A. H. WELLINGTON.

Vegetable Cutter.

No. 40,971. Patented Dec. 15, 1863.

Fig 1

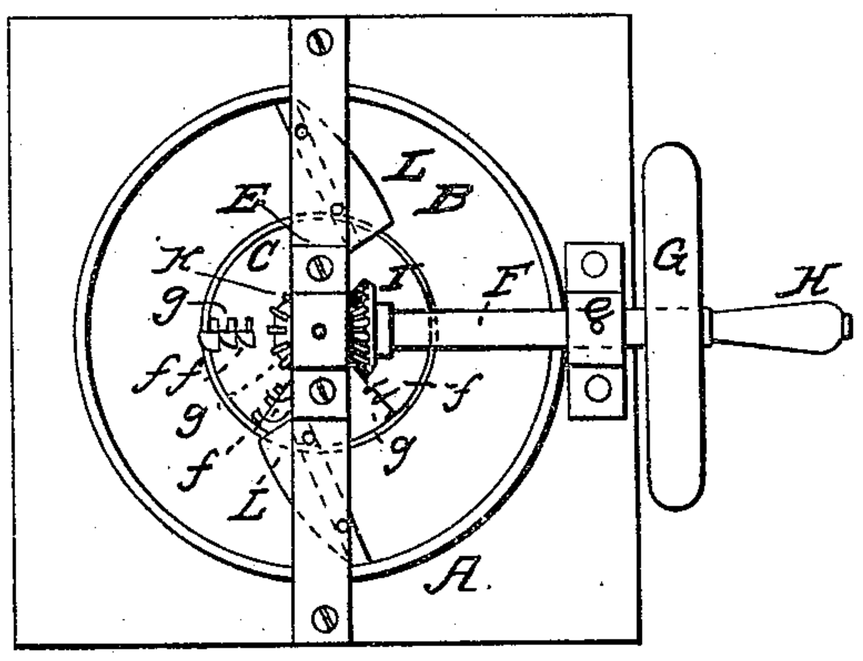


Fig. 2

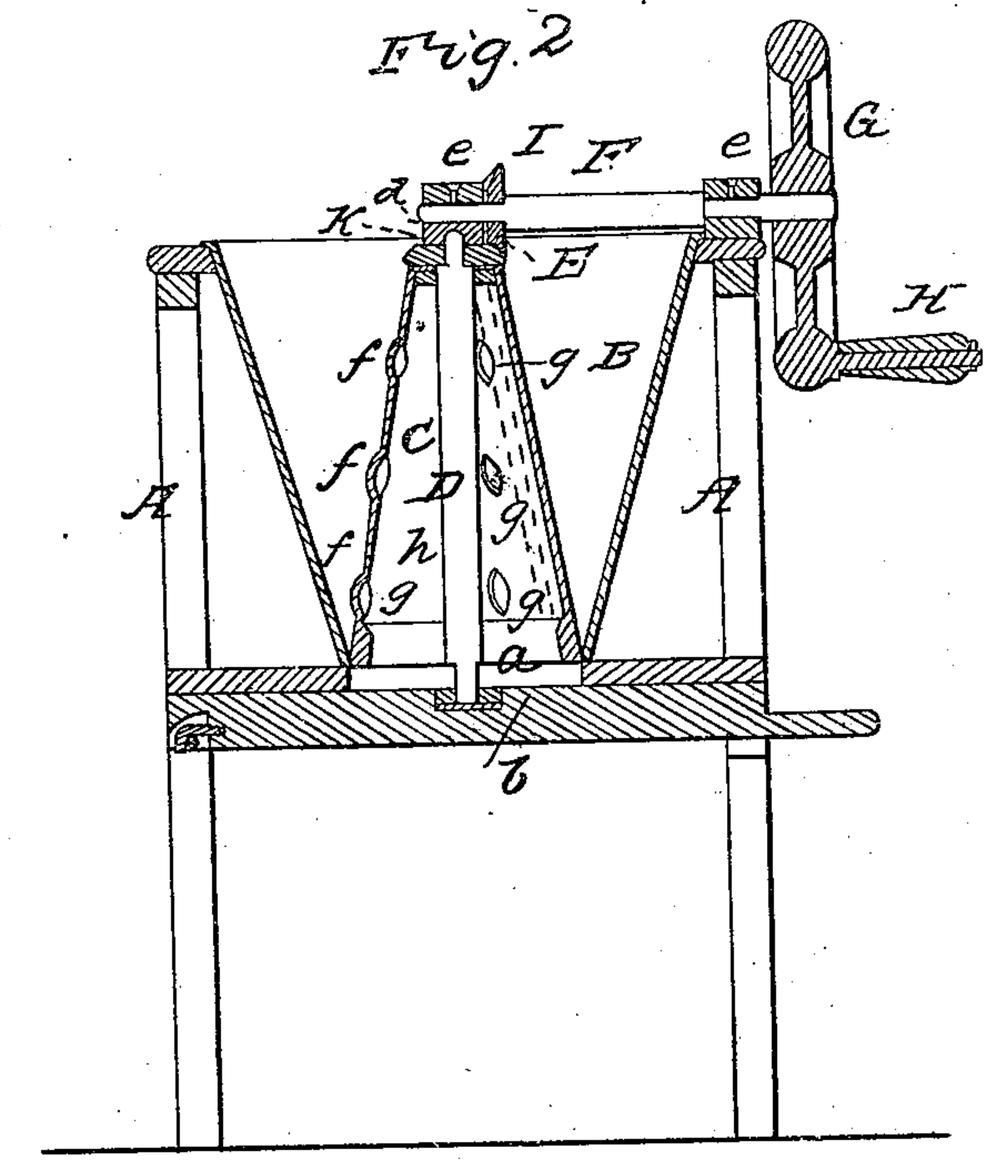
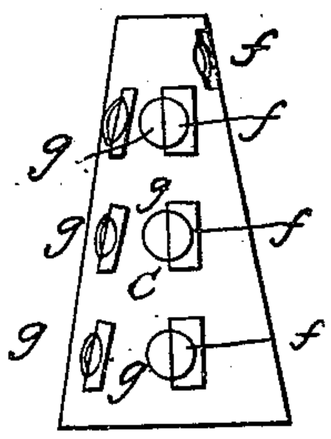


Fig. 3



Witnesses

R. F. Ralph

Frederick Cates.

Inventor

A. H. Wellington

by his attorney

R. H. Eddy

UNITED STATES PATENT OFFICE.

AMOS H. WELLINGTON, OF WOODSTOCK, VERMONT.

IMPROVEMENT IN VEGETABLE-CUTTERS.

Specification forming part of Letters Patent No. **40,971**, dated December 15, 1863.

To all whom it may concern:

Be it known that I, AMOS H. WELLINGTON, a resident of Woodstock, in the county of Windsor and State of Vermont, have invented an Improved Vegetable-Cutter, or Machine for Reducing Vegetables, Roots, &c.; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, and Fig. 2 a vertical section, of it.

The nature of my invention or improvement consists in a combination and arrangement of a vertical conical hopper, two detainers or cutting-boards, and a vertical hollow cone provided with knives or cutters having throats opening into the interior space of the cone, whereby the portions cut from the vegetables in the hopper will be caused to pass through the throats and through and out of the hollow cone.

In the drawings, A denotes the stand or frame of the machine and having within it and supported by it a vertical conical frustum or hopper, B, whose narrower end is downward, such hopper being open at each end. Within this hopper is the cutter-cone or hollow conical frustum C, which has a vertical shaft, D, extending through it, and, being pivoted into a step, *a*, supported by a cross-bar, *b*, arranged below the hopper. The larger end of the frustum C is open and placed at the bottom of the hopper and has a diameter equal to or a little less than that of the interior of the lower end of the said hopper. Furthermore, the shaft D at its upper end has a journal, *c*, which works in a bearing, *d*, supported by a cross-bar, E, which extends over the top of the hopper and serves to support one of the boxes *e e*, of another or horizontal driving-shaft, F, which is arranged and provided with a fly-wheel, G, having a crank, H, as shown in the drawings. A beveled gear, I, carried by the shaft F, engages with another beveled gear, K, fixed on the upright shaft D. The cutter-cone C (a side view of which is shown in Fig. 3) is furnished on its outer surface with a series of gouges or cutters, *f f f*, each of which is placed over a hole or throat, *g*, which leads directly through the rim or shell and into the internal space, *h*, of the said cutter-cone. Each of the said cutters *f* is so disposed with respect to the cutter-boards L as to be sharpened by coming in contact with the dirt which may accumulate on the vertical edges of the said boards, thereby being rendered self sharpening. On opposite sides of the said cutter-cone and extending down within the hopper are two detainers or cutting-boards, L L, each of which consists of a board or plate which at its upper end is fastened to the cross-bar E. Each of these detainers or cutting-boards is further arranged so as to stand tangentially, or about so, to the outer surface of the cutter-cone. This causes each detainer or cutting-board to stand in a plane inclined in two directions to the axis of the cutter-cone, the inclinations being highly favorable to the proper presentation to the cutters of the vegetables or matters to be reduced by them.

By laying hold of the crank of the fly-wheel and revolving the latter, the cutter-cone will be put in rotation.

When the hopper is supplied with vegetables, placed in the spaces on each side of each of the detainers or cutting-boards, and the cutter-cone is set in revolution, the said vegetables will be cut or reduced by the cutters and will pass through the throats of the cutters and into and through the cutter-cone, and be discharged out of its lower end.

By having two detainers or cutting-boards the amount of work performed by the cutters will be doubled, or at any rate greatly increased beyond what would be effected by the employment of only one detainer or cutting-board in the hopper. Furthermore, the arrangement of each of the detainers or cutting-boards is such that it contributes, through the action of gravity, to direct the vegetables to be cut toward the other detainer or cutting-board, which will retain them against the cutters while they are performing their office.

The machine, constructed as described, has been found in practice to be highly serviceable and to possess many important advantages over various other machines for like purposes.

I do not claim a hollow cone provided with cutters and arranged within a hopper, and with its axis horizontal, or about so, and working

with one detainer only, or its equivalent, arranged horizontally, the same being as shown in the application for a patent made by E. Moody, rejected May 9, 1853.

I claim—

My improved machine or combination and arrangement of the vertical conical hopper B, the two detainers or cutting-boards, L L, and a vertical hollow cone or frustum, C, provided with knives having throats opening into the interior space or chamber of the said cone or frustum, the whole being substantially as and for the purpose and to operate as hereinbefore specified.

A. H. WELLINGTON.

Witnesses:

LEWIS PRATT,

GARDNER C. HAWKINS.