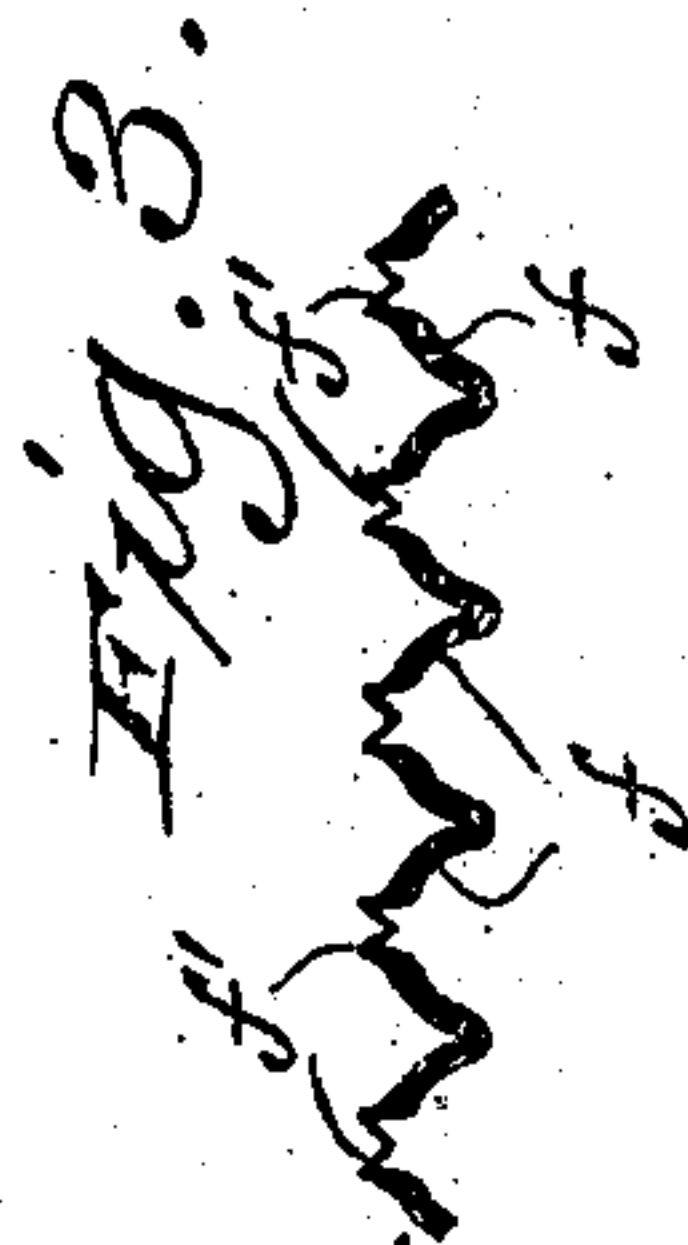
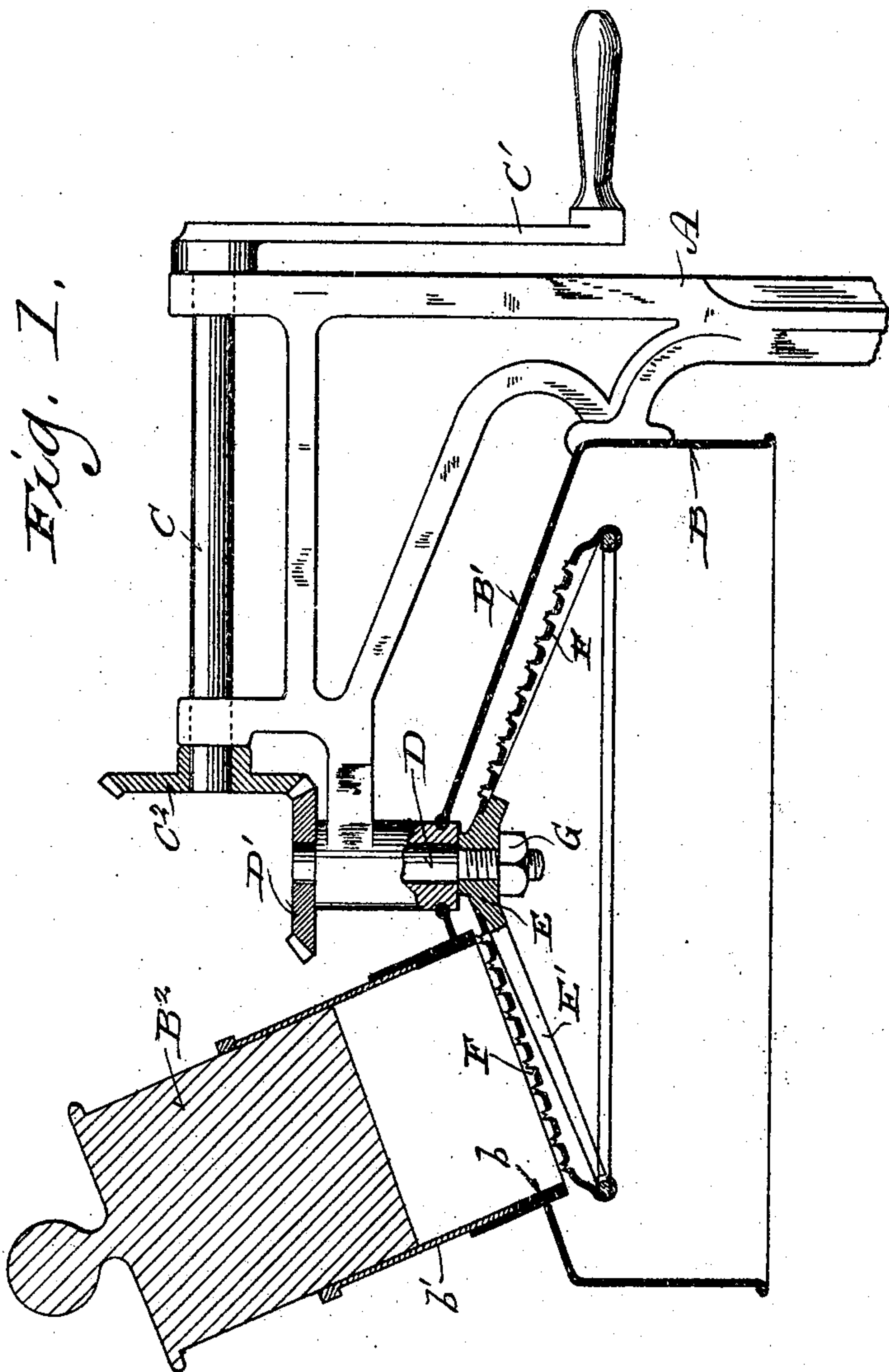


(No Model.)

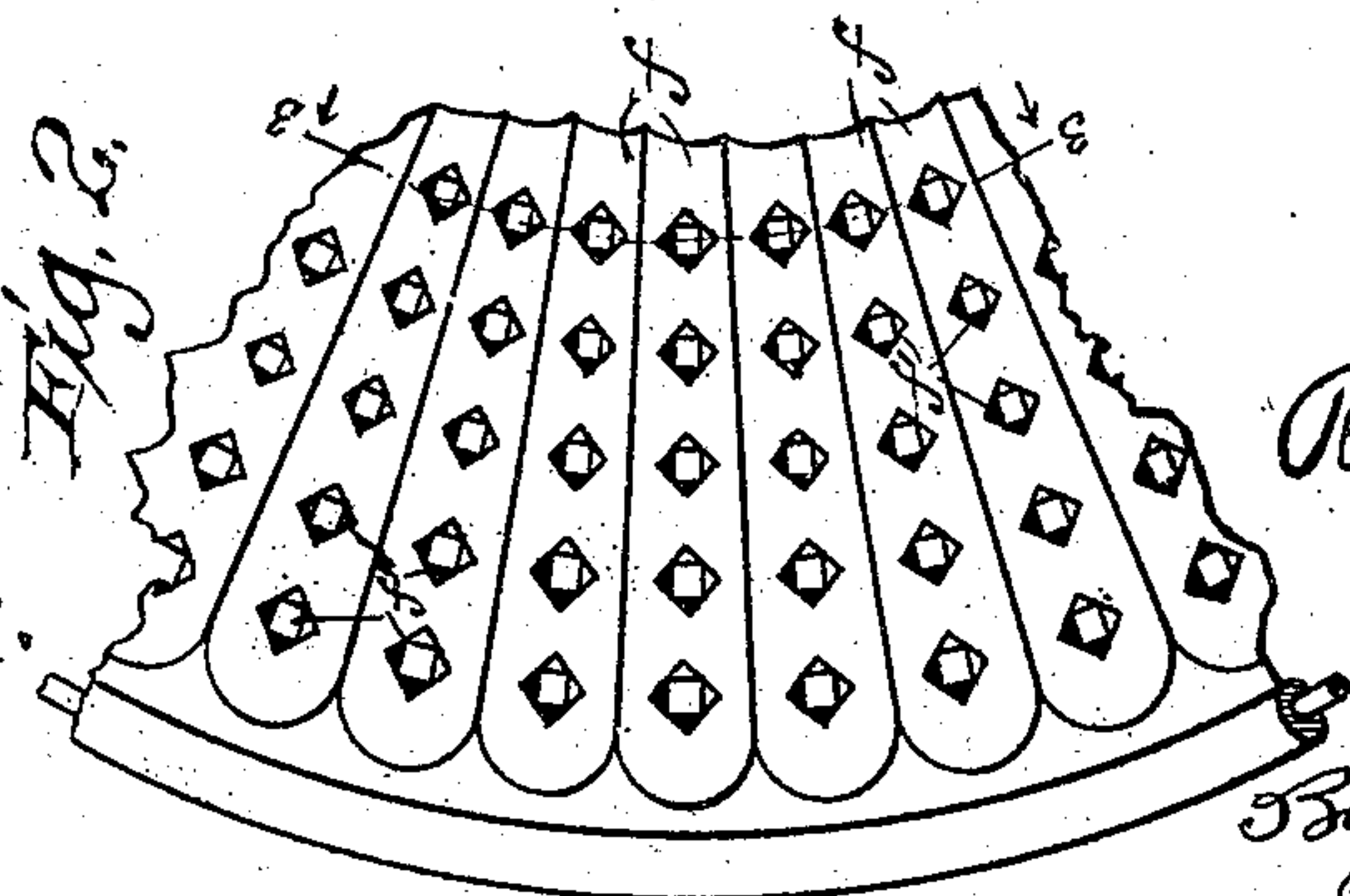
R. OLP.  
VEGETABLE GRATER.

No. 502,527.

Patented Aug. 1, 1893.



Witnesses  
Geo W. Young  
John C. Miles.



Inventor  
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Attorneys



# UNITED STATES PATENT OFFICE.

ROBERT OLP, OF MANITOWOC, WISCONSIN.

## VEGETABLE-GRATER.

SPECIFICATION forming part of Letters Patent No. 502,527, dated August 1, 1893.

Application filed April 8, 1893. Serial No. 469,511. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT OLP, a citizen of the United States, and a resident of Manitowoc, in the county of Manitowoc, and in the State of Wisconsin, have invented certain new and useful Improvements in Vegetable-Graters; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to new and useful improvements in vegetable graters and consists in the matters hereinafter described and pointed out in the appended claims.

In the accompanying drawings illustrating my invention: Figure 1 is a vertical sectional view of my improved device. Fig. 2 is a fragmentary plan view of a part of the revoluble grater. Fig. 3 is a detail sectional view of the same.

In said drawings: A designates a suitable standard or support which may be provided at its lower end with any suitable means for engagement with the edge of a table or other support, and B a suitable housing preferably of a shallow, cylindrical form and provided with a top B' constructed in the form of an obtuse cone having a suitable feeding aperture *b* to which is fitted a spout or hopper *b'* within which a plug or follower B<sup>2</sup> is arranged.

Upon the frame A is journaled a horizontally disposed shaft C, provided upon one end with an operating crank C' and carrying at its other end a bevel gear C<sup>2</sup>. A vertically disposed shaft D is revolubly journaled in the frame A and carries upon its upper end a suitable bevel gear D' arranged to mesh with the gear C<sup>2</sup> and extending through the top of the housing B and having operative connection with the rotary grater. The grater comprises a central support or hub E, engaged with the shaft D in the manner shown and carrying a suitable frame E' to which the grater proper is secured. This grater F is formed from a sheet of metal stamped up into a generally conical shape and with its inclined walls arranged upon an angle corresponding with the inclination of the top B' of the casing B, and is further provided with radial corrugations or ribs *f f* as shown more particularly in Figs. 2 and 3. Along each of these radial corrugations or ribs the metal forming the grater F is provided with a row of perfora-

tions *f' f'* and the edges of the metal around these perforations are bent up so as to afford sharp corners, in the usual manner.

As shown in Fig. 1, the grater F is arranged to revolve horizontally with its upper face in close proximity to the feeding aperture, so that any material fed through said aperture will be acted upon by said grater and finely divided.

By the described construction of the grater with the radial corrugations or ribs, all of the finely divided or grated material which is not forced through the apertures or perforations in the grater, is permitted to gravitate toward the outer periphery of the grater, from which it drops into a receptacle which may be placed below the housing. In this manner the grater is effectually prevented from becoming clogged or filled up with the grated material.

As shown in the drawings, the frame E' to which the grater is secured, is secured to the shaft D, by means of a nut G, having screw threaded engagement with the lower end of said shaft, and by this construction, the grater may be readily detached from the shaft D and removed from the housing for the purpose of cleaning.

While I have shown and described my improved grater as provided with the horizontally disposed housing and the horizontally revoluble grating tool, yet I would have it understood that I do not desire to limit myself to the exact form of construction shown, as the position and arrangement of said parts may be varied without departure from my original invention, and the grater and the housing might be arranged in a vertical instead of a horizontal position if preferred.

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

1. A vegetable grater comprising a suitable frame or support, a housing secured thereto and provided with a suitable feeding aperture, a drive shaft journaled in said frame or support, and a revoluble grater journaled within said housing and operatively engaged with said shaft, said grater being provided with radial corrugations or ribs each having a series of perforations and abrading edges or points, substantially as set forth.

2. A vegetable grater comprising a suitable

frame or support, a housing secured thereto  
and having its top in the form of an obtuse  
cone, provided with a suitable feeding aper-  
ture, a drive shaft journaled in the frame or  
5 support and a grater revolubly supported  
within said housing and operatively connected  
with said drive shaft, and also constructed in  
the form of an obtuse cone, having its inclined  
walls upon an angle corresponding with the  
10 incline of the top of the housing and provided  
with a series of radial corrugations or ribs,

each having a row of perforations and abrad-  
ing edges or points, substantially as set forth.

In testimony that I claim the foregoing I  
have hereunto set my hand, at Manitowoc, in 15  
the county of Manitowoc and State of Wis-  
consin, in the presence of two witnesses.

ROBERT OLP.

Witnesses:

LOUIS C. SENGLAUB,  
CARL E. SCHMIDT.