

(No Model.)

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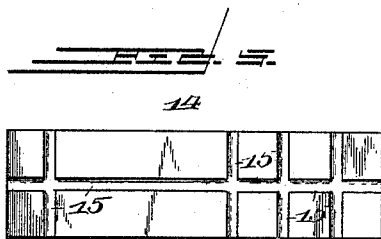
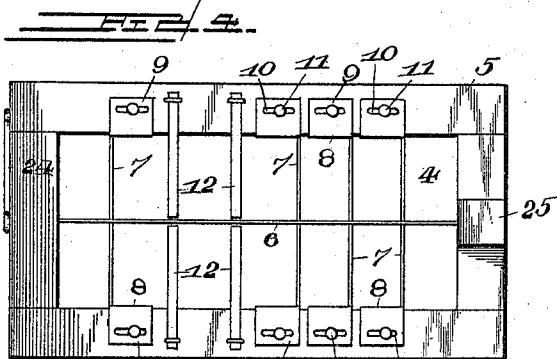
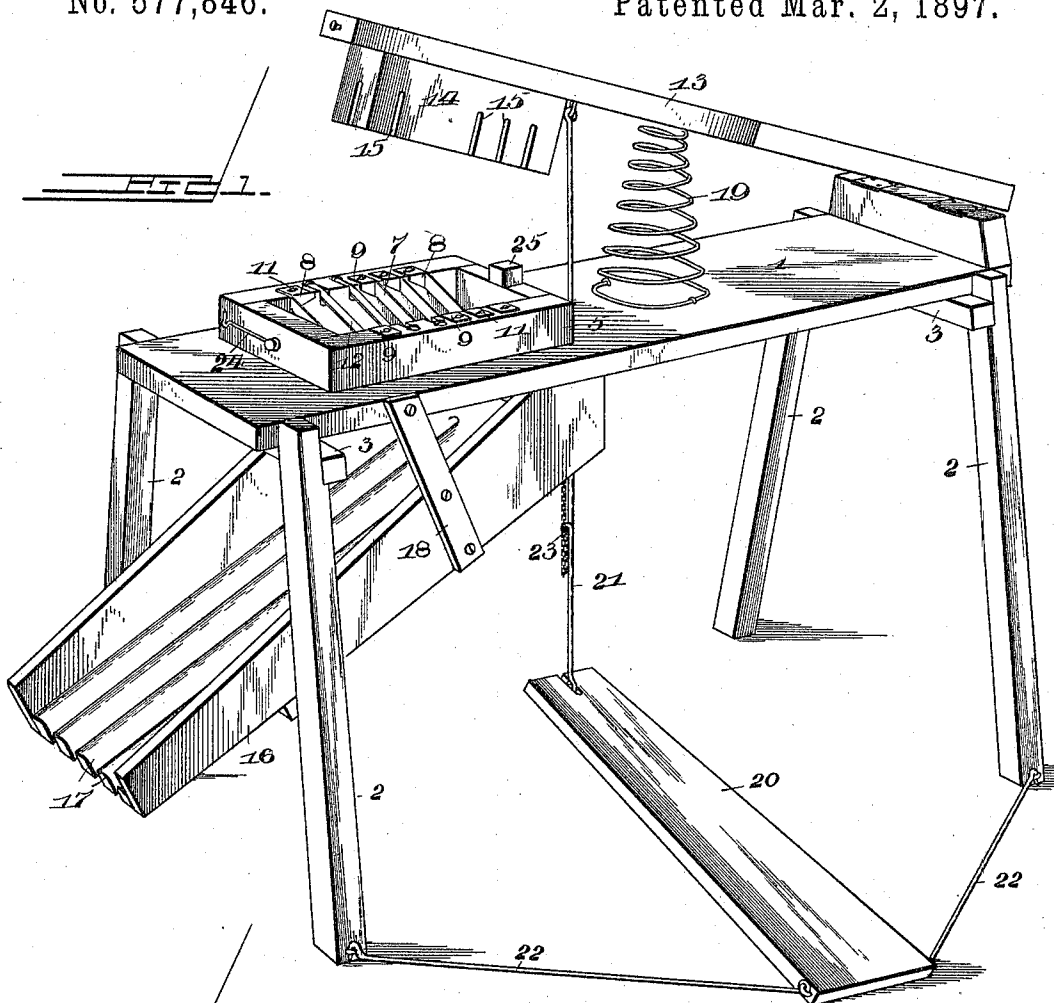
D. W. EDDY & C. A. CARLTON.

C. CARLTON, Administrator of C. A. CARLTON, Deceased.

SEED POTATO CUTTER.

No. 577,846.

Patented Mar. 2, 1897.



Witnesses

W. F. Doyle.
R. M. Smith.

By their Attorneys,

Darwin W. Eddy and
Charles A. Carlton,

C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2

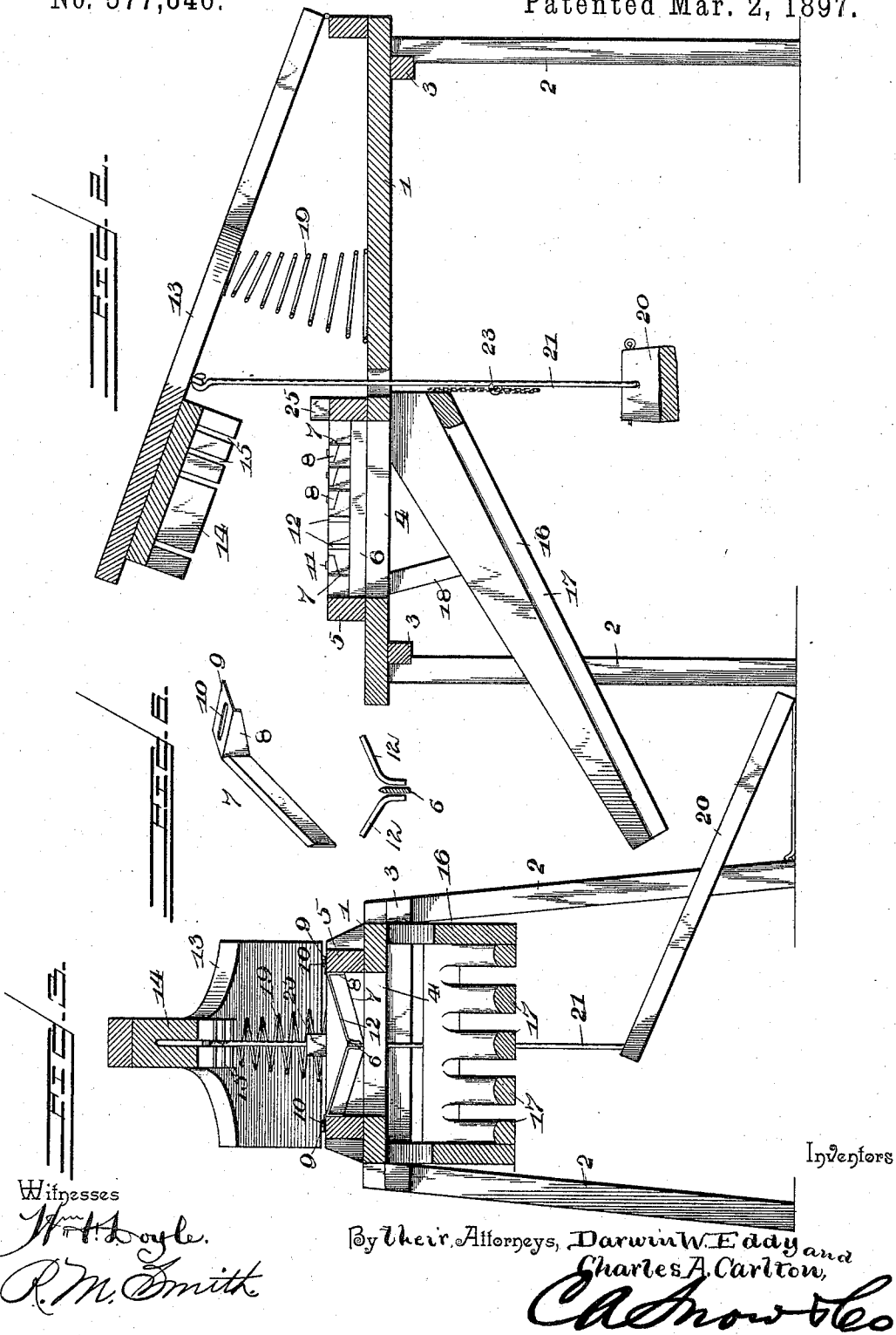
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UNITED STATES PATENT OFFICE.

DARWIN W. EDDY AND CHARLES A. CARLTON, OF WOODLAND, MAINE;
CHARLES CARLTON ADMINISTRATOR OF SAID CHARLES A. CARLTON,
DECEASED.

SEED-POTATO CUTTER.

SPECIFICATION forming part of Letters Patent No. 577,846, dated March 2, 1897.

Application filed September 20, 1895. Serial No. 563,094. (No model.)

To all whom it may concern.

Be it known that we, DARWIN W. EDDY and CHARLES A. CARLTON, citizens of the United States, residing at Woodland, in the county of Aroostook and State of Maine, have invented a new and useful Seed-Potato Cutter, of which the following is a specification.

This invention relates to an improvement in seed-potato cutters, and has for its object to provide a simple, inexpensive, and efficient machine adapted to be operated by foot-power and to divide or slice seed-potatoes into any desired number of pieces, according to the number of eyes or seeds therein.

The principal object of the present invention is to provide a series of cutters of novel construction which, in addition to their usual function, are formed and disposed in such manner as to constitute a pocket in which the potatoes may be held preparatory to the slicing of the same.

The invention also contemplates constructing the cutters in such manner that they are capable of being adjusted toward and away from each other for regulating the size of the pieces into which the potatoes may be divided.

Other objects and advantages of the invention will be set forth in the ensuing description.

The invention consists in certain novel features and details of construction and arrangement of parts, as hereinafter fully described, illustrated in the drawings, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the improved seed-potato cutter constructed in accordance with the present invention. Fig. 2 is a vertical longitudinal section through the same. Fig. 3 is a cross-sectional view taken adjacent to the slicing-cutters. Fig. 4 is a detail plan view showing the arrangement of the cutters and the means for adjusting the same. Fig. 5 is a reverse plan view of the plunger. Fig. 6 is an enlarged detail perspective view of one of the cutters.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings,

1 designates a suitable table top or board which is supported upon downwardly-diverging legs 2, connected at or near their tops by transverse bars 3, which pass beneath the top or board 1 and serve to firmly support the latter. Adjacent to one end of the top board 1, which is purposely made elongated, as shown, is formed a rectangular opening 4, which is surrounded by a correspondingly-shaped frame 5, extending upwardly above the upper face of the table. This surrounding frame has arranged therein a centrally-located and longitudinally-extending steel cutter 6, the upper knife-edge of which is disposed in a lower plane than the plane of the upper edge of the surrounding frame 5.

Secured to the longitudinal side bars of the frame 5 and extending inwardly therefrom is a series of obliquely-disposed cutters 7. The upper cutting edges of the cutters 7 are disposed in lines extending from the upper edge of the surrounding frame 5 to the upper edge of the longitudinally-extending cutter 6, thus imparting to the cutters 7 an inward and downward inclination. Each of said cutters terminates at its inner end against or in close proximity to the longitudinal cutter 6 and adjacent to its outer end is given a right-angle bend to form a supporting-back 8, which rests against the inner surface of the frame 5, as shown. Each cutter is also extended to form a horizontal portion 9, which rests upon the top edge of the frame 5 and is formed with an elongated slot 10, extending longitudinally of the frame 5 and table 1. By means of this construction it will be seen that the cutters 7 may be adjusted longitudinally within the opening 4, so as to regulate the distance between said cutters, as desired, suitable screws or fastening devices 11 being passed through the slots 9 and into the frame 5 for holding said cutters fixed in their adjusted positions. Any number of these inwardly-declining cutters may be employed, according to the size of the opening 4, and they are preferably arranged in unequal groups, so that a potato may be divided into two, four, six, or more pieces, according to where the same is placed upon the cutters. The particular disposition and arrangement of the cutters 6 and 7 constitute a V-shaped

pocket or valley, which serves to hold one or more potatoes preparatory to the descent of the plunger.

Between certain of the inwardly-declining cutters 6 are arranged leaf-springs 12, which are secured at their outer extremities to the frame 5 in any convenient manner and extend inwardly in planes substantially coincident horizontally with the upper knife-edges of the cutters 7, said springs at their inner ends being deflected downwardly, so as to bear against the longitudinal cutter 6. The springs 12 thus contribute to form the V-shaped pocket referred to and serve to uphold a potato placed thereon in convenient position to be operated by the plunger.

13 designates a plunger-arm which is hinged at one end to the table 1, as shown, and has secured to its opposite end the plunger-head 14, the same being formed of any desired material, of a size slightly less than the rectangular opening 4 and corresponding in shape to said opening. This plunger-head 14 is removably secured to the plunger-arm 13 by means of screws or other suitable fastening devices and is provided in its under side with a longitudinal kerf and a series of transverse kerfs, as indicated at 15, corresponding in number and position to the cutters 6 and 7 within the opening 4 and of a depth sufficient to receive said cutters upon said plunger reaching the extent of its downward movement. When thrust downward to its full extent, the plunger-head thus forces the potato through the cutters, and the divided pieces or slices thereof are pushed beneath and free from said cutters, where they drop into an inclined discharge trough or chute 16. This trough or chute comprises vertically-disposed sides and a slatted bottom 17, and has upwardly-extending arms 18 upon opposite sides thereof, which project upon each side of the table 1 and are pivotally connected therewith. The arms 18 are arranged back of the center of the inclined trough or chute 16, so as to give to the outer end of said trough the preponderance of weight, thereby causing such end to normally drop until the inner end thereof rests beneath the table 1, which forms a stop therefor.

The plunger-arm 13 is normally upheld by means of a spiral spring 19, interposed between it and the table 1 and secured in place in any convenient manner, and said plunger-arm is adapted to be depressed and operated by means of a treadle 20, arranged beneath the table 1 and connected at its swinging end to the plunger-arm by means of a connecting rod or link 21. The opposite end of the treadle 20 rests upon the ground and is braced and held in proper working position by means of oppositely-extending guy-rods 22, which are connected at their inner adjacent ends to the treadle and have their opposite ends hooked to engage with screw-eyes inserted in the lower extremities of the legs 2, as shown. The connecting rod or link 21 is provided at

a suitable point with a bend or eye 23, from which a chain or other flexible connection extends upwardly and attaches to the inner end of the pivoted trough or chute 16. By means of this construction every time the plunger descends a downward impetus is given to the inner end of the pivoted trough 16, thus causing the divided portions of the potatoes to gravitate along the slatted bottom of said trough and into a suitable basket or receptacle, while the chips or small and useless portions fall through between the slats of the trough-bottom and are prevented from entering the basket. When not required for use, the treadle 20 may be detached from the legs of the table and folded inward beneath the same, and the plunger-arm may be folded downward and so held by means of a hook 24, secured to the frame 5 or other convenient point and engaging a pin or stop on said lever-arm.

The seed-potato cutter hereinabove described is very simple and inexpensive in construction, may be operated with ease and rapidity, and will enable one man to accomplish the work of two or more. If desired, a rubber bumper or stop 25 may be employed for cushioning the descent of the plunger.

Various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The herein-described cutter, comprising a suitable table having an opening therein, a plunger operating in said opening, a centrally-disposed cutter arranged within said opening and beneath the plane of the upper edge thereof, a series of inwardly-declining cutters terminating at said central cutter, and two or more oppositely-arranged leaf-springs extending in the plane of the cutting edges of the inwardly-declining cutters and having their inner free ends bearing against or lying in close proximity to said central cutter, substantially as and for the purpose set forth.

2. The herein-described cutter, comprising a suitable table, a plunger operating through an opening in said table, a treadle arranged beneath the table and connected with said plunger, and a pair of oppositely-extending guy-rods secured to said treadle and having their terminals hooked to engage with fasteners secured to the table-legs, substantially as and for the purpose described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

DARWIN W. EDDY.
CHARLES A. CARLTON.

Witnesses:

GEORGE F. ROBINSON,
LYSANDER W. SAWIN.