Feb. 13, 1923.

J. RIDPATH.

POTATO CUTTER.

FILED SEPT. 13, 1922.

1,445,555.

2 SHEETS—SHEET 1.

Fig. 1.

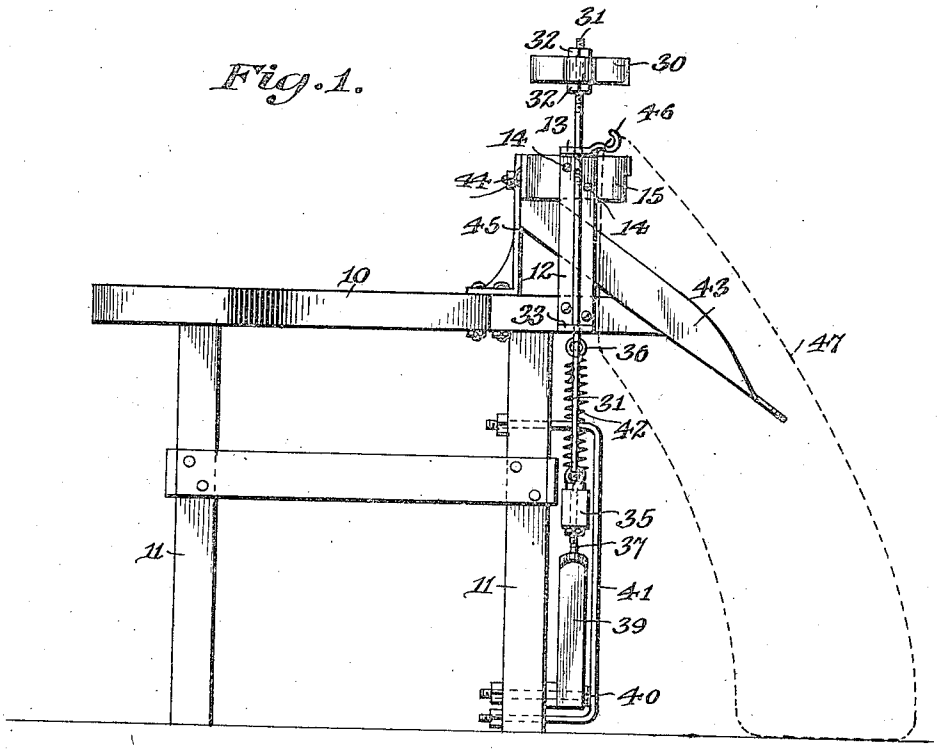
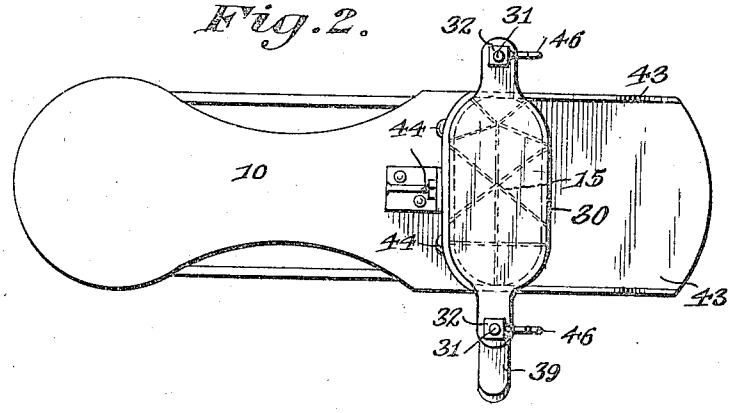


Fig. 2.



John Ridpath, INVENTOR.

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2 SHEETS--SHEET 2.

Fig. 3.

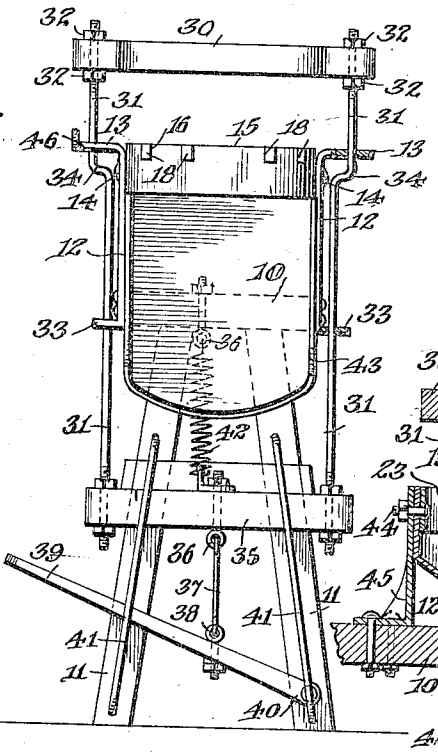


Fig. 4.

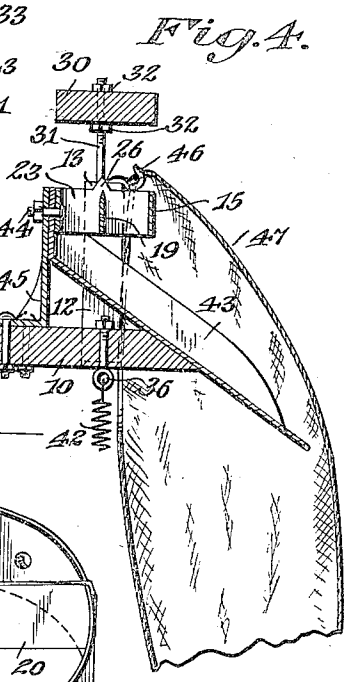
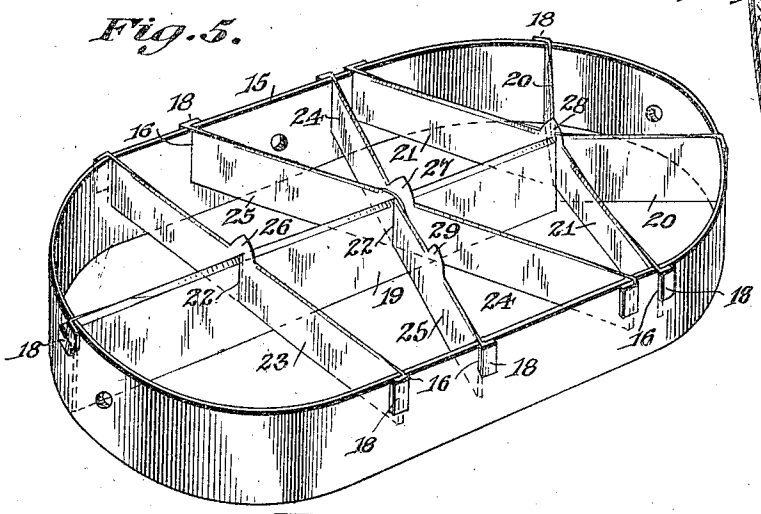


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN RIDPATH, OF SHERMAN, SOUTH DAKOTA.

POTATO CUTTER.

Application filed September 13, 1922. Serial No. 587,980.

To all whom it may concern:

Be it known that I, JOHN RIDPATH, a citizen of the United States, residing at Sherman, in the county of Minnehaha and State of South Dakota, have invented certain new and useful Improvements in Potato Cutters, of which the following is a specification.

This invention relates to devices for dividing potatoes into sections for planting, and has for one of its objects to provide a device of this character having means whereby potatoes of various sizes may be readily and quickly divided with an "eye" or seed in each piece, and without detaching or adjusting any of the parts.

Another object of the invention is to provide a device of this character in which the dividing elements may be readily detached for renewal or repairs without disturbing the other portions.

With these and other objects in view the invention consists in certain novel features of construction as hereinafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention:—

Figure 1 is a side elevation.

Figure 2 is a plan view.

Figure 3 is a front elevation with the receiving sack removed.

Figure 4 is a sectional detail enlarged.

Figure 5 is a detached perspective view enlarged, of the knife element of the improved device.

The improved device comprises a seat or platform 10 supported by legs 11 at a convenient height for the operator, and with vertical standards 12 at one end, the latter outturned at the upper end to form perforated ears 13, as shown.

Attached at 14 to the upper ends of the standards 12, is a flat elliptical shaped frame or endless band 15.

The band is formed with upwardly opening notches 16 at spaced intervals, and engaging in these notches are the terminals of a plurality of blades having their upper edges sharpened or "knife edged," as shown. At their ends the blades are reduced to enter the notches 16 and bent laterally externally of the band as shown at 18, to prevent lateral displacement of the blades.

One of the blades 19 extends from one end of the band 15 to a point near the other end and is connected at this point to the apex of a V-shaped blade 20, the latter coupled at its outer ends to the band, while a reversely directed V-shaped blade 21 is also coupled to the inner end of the blade 19 and also to the apex of the blade 20, and coupled at its ends to the band in spaced relation to the ends of the blades.

Coupled at 22 to the longitudinally directed blade 19 near the other end is another blade 23, the latter connected to the band 15 at opposite sides, as shown.

Extending transversely of the band 15 intermediate the blades 21 and 23 are other reversely arranged blades 24 and 25, crossing each other where they engage the blades 19 and coupled at their ends to the band 15.

The blade 23 is provided with an upwardly directed spur 26 where it crosses the blade 19 while the blades 21 and 25 are provided respectively with similar spurs 27 and 28 at their junctures with the central blade 19.

The blade 25 is also provided with a similar spur 29 at one side of the central blade 19.

By this arrangement when a potato is to be cut into two portions, for instance when the potato is small and contains two "eyes" or "seeds" only, it is placed upon the spur 29 with one "eye" at each side of the blade 25 so that when forced down it will be severed into two portions with an eye or seed in each portion.

When a larger potato or one containing four eyes or seeds is to be "cut," it is placed on the spur 26 and then when forced downwardly, it will be severed into four portions by the blades 19 and 23, with an eye or seed in each portion.

Then when a potato is to be severed into six portions it will be placed on the spur 27, and when a potato is to be severed into five portions, it is placed on the spur 28, as will be obvious.

An approved means for forcing the potatoes against the blades is shown, and consists of a block or head 30 provided with depressing mechanism, preferably foot operated, the actuating mechanism comprising pull rods 31 attached to the ends of the block 31, preferably by adjusting nuts 32 to enable the block to be adjusted relative to the rods.

At their lower ends the standards 12 are outturned to form ears 33, perforated to slidably receive the rods 31. The ears 13 extend farther out than the ears 33, and the

rods are offset as shown at 34, so that the space between the rods is greater above the ears 13 than below them, to provide ample space for the insertion of the potatoes.

The rods 31 are coupled at their lower ends to a beam 35, and coupled at 36 to the center of the beam is a pull rod 37 to which a foot lever 38 is coupled at 39.

The foot lever is pivoted at 40 to one of the legs 11, and is guided in its movement by rods 41.

A spring 42 is connected to the beam 25 and to the seat member 10, and operates to maintain the beam 35, the rods 31, and the block 30 yieldably in elevated and inoperative position.

A guide chute or conductor spout 43 is attached at the upper end to the band 15 by bolts 44, or the like, and a brace 45 is also connected between the seat 10 and the upper part of the chute, to strengthen and reinforce the coupling between the parts.

The severed potatoes will thus be deposited in the chute and conducted into a suitable receptacle therefrom.

Formed upon the ears 13 are hooks 46 to support a receiving sack 47, or the like, as shown in Fig. 4.

By this simple means potatoes of various sizes may be severed to hold a single eye or seed in each section, and by adjusting upon the crossed and radially arranged knives the improved device may be adapted to potatoes of various sizes without change of structure, the change being accomplished by placing the potatoes upon a particular portion of the crossed knives.

The improved device is very simple in construction, can be inexpensively manufactured, and operates effectually for the purposes described.

The preferred embodiment of the invention is disclosed in the drawings and set forth in the specification, but it will be understood that modifications within the scope of the claimed invention may be made in the construction without departing from the principle of the invention or sacrificing any of its advantages.

Having thus described the invention what is claimed is:—

1. In an apparatus of the class described, a base member, standards attached to said base member and having outturned perforated ears at the ends, an endless band attached to said standards, a plurality of cutting blades connected at their ends to said band and extending transversely thereof, a follower block, pull rods connected to said follower block and slidable through said ears, and means for actuating said pull rods to cause the follower block to be moved toward the band and its cutting blades.

2. In an apparatus of the class described, a base member, standards attached to said base member and having outturned perforated ears, an endless band attached to said standards, a plurality of cutting blades connected at their ends to said band and extending transversely thereof, a follower block, pull rods connected to said follower block and slidable through said ears, a beam member connecting said rods at their lower ends, and a foot lever coupled to said beam, whereby the follower block may be moved toward said band and its cutting blades.

3. In an apparatus of the class described, a base member, an endless band supported from said base member and having a plurality of upwardly opening spaced notches in its upper edge, a plurality of cutting blades engaging at their ends in said notches with the ends turned laterally to engage the exterior of the band, said cutting blades extending transversely the band, a follower block, and means for moving said follower block towards said band and its cutting blades.

In testimony whereof, I hereunto affix my signature.

JOHN RIDPATH.