

(No Model.)

J. J. SHERMAN.

MACHINE FOR CUTTING ROOTS, VEGETABLES, &c.

No. 580,807.

Patented Apr. 13, 1897.

Fig 1

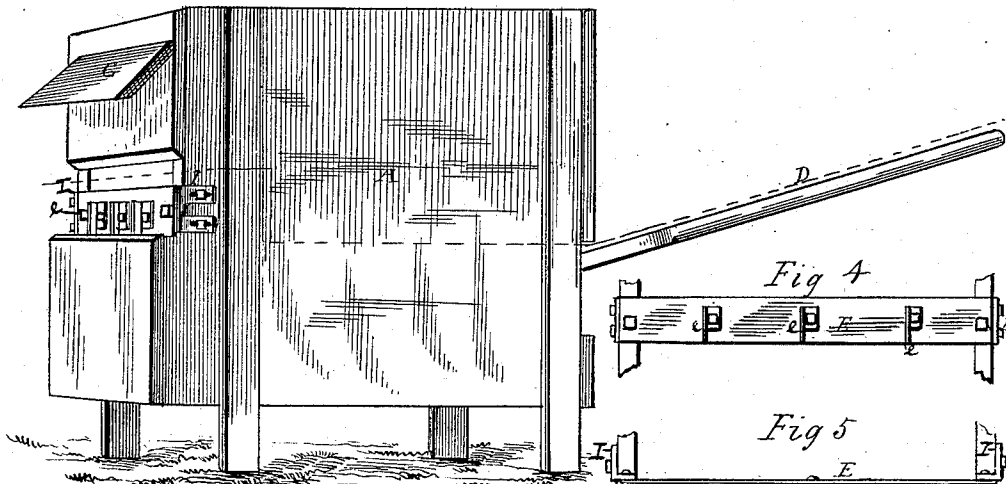


Fig 2

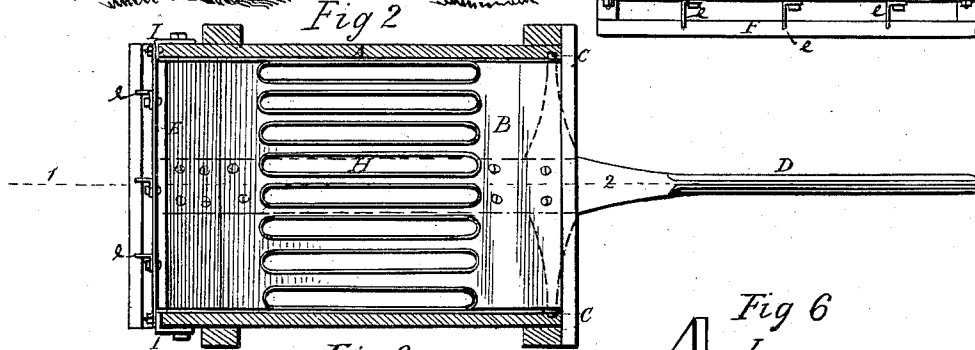


Fig 3

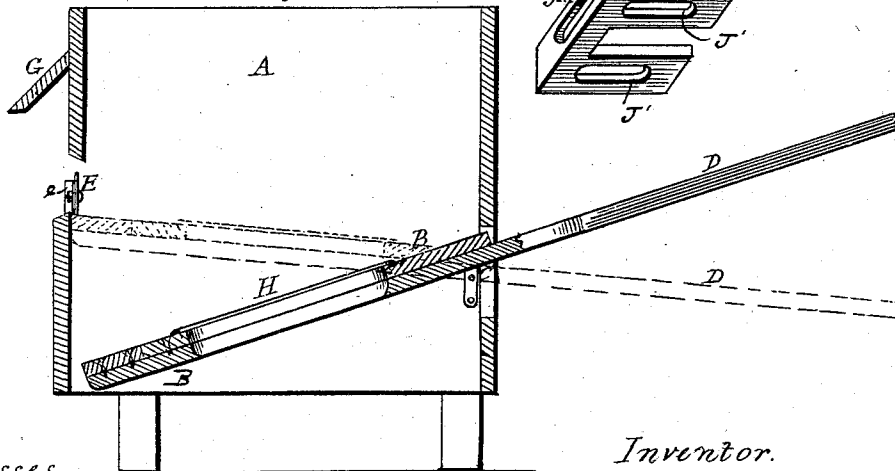
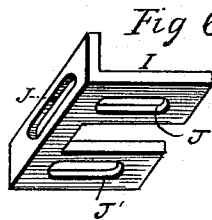


Fig 4



Fig 5



Witnesses
John Gillis
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UNITED STATES PATENT OFFICE.

JOHN JOSEPH SHERMAN, OF TRAVERSE CITY, MICHIGAN.

MACHINE FOR CUTTING ROOTS, VEGETABLES, &c.

SPECIFICATION forming part of Letters Patent No. 580,807, dated April 13, 1897.

Application filed May 28, 1896. Serial No. 593,493. (No model.)

To all whom it may concern:

Be it known that I, JOHN JOSEPH SHERMAN, of Traverse City, in the county of Grand Traverse and State of Michigan, have invented a new and useful Improvement in Root-Cutters, of which the following is a specification.

My invention is an improvement in that class of vegetable cutters and slicers in which the tubers or roots are forced into contact with a fixed knife or blade, and thus divided into one or more parts or pieces.

The improvement is embodied in certain features of construction, arrangement, and combination of parts, as hereinafter set forth.

In the accompanying drawings, Figure 1 is a perspective view of my apparatus. Fig. 2 is practically a horizontal central section of the apparatus. Fig. 3 is a vertical central section of the same. Figs. 4 and 5 are respectively front and top views of the cutter or knife. Fig. 6 is a perspective view of one of the brackets to which the cutter is attached.

The rectangular box A, constituting the body of the machine, has a transverse slot in its front side and another slot in the opposite or rear side. A cutter or knife E is arranged in the front slot, and a lever D is pivoted in and projects through the other or rear slot, as shown. The said lever D comprises a handle, which is exterior to the box A, and a broad flat portion B, which is within the box A, the pivotal point C, Fig. 3, being intermediate these two portions B D. The broad portion B is rectangular and of nearly of the same dimensions as the box A interiorly, so that it may serve as a false oscillatory bottom for the same, and thus support the tubers or roots which are placed in the box to be cut.

The portion B of the lever is provided with a series of parallel slots H, which permit passage of earth or soil that may be loosely mingled with the roots. The front end of the lever is composed of a board that is attached to the lever proper by means of screws, so that it may be readily detached when worn out. When the lever is tilted into the position shown by dotted lines, Fig. 3, the roots, which had previously rolled down to the front end of the lever when in the position shown by full lines in same figure, are raised into contact with the knife E and cut into pieces. It will be seen that in such operation the front

end of the board B comes in contact with the edge of said knife, which determines the upward throw of the lever.

The knife is attached to the box A by means of right-angular clips or brackets I, (see Figs. 1 and 6,) which are provided with a vertical slot J in their lateral flanges, which forms the front side, and with horizontal slots J' in the other flange. The knife E is secured at its ends to the front flanges by means of screw-bolts, and the brackets I are similarly secured to the sides of the box A. It is apparent that this construction and combination of parts enable the knife E to be easily adjusted vertically and to be removed when it requires sharpening, and, what is more important, it permits the knife to be adjusted nearer to or farther from the lower edge of the slot in box A for varying the thickness of the pieces or slices of the tubers or roots into which the knife divides them.

The cutter or blade E has a series of short supplemental knives or cutters e attached to its front side and projecting at a right angle to it. The said cutters e have a right-angular base-flange through which a screw-bolt passes for securing them detachably to the main blade E. They obviously serve to further divide the roots into pieces or slices, and for this purpose their lower edges are arranged flush with the main cutter E, so as to strike the end of the lever portion B when the latter is raised, as shown by dotted lines, Fig. 3. The pieces or slices thus produced pass up through the slot and fall downward into a suitable receptacle that will in practice be provided for them.

The inclined board G, affixed to the front of the box A above the slot and knife E, will arrest the pieces or slices if thrown up so far.

What I claim is—

1. In a root-cutter, the combination with the box having a front slot, and a knife fixed in rear of said slot, of a movable device arranged within said box and adapted to be raised for forcing roots into contact with the knife and ejecting the severed pieces through the slot, as shown and described.

2. The improved root-cutter comprising a box, having a front and rear slot, a knife fixed in the front slot, a pivoted lever projecting through the rear slot in the form of a

handle, and having a broad portion that fits loosely within the box and constitutes the false movable bottom of the same, adapted to be raised into contact with said knife, as shown and described.

3. In a root-cutter, the combination with the box having a front slot and a knife fixed therein, of a pivoted lever whose broad portion is arranged within said box and provided with openings for escape of dirt &c. as the lever is operated, as shown and described.

4. In a root-cutter, the combination with the box having a slot as specified of a knife or blade arranged in the slot, and clips or brackets arranged on the sides of the box and

having horizontal slots for reception of fastening-bolts that permit adjustment of the knife relative to the lower edge of the slot, as shown and described.

5. In a root-cutter, the combination with the box having a slot, and movable bottom, of a knife or root-slicer arranged in said slot and composed of a main transverse blade and a series of supplemental blades which are attached to the main blade and project from the same, as shown and described.

JOHN JOSEPH SHERMAN.

Witnesses:

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