W. K. Lewis,

Pea Sheller,

No. 54,927. Patented May 22, 1866.

Fig: 1.

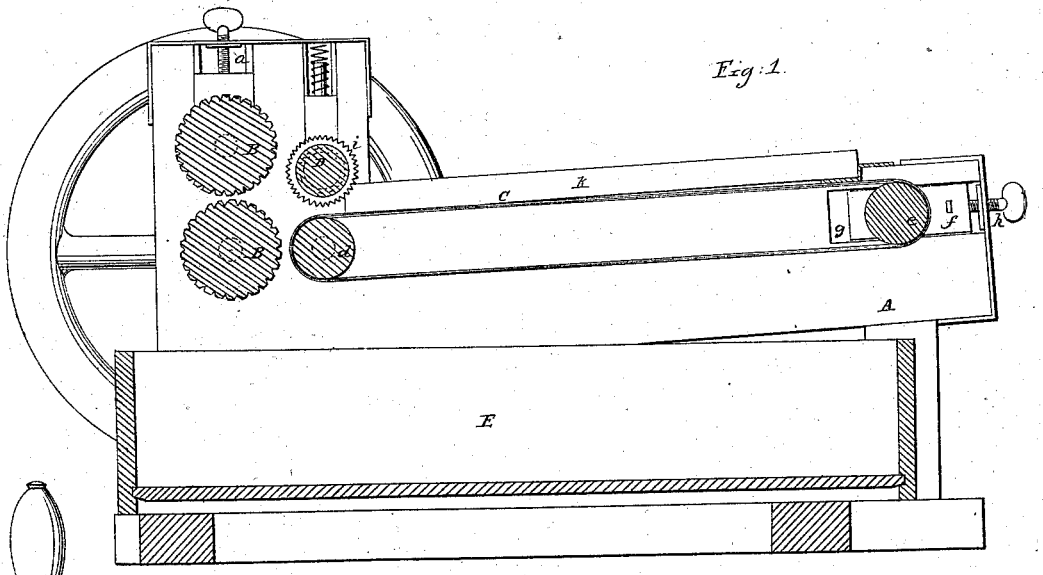
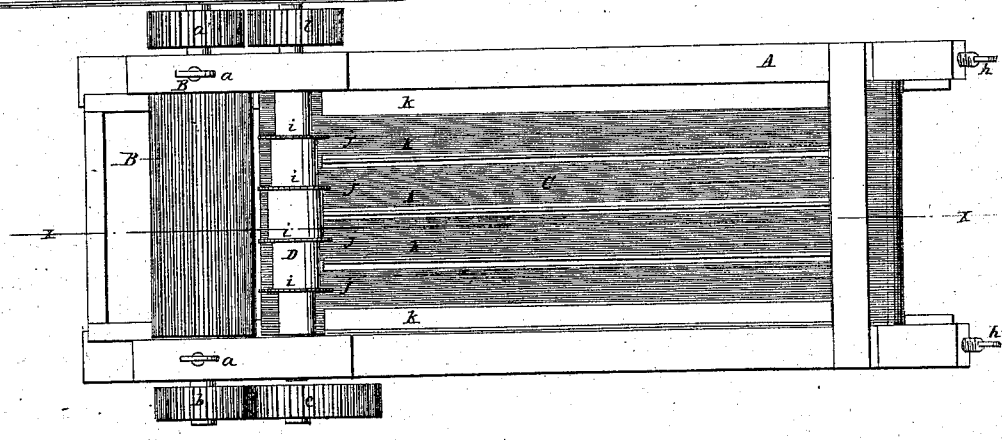


Fig: 2.



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UNITED STATES PATENT OFFICE.

W. K. LEWIS, OF BOSTON, MASSACHUSETTS.

IMPROVED PEA AND BEAN SHELLER.

Specification forming part of Letters Patent No. **54,927**, dated May 22, 1866.

To all whom it may concern:

Be it known that I, W. K. LEWIS, of Boston, Suffolk county, State of Massachusetts, have invented a new and Improved Device for Shelling Pease and Beans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to certain new and useful improvements in a machine for shelling pease and beans, for which Letters Patent were granted to Mellen Bray and Joseph A. Talpey, bearing date January 30, 1866.

The invention consists in an improved manner of operating the endless feed-apron, whereby the same may be strained or tightened whenever necessary without at all affecting its driving mechanism.

The invention also consists in an auxiliary feed attachment by which the proper presentation of the pease or beans to the shelling-rollers is insured and the rupturing or splitting of the pods greatly facilitated.

A represents a framing, which may be constructed in any proper manner to support the working parts, and B B are two fluted or corrugated rollers, which are placed one over the other in the same axial plane, the upper roller being adjusted by set-screws *a a* in the patented machine of Bray and Talpey, previously alluded to.

The rollers B B are connected at one end by gears *a'*, and the upper roller, B, at the end opposite to that where its gear *a* is attached, has a gear, *b*, upon it, and this gear *b* meshes into a wheel, *c*, which is on one end of a roller, *d*, around which the front part of an endless apron, C, passes, the rear part of said apron passing around a roller, *e*, the bearings *f* of which are adjustable, being fitted in oblong slots *g* in the framing and moved by screws *h*. (See more particularly Fig. 1.) By this arrangement it will be seen that the apron C may be tightened whenever desired without at all affecting its driving mechanism.

In the original machine the apron is operated by a belt passing around the roller *e* or a pulley thereon. Hence, whenever the apron requires to be tightened the belt is unduly stretched, and considerable difficulty is experienced in keeping the apron-driving mechanism in proper condition—a difficulty fully obviated by my improvement.

D represents a shaft, which passes transversely over the lower or depressed front part of the apron C, said apron being slightly inclined, as shown in Fig. 1. This roller has a series of serrated wheels, *i*, placed or keyed upon it, the lower edges of which are a short distance above the apron, one or more wheels being directly over spaces *j* between slots *k*, which are placed longitudinally over the apron and connected to the framing A. The shaft D is rotated by gears *v* from the front roller, *d*.

Power is applied to the lower shelling-roller, B, and the apron C moves in the direction indicated by the arrow 1, the pease to be shelled being placed on the rear part of the apron C, the slots *k* causing the pea-pods to pass in a lengthwise position toward the rollers B. The serrated wheels *i* catch into the pods and partially rupture them, and also have a tendency to straighten them or place them in a position at right angles with the axes of the rollers, so that the ends of the pods will be caught between the rollers and the pods drawn between them, while the pease will be expelled and drop between the lever-roller B and the front apron, C, into a box, E, in the lower part of the framing.

The shelling-rollers and endless feed-apron were previously used, and may be seen in the patented machine of Bray and Talpey, previously alluded to, and I therefore do not claim, broadly, said rollers and apron; but

I do claim as new and desire to secure by Letters Patent—

The serrated wheels *i*, placed on a shaft, D, over the front part of the apron C, when used in combination with the endless apron and rollers B B, and as an auxiliary feed for said rollers, for the purpose specified.

W. K. LEWIS.

Witnesses:
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