

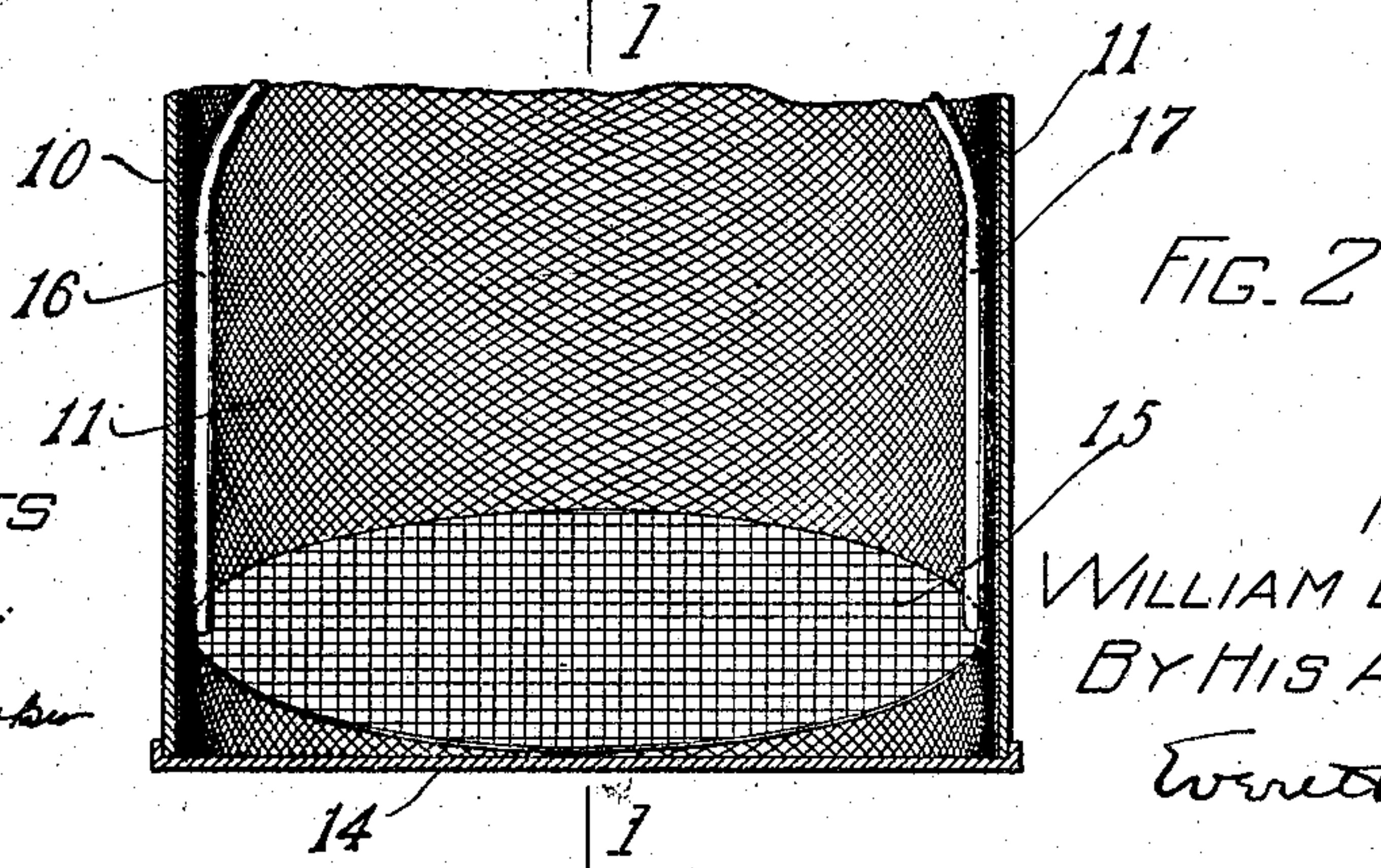
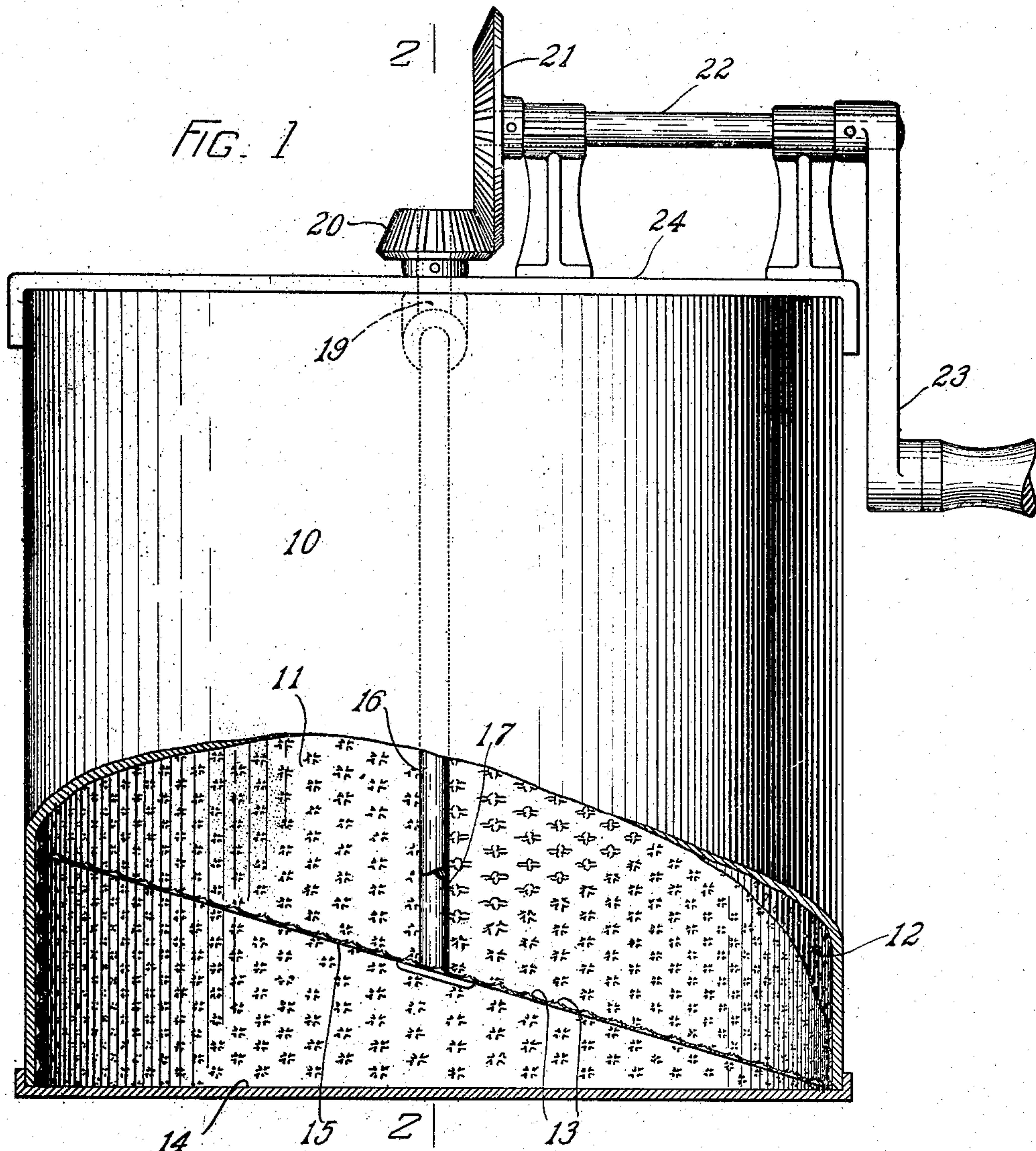
W. L. WEBER.

DECORTICATOR.

APPLICATION FILED MAY 16, 1907.

930,511.

Patented Aug. 10, 1909.



WITNESSES
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DECORTICATOR.

No. 930,511.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed May 16, 1907. Serial No. 373,987.

To all whom it may concern:

Be it known that I, WILLIAM L. WEBER, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Decorticators, of which the following is a specification.

This invention relates to decorticators.

More particularly, it relates to apparatus for removing the skin from potatoes and other vegetables.

The invention is related in subject matter to that shown and claimed in my co-pending application Serial #373,986.

The particular purpose of the invention is to provide apparatus suitable for household use, and to this end the object is to make apparatus of inexpensive construction and of simplicity and speed in operation. I believe that in all of these respects the apparatus herein described is an improvement over other apparatus which has been previously used; and this is accomplished by providing a receptacle, preferably cylindrical in form with its axis upright, having walls of "stabbed" material, or other suitable decorticator, and having a rotating bottom of like material arranged in the form of an inclined surface extending across the cylinder.

In the accompanying drawings Figure 1 represents one embodiment of the invention showing an elevation of apparatus in which the receptacle is represented as broken away to the plane 1—1 of Fig. 2. Fig. 2 represents diagrammatically a portion of the same apparatus, in section on the plane 2—2 of Fig. 1, except that the inclined bottom is shown complete, not sectioned.

In the drawings: 10 represents a cylindrical receptacle, in which a cylindrical lining 11 is set. This lining is preferably formed of stabbed material, the structure of which is shown in Fig. 1, where the front surface 11 and the back surface 12 of the material are seen. This material consists of a sheet of metal stabbed or punched by an instrument which pierces it from one side, bending up sharp corners 13 at each hole where the instrument pierces it. While this form of decortivating material is preferred, it will be obvious that any other suitable form may be used. Above the bottom 14 of the receptacle is a false bottom 15, also preferably formed of stabbed material, and arranged at an incline to the receptacle. If

the sides of the receptacle be cylindrical and this inclined bottom be a plane, it will have an elliptical form. As represented in the drawings, this is supported by two side arms 16, 17, which are arms of a fork uniting at the upper part of the receptacle into a single shaft 19, which has a beveled gear 20 driven by another beveled gear 21, and shaft 22 and crank 23. These driving parts are mounted on a strap or cover 24 set across the top of the receptacle. The shaft 19 is also supported from this strap 24, the hub of gear 20 forming a shoulder. Thus, the inclined bottom 15, the arms 16, 17 supporting it, and the shaft 19, are all removable from the receptacle, with the strap 24 and driving mechanism thereon. The lining 11 may also be removable if desired. Upon rotation of the crank 23 and shaft 22 the inclined bottom 15 is rotated about the axis of shaft 19, which is the axis of the receptacle, the lining 11 remaining stationary.

In operation, a small amount of water is placed in the receptacle, and a quantity of potatoes or other vegetables. Crank 23 is then rotated in either direction desired. An interaction between the rotating inclined bottom, the stationary walls, and the water and the solid contents then results, in the course of which the individual potatoes are formed, with the water, into a mass which rises relatively high on the upright walls, and travels around in contact therewith. Individual potatoes rise through this mass in contact with the decortivating surface of the receptacle wall, fall from the top to the inclined plane, whence they rebound or are thrown back into the bottom of the mass and toward the cylindrical walls under their fellows, whence they are in turn pushed upward by succeeding quantities of water and individual potatoes which undergo the same experience. The potatoes impale themselves to a slight degree upon the decortivating surface of the inclined bottom, but owing in part to its inclination and to its movement they are thrown from it, and in this respect the slight impaling upon the points assists. The rapid succession of impacts of each individual potato against various sharp points of the decortivating surface removes minute bits of the skin, and the rush of water loosens and removes these bits both from the potato and from the impaling point, keeping the points always free, clear and sharp for

action. Owing to the location of the arms of the fork at the sides midway of the incline, they assist in driving the body of potatoes and water around the inner wall of the receptacle, and at the same time afford a perfectly free inner space from wall to wall; and do not themselves obstruct the path of any potatoes which are in the act of being thrown from the inclined surface to the wall, as they are at the extreme edges of said incline, the entire area of the incline being embraced between them, as is clear in Fig. 2.

While I have shown and described herein the form of this invention which I prefer, it is obvious that variations may be made from the structure here shown without departing from the scope of the invention.

I claim:

1. A receptacle having a rotatable bottom, inclined in the direction of its rotation, in combination with walls of decorticating material, and means to rotate the bottom.

2. A receptacle, having a bottom rotatable with respect to the walls and inclined in the direction of its rotation, and walls having a circular interior surface of decorticating material.

3. A receptacle, having a rotatable bottom, inclined in the direction of its rotation; circular walls rising close therefrom, having an interior surface of decorticating material;

supporting arms rising from the edges of the bottom; an axial shaft to which the arms are joined in the upper part of the receptacle, and means to support and rotate said shaft.

4. A receptacle, having a rotatable bottom, inclined in the direction of its rotation with a decorticating upper surface, and circular walls rising close to its periphery, having a surface of decorticating material.

5. A receptacle, having a rotatable bottom, inclined in the direction of its rotation, with a decorticating upper surface, circular walls having an interior surface of decorticating material; supporting arms rising from the periphery of the bottom approximately at its widest level; and means to rotate these arms about the axis.

6. A receptacle, having interiorly at the bottom a plate having a plane upper surface inclined to the vertical, and means to rotate the plate about a vertical axis, there being walls of decorticating material surrounding the path of rotation of the edge of said plate.

In testimony whereof I hereto affix my signature, in presence of two witnesses.

WILLIAM L. WEBER.

Witnesses:

ELLIOTT B. CHURCH,
EVERETT E. KENT.