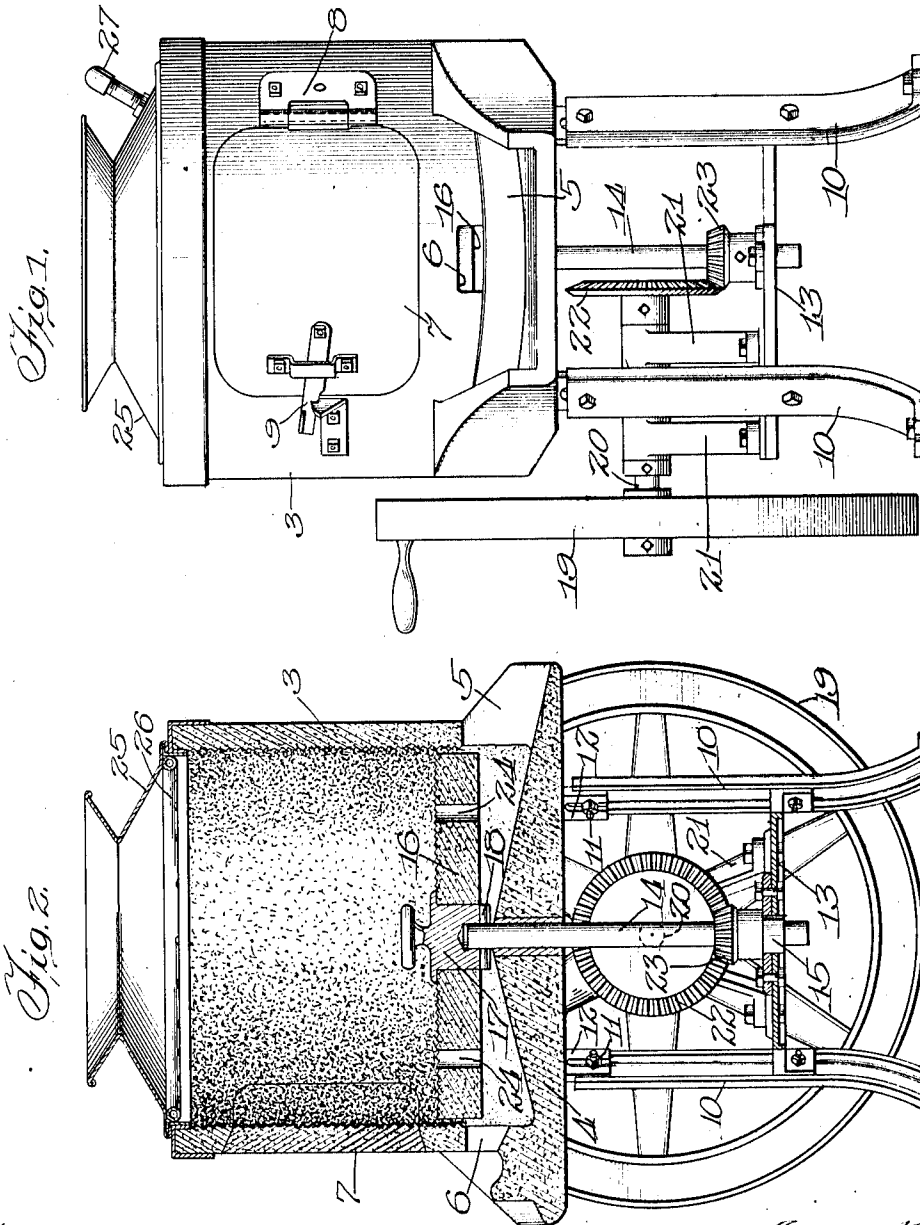


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 POTATO PEELING MACHINE.  
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1,035,771.

Patented Aug. 13, 1912.



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# UNITED STATES PATENT OFFICE.

GEORGE S. BLAKESLEE, OF CHICAGO, ILLINOIS.

## POTATO-PEELING MACHINE.

1,035,771.

Specification of Letters Patent.

Patented Aug. 13, 1912.

Application filed January 20, 1910. Serial No. 539,144.

*To all whom it may concern:*

Be it known that I, GEORGE S. BLAKESLEE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Potato-Peeling Machines, of which the following is a specification, reference being had to the accompanying drawings.

10 My invention relates to potato peelers, and it has for its object to provide a new and improved machine by which potatoes may be expeditiously and effectively peeled without excessive waste, and which will be 15 cheap and substantial in construction. I accomplish this object as illustrated in the drawings and as hereinafter described.

What I regard as new is set forth in the claims.

20 In the drawings,—Figure 1 is an elevation of my improved machine; and Fig. 2 is a central vertical section thereof.

My improved machine belongs to the type of potato peelers in which the peeling is removed by agitating the potatoes in contact with an abrasive surface. The best machine heretofore constructed of this type, so far as I am aware, comprises a cylindrical receptacle having a bottom adapted 30 to rotate about a vertical axis which is concentric with the receptacle so that a mass of potatoes resting upon the bottom are tumbled about therein by the rotation of the bottom plate. The cylindrical walls of the 35 receptacle are made of cast-iron or steel having a facing of some abrasive material such as particles of flint or other granular matter adapted to abrade the surface of the potatoes and remove the peeling therefrom. 40 Provision is also made for the escape of water which carries with it the ground off peelings.

While this general construction has proven quite satisfactory in practice so far 45 as the removal of the peelings is concerned, devices of this character as heretofore constructed have been quite unsatisfactory because they have been short-lived, the abrading surface wearing out quickly, and owing 50 to its being secured to the inner surface of the metallic shell or cylinder it disintegrates rapidly and destroys the efficiency of the apparatus.

My improved peeler is in many respects 55 similar in construction to that above described, but differs therefrom in the im-

portant respect that instead of making the cylinder or receptacle of cast-iron and providing it with an abrading surface attached thereto, I provide the receptacle with a wall 60 formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of a softer cementitious material, and in the best embodiment of my invention I make the re- 65 ceptacle throughout of such material. In like manner the bottom-plate is composed of the same composition, so that the abrasive surfaces last as long as the machine lasts. As the cylinder or receptacle and 70 bottom-plate may be made of any desired thickness it will be apparent that my improved machine is made practically indestructible through wear.

So far as I am aware, no one has heretofore proposed to provide a potato peeling machine with a wall formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of a softer cementitious 80 material or a receptacle for the articles to be operated upon composed throughout of such material, and this constitutes the salient feature of my present invention.

Referring to the drawings for a description of the embodiment of my invention 85 therein shown,—3 indicates the cylindrical receptacle, in which the potatoes or other articles are placed. As shown in Fig. 2, said receptacle is an upright cylinder, the 90 walls of which are made of abrasive material which, as above explained, is composed of comminuted flint or other suitable hard substance mixed with cement. By this construction the walls of the receptacle are 95 made self-sustaining, and as the cement is softer than the flint or other abradant used and consequently wears away more quickly, the abrading surface is always effective. Moreover, the machine is practically inde- 100 structible through wear, as the walls may be made of any desired thickness and will be effective substantially until the wall is completely worn away.

4 indicates the bottom of the apparatus, 105 which is integral with the cylindrical portion 3 and is made of the same material. As shown in Fig. 2, the upper surface of the bottom 4 is inclined in opposite directions toward outlets 5—6 through which 110 water and peelings are discharged, as hereinafter described.

7 indicates a door hinged to the cylindrical portion 3, as shown at 8 in Fig. 1, and secured by a latch 9. The door 7 is also made of the same material as the cylinder 3.

10 indicates standards or legs which are connected to the bottom 4 and support the receptacle 3. Preferably the legs 10 are adjustably connected with the bottom by bolts 11 secured in slots provided in lugs 12 which depend from the bottom 4, as shown in Fig. 2.

13 indicates horizontal braces for the legs 10.

14 indicates an upright shaft mounted at its lower end in a suitable bearing 15 carried by the braces 13 and extending up through the bottom 4. At its upper end the shaft 14 carries the bottom-plate 16 which, as shown in Fig. 2, is also made of the abrasive compound used in making the cylinder 3. The bottom-plate 16 fits upon the upper end of the shaft 14, being provided with a central block 17 for that purpose. The block 17 has a transverse groove on its under side which receives a cross-pin 18 secured in the upper end of the shaft 14 so that when the block 17 is in place the bottom-plate 16 rotates with the shaft 14. It may, however, be readily removed by simply lifting it from its seat.

The shaft 14 is rotated by means of a hand-wheel 19 mounted on a horizontal shaft 20 supported by a bracket 21 mounted on the braces 13, said shaft carrying a beveled gear 22 which meshes with a pinion 23 mounted on and secured to the lower end of the shaft 14, as shown. By this construction, by rotating the hand-wheel 19 the shaft 14 may be caused to rotate rapidly, thereby rotating the bottom-plate 16.

24 indicates passages in the bottom-plate for the escape of water.

25 indicates a cover, which fits upon the upper end of the cylinder 3 and carries a water-pipe 26 adapted to discharge water into the cylinder. The water-pipe 26 is provided with an external connection 27 by which it may be connected with any suitable source of supply.

In use the potatoes, or other articles to be peeled, are placed in the cylinder, resting upon the bottom-plate 16 which is then caused to rotate, water being meanwhile supplied through the pipe 26. The rotation of the bottom-plate agitates the potatoes so that ultimately their entire surfaces are brought into contact with the abrasive inner face of the receptacle and with the upper surface of the bottom-plate, both of which surfaces operate to grind off the peeling. The peelings are removed in fine particles so

that they are carried out of the receptacle with the outflowing water.

It will be apparent that inasmuch as the operating faces of the apparatus are integral portions of the receptacle and not separate lining material applied thereto the apparatus does not deteriorate in operation but can be used effectively until it is completely worn out.

The wall composed of abrasive material and the bonding substance does not consist of a single layer of material, but comprises a body or mass through which the abrasive material is distributed, so that the operating surface is not destroyed by dislodgment of particles of the abradant, but is automatically renewed by the exposure of fresh abrading particles as the operating surface gradually wears away.

While my improved apparatus is designed particularly for peeling potatoes, it may be used for peeling any other products of a similar nature.

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

1. A peeler, comprising a receptacle; the side wall of which is formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of a softer cementitious material, and means for bringing the articles to be peeled into operative contact with said wall.

2. A peeler, comprising a receptacle having a rotary bottom-plate, the side wall of said receptacle and the bottom-plate being formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of softer cementitious material.

3. A peeler, comprising an upright cylinder formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of a softer cementitious material, and means in the lower portion of said cylinder for bringing the articles to be peeled into operative contact with the inner wall of the cylinder.

4. A peeler, comprising an upright cylinder formed of a self-sustaining mass composed of distinct flinty particles of abrasive material and a bonding agent consisting of a softer cementitious material, and a rotary bottom-plate also composed of a self-sustaining mass of the same materials.

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Witnesses.

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