Jan. 24, 1956 F. S. HUGHES 2,731,970

BEAN AND PEA POD SPLITTER

Filed Feb. 26, 1954

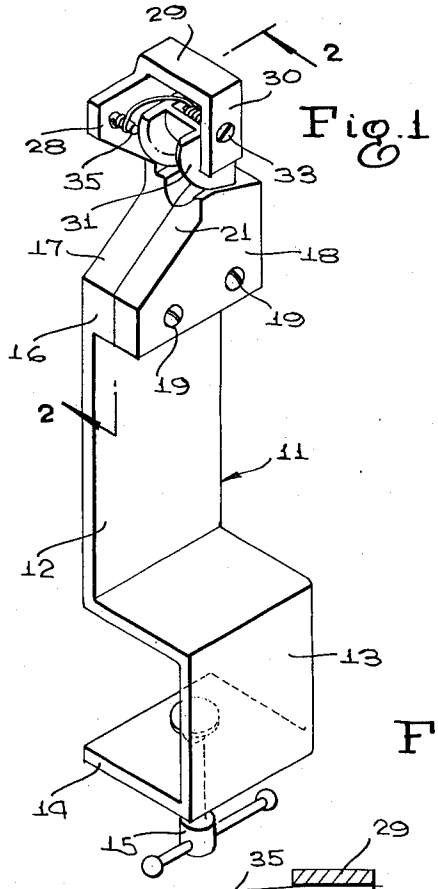


Fig. 1

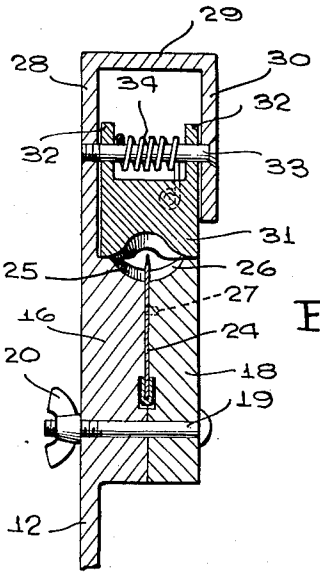


Fig. 3

Fig. 2

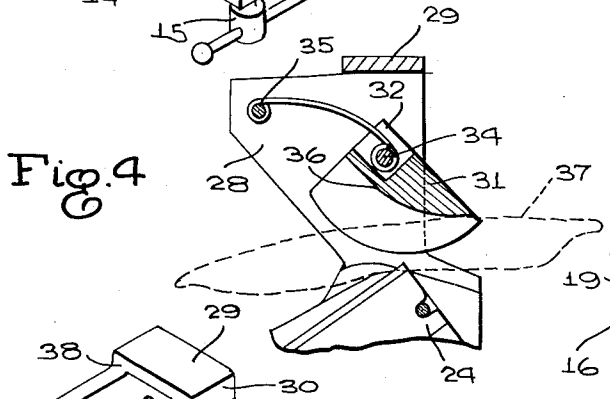
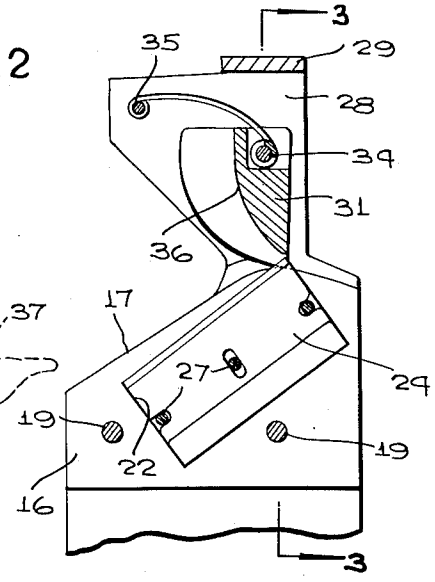


Fig. 4



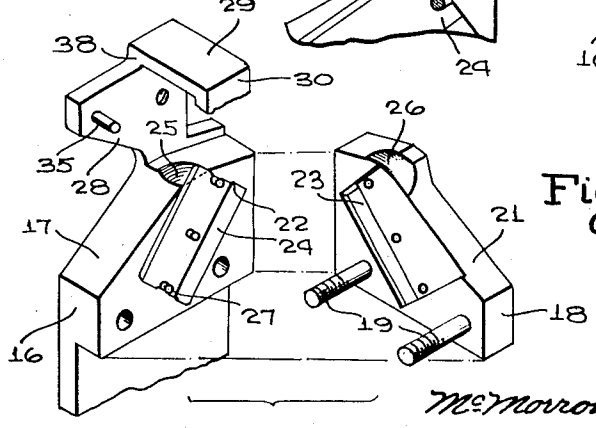


Fig. 5

INVENTOR.
FRED S. HUGHES

BY

McMorrow, Berman & Davidson
ATTORNEYS

United States Patent Office

2,731,970

Patented Jan. 24, 1956

2,731,970

BEAN AND PEA POD SPLITTER

Fred S. Hughes, Augusta, Ga.

Application February 26, 1954, Serial No. 412,921

3 Claims. (Cl. 130—30)

This invention relates to food processing implements, and more particularly to an improved bean and pea pod splitter adapted to be employed to expedite the shelling of beans and peas.

The main object of the invention is to provide a novel and improved bean and pea pod splitter which is simple in construction, which is easy to use, and which facilitates the removal of the pods from beans and peas.

A further object of the invention is to provide an improved bean and pea pod splitter employing a razor blade as the cutting element thereof, the splitter being arranged so that the razor blade may be readily replaced whenever required, the device involving inexpensive components, being rugged in construction, and being arranged to automatically slit a bean or pead pod as the bean or pea pod is forced through the device.

Further objects and advantages of the invention will become apparent from the following description and claims, and from the accompanying drawings, wherein:

Figure 1 is a perspective view of an improved bean and pea pod splitter constructed in accordance with the present invention.

Figure 2 is an enlarged vertical cross sectional view taken on the line 2—2 of Figure 1.

Figure 3 is a vertical cross sectional view taken on line 3—3 of Figure 2.

Figure 4 is a vertical cross sectional view showing the elements of Figure 2 and illustrating the manner in which the pivoted guide arm is rotated by the passage of a pea pod through the device.

Figure 5 is a fragmentary perspective view showing the manner in which the elements of the device may be separated to replace the cutting blade thereof.

Referring to the drawings, the improved bean and pea pod splitter is designated generally at 11 and comprises an upstanding support member 12 formed at its lower portion with the generally C-shaped member 13 adapted to be engaged with the edge of a table or shelf, the bottom flange 14 of the member 13 being provided with the screw clamp 15 which, when tightened, clamps the bottom member 13 to the edge of the table or shelf.

The support member 12 is formed at its top end with the thickened head portion 16 having the inclined edge 17. Designated at 18 is a block member similar in shape to the thickened portion 16 and being detachably secured thereto by a pair of bolts 19, 19 extending transversely through member 18 and portion 16 and being engaged on their outer ends by respective wing nuts 20. The block member 18 has the inclined edge portion 21 which is flush with the inclined edge portion 17 of the thickened element 16.

The inside opposing surfaces of the elements 16 and 18 are formed with mating inclined recesses 22 and 23 adapted to receive a conventional razor blade 24 in a position wherein a corner of the sharpened edge portion of the blade projects upwardly from a rounded seat defined by the concave recessed top portions 25 and 26 of the elements 16 and 18. Secured in the recess 22 are

the positioning pins 27 which are spaced to extend through the positioning aperture and notches of the conventional razor blade 24 to position the razor blade properly in the manner illustrated in Figure 5.

Integrally formed with the element 16 is the vertically extending flange 28 which is generally triangular in shape and which is integrally formed at its top edge with the arm 29 having the depending vertical element 30 extending parallel to the flange 28. Designated at 31 is a guide arm which is disposed between the flange 28 and the depending element 30, said guide arm having the parallel corner tabs 32, 32 disposed respectively adjacent flange 28 and depending element 30. A transverse pivot bolt 33 extends through flange 28, through the pivot tabs 32, 32, and is threadedly engaged in the flange 28, whereby the guide arm 31 is pivotally connected to the flange 28 and is supported for rotation around an axis normal to the plane of the razor blade 24.

The guide arm 31 is biased downwardly, namely, in a clockwise direction, as viewed in Figure 4, by a coiled spring 34 surrounding the pivot shaft 33. One end of the coiled spring 34 is secured to the guide arm 31 and the other end of said spring is secured to a pin member 35 mounted on the flange 28.

The guide arm 31 is formed with a downwardly channeled bottom surface 36 which faces the seat defined by the recesses 25 and 26, said channeled surface being curved arcuately along its length and being arranged to define a convergent pod-receiving passage with respect to the seat defined by the recesses 25 and 26.

Thus, in using the device, a pod 37 is inserted into the convergent opening defined between the channeled surface 36 of arm 31 and the seat defined by the recesses 25 and 26 and is forced through said opening, the arm 31 acting to hold the pod against the upstanding corner portion of the edge of the blade as the pod is forced through said opening, whereby the pod is split longitudinally by the blade. The upstanding corner portion of the blade is substantially shielded by the channeled arm 31, so that the operator may force the pod through the opening defined between the arm and the recesses 25 and 26 without any risk of injury by contact with the edge of the blade.

After a pod has been slit in the manner above described, it may be opened by a simple manual squeezing pressure applied to the pod or may be squeezed against a suitable support, for example, against a corner 38 defined between the top edge of flange 28 and the arm 29.

Whenever replacement of the blade 24 is necessary, the block 18 may be detached from the element 16 by disengaging the wing nuts 20, allowing access to the old blade so that it may be removed and replaced by a new blade.

While a specific embodiment of an improved bean and pea pod splitter has been disclosed in the foregoing description, it will be understood that various modifications within the spirit of the invention may occur to those skilled in the art. Therefore, it is intended that no limitations be placed on the invention except as defined by the scope of the appended claims.

What is claimed is:

1. A bean and pea pod splitter comprising an upstanding support member having an inwardly and longitudinally convergent feed passage, a cutting blade secured to said support member and projecting longitudinally in the narrow inner portion of said passage, a guide arm pivoted in said passage opposite said blade for rotation around an axis normal to the plane of said blade, and spring means urging said guide arm toward said blade, whereby said arm acts to hold a pod against the blade as said pod is passed inwardly through said passage between said arm and the blade.

2. A bean and pea pod splitter comprising an upstanding support member having an inwardly and longitudinally convergent feed passage, a cutting blade secured vertically to said support member and projecting longitudinally and upwardly from the bottom of the narrow inner portion of said passage, a guide arm pivoted in said passage opposite said blade for rotation around an axis normal to the plane of said blade, said arm having a downwardly channeled inwardly convergent surface facing the bottom of said passage, and spring means urging said guide arm downwardly toward said blade, whereby said arm acts to hold a pod against the blade as said pod is passed inwardly through said passage between said downwardly channeled surface and the bottom of said passage.

3. A bean and pea pod splitter comprising an upstanding support member having an inwardly and longitudinally convergent feed passage, a cutting blade secured vertically to said support member and projecting longitudinally and upwardly from the bottom of the narrow

inner portion of said passage, a guide arm pivoted in said passage opposite said blade for rotation around an axis normal to the plane of said blade, said arm having a downwardly channeled surface facing the bottom of said passage, said channeled inwardly convergent surface being curved arcuately along its length and defining a convergent pod-receiving opening with respect to the bottom of said passage, and spring means urging said guide arm downwardly toward said blade, whereby said arm acts to hold a pod against the blade as said pod is passed inwardly through said convergent opening between said downwardly channeled surface and the bottom of said passage.

References Cited in the file of this patent

UNITED STATES PATENTS

2,369,360	Martin	Feb. 13, 1945
2,418,581	Evernden	Apr. 8, 1947
2,675,843	Jarvis	Apr. 20, 1954