

S. B. ARCHER.
 POTATO PEELING MACHINE.
 APPLICATION FILED JUNE 9, 1905.

999,478.

Patented Aug. 1, 1911.

Fig. 1.

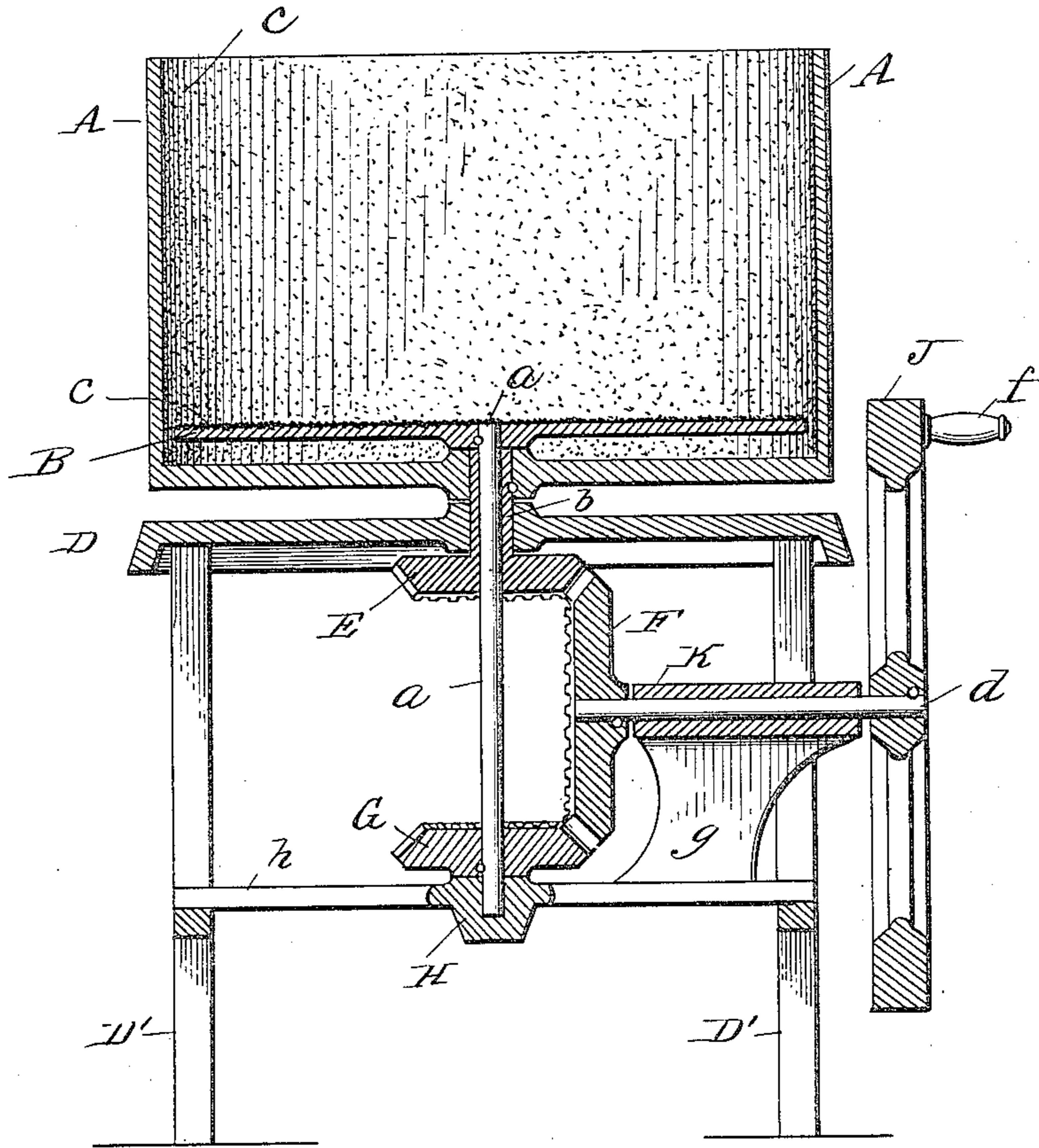


Fig. 2.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

SAMUEL B. ARCHER, OF SARATOGA SPRINGS, NEW YORK.

POTATO-PEELING MACHINE.

999,478.

Specification of Letters Patent.

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Application filed June 9, 1905. Serial No. 264,402.

To all whom it may concern:

Be it known that I, SAMUEL B. ARCHER, a citizen of the United States, residing at Saratoga Springs, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Potato-Peeling Machines, of which the following is a specification.

My invention relates to improvements in that class of vegetable and fruit peeling machines in which the peel is removed by a scouring action produced by the articles to be peeled being agitated against the abrading surfaces of the machine by centrifugal force and more especially in the abrading material used for lining, or coating the interior surfaces of the machine, and to so arrange and construct the machine that the articles to be peeled are constantly agitated in such manner as to bring all the parts of every article in contact with the abrading surfaces. To accomplish this result a machine of any suitable design may be used.

My invention relates essentially to the abrading material used in lining or coating such parts of the machine as come in contact with the articles to be peeled.

I am aware that several classes of abrading surfaces have been used in the construction of vegetable and fruit peeling machines, such as punctured metal, commonly used in horse radish and nutmeg graters, also brushes and striated or grooved metal, but I believe myself to be the first to use granulated flint, emery, corundum, carborundum and other like substances as an abrading surface for this class of machines, and the present success of this class of machines is due entirely to the use of a granulated abrasant for the peeling surfaces. To accomplish the desired result, my invention consists in coating or lining the parts of the machine coming in contact with the articles to be peeled with enamel, japan, asphalt, pitch, cement or any similar waterproof adhesive material and embedding in the face of such material a thick coating of granulated flint, emery, corundum, carborundum, or any similar material and burning, baking or drying the same thereon, or the granulated abrading material may be sprinkled over the face of the sand mold of the parts to be coated and then molten metal poured over the same.

It also consists of certain other details of construction which will be more fully de-

scribed and set forth in the following specification, reference being had to the accompanying drawing which shows a machine lined or coated on its interior surfaces with my granulated abrading material, and in which like letters refer to like parts in the different figures, in which:—

Figure 1 represents a longitudinal sectional view of the machine and Fig. 2 is an enlarged section of the disk, showing the granulated abrading surface more clearly.

In the drawing A is a metal cylinder, preferably made of iron or steel, which is open at the top, the bottom also having openings in it to allow the water and peelings to pass out into the sewer, and being connected to the hollow shaft *b*. This cylinder is lined or coated in the inside of its vertical walls with my improved granulated abrading material *c*, consisting of granulated flint, emery, corundum, carborundum or any similar abrasant, which is attached to the cylinder by any waterproof adhesive material such as enamel, japan, asphalt, pitch, cement or any similar material, or by spreading the abrading material over the face of the sand mold of the parts to be coated and then pouring the molten metal over the same.

B is a metal disk placed at the bottom of the cylinder and revolving at an angle to the vertical walls of the cylinder. The top surface of this disk is also coated with my granulated abrasant the same as the inside of the cylinder.

D is a stand or table having a suitable number of legs *D'* which support the machine.

b is a hollow shaft or sleeve by which the cylinder A is attached to the gear E.

a is a shaft, which is attached to the disk B, passing through the sleeve *b* and connects with the gear G and supported at the bottom by the step H on a cross-plate *h* of the table. The gear F is attached to the shaft *d*, which passes through the bearing K and is attached to the balance wheel J. The bearing K is attached to the cross-plate *h* by the web *g*.

f is a handle for operating a hand machine, but any other power may be used as desired.

To operate my machine the power is first applied to the balance wheel or driving pulley J, which transmits the power through the shaft *d* to the gear F which in turn re-

volves the gear E in one direction and operates the cylinder A with it and at the same time revolves the gear G in the opposite direction which likewise operates the disk B at an angle with the sides of the cylinder A. As soon as the machine is in motion, the articles to be peeled are thrown in at the top of the cylinder and fall onto the disk B, the centrifugal motion of which starts the articles toward the outside of the disk, as soon as they reach the edge of the disk, they come in contact with the side of the cylinder which starts them revolving in the opposite direction. The abrading surface of the disk and cylinder keeps the articles revolving all the time and soon removes the surface of the articles.

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

1. A machine for peeling potatoes, provided with a metal cylinder, having a metal disk at or near the bottom and revolving at an angle to the sides thereof, and having their interior surfaces lined or coated with a granulated abradant, in combination with mechanism for operating the same. 25

2. A machine for peeling potatoes, provided with a metal cylinder, having a metal disk at or near the bottom thereof and revolving at an angle to the sides thereof, and the top surface of said disk being coated with a granulated abradant, in combination with mechanism for operating the same. 30

In testimony whereof I affix my signature in presence of two witnesses. 35

SAMUEL B. ARCHER.

Witnesses:

EDWIN L. YEWELL,
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