

(No Model.)

E. GILMORE.
GRATER.

No. 571,358.

Patented Nov. 17, 1896.

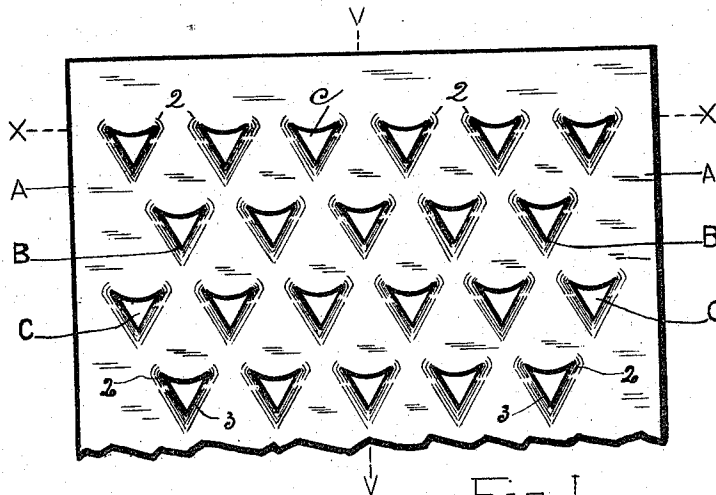


Fig. I.

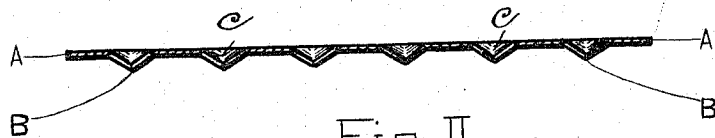


Fig. II.

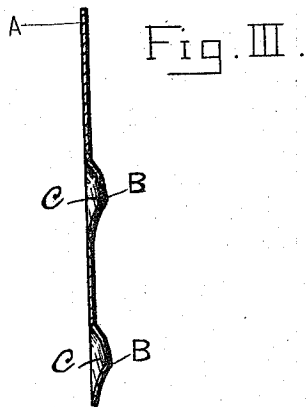


Fig. III.

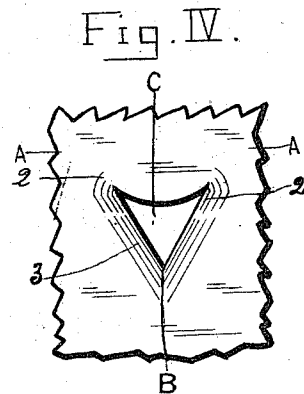


Fig. IV.

Witnesses
B. E. Herald
Lester Thompson

Inventor
Evangeline Gilmore.
By her Attorney,
John H. Hendry

UNITED STATES PATENT OFFICE.

EVANGELINE GILMORE, OF HAMILTON, CANADA.

GRATER.

SPECIFICATION forming part of Letters Patent No. 571,358, dated November 17, 1896.

Application filed February 20, 1896. Serial No. 579,991. (No model.)

To all whom it may concern:

Be it known that I, EVANGELINE GILMORE, a citizen of Canada, and a resident of Hamilton, in the county of Wentworth and Province of Ontario, Canada, have invented new and useful Improvements in Graters, of which the following is a specification.

My invention relates to improvements in a grater, the face of which may be either flat or convex, having a number or series of raised cutters or graters which form and are a part of said grater and formed with apertures through each said cutter. These raised cutters are of an acute angle in shape the root or point of angle being the lower part of each cutter, as shown, this being preferable to any other design, the angle cutting part of each of the series of graters alone being raised above the plane or face of the grater plate, and having sloping sides. When grating, the downward stroke alone is effective.

The objects of my improvements are to provide a grater that will grate or reduce or pulverize various kinds of spices, and more especially to reduce to pulp or small parts various kinds of vegetables or fruit, such as carrots, potatoes, lemons, and oranges, in a speedy and perfect manner, the said apertures of the raised cutter remaining open and free. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a face elevation of a large and very open grater, the lower part of which is broken away, showing a number of the raised graters or cutters, their cutting parts or edges being formed by their apertures. Fig. 2 is a sectional view of the same through the horizontal line X X. Fig. 3 is a sectional view of Fig. 1 through the vertical line V V. Fig. 4 is a face elevation of a piece of the grater, on an enlarged scale, to show the constructive formation of one of a series of the raised cutters with aperture.

Similar letters refer to similar parts throughout the several views.

In the drawings, A is the light metallic grater-plate, which may be of convex form or perfectly flat, as delineated, B are the raised graters or cutters, which form a part of said plate, and C are the apertures, as shown when

punched or stamped out, thus forming the angle-shaped cutters.

It will be observed that in order to grate with this device the vegetable or fruit must be brought downward upon the grater, therefore engaging with the several cutters.

On account of the particular shape and raised construction of the cutters the same cuts very fine and clean, without any improper clogging or obstruction of the apertures or openings C, this being very important.

The most important part is the acute-angle cutters, the projecting or raised cutting part of which must be raised above the face of the grater-plate without the least obstruction, the outer part 2 of each cutter slightly sloping to the face of the plate; and the outer part 3 of the angle cutters gradually slope to the face of the plate, therefore leaving the edges of the angle cutters free, the roots of the angles being the lower part. These upper and side sloping parts of the angle cutters give firmness and strength to the same and also to the grater-plate. This plate, with its raised cutters and apertures, is formed by means of punching into this particular shape for grating purposes, the rear of the plate conforming in shape to its face, as delineated, the said apertures C being through the raised parts and sloping rearward in conformity therewith, as defined, the double-inclined straight cutting edges rising from the plane of the plate and meeting in an apex at the rear end of the perforations, thereby producing a uniform shear cutting of the material and a final clean severance of the shaving at the rear edge.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a grater, the metallic plate, having punched through it the substantially triangular apertures C, each aperture having the raised lateral inclined cutting edges, rising from the receiving end toward and joining at the rear or apex of the triangle, to give a shear cut and a clean final severance of the grated material, substantially as set forth.

EVANGELINE GILMORE.

Witnesses:

JOHN H. HENDRY,
B. E. HERALD,