No. 760,095. PATENTED MAY 17, 1904.

W. ARCHDEACON.

TOMATO PEELING MACHINE.

APPLICATION FILED JUNE 25, 1903.

NO MODEL.

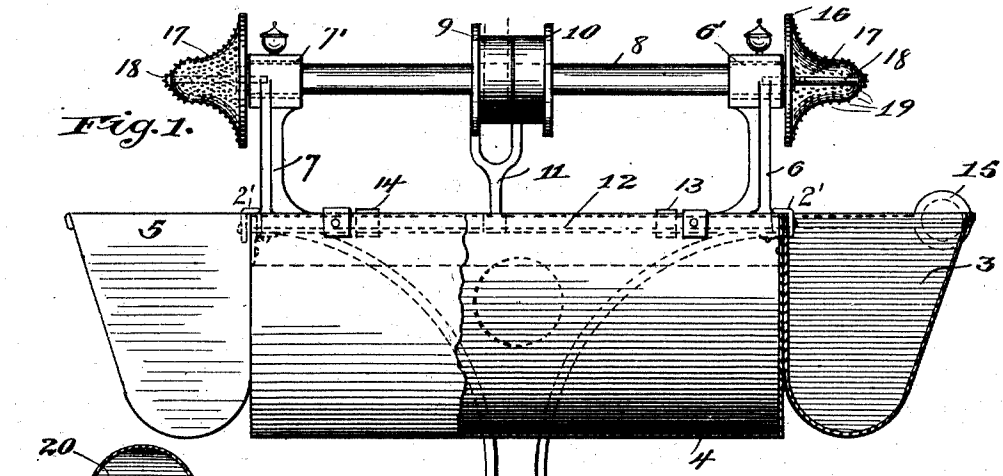


Fig. 1.

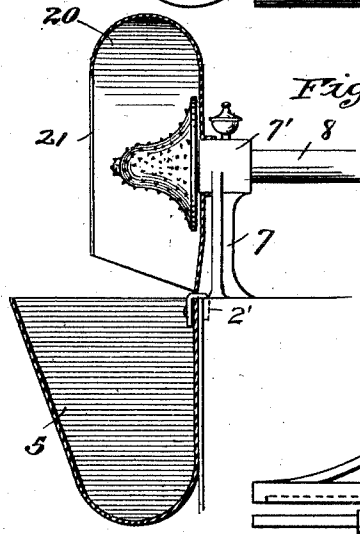


Fig. 4.

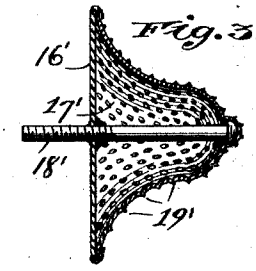


Fig. 3.

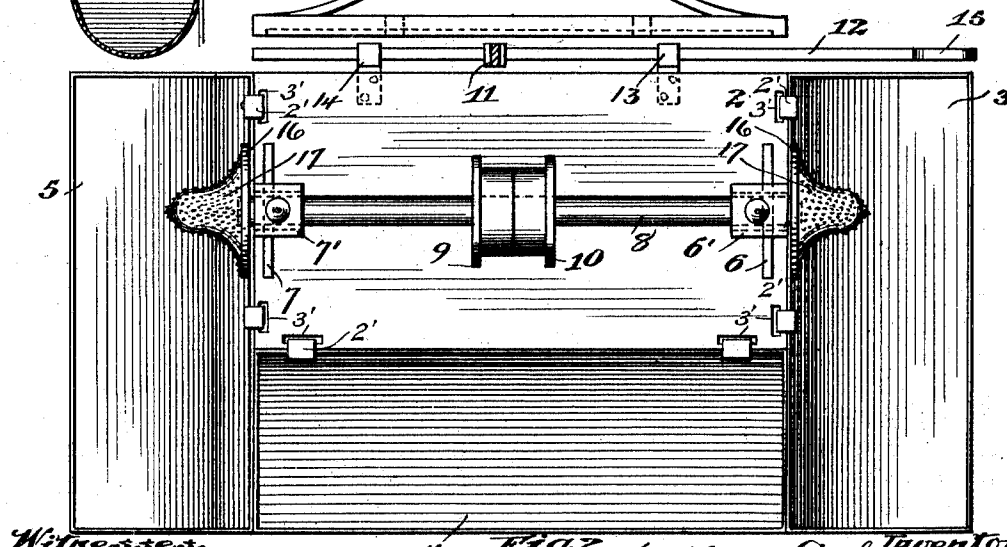


Fig. 2.

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No. 760,095. Patented May 17, 1904.

UNITED STATES PATENT OFFICE.

WILLIAM ARCHDEACON, OF OAKPARK, ILLINOIS.

TOMATO-PEELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 760,095, dated May 17, 1904.

Application filed June 25, 1903. Serial No. 163,120. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ARCHDEACON, of Oakpark, Illinois, have invented certain new and useful Improvements in Tomato-Peeling Machines, of which the following is a specification.

This invention relates to improvements in tomato-peeling machines; and among the salient objects of this invention are to provide a machine of this character by which the skin or outer covering of tomatoes and the like can readily and rapidly be removed without unnecessary waste of the tomato proper, to provide a machine by means of which tomatoes of any size and shape can be easily and readly relieved of their skins without mutilating the same, and to provide a machine of simple construction capable of peeling the largest number of tomatoes possible in a given time.

To the above ends the invention consists in the matters hereinafter described, and more particularly pointed out in the appended claims, the invention being more readily understood from the following description, reference being had to the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side elevation with certain parts broken away. Fig. 2 is a top plan view, and Fig. 3 is a view of a peeler-head in modified form. Fig. 4 shows a hood in section for the peeler-head.

Similar numerals designate similar parts in all the figures.

Referring to the drawings, 1 designates the support or base, which may be of any desired construction, but in the present instance is shown as one piece of cast-iron.

2 designates the top or table, upon which the peeling mechanism is mounted, and 3, 4, and 5 respectively designate troughs, which may be of any desired construction and mounted at the ends and one side of said table. The troughs 3 and 5 are respectively mounted underneath the two peeler-heads, hereinafter described, and are adapted to catch the peeling as it is separated from the article being peeled. The trough 4, mounted at the side, may be used for receiving the tomatoes before or after they have been peeled, as desired, and each of said troughs may be so constructed as to be readily removed and another put in its place. This is accomplished by means of hooks 2′, secured to said troughs and adapted to fit into slots 3′ in said table. Upon said table are firmly secured the two bearing-standards 6 and 7, provided, respectively, with the journal-boxes 6′ and 7′, in which is journaled the shaft 8. Upon said shaft are mounted the driving and loose pulleys, (designated, respectively, as 9 and 10,) adapted to receive a driving-belt, which may be connected with any desired motive power, or power may be communicated to said shaft in any other desirable manner. At the back of the table is mounted the Y-shaped belt-shifter 11, properly secured to the shifting rod 12, which passes through and is supported by the blocks 13 and 14 and is adapted to be shifted backwardly and forwardly therethrough by means of the hand-ring 15 to transfer the belt from one pulley to the other.

Upon the ends of the shaft 8 are mounted the peeler-heads, each comprising the sheet-metal plate 16, apertured at its center and mounted upon the reduced end of the shaft 8, and the bell-shaped peeler 17, held against said plate by means of the bolt 18, which passes through an aperture in the outer or small end of said bell-shaped peeler and screws into the end of the shaft 8, holding the peeler firmly against the plate 16, so that it rotates with the shaft. The bell-shaped peelers are formed, preferably, of comparatively thin sheet metal having the point projections 19 upon their outer surfaces, which may be formed by punching the metal out from the inside or in any other way which will give to their surfaces a grater or rasp like effect.

Fig. 3 shows a peeler-head in slightly-modified form, in which the thin sheet-metal plate 16′ is folded to embrace the edge of the bell-shaped portion of the peeler, to which it is then securely soldered. The bolt 18′ is likewise securely soldered to the plate at the point of intersection, the end thereof projecting through the peeler into the reduced portion thereof, into which it is made fast by soldering or in any other desirable method, thus making the peeler-head, with its attaching-

bolt, practically in one piece adapted to be screwed into the end of the power-shaft 8.

One of the important features of the peeler is the shape of its outer or peeling surface, which in the present instance is made bell-shaped; but it will be understood that any shape may be adopted which will provide the combined convexed and concaved revolving surfaces, terminating in a point-like end portion adapted to be projected into the cavities at the core ends of the tomato. While the curved surfaces thus described have been found by experience to be the most satisfactory, I do not limit myself to the particular form of a revolving peeler-head here shown.

In order to confine the peelings and direct them into the trough 5 as they are torn from the tomato or other article being peeled by the rapidly-revolving peeler, a hood 20 may be provided and attached to the standard 7, so as to inclose said peeler-head in the manner shown in Fig. 4. The front of said hood or that portion at the end of the peeler-head is open, as indicated at 21, by the portion thereof not shown in section, through which opening the tomato is applied by hand to the peeler-head.

The operation of the device will be readily understood from the foregoing description, but may be briefly stated as follows: Power is applied to the shaft 8 through the driving-pulley 9 to transmit a rapidly-revolving motion to the peelers. The operator then applies the tomato or any other like article to be peeled by hand through the opening 21 in the front of the hood 20 to the grater-like surface of the peeler, turning it in the hands and moving it upon the different portions of the peeler-surface most suited to the particular part of the tomato to be peeled. As the peeling is thus removed from the tomato it is thrown by reason of the revolving motion of the peelers either into the trough or against the inside of the hood and falls into the trough.

While the above-described invention is adapted particularly for peeling tomatoes, it will be understood that it can be used for peeling any analogous articles—such as peaches, pears, apples, potatoes, &c.—with the same effect.

I claim—

1. In a machine for peeling tomatoes and the like, the combination with the support therefor, of a revoluble peeler-head having an outer concaved, grater-like surface.

2. In a machine for peeling tomatoes and the like, the combination with the support therefor, of a revoluble peeler-head having a combined convexed and concaved, grater-like surface, for the purpose described.

3. In a machine for peeling tomatoes and the like, the combination with the supporting-table, of a shaft mounted thereon to revolve, a peeler-head having a combined convexed and concaved, grater-like surface, mounted upon said shaft, and means for revolving said shaft at a rapid rate.

4. In a machine for peeling tomatoes and the like, the combination with the supporting-table, of a shaft mounted thereon, adapted to be revolved at a rapid rate, and a peeler-head mounted upon the end of said shaft, said peeler-head having a combined convexed and concaved, grater-like surface, and terminating in a reduced end portion, for the purpose described.

5. In a machine for peeling tomatoes and the like, the combination with the supporting-table, of a shaft mounted thereon, a bell-shaped peeler-head having a grater-like surface mounted upon the end of said shaft, and means for transmitting a rapid revolving motion thereto.

6. In a machine for peeling tomatoes and the like, the combination with the supporting-table, of a shaft mounted thereon, a pair of plate-like members rigidly mounted upon the ends of said shaft, a pair of bell-shaped peeler-heads rigidly secured to said plate-like members, said peeler-heads having combined convexed and concaved, grater-like surfaces, and means for revolving said peeler-heads at a rapid rate.

7. In a machine for peeling tomatoes and the like, the combination with a table or like support, of a revoluble peeler-head mounted thereabove and having an outer concaved grater-like surface, and a receptacle for the waste scrap carried by said table beneath said peeler-head, substantially as described.

8. In a machine for peeling tomatoes and the like, the combination with a table or like support, of a revoluble peeler-head having an outer concaved grater-like surface mounted thereon, of a hood inclosing said peeler-head, and a receptacle beneath said peeler-head to catch the peelings as they are removed from the tomato, substantially as described.

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