Sept. 20, 1932. G. W. BERRY 1,878,457

RIND REMOVING MACHINE

Filed March 18, 1929

Fig. 3.

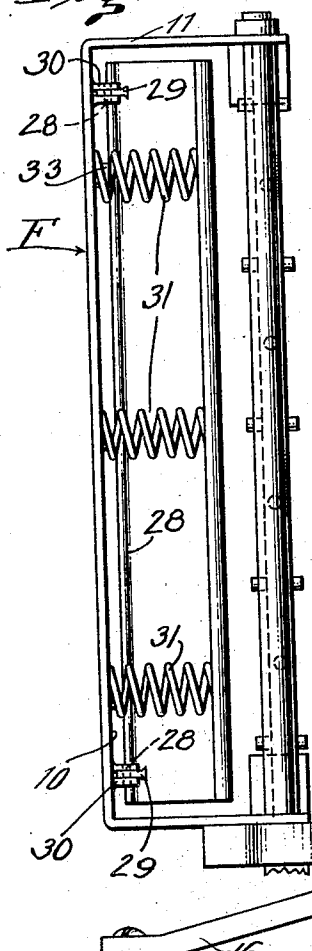


Fig. 1.

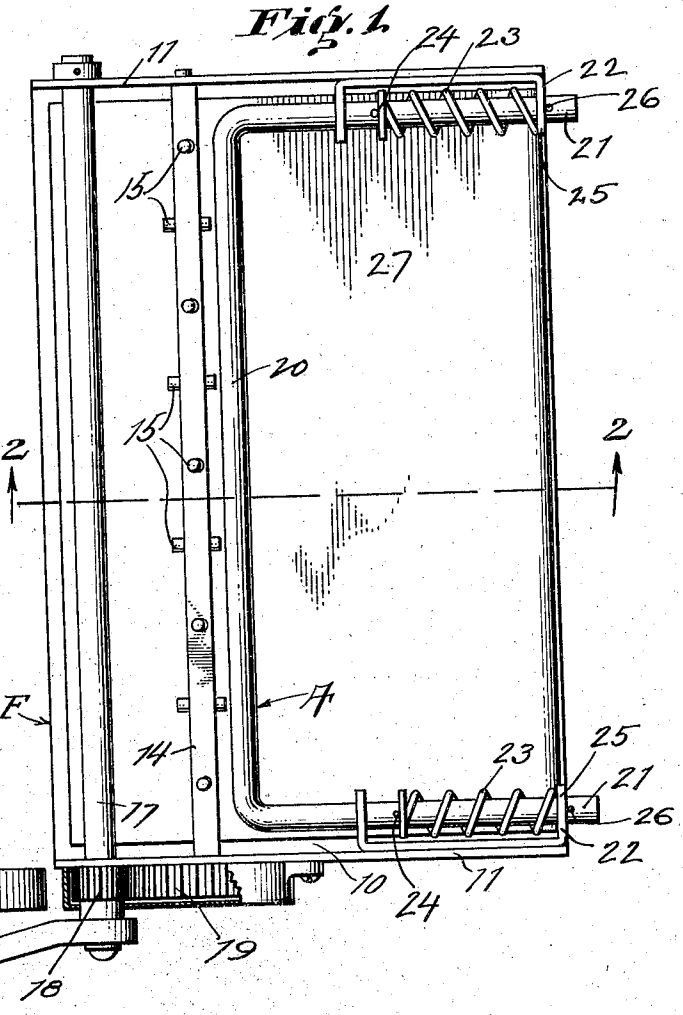
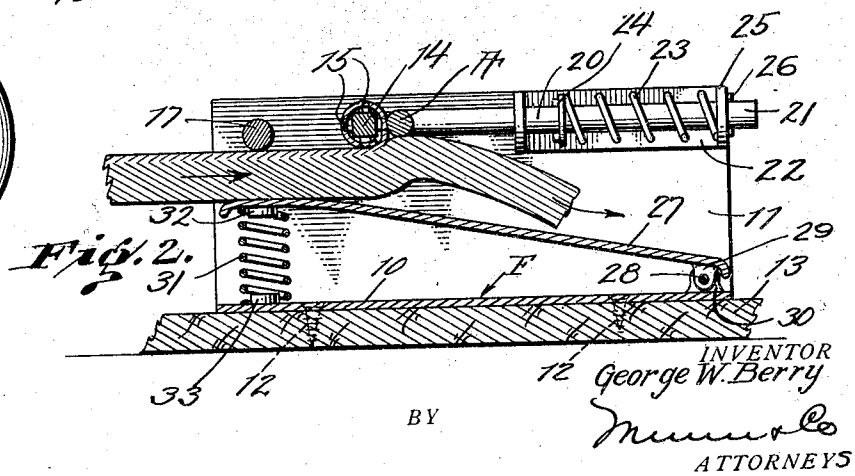


Fig. 2.



INVENTOR
George W. Berry

BY

ATTORNEYS

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GEORGE W. BERRY, OF SANTA PAULA, CALIFORNIA

RIND REMOVING MACHINE

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My invention relates to and has for a purpose the provision of a simple, substantial and inexpensive machine particularly adapted although not necessarily, for use in removing the rind from bacon, and by which the removal of the rind can be effected with the utmost ease and dispatch, thus greatly facilitating the preparation of the bacon for use and eliminating the skillful labor required in present methods of manually cutting or otherwise removing the rind from the bacon.

I will describe only one form of rind removing machine embodying my invention and will then point out the novel features thereof in claims.

In the accompanying drawing,

Fig. 1 is a view showing in plan partly broken away, one form of skin removing machine embodying my invention.

Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1, and

Fig. 3 is a view in end elevation of the machine shown in the preceding figures.

Referring specifically to the drawing in which similar reference characters designate similar parts in each of the several views, my invention in its present embodiment comprises a frame F preferably constructed of sheet metal to provide a rectangular base 10 having upstanding flanges 11 along its side edges. The base 10 is provided with openings through which fastening members 12 are adapted to be extended to secure the frame to a horizontal support such as a table or bench 13. The base 10 and flanges 11 cooperate to provide a trough adapted to freely receive a slab or side of bacon therein; and journaled in the flanges 11 to span the latter horizontally, is a shaft 14 on which the rind of a piece of bacon inserted in the trough below the shaft is adapted to be wound.

The shaft 14 may be angular in cross section such as square for example as illustrated, to provide edges for preventing slipping of the bacon rind during winding thereof on the shaft, or may be provided with projections or teeth 15 at intervals along its length adapted to penetrate the rind to prevent slipping of the latter on the shaft.

The shaft is adapted to be rotated in a counter clockwise direction as viewed in Fig. 2 either by means of power or by a crank 16 fixed to a shaft 17 journaled in the flanges 11; the shaft 17 having also fixed thereto a pinion gear 18 meshing with a relatively large gear 19 for increasing the power developed at the crank.

As the bacon rind is being wound on the shaft 14, the bacon is caused to traverse a path different from that of the rind so as to separate the latter from the bacon by a stripping or tearing action. To this end I provide an abutment designated generally at A for directing or guiding the bacon tangentially from the shaft, and advanced between the flanges 11 as its rind is wound on the shaft. In the present instance this abutment comprises a round bar 20 terminating at its ends in right angularly disposed parallel extensions 21 slidably mounted in U shaped brackets 22 fixed to the flanges 11, to support the bar 20 substantially at the level of and parallel with the shaft 14 for movement horizontally towards and away from the shaft.

The abutment is normally urged towards the shaft 14 by means of coil springs 23 surrounding the extensions 21 and bearing at one end against pins 24 extending diametrically through the extensions, and at their other ends against one of the arms 25 of the brackets. The movement of the abutment A towards the shaft is limited to a position in which the bar 20 clears the teeth 15, by means of other pins 26 which are adapted to engage the arms 25 of the extensions.

A piece of bacon when inserted between the shaft 14 and the base 10 is adapted to be urged upwardly towards the shaft; and to this end I provide a platform 27 on which the bacon is adapted to rest, pivotally mounted at one end on the base 10, by means of pins 28 extending through ears 29 and 30 on the platform and base respectively. The free end of the platform is normally urged upwardly by means of coil springs 31 interposed between the platform and base 10 and receiving projections 32 and 33 formed on the platform and base respectively, to prevent lateral displacement of the springs. The yieldability of the platform provides for sides or slabs

of bacon of different thicknesses, and insures that the bacon will be held up to the shaft 14 regardless of the thickness of the bacon.

The operation of the machine is as follows: Let it be assumed that it is desired to remove the rind from a side of bacon. The bacon is first slit under the rind from one end by a suitable knife to form a flap of rind. The platform 27 is now depressed and the end of the bacon inserted between the platform and the shaft 14, after which the free end of the previously formed flap of rind is passed upwardly between the shaft 14 and the rod 20 and then wrapped about the shaft. The crank 16 is now operated to rotate the shaft 14 in a counter-clockwise direction as viewed in Fig. 2. As the forward end of the bacon from which the flap of rind has been removed, extends in advance of the bar 20 it will be clear that upon continued rotation of the shaft 14, the rind will be wound upon the shaft, whereas winding of the bacon on the shaft will be prevented and the bacon directed or guided by the rod 20 tangentially from the shaft so as to be fed or advanced over the platform 27, thus stripping or tearing the rind from the bacon. As the coil of rind on the shaft 14 increases in diameter, the springs 23 permit the rod 20 to be forced away from the shaft, and operate to yieldingly maintain the rod in engagement with the rind wound on the shaft so as to insure that the bacon will be directed away from the shaft and the rind thus separated from the bacon.

It will be manifest that broadly speaking the frame F and platform 27 constitute a support for a piece of bacon, and that the shaft 14 and abutment A constitute a means for causing the rind to be removed from the supported piece of bacon. Furthermore, that more specifically the abutment A constitutes a means for directing or guiding a piece of bacon for movement along a predetermined path, and the shaft 14 a means to which the bacon rind is attachable, for causing the rind to traverse a different path from the bacon in a manner to effect stripping or tearing of the rind from the bacon.

Although I have herein shown and described only one form of rind removing machine embodying my invention, it is to be understood that various changes and modifications may be made therein without departing from the spirit of the invention and the spirit and scope of the appended claims.

I claim:

1. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon rind thereon, means for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, and means for urging the last means against the rind wound on the first means for the purpose described.

2. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon rind thereon, a movable abutment for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, and means for urging the abutment against the rind wound on the first means yet rendering the abutment free to yield as the coil of bacon rind increases in size.

3. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon rind thereon in coil formation, means for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, and means for normally urging the bacon bodily towards the first means, yet yielding as the coil of bacon rind increases in size.

4. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon rind thereon, means for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, means for normally urging the bacon bodily towards the first means comprising a platform mounted for movement towards and away from the first means and on which the bacon is adapted to rest, and means for normally urging the platform towards the first means.

5. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the bacon rind thereon, means for directing the bacon tangentially from the first means as the bacon rind is wound on the latter, to thereby effect stripping of the rind from the bacon, means for normally urging the bacon bodily towards the first means, comprising a pivotally mounted platform on which the bacon is adapted to rest, and spring means for normally urging the platform towards the first means.

6. A rind removing machine comprising a frame, a shaft journaled in the frame and on which the rind of a piece of bacon is adapted to be wound, a bar slidably mounted in the frame and disposed in parallel relation to the shaft and in such proximity to the latter as to direct the bacon tangentially from the shaft as the rind of the bacon is wound on the shaft

and thereby strip the rind from the bacon, a platform below the shaft, pivotally mounted in the frame and on which the bacon is adapted to rest, means for normally urging the platform upwardly, and means for rotating the shaft.

7. A rind removing machine comprising means to which the rind of a piece of bacon is attachable, means for mounting the first means for rotary movement to effect winding of the rind thereon, means for directing the bacon away from the first means as the rind is wound on the latter, whereby to strip the rind from the bacon, and means whereby the first and last means are relatively urged yieldingly towards each other.

GEORGE W. BERRY.