T. TSCHANUN.
Vegetable-Cutter.

No. 213,147. Patented Mar. 11, 1879.

Fig: 1.

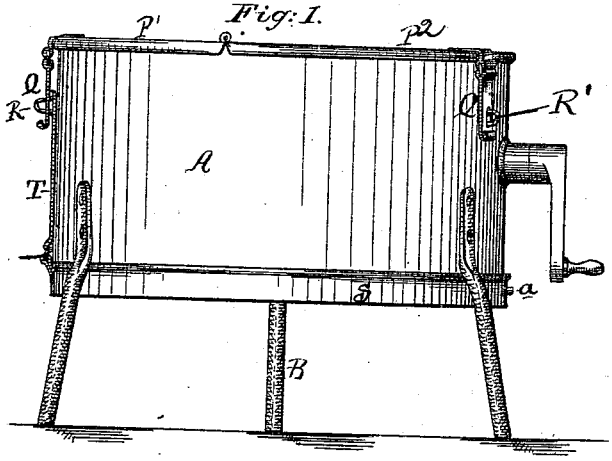


Fig: 2.

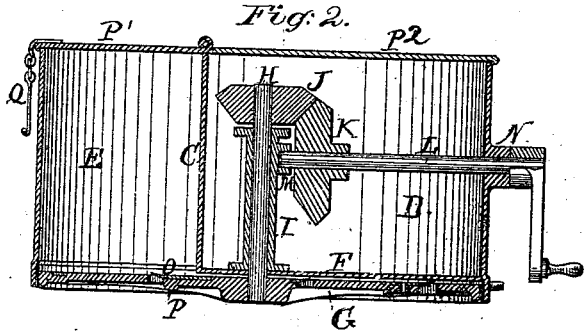


Fig: 3.

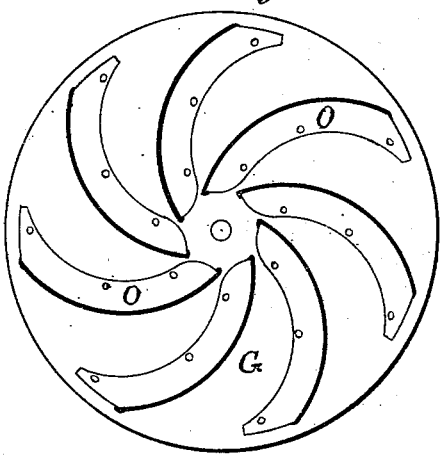
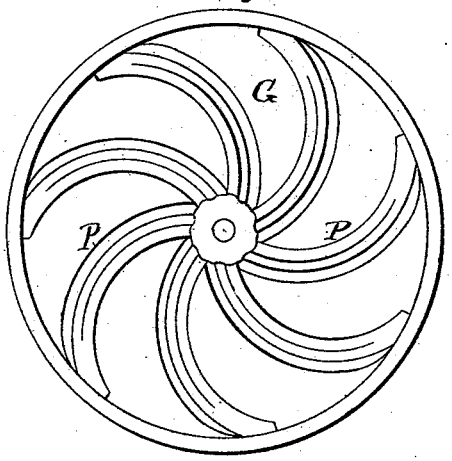


Fig: 4.



Witnesses:
A Scott
M Gardner

Inventor:
Theodor Tschanun
per: A. Schüchting
Attorney.

UNITED STATES PATENT OFFICE.

THEODOR TSCHANUN, OF GASCHURN, AUSTRIA, ASSIGNOR TO FRANZ JOSEPH WITTWER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN VEGETABLE-CUTTERS.

Specification forming part of Letters Patent No. **213,147**, dated March 11, 1879; application filed December 29, 1877.

To all whom it may concern:

Be it known that I, THEODOR TSCHANUN, of Gaschurn, Tyrol, Empire of Austria, have invented certain new and useful Improvements in Cabbage-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and letters of reference marked thereon, which form a part of this specification.

The present invention relates to that class of cabbage or vegetable cutters in which is employed a horizontal cutting bed or disk, revolving beneath a receiving-box or holder.

The invention consists in the construction and combination of parts, which will be hereinafter fully explained, and specifically set forth in the claim.

The accompanying drawings form part of this specification, and similar letters of reference indicate corresponding parts.

Figure 1 is a side elevation of my vegetable-cutter, showing the same in a closed condition, or when not in use. Fig. 2 is a vertical cross-section, showing the bottom cover removed. Fig. 3 is a top view of the cutting bed or disk, and Fig. 4 is a bottom view of the same.

The tub or receiving-box A is of a cylindrical shape, and is provided with legs B, which support it the requisite distance above the floor or ground. A vertical partition or wall, C, divides the tub into two compartments or chambers, D E, of which the former has a permanent or true bottom, F, while the second compartment, E, has a bottom formed of a circular cutting bed or disk, G, revolving beneath the tub. Said disk or cutting-bed has a central shaft or spindle, H, which passes through a long tubular bearing, I, and bears at its upper end a bevel-gear wheel or pinion, J, meshing into a corresponding gear-wheel, K, on the inner end of a horizontal driving-shaft, L. Said shaft is seated in a bearing or socket, M, of the tubular bearing I, and passes through a socket-piece, N, on the side wall of the tub or receiving-box A.

The cutting-bed is provided with a series of curved slits or openings, radiating from the center toward the edge of said cutting-bed. At the side of each slit is a countersunk or depressed seat for a curved cutting-knife, O, the top surface of which is flush with the top surface of the cutting-bed. The knives arranged in the slits or openings of the cutting-bed will, when the latter is revolved, serve to cut the vegetables, such as cabbage, into thin slices, which will then pass out through the slits and fall into a suitable receptacle arranged beneath the cutting-box. By arranging the knives as shown, a series of knives will be in operation at the same time, and a draw-cut is also produced.

The compartment E is the receiving or holding chamber, and the chamber D may be said to contain the operating mechanism.

The cutting-wheel has no bottom bearing, and is suspended entirely by the shaft H, which has its bearing in the tube I, and is held therein by the pinion J, resting on a bridge or horizontal top extension of the tube I. This extension is securely fastened to the sides of the compartment D. The cutting-wheel can be removed by detaching said pinion, which at other times is firmly held in position by a spline or feather connection, set-screw, or equivalent fastening device.

As shown in Fig. 4, the bottom surface of the cutting-bed is provided with strengthening-ribs P at the points where the cutting-knives are attached. Screws are generally used for retaining said knives in place, so that they can be readily removed when worn, or when it is necessary to sharpen the same. Each compartment of the tub is provided with a hinged cover, which covers are hung upon a common hinge. The cover for the compartment E is designated by the letter P^1, and that for the compartment D by the letter P^2; and both covers are provided with hasps Q, which fit on staples R R′, secured, respectively, to the hinged hasp T and the side of the tub.

A bottom cover, S, having an upwardly-projecting edge rim, is fitted to the bottom of the tub A, for closing the same thereat. Said bottom cover has a hole at one side, which receives pin *a*, projecting from the tub. The op-

posite side of said cover is provided with a hinged hasp, T, having the staple R at its upper end, for receiving and holding the hasp of one of the top covers. By this construction the operating devices and the cutting wheel or bed can be entirely inclosed or covered when the machine is not required for use. The bottom cover is entirely detachable, so as not to interfere with the proper operation of the cutting-bed, and have the space thereunder unobstructed.

The operation of the machine may be briefly described as follows, viz: The cabbage or vegetables to be cut are placed in the compartment E, and the rotary cutter wheel or disk is turned by the gearing and hand-crank. This will cause the knives carried by the wheel or disk to slice or cut up the vegetables, the latter being held against the partition of the tub during the cutting operation. The sliced vegetables pass through the slits or openings in the cutter-wheel, and are received in a box or receptacle located below said wheel.

I am aware that vegetable-cutters have been constructed in which a revolving cutter bed or wheel operates below a feeding-hopper of a supporting-frame or a chamber of a tub or casing. The operating mechanism in these devices consists of a vertical spindle, carrying the cutter-bed and a bevel-gear wheel, which engages with a similar gear-wheel of a horizontal shaft.

So far as I am aware, no existing vegetable-cutter possesses a tub which is divided into two compartments, one being bottomless and receiving the vegetables to be cut, and the other compartment having a bottom, and serving to contain the operating mechanism, spare vegetables, and such tools or devices as may be required for use about the machine.

Both compartments being provided with independent covers, the vegetables being cut are held within the cutting-compartment, and prevented from flying out. The operating mechanism being inclosed in a compartment, it also is protected, and all liability of clogging by particles of vegetables is obviated.

The cutting-wheel is in all previous vegetable-cutters exposed or permitted to remain uncovered, whereas I provide an attachable cover, which can be readily applied to the bottom of the tub, and easily removed when desired. Said cover will serve to prevent tampering with the cutting-bed, and will serve also to exclude dust. The bottom cover being connected with the cover of the cutting-compartment by simple fastening devices, both these covers can be secured in a perfect manner. By removing the crank of the driving-shaft and placing it inside the compartment provided for the operating mechanism, and locking the cover of the latter, it will be impossible to turn the cutting-wheel by children and others liable to do themselves injury.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The detachable bottom cover S, having an upwardly-projecting rim, an aperture, and a hasp, T, with staple R, in combination with the tub A, having a pin, *a*, the cutting-wheel G, and top cover P^1, having a hasp, Q, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THEODOR TSCHANUN.

Witnesses:

ANTON MEYER,

ANTON SCHAFER.