J. W. LINVILLE & C. C. TILLMAN.

MACHINE FOR PEELING TOMATOES.

APPLICATION FILED FEB. 10, 1915.

1,241,529.

Patented Oct. 2, 1917.

2 SHEETS—SHEET 1.

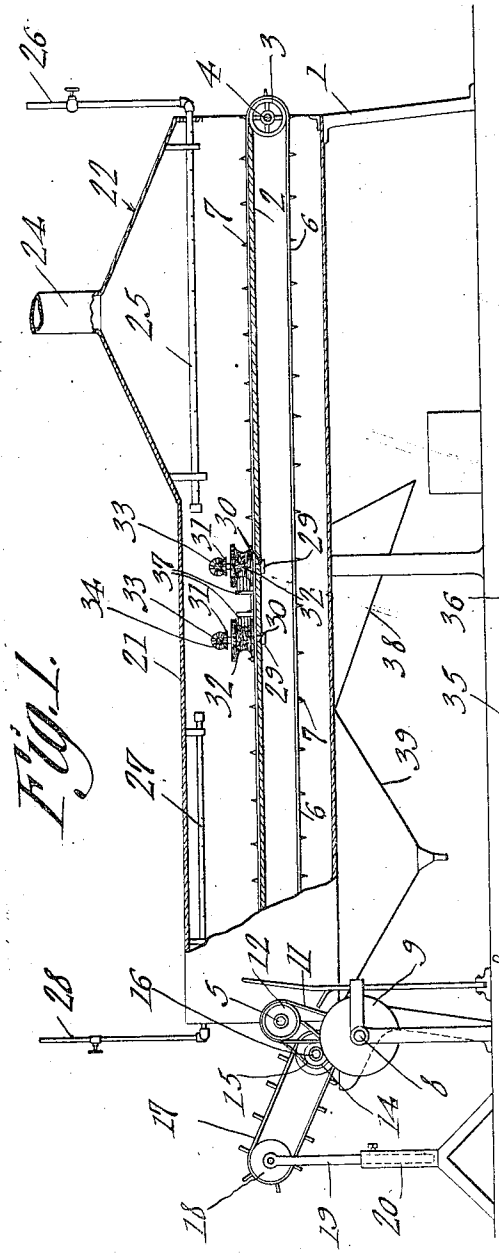


Fig. 1.

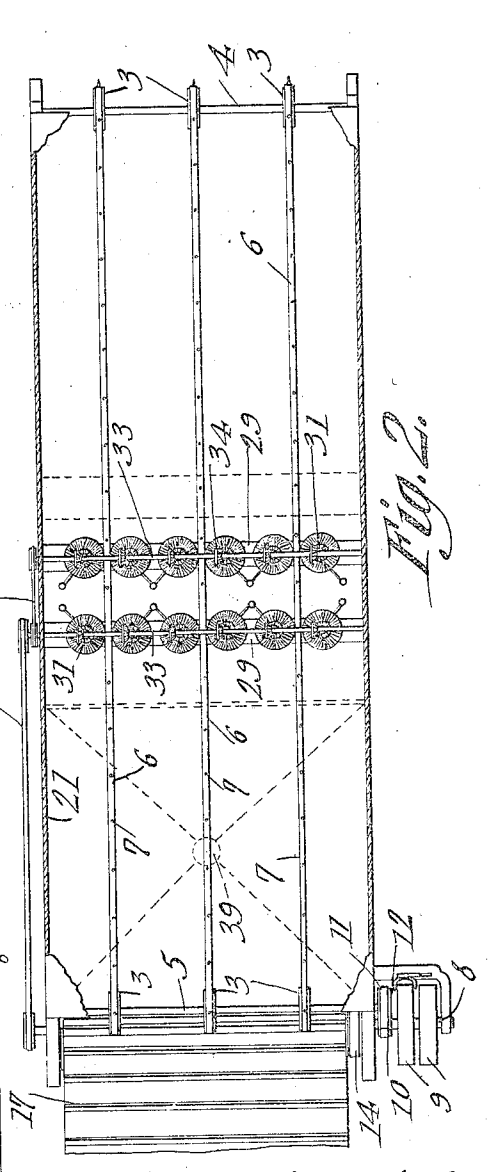


Fig. 2.

Witnesses

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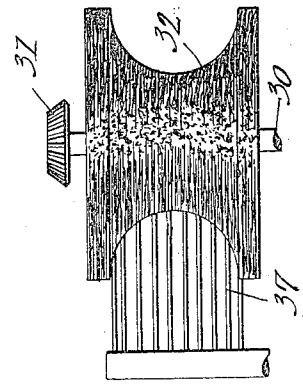


Fig. 4.

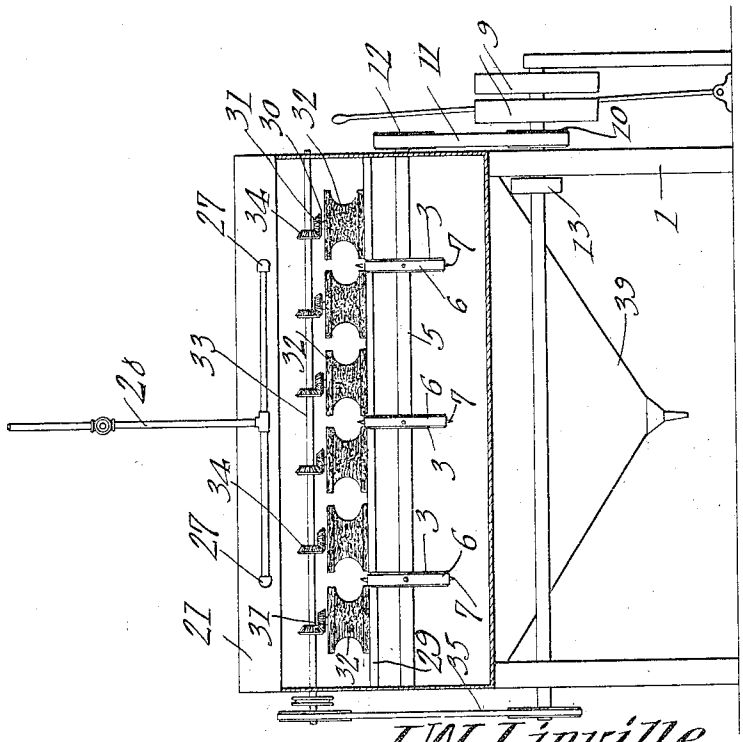


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

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MACHINE FOR PEELING TOMATOES.

1,241,529. Specification of Letters Patent. Patented Oct. 2, 1917.

Application filed February 10, 1915. Serial No. 7,393.

To all whom it may concern:

Be it known that we, JOHN W. LINVILLE and CARL C. TILLMAN, citizens of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented a new and useful Machine for Peeling Tomatoes, of which the following is a specification.

This invention relates to machines for peeling tomatoes and is more especially designed for use in connection with a tomato coring machine such as constitutes the subject matter of a separate application filed by us.

One of the objects of the invention is to provide means whereby the tomatoes, after being subjected to the action of a scalding fluid, will be conveyed to skin removing elements of novel form, subsequently washed, and then delivered at a point where they can be readily inspected prior to being canned.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—

Figure 1 is a view partly in side elevation and partly in longitudinal section of the complete machine.

Fig. 2 is a plan view thereof, the hood or housing being removed.

Fig. 3 is an enlarged end elevation, the supplemental or inspection belt being removed and the casing being shown in section.

Fig. 4 is an enlarged elevation of one of the peeling brushes and its cleaning fork.

Referring to the figures by characters of reference 1 designates a suitable supporting structure carrying parallel longitudinal tracks or supports 2 at the ends of which are located pulleys, sprockets or the like indicated at 3, the wheels 3 at one end being mounted on and revoluble with a shaft 4, while the wheels at the other end of the machine are secured to and rotate with a shaft 5. These wheels 3 are engaged by endless conveyer belts or chains 6 having outstanding spikes 7, the upper runs of the belts being adapted to rest upon the supports or track 2.

A drive shaft 8 is arranged adjacent to one end of the machine and has secured to it a pulley 9 or the like for receiving motion from a belt not shown. Another pulley or sprocket 10 is secured to the shaft 8 and motion is adapted to be transmitted therefrom through a belt or chain 11, to a pulley or sprocket 12 secured to the shaft 5. Another pulley or sprocket 13 is secured to shaft 8 and is adapted to transmit motion through an endless belt or chain 14, to a pulley or sprocket 15 secured to a shaft 16 which is journaled within one end portion of the frame 1 and drives an endless inspection belt 17. The outermost portion of this inspection belt is carried by a roller or sprocket 18 journaled in the upper end of a vertically adjustable frame 19 carried by a base 20. By adjusting the frame 19 upwardly and downwardly relative to the support or base 20, the pitch of the inspection belt can be varied at will.

Extending over the track or supports 2 and throughout the width and length of the frame 1 is a housing 21 open at its ends and provided at its inlet or receiving end with a hood or dome 22 from the top of which extends a steam outlet pipe 24. Arranged under this hood or dome are pipes 25 in communication with a steam supply pipe 26, these pipes 25 having suitably arranged openings whereby steam will escape from the pipes and be directed onto the contents of the chains or conveyers 6.

Additional pipes 27 are arranged within the housing near the discharge end thereof and above the conveyers 6 and these pipes are in communication with a water supply pipe 28 the water being adapted to discharge through openings in the pipes 27 and onto the contents of the conveyers 6. Arranged in transverse series between the pipes 25 and 27 and upon cross strips 29 supported by the rails 2 are vertical shafts 30 each of which is provided at its upper end with a bevel gear 31 and each shaft carrying a brush 32 the periphery of which is formed with an annular groove the wall of which is rounded as shown. This groove is of such size as to practically conform with the contour of the article to be peeled.

Extending above each series of vertical

shafts 30 is a transverse shaft 33 carrying bevel gears 34 which mesh with the respective gears 31. One of the shafts 33 receives motion through a chain 35 or the like from the shaft 8 and transmits motion through a chain 36 or the like to the other shaft 33. By providing gears as shown it will be seen that the brushes, which are disposed in pairs, will be actuated, the brushes of each pair rotating in the same direction so that as an article is drawn between the brushes of each pair by the conveyers 6, the said article will be acted on by the brushes and the scalded skin removed. Arranged close to each of the brushes is a cleaning fork 37 or the like designed to remove skins from the brushes. A hopper 38 is arranged under the brushes to receive the skins, while another hopper or basin 39 is located under the pipes 27 to receive the water used in washing the articles.

The tomatoes or other articles to be peeled are supplied to the machine at the inlet end thereof, the spikes 7 being adapted to stick into the articles so as to hold them to the conveyers 6. These conveyers, which are driven in the manner described, carry the tomatoes under the hood 22 where they are subjected to the scalding action of steam issuing from the pipes 25, this steam thus loosening the skins without, however, cooking the tomatoes. As the tomatoes continue to move through the machine they are brought between the brushes and these brushes, by rotating rapidly, remove the skins from the tomatoes so that, when the said tomatoes arrive under the pipes 27, they will be practically free of all particles of skin. While passing under the pipes 27, the water issuing therefrom will wash any particles of skin from the tomatoes and the said tomatoes will be delivered in a clean condition onto the inspection belt 17 from which they will be discharged into the canning machinery. The skins are removed from the brushes by the forks 37 and fall into the hopper 38, while the water draining off of the washed tomatoes will be discharged into the hopper or basin 39.

What is claimed is:—

1. In a machine for peeling tomatoes and the like, spaced brushes, means for rotating the brushes simultaneously in the same direction, a carrier passing between the brushes, means for pivotally securing a tomato or the like on the carrier, and means to propel the carrier to draw the article between the rotating brushes and subject it to the action thereof.

2. In a machine for peeling tomatoes and the like, the combination with steaming means and washing means, of spaced brushes between the steaming and washing means, means for simultaneously rotating the brushes in the same direction, and a conveyer including means for pivoting an article thereon for drawing an article from the steaming means and between and across the faces of the brushes while said article is being subjected to the action of the rotating brushes.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of two witnesses.

JOHN W. LINVILLE.
CARL C. TILLMAN.

Witnesses:
JNO. L. KRIEGER,
MRS. JOHN W. LINVILLE.