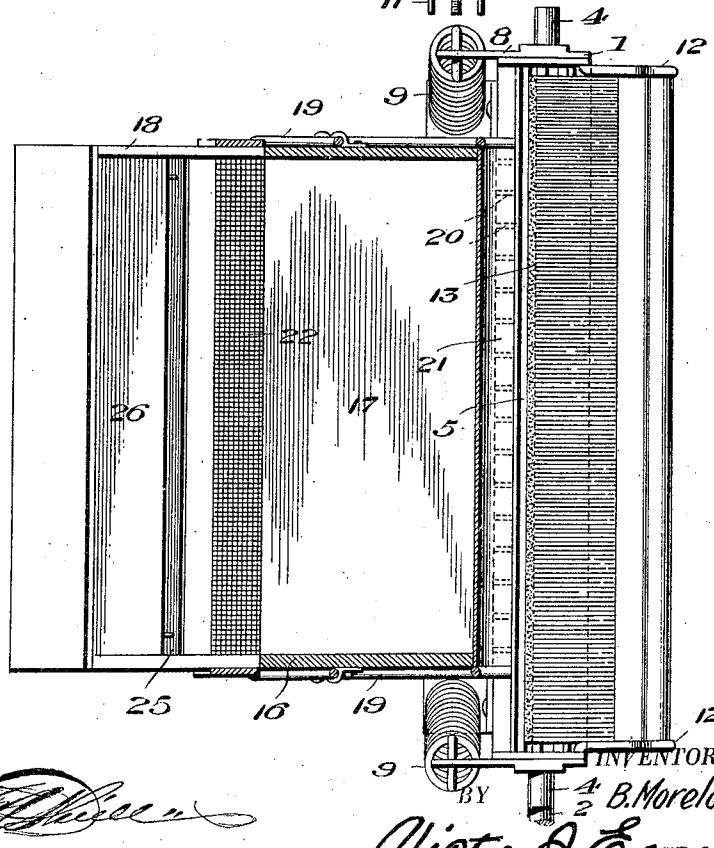


Fig. 4.



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BYRON MORELOCK, OF CAMDEN, NEW JERSEY.

BEAN SHELLER.

1,419,072. Specification of Letters Patent. **Patented June 6, 1922.**

Application filed June 23, 1919. Serial No. 305,964.

To all whom it may concern:

Be it known that I, BYRON MORELOCK, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented new and useful Improvements in Bean Shellers, of which the following is a specification.

This invention relates to improvements in devices for shelling beans and the like, and the principal object of the invention is to provide a simple sheller for home use and one which will effectually remove the beans from the hulls.

Another object of the invention is to provide means for directing the beans into a receptacle, such means also acting to remove any dust or dirt that may be carried along with the beans.

Still another object of the invention is to provide means for adjusting the tension on the shelling rollers to render the device capable of being used with beans of various sizes.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a side view of the device;

Figure 2 is a vertical section on line 2—2 of Figure 1;

Figure 3 is a section on line 3—3 of Figure 2;

Figure 4 is a horizontal section.

In these views 1 indicates an upright frame in which is journaled the shaft 2 of the lower roller 3 and which is slotted to receive the shaft 4 of the upper roller 5. In this way the upper roller may be moved towards the front of the lower roller. Said rollers are fluted longitudinally as shown. The shaft 2 of the lower roller is provided with an extension at one end to receive a crank handle 6 and the two rollers are geared together by the pins and holes 7. Each end of the shaft 4 of the upper roller is engaged by an arm 8 which is pivoted to the frame. Said arms carry the upper half of the bearing for the shaft. The free end of each arm is engaged by the upper end of a coiled spring 9, the lower end of which is engaged by a hook 10 which is carried by an L-shaped bracket secured to the frame and is adjustable by the thumb nut 11. In this way the pressure of the upper roller upon the lower roller may be adjusted by increasing or decreasing the tension of the springs.

At the upper ends of the frame laterally-extending arms 12 are provided in which is pivotally mounted a brush 13 which engages the upper part of the upper roller. A second brush 14 is pivotally mounted in the lower part of the frame and engages the lower part of the lower roller, the two brushes being connected together by the springs 15 which tend to hold the two brushes in frictional engagement with the rollers.

16 indicates the hopper frame which consists of the inclined hopper 17 and the screen frame 18. This frame is connected with the frame 1 by the brackets 19 and the mouth of the hopper is located adjacent the point where the rollers come together. The bottom wall of the hopper is provided with the projecting pins 20 which bridge the gap between said bottom wall of the lower roller. In this way the beams will cause the hulls to pass onto the rollers while leaving a space through which the beams may drop. The front of the hopper is provided with a curved part 21 which acts as a guide to direct the pods to the mouth of the hopper.

The frame 18 has its bottom formed of the screen 22 and a plate 23 which has its front edge closed to the perimeter of the lower roller and directly under the beams so that the beams falling through the spaces between the pins will drop onto said plate and from said plate will pass down the screen. The outer part of the frame 18 is provided with a downwardly projecting portion 24 and a bottom plate 25 is carried by said portion 24. The outer edge of the screen is spaced from the inner edge of said plate 25 and the screen is located above said plate so that the beans rolling down the screen will jump over the space between the screen and the plate while dirt or particles of hulls will fall off the screen, if it has not already passed through the screen, and will not strike the plate. The width of this space may be adjusted by means of the slide 26 carried by the plate 25. In other words by moving the slide 26 upwardly the width of

this space between the lower end of screen 22 and said slide is reduced but when the slide is moved downwardly the width of this space is increased. By this arrangement of parts the width of the space can be made more or less to suit the weight of the peas or beans being shelled.

If desired, a sack 27 may be fastened to the outer part of the screen frame to receive the beans or this end of the screen frame may be placed over any kind of a receptacle to receive the beans.

The device may be provided with clamps or may be supported on a table or other support in any desired manner. The pods containing the beans are placed in the hopper and the crank turned to rotate the rollers. The rollers will grip the pods and as they are being fed through the rollers the beans will be pressed out and dropped through the spaces between the pins onto the plate of the screen and will pass down the screen and into the receptacle. The hulls will drop from between the rollers onto the table or any receptacle placed adjacent the device. The rollers are kept clean by the brushes. Any soft or rotten beans will pass through the rollers.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A device of the class described comprising an upright frame provided with aligned slots, a vertically movable shaft mounted in said slots, a longitudinally fluted roller secured to said shaft, a shaft journalled in suitable bearings in said frame beneath the shaft aforesaid, a crank handle secured to one end of the last mentioned shaft, the longitudinally fluted roller secured to the last mentioned shaft, L-shaped brackets secured to said frame at the lower end thereof, adjustable hooks carried by said brackets, arms pivotally secured to opposite sides of said frame and engaging the first mentioned shaft, and coil springs secured to the free ends of said arms and connected to said hooks.

In testimony whereof I affix my signature.

BYRON MORELOCK.