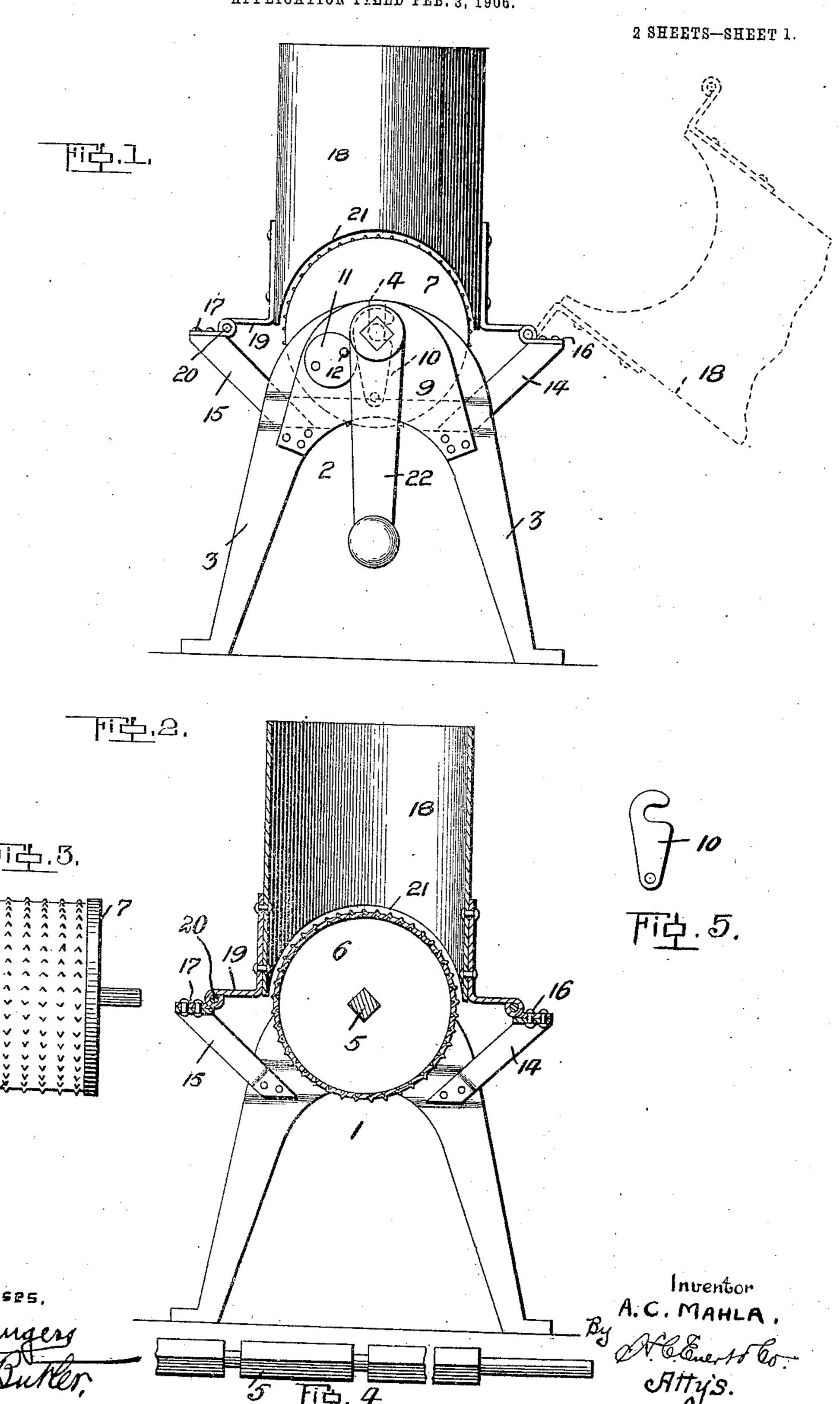
A. C. MAHLA.

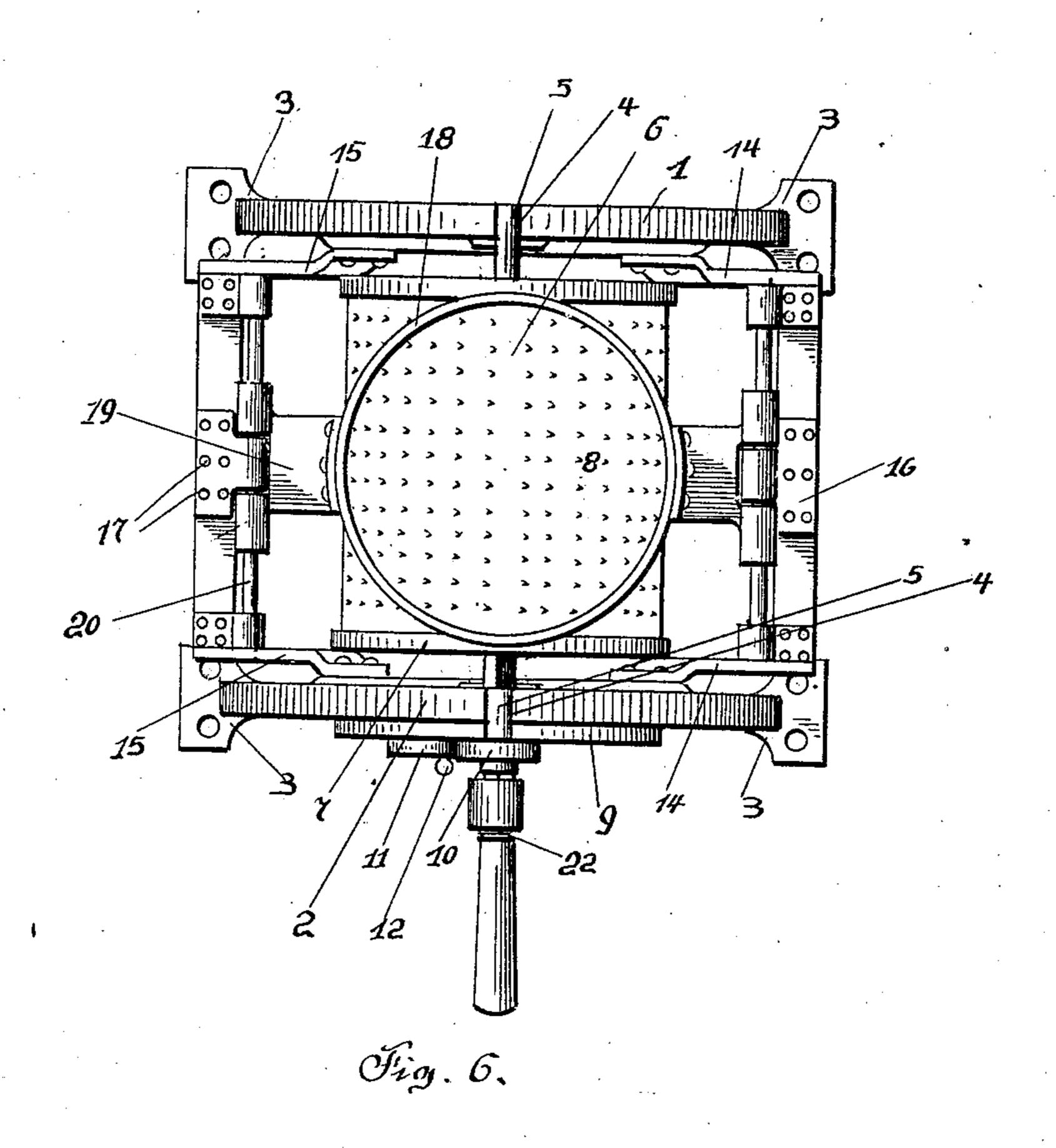
GRATER.

APPLICATION FILED FEB. 3, 1906.



## A. C. MAHLA. GRATER. APPLICATION FILED FEB. 3, 1906.

2 SHEETS-SHEET 2



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## UNITED STATES PATENT OFFICE.

## ANDREW C. MAHLA, OF OAKMONT, PENNSYLVANIA.

## GRATER.

No. 835,285.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed February 3, 1906. Serial No. 299,295.

To all whom it may concern:

Be it known that I, Andrew C. Mahla, a citizen of the United States of America, residing at Oakmont, in the county of Alle-5 gheny and State of Pennsylvania, have invented certain new and useful Improvements in Graters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in graters; and the invention relates more particularly to a grater employed for culinary purposes, such as nutmeg-graters, shredders, and vegetable crush-

15 ers or mashers.

The primary object of this invention is to provide a novel form of machine wherein various kinds of vegetables and cereals may be disintegrated into small particles, the ma-20 chine being so constructed that a large quantity of vegetables or cereals may be operated upon. In this connection I have devised a machine which will prevent the vegetables or cereals from being scattered while being 25 reduced to small particles within the machine, said machine forming a novel housing, in which the vegetables or cereals are placed, also a receptacle to receive the disintegrated vegetables or cereals.

The machine which I have constructed can also be used for crushing vegetables, as potatoes, and the simplicity of construction employed permits of the machine being easily and quickly cleansed after each operation.

The invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed, and referring to the drawings, accompanying this application, like numer-40 als of reference designate corresponding parts throughout the several views, in which—

Figure 1 is an end view of my improved grating-machine, showing the hood of the same swung open in dotted lines. Fig. 2 is a 45 vertical sectional view of my grating-machine. Fig. 3 is a fragmentary elevation of a portion of the disintegrating drum or cylinder used in connection with the machine. Fig. 4 is a side elevation of a shaft used in 50 connection with the machine. Fig. 5 is a front elevation of a hook-shaped member, and Fig. 6 is a top plan view of a grating-machine constructed in accordance with my invention.

To put my invention into practice, I con-55 struct my improved machine of two supports 1 and 2, having depending legs 3. The up-

per ends of the supports are provided with slots 4, and in said slots is journaled a shaft 5, which is rectangular throughout its length except where it rests in the slots 4 4 of the 60 supports 1 and 2, that portion of the shaft being cylindrical. Upon the shaft 5 between the supports 1 and 2 is mounted a drum or cylinder 6, having a detachable end plate 7, whereby the interior of the drum or cylinder 65 can be easily and quickly cleansed at any desired time. The periphery of the drum or cylinder is provided with a roughened or toothed surface 8, preferably formed by providing the cylinder with indentations or 70 stamping the cylinder to form outwardlyextending teeth, such as shown in Figs. 2 and 3 of the drawings.

The support 2 is provided with an outwardly-extending bracket 9, having a slot 75 formed therein similar to the slots 4 of the supports. The shaft 5 rests within the bracket 9 and is retained within the support 1 and said bracket by a hook-shaped member 10, pivotally mounted upon said bracket and 80 held in engagement with the shaft 5 by an eccentrically-mounted plate or disk 11, said disk being mounted adjacent to the hookshaped member 10 and provided with a handle 12, whereby the disk can be easily swung 85 into and out of engagement with the hook-

shaped member.

The supports 1 and 2 are provided with outwardly-extending arms 14 14 and 15 15, the arms 14 14 being secured together by a 90 hinged member 16, while the arms 15 15 are secured together by a hinged member 17. Hinged to the member 16 is a vertically-disposed hood or chute 18, the opposite side of which is provided with a hinged member 19, 95 whereby it can be fixed in engagement with the hinged member 17 by a pin 20. The lower edges of the hood or chute are cut away, as at 21 21, to fit over the drum or cylinder 6 of the machine.

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To operate my improved machine, I provide the shaft 5 at its one end, preferably at the side of the bracket 9, with a crankhandle 22, and when this crank-handle is rotated a rotary movement will be im- 105 parted to the drum or cylinder 6. When vegetables or cereals are placed within the hood or chute, said vegetables will contact with the roughened toothed surface 8 of the revoluble drum or cylinder and will be disin- 110 tegrated and precipitated into a suitable receptacle (not shown) placed between the

supports 1 and 2 beneath the drum or cylinder 6. A portion of the vegetables or ingredients being disintegrated will enter the cylinder 6; but the cylinder 6 can be readily cleansed at any desired time by moving the hood or chute 18 rearwardly, as shown in dotted lines in Fig. 1 of the drawings, and releasing the hook-shaped members 10 10, which permits of the shaft 5 and the cylinder or drum being removed, at which time the end plate of the cylinder can be removed to cleanse the interior thereof.

The machine in its entirety is preferably constructed of strong and durable metal, and when constructed upon a large scale may be operated from a motor or any suitable source

of energy.

Such changes in the construction and operation of the grater as are permissible by the appended claim may be resorted to without departing from the spirit and scope of the invention.

What I claim, and desire to secure by Let-

ters Patent, is—

A grater comprising a pair of supports slotted at their upper ends, and having support-

ing-legs, a bracket secured to one of said supports and having a slot registering with the slot in the support, arms extending outwardly at an angle from opposite sides of the 30 supports, a hinge member securing the arms on one side of the supports together, a hood hinged to said hinge member, a second hinge member securing the arms on the opposite side of said supports together, means for se- 35 curing said hood to said second hinge member, a shaft journaled in the slots in said supports and in the slot of said bracket, and having a crank on one end, a grating-cylinder carried by said shaft, the hood being cut 40 away on its lower face to conform to the cylinder, a fastening device pivoted to said bracket and engaging the shaft for holding the latter in the slots of said supports, substantially as described.

In testimony whereof I affix my signature

in the presence of two witnesses.

ANDREW C. MAHLA.

Witnesses:

E. E. POTTER, H. C. EVERT.