

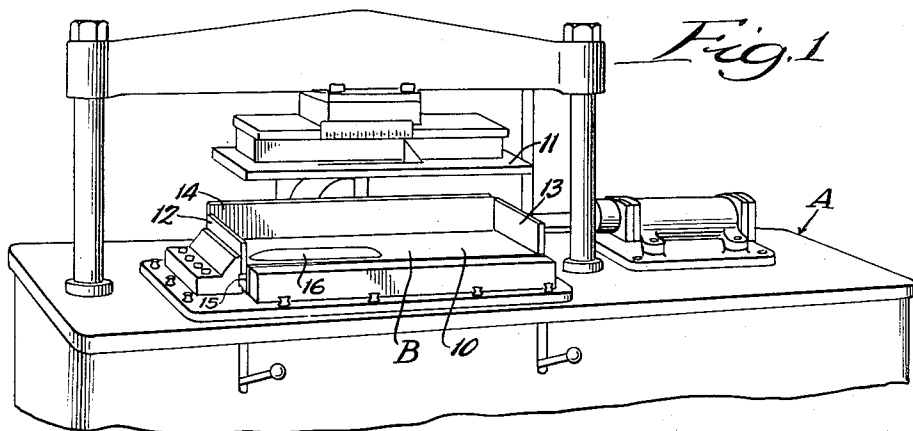
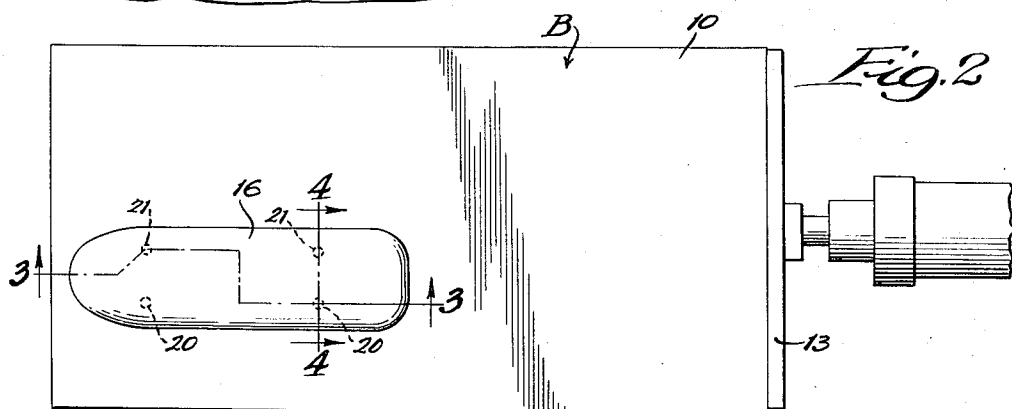
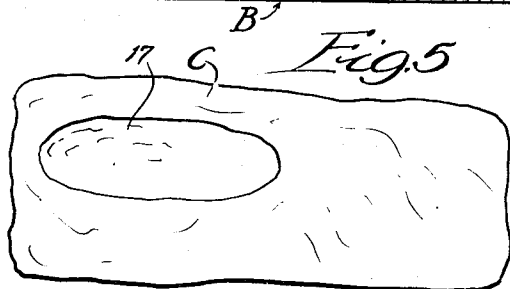
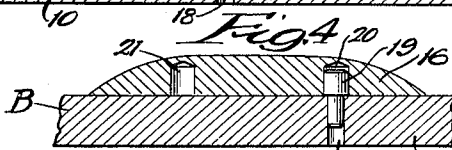
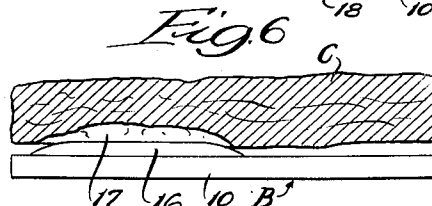
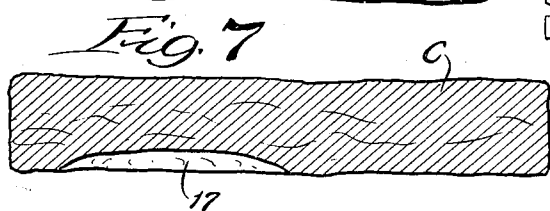
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FILLER PLATE FOR A BACON-FORMING PRESS

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FILLER PLATE FOR A BACON-FORMING PRESS

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5 Claims. (Cl. 100—232)

This invention relates to a filler plate for a bacon-forming press.

It is the practice to subject bacon slabs or bellies to a pressing operation before the bacon is sliced. The purpose of this pressing operation is to form the somewhat irregular bacon bellies into more nearly rectilinear shapes. In this way, slices of approximately uniform width and length can be produced from ragged, distorted bellies of all sizes, either skinned or unskinned. Therefore, bacon-forming presses are widely employed in the industry. Usually, the bacon-forming press is designed to press the bacon slab simultaneously from all sides. This is accomplished by introducing the bacon slab into a bacon-forming chamber having a bottom plate, a relatively movable top plate, and relatively movable side and end plates. The practice has been to have all of these bacon slab-engaging plates flat and smooth surfaced. This has the advantage of tending to produce a truly squared bacon slab from which uniform slices can be cut.

When the pressing operation is carried out as described above, a difficulty arises when the pressed slab is cut into slices on a high-speed slicing machine, unless the slab is further smoothed by hand after its removal from the bacon-forming press, either before or during the slicing operation. This is due to the fact that the bacon belly has a so-called flank pocket. The flank pocket is a depression in the inside surface at the ham end of the bacon belly. It is desired to flatten out or fill up the flank pocket, or in other words to make the pocket less pronounced, by the pressing operation. The use of flat plates in the bacon-forming press, as described above, accomplishes this result but it has the disadvantage of tending to produce wrinkles in the surface of the bacon belly in the vicinity of the flank pocket. When the rotary cutting blade of the high-speed slicing machine strikes these wrinkles, there is a tendency for a tear to be produced in the bacon strip at this point. Thus, a number of slices of bacon from each slab across the area of the flank pocket may have an objectionable appearance due to these tears or notches. Therefore, it is necessary to rub out by hand or smooth the wrinkled surface of the bacon belly after it is pressed to prepare it for the slicing operation. This consumes considerable time in relation to the pressing operation, since many bacon presses can handle up to 9 or 10 slabs of bacon per minute. However, heretofore no method has been provided for eliminating the hand smoothing step subsequent to the pressing operation while still obtaining a bacon slab of the desired uniform rectilinear shape and without wrinkles in the vicinity of the flank pocket.

It is therefore the principal object of this invention to provide a bacon-forming press which substantially overcomes the above problem, and eliminates the necessity of the hand smoothing operation. Further objects and advantages will appear as the specification proceeds.

This invention is shown in an illustrative embodiment in the accompanying drawing, in which—

Fig. 1 is a fragmentary perspective view of a bacon-

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forming press of the type with which my invention can advantageously be employed; Fig. 2 is a plan view of the bottom or base plate of the bacon-forming chamber in the bacon press of Fig. 1; Fig. 3, a fragmentary longitudinal cross-sectional view of the base plate of Fig. 2, showing the filler plate of this invention positioned thereon, the section being taken on line 3—3 of Fig. 2; Fig. 4, a transverse sectional view of the filler plate and base plate taken on line 4—4 of Fig. 2; Fig. 5, a plan view of the inside surface of an unpressed bacon belly, showing the location of the flank pocket; Fig. 6, a transverse cross-sectional view of the bacon belly of Fig. 5 taken through the flank pocket, and showing the bacon belly superimposed on the plate structure of Fig. 4 in pressing position; and Fig. 7, a transverse cross-sectional view of the bacon belly of Fig. 5 as it would appear after being pressed, the section being taken on the same axis as the section of Fig. 6.

Looking first at Fig. 1, there is shown a bacon-forming press A of the type having a bacon-forming chamber B provided by a bottom plate 10, a top plate 11, end plates 12 and 13, and side plates 14 and 15. It will be noted that all of these forming plates are flat and smooth surfaced, and aligned so as to produce a rectilinearly shaped bacon slab. In the illustration given, the press is hydraulically operated, and top plate 11, end plate 13, and side plate 15 are the hydraulically operated movable plates. Side or front plate 15 is arranged to drop down out of sight at the conclusion of the pressing operation to facilitate loading and unloading of the pressing chamber.

The invention to which this application is directed is seen more clearly in Figs. 2, 3, and 4. It consists of a filler plate 16 which is received on bottom plate 10 for engaging the flank pocket at the ham end of the bacon belly. The result accomplished by the use of filler plate 16 is that the bacon belly can be pressed without wrinkling the surface of the belly in the vicinity of the flank pocket.

Preferably, filler plate 16 has a smoothly rounded outer surface, and tapers gradually at its edge portions toward bottom plate 10, as shown more clearly in Figs. 3 and 4. It will be understood, of course, that filler plate 16 is dimensioned to supportingly engage the flank pocket of the bacon belly, and that it is positioned on plate 10 so that it will be aligned with the flank pocket when the bacon belly is placed within forming chamber B and centered against end wall 12 and side or rear wall 14.

One surprising result of employing a filler plate in a bacon press of the type described is that not only is the surface of the bacon belly in the area of the flank pocket prevented from wrinkling, but the depth of the flank pocket is also considerably decreased during the pressing operation. The latter effect is especially pronounced when the filler plate is of lesser thickness than the corresponding depth of the flank pocket, but is of greater length and width than the corresponding length and width of the flank pocket. This will be made clearer by examining Figs. 4 to 7 of the drawing. First looking at Fig. 5, there is shown a typical bacon belly C having a flank pocket 17 at its ham end. In Fig. 6 there is shown a cross section of the bacon belly C superimposed on bottom plate 10 with filler plate 16 supportingly engaging flank pocket 17. It will be noted that the tapered edge portions of filler plate 16 extend somewhat beyond the edges of flank pocket 17, and also that the filler plate is of somewhat lesser thickness than the depth of the flank pocket. This is the preferred construction, as indicated. In the preferred construction, the same relationship between filler plate 16 and flank pocket 17 would be observed in a longitudinal sectional view similar to the transverse sectional view of Fig. 6. In Fig. 7, the appearance of the bacon

slab after pressing is shown, the section being the same as that of Fig. 6. It will be noted that the flank pocket is considerably less pronounced and that the surfaces in the vicinity of the flank pocket have remained smooth and unwrinkled.

To permit the position of filler plate 16 to be adjusted for pressing small as well as large bacon slabs, it is preferred to have filler plate 16 detachably supported on bottom plate 10. In other words, filler plate 16 and bottom plate 10 should be provided with means for mounting filler plate 16 in at least two alternate positions for adjusting the location of the filler plate for use with different sizes of bacon bellies. In the illustration given, as shown in Figs. 2 to 4, bottom plate 10 is provided with holes 18 into which are press-fitted the reduced end portions of dowel pins 19. Filler plate 16 is provided with two sets of corresponding holes 20 and 21 for slidably receiving the projecting ends of pins 19. As shown in Fig. 2, filler plate 16 is in its position for use with large bacon slabs, in which position holes 20 receive pins 19. To shift filler plate 16 to its position for use with small bacon bellies, it is only necessary to lift it and shift it laterally until pins 19 are engaged in holes 21.

While it is more convenient to mount filler plate 16 on bottom plate 10, it can also be mounted on top plate 11, in which case the bacon slab would be inserted with the flank pocket upwardly instead of downwardly. In addition, other variations can be made in the constructional details set out above without departing from the spirit of this invention.

I claim:

1. In a bacon-forming press of the type having a bacon-forming chamber provided by a bottom plate, a movable top plate, and relatively movable side and end plates, the improvement comprising a filler plate received on said bottom plate for engaging the flank pocket at the ham end of the bacon belly, said filler plate having a smoothly rounded upper surface, whereby said bacon belly can be pressed without wrinkling the surface of the belly in the vicinity of said flank pocket.

2. The structure of claim 1 characterized by the further fact that said filler plate is of lesser thickness than the corresponding depth of said flank pocket but of greater length and width than the corresponding length and width of said flank pocket.

3. The structure of claim 1 characterized by the further fact that said filler plate is detachably received on said bottom plate, and that said filler plate and bottom plate are equipped with means for mounting said filler plate on said bottom plate in at least two alternate positions, thereby permitting the location of said filler plate to be adjusted for use with different sizes of bacon bellies.

4. In a bacon-forming press of the type having a bacon-forming chamber provided by spaced bottom and top plates, end plates, and side plates, all of said plates having substantially flat, smooth inner surfaces and the oppositely disposed pairs of plates being relatively movable, the improvement comprising a filler plate detachably mounted on one of said bottom and top plates for engaging the flank pocket of the bacon belly, said filler plate having a smoothly rounded outer surface for preventing the wrinkling of the bacon belly surface in the vicinity of the flank pocket while at the same time tending to flatten out said flank pocket.

5. In a bacon-forming press having a bacon-forming chamber provided between two relatively movable plates, the improvement comprising a filler plate received on one of said chamber-providing plates for engaging the flank pocket of the bacon belly, whereby said bacon belly can be pressed without wrinkling the surface of the belly in the vicinity of said flank pocket.

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