Feb. 15, 1938. E. F. NESS 2,108,546

MACHINE FOR WRAPPING BARS OF BUTTER OR THE LIKE

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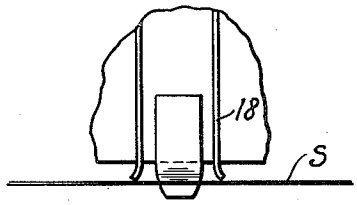
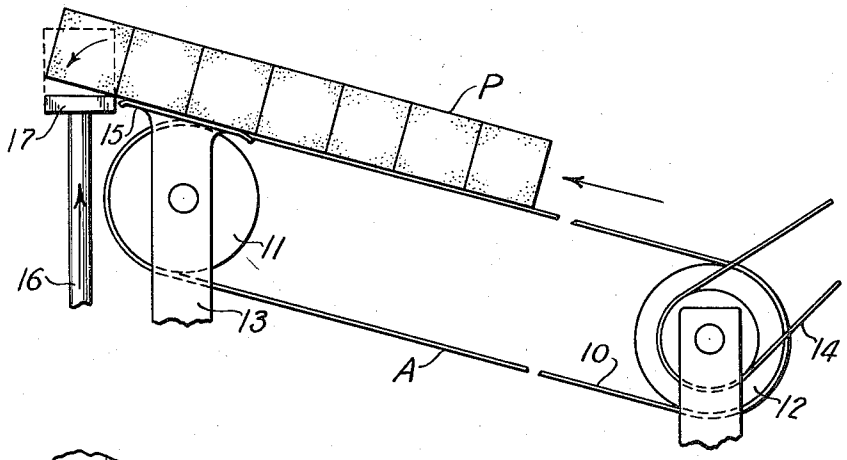


FIG. 1.



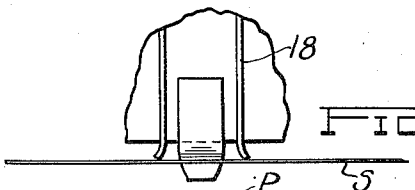
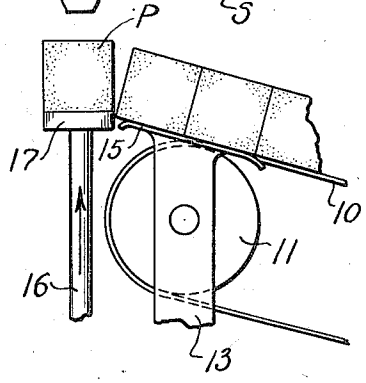


FIG. 2.



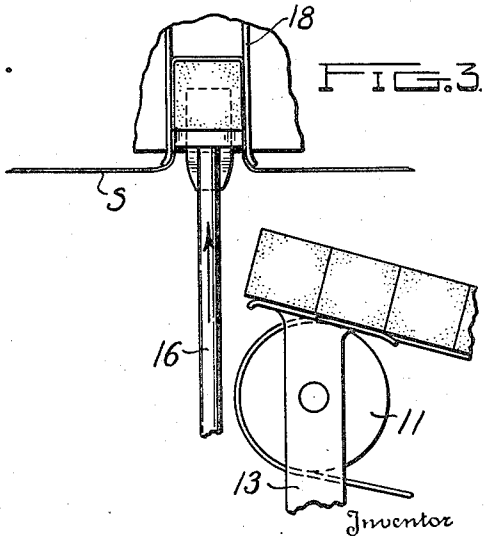


FIG. 3.

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UNITED STATES PATENT OFFICE

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MACHINE FOR WRAPPING BARS OF BUTTER OR THE LIKE

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3 Claims. (Cl. 93—2)

This invention relates to machine for wrapping bars or prints of butter, oleomargarine, or the like, with flexible sheet material, but more particularly to feeding devices for such machines by which the bars are advanced to the wrapping parts.

An object is to produce a feeding mechanism for wrapping machines of this character which militates against adjacent bars adhering to one another and, when separated, pulling material from one bar or the other.

Further objects will hereinafter appear and for purposes of illustration, an embodiment of the invention is shown on the accompanying drawing in which:

Figure 1 is a diagrammatic view in side elevation showing the bar or print feeder and the ram for advancing individual bars from the feeder to the wrapping device;

Figure 2 is a fragmentary elevation showing the ram after a bar has been engaged by it; and

Figure 3 is a view similar to Figure 2 showing the position of the ram during its advancing movement to the wrapping device.

The illustrated embodiment of the invention comprises a feeding device A for bars or prints of butter, oleomargarine or the like, designated at P. The bars P are usually of pound, half-pound or one-quarter pound size, rectangular in cross section, and of longitudinally elongate form. In practice, the butter is delivered in bulk to a printer, which first forms a slab of rectangular cross section, and from this slab bars or prints of different sizes are cut, according to the desired weight. The prints or bars are delivered from the printer in any suitable way to the feeder A, which, in this instance, is in the form of an endless belt 10, trained about pulleys 11 and 12 suitably mounted in a supporting frame 13. The receiving end of the belt 10 is below the discharging end thereof, so that the bars P are advanced uphill or in an upwardly inclined direction. The belt 10 in this instance is driven by belt 14, and may operate continuously or in a step by step manner, as desired.

The bars P are disposed crosswise of the belt 10 with their ends in alignment and the side of the bars may be in closely juxtaposed relation. The belt moves at a relatively slow rate of speed and the bars P are advanced thereby to a shoe 15, succeeding bars pushing or advancing the foremost bar along the shoe toward the discharge end.

Reciprocating vertically in front of the belt 10 is a ram 16 having a horizontally disposed shelf 17 at its upper end. The ram 16 is driven in any suitable manner in timed relation to the movement of the belt 10, so that as the ram moves upwardly, the shelf 17 will engage the foremost bar P at the rearward edge portion of the underside thereof. As the ram continues its advancing movement, the bar so engaged is tilted away from the next succeeding bar, so that its undersurface rests upon the shelf 17.

Tilting of the bar away from the adjacent bar militates against these bars adhering, obviating the liability of portions of one bar adhering to and being pulled away by the other bar. Sticking of bars has heretofore been troublesome in that it not only interferes with the securing of accurate weights, but also with the wrapping operation.

Although the angle may be varied, an angle of approximately 10 degrees defined by the intersection of the line of movement of the bars on the bars on the belt 10 and the top surface of the ram 16, has been found entirely satisfactory. In any event it should be understood that the angle defined by such lines of movement should be other than 90 degrees (either greater or less) and such as to enable one edge portion of the shelf 17 to engage an edge portion of the bar P in the first instance.

The ram 16 continues its upward movement, moving the bar P thereon into engagement with a sheet S of flexible sheet material, such as parchment paper, which has been delivered into its path of movement. Thereafter, the bar P is advanced by the ram between the folding plates 18, which operate to fold the sheet material S partially around the bar P. Completion of the wrapping operation may be effected in any well known manner, such devices being well known to those skilled in this art. The ram 16 may advance the individual bars P entirely through the folding plates, and thereafter another ram operating at right angles to the movement of the ram 16 may carry the partially wrapped bar through other folding members to complete the folding of the sheet. Since such mechanism forms no part of the present invention, detailed description thereof is not given. It will be understood that after the ram 16 has completed its upward movement, it retracks in position to engage the next succeeding bar and repeats the above described operation.

It will be understood that numerous changes in details of construction, arrangement and operation may be effected without departing from the spirit of the invention, especially as defined in the appended claims. While I have used the

word "butter" in the claims, it is not to be considered as limiting because other plastic or semi-plastic materials, such as oleomargarine, lard, etc., can be similarly handled to advantage.

What I claim as new and desire to secure by Letters Patent is:

1. In a butter bar wrapping machine having wrapper folding members, wherein the bars are substantially in contact with each other, means for feeding the bars to the folding members, means for supporting the bars after they leave the feeding means, and means timed to successively move the bars as their rear sides reach the front of the supporting means to the folding members.

2. A butter wrapping machine in accordance with claim 1, wherein the supporting means consists of a shoe which projects at one end beyond the feeding means and is in substantially the line of movement of the periphery of the means which move the bars to the folding members.

3. A butter wrapping machine in accordance with claim 1, wherein the feeding means embodies an endless conveyor and a shoe overlying the conveyor and has its front disposed adjacent the line of movement of the means which move the bars to the folding members.

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