M. RIEGEL.

PEPPER PEELING MACHINE.

APPLICATION FILED JUNE 23, 1917.

1,258,245.

Patented Mar. 5, 1918.

4 SHEETS—SHEET 1.

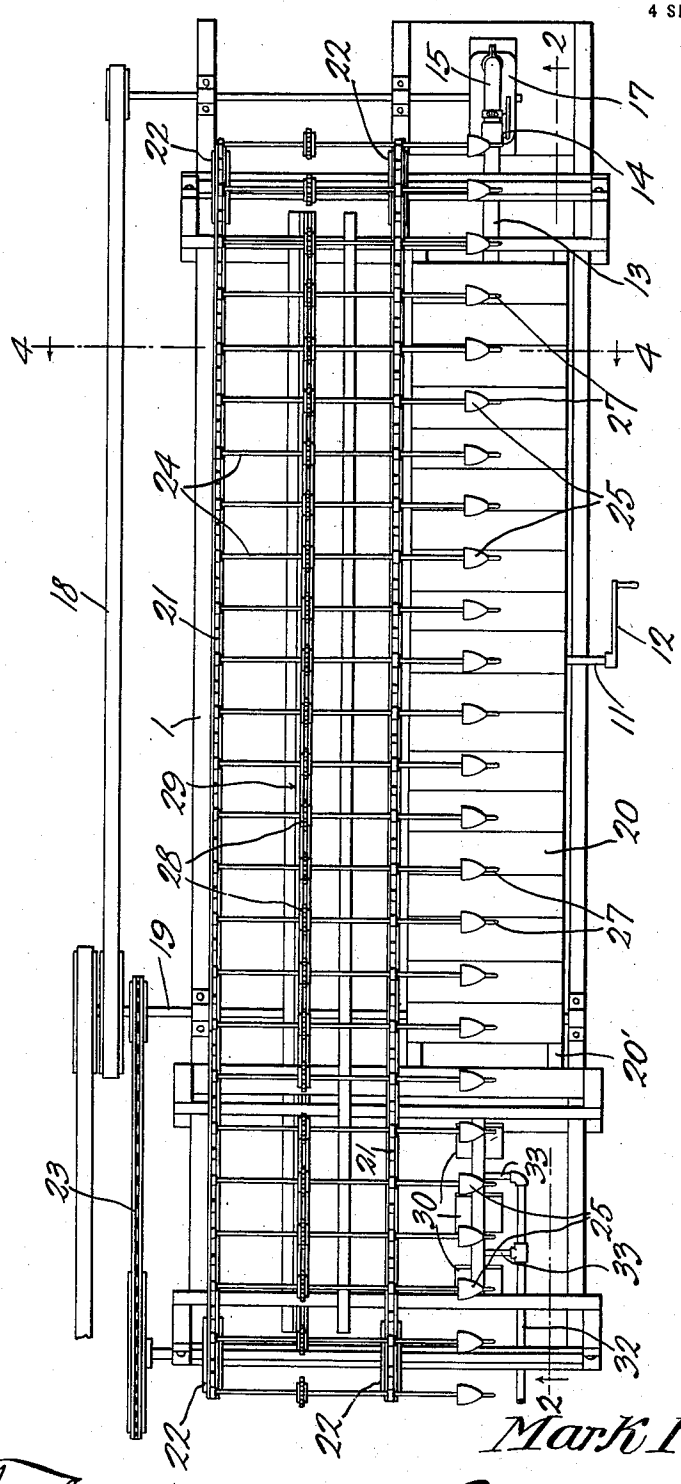


Fig. 1.

Witness

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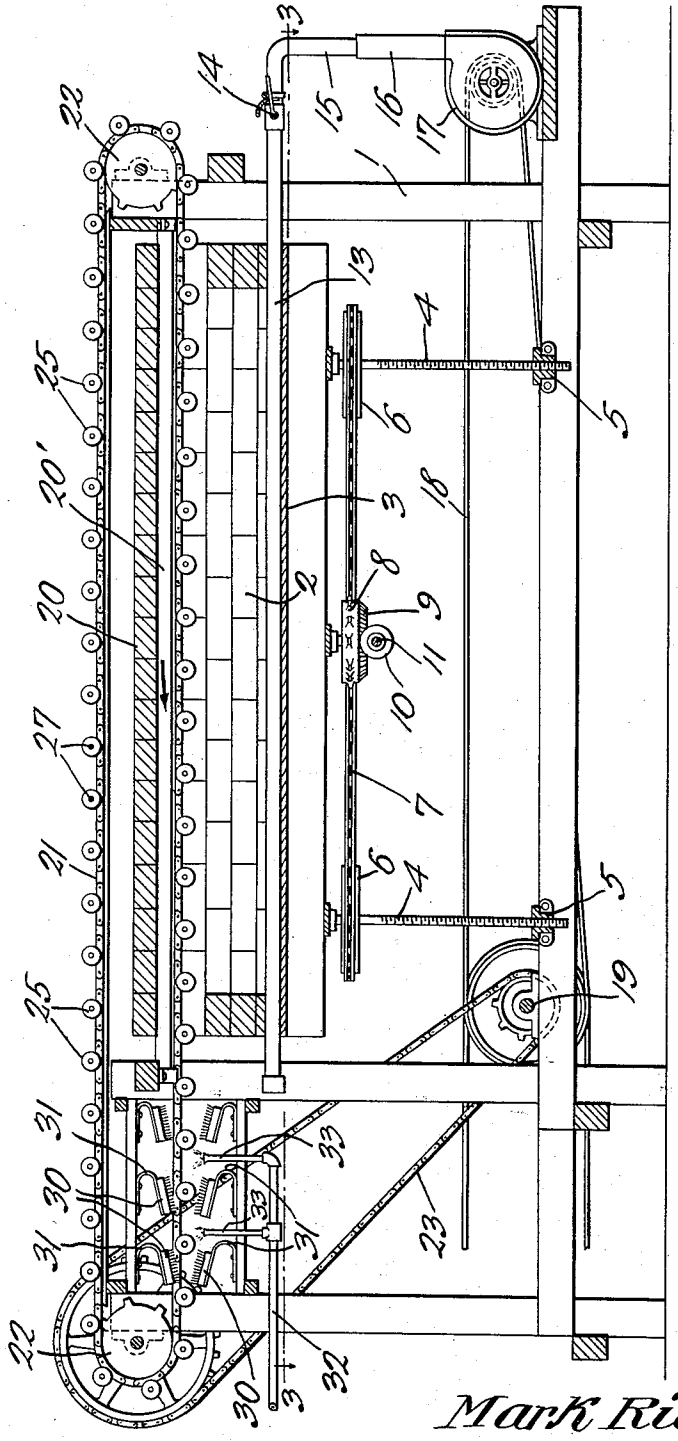
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4 SHEETS—SHEET 2.

Fig. 2.



Witness

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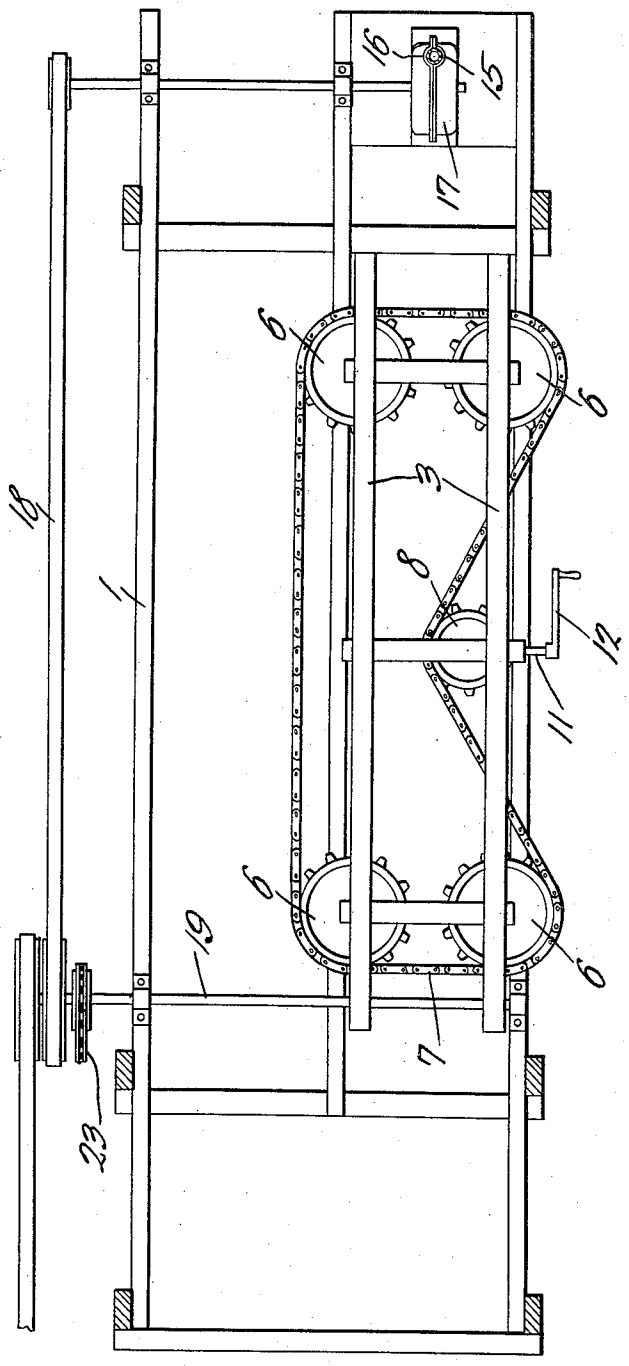
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4 SHEETS—SHEET 3.

Fig. 3.



Witness

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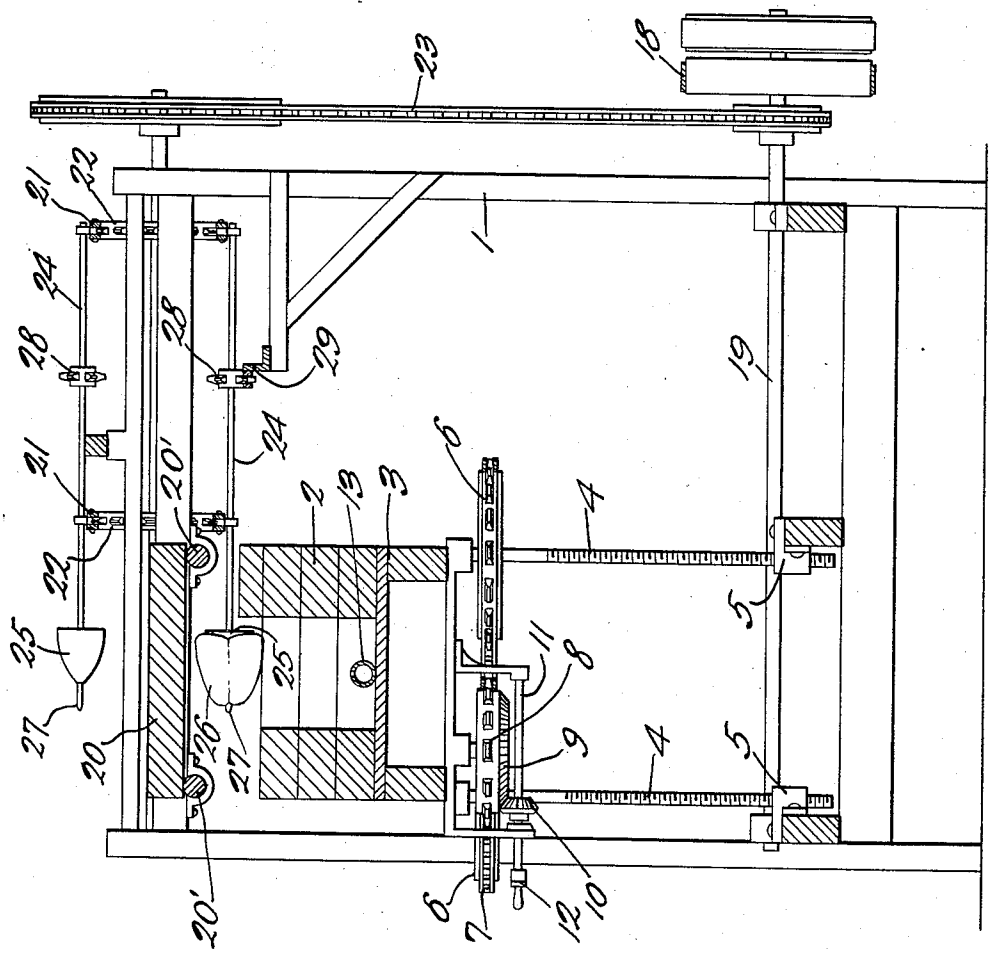
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4 SHEETS—SHEET 4.

Fig. 4.



Witness

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UNITED STATES PATENT OFFICE.

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PEPPER-PEELING MACHINE.

1,258,245. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed June 23, 1917. Serial No. 176,574.

To all whom it may concern:

Be it known that I, MARK RIEGEL, a citizen of the United States, residing at Pomona, in the county of Spalding and State of Georgia, have invented a new and useful Pepper-Peeling Machine, of which the following is a specification.

The present invention relates to a machine designed for removing the skins from peppers and kindred vegetables and fruits, and it is the object of the invention to provide a novel and improved apparatus for effectively removing the skins without cooking or injuring the peppers or removing the oily consistency thereof.

Broadly considered, the invention resides in carrying the peppers over a furnace to blister and char the skins, and as the peppers are carried away from the furnace, they pass means for brushing or otherwise removing the loose skins from the peppers.

The invention also has for its object the provision of a machine of the nature indicated having novel features of construction to enhance the utility and efficiency thereof.

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.

The invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a plan view of the improved machine.

Fig. 2 is a longitudinal section on the line 2—2 of Fig. 1.

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2.

Fig. 4 is an enlarged cross section on the line 4—4 of Fig. 1.

The machine embodies a suitable frame 1 in which is mounted a longitudinal furnace 2 having the supporting bed 3, the walls of the furnace being of brick work or other suitable construction, and this furnace may be of construction for using coke, charcoal, gas or other fuel, to produce the heat for blistering and charring the skins of the peppers.

The furnace is supported for vertical movement, for convenience in starting the fire and cleaning out the furnace, and for this purpose, the bed 3 is supported by four upright screws or standards 4 threaded within nuts 5 carried by the lower portion of the frame 1 below the bed 3. In order to simultaneously rotate the screws 4 to either raise or lower the furnace, sprocket wheels 6 are secured to the screws near their upper ends and an endless sprocket chain 7 is trained around said sprocket wheels and also engages a sprocket wheel 8 carried by the bed 3. This sprocket wheel 8 has a bevel gear 9 meshing with a bevel pinion 10 secured upon a shaft 11 hung from the furnace bed, and provided at one end with a crank 12 or other suitable means for rotating the shaft 11, which will through the medium of the pinion 8 and bevel gear 9 rotate the sprocket wheel 8 to move the chain 7, thereby rotating the sprocket wheel 6 and screws 4, to either raise or lower the furnace according to the direction in which the crank 12 is rotated. The furnace can thus be lowered to start the fire, clean out the furnace, or the like, and can be readily raised into operative position.

In order to furnish an air draft for the furnace, an air pipe 13 extends longitudinally therein and is apertured for the flow of air into the fire box. The pipe 13 is provided with a suitable damper 14 and a downturned air receiving terminal 15 telescoping or slidably fitting the upstanding outlet nozzle 16 of a blower 17 to provide a forced draft. The telescopic connection between the pipe 13 and blower permits the furnace to be raised or lowered without breaking the connection between the blower and air supply pipe 13. The blower 17 is connected by a belt 18 or otherwise with a driving shaft 19.

The top 20 of brick or other refractory material is supported on longitudinal beams or rails 20′ carried by the frame 1 above the furnace, and the furnace when raised is moved close underneath the top 20, as seen in Fig. 4, whereby the top will minimize the loss of heat, will protect the attendants and operators, and will reflect the heat downwardly against the peppers which are moved over the furnace underneath the top 20.

The conveyer for carrying the peppers or other articles longitudinally over the furnace embodies a pair of endless longitudi-

nal sprocket chains 21 trained around sprocket wheels 22 supported for rotation at the opposite ends of the frame, and the shaft of one pair of sprocket wheels is connected by a sprocket chain 23 or otherwise with the driving shaft 19, to actuate the conveyer. Transverse shafts 24 are journaled at intervals to the chains 21, said chains being located at one side of the vertical plane of the furnace, and the shafts 24 have terminals extending forwardly and overhanging the furnace. Said terminals of the shaft have cones 25 onto which the peppers 26 are slipped, after being cored and seeded. The cones 25 have pins 27 projecting from their tips or apices to pierce the tips of the peppers to assist in centering and holding them in place upon the cones. The lower and upper runs of the conveyer work below and above the horizontal plane of the top 20 of the furnace, whereby the cones 25 move under the top 20 above the furnace in the direction of the arrow in Fig. 2, while the cones in moving backwardly in the opposite direction with the upper run of the conveyer move above the top 20. The shafts 24 work within the slot between the furnace 2 and top 20, as seen in Fig. 4.

As a means for rotating the shafts 24 as they are moved over the furnace underneath the top 20 thereof, to expose all sides of the peppers to the heat evenly, a pinion 28 is secured upon each shaft 24, and said pinions mesh with a longitudinal rack 29 supported by the frame underneath the lower run of the conveyer. Thus, as the shafts 24 are carried with the lower run of the conveyer, the pinions 28 mesh with the rack 9, causing the shafts 24 to rotate.

The device for removing the loosened skins is located beyond end of the furnace, and embodies pairs of converging brushes 30 supported by springs or brackets 31 from the frame 1, so that the cones 25 move between the brushes after leaving the furnace, thus bringing the peppers into engagement with the bristles of the brushes, during which time the cones 25 are also rotated by the engagement of the pinions 28 with the rack 29. Water, steam, air or other fluid can be supplied to the peppers during the brushing thereof, by means of a pipe 32 having nozzles 33 for directing the fluid to the peppers between or adjacent to the brushes, whereby to assist in the removal of the loosened skins.

In operation, the peppers after being cored and seeded, are slipped onto the cones 25 above the top 20, which protects the operator or attendants from the heat of the furnace, and the peppers are then carried with the conveyer underneath the top 20 and longitudinally cross the mouth of the furnace, during which time the peppers are rotated with the shafts 24. This will blister and char the skins of the peppers but will not cook or injure them, or remove their oily consistency. The peppers are carried from the furnace between the brushes 30 and in engaging the bristles thereof will have their skins removed, assisted by the fluid flowing from the nozzles 33 against the peppers during the cleaning operation. After the peppers have passed through the cleaning device, they are removed, and are replaced by the unpeeled peppers, thus providing a continuous operation. By passing the peppers over the furnace and turning them during such movement, the skins of the peppers are subjected to the dry heat of the furnace, to blister and char them without the liability of injuring the valuable portion of the peppers.

Having thus described the invention, what is claimed as new is:—

A peeling machine including a heating means, a heat insulating covering spaced therefrom, rotating means for supporting articles to be treated by the heating means, and means for moving supported articles between the cover and the heating means to be treated by the latter, and then over the covering.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

MARK RIEGEL.

Witnesses:
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