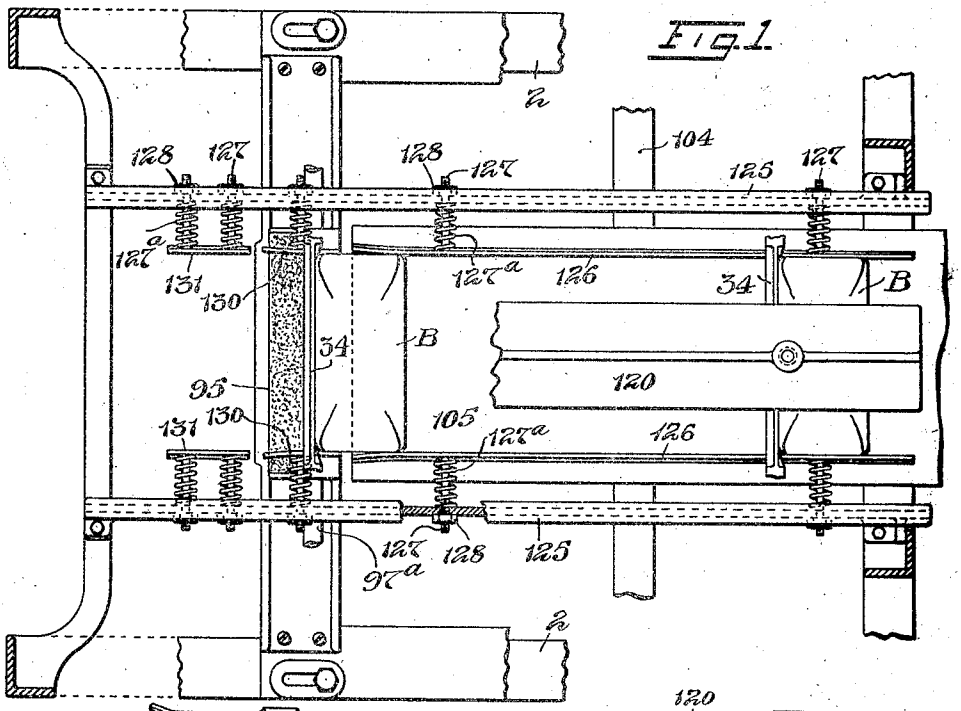
H. A. SÉVIGNÉ.

APPLIANCE FOR SEALING WRAPPED PACKAGES.

APPLICATION FILED NOV. 24, 1913.

1,104,740. **Patented July 21, 1914.**

Fig. 1.



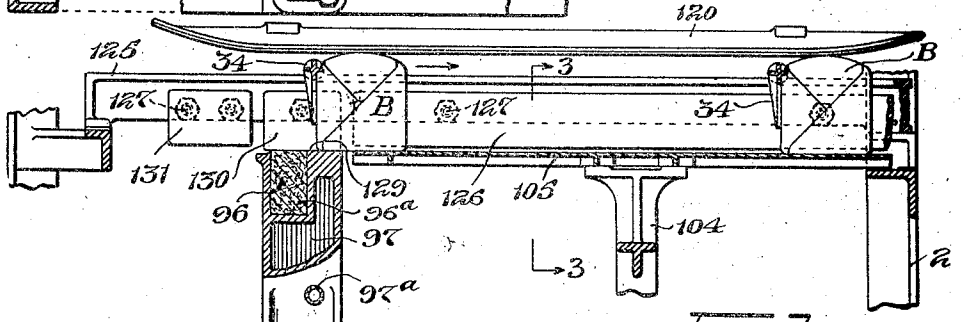


Fig. 2.

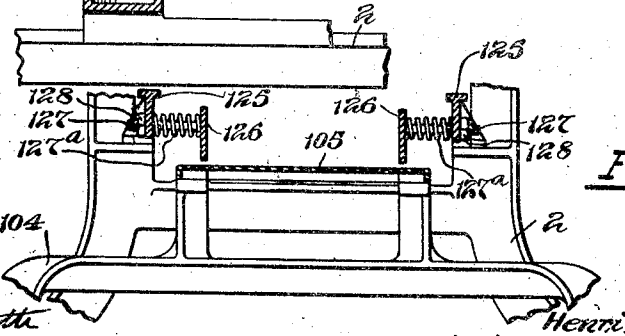


Fig. 3.

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APPLIANCE FOR SEALING WRAPPED PACKAGES.

1,104,740. Specification of Letters Patent. Patented July 21, 1914.

Application filed November 24, 1913. Serial No. 802,823.

To all whom it may concern:

Be it known that I, HENRI A. SÉVIGNÉ, a citizen of the United States, and resident of Winthrop, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Appliances for Sealing Wrapped Packages, of which the following is a specification.

This invention relates to the sealing of wrapped packages and has reference particularly to mechanism or devices for facilitating the sealing of loaves of bread which have been wrapped in what is known as "waxed paper."

While the appliance may be employed in connection with a machine for automatically and mechanically wrapping loaves of bread as described and illustrated in my application 602,062 and may have means for applying wax at the sealing point, yet, as explained in my said application, the means for supplying wax may be dispensed with and the paper wrapper impregnated with wax or other like sealing material adapted to seal the several folds of the wrapper when brought in contact with means for heating the same. My improved sealing appliance however does not require that it shall be used in connection with a machine which wraps the articles, for the said articles, such as loaves of bread, may be wrapped by hand and then pushed through the sealing appliance, with the result that the portions of the package which require treatment are first heated, either for the purpose of melting the wax carried by the paper or for applying wax in heated condition, and then cooling said portions of the package to retain the sealed portions in set position.

My invention consists in the improvements which I shall now proceed to describe and claim.

Of the accompanying drawings: Figure 1 is a plan view, parts being broken out or in section, said view also showing portions of a suitable framework for the appliance; Fig. 2 represents a longitudinal section of the same, partly broken out or in section; Fig. 3 represents a section on line 3—3 of Fig. 2.

Similar reference characters indicate similar parts in all of the views.

A suitable frame-work 2 supports the appliance, including a heated tank 95 having a chamber 96 in its upper portion, the chamber 97 having a gas heater pipe 97ª. Standards 104 support the table or cooling plate 105. A suitably supported pressure plate 120 may be employed to bear upon the upper surfaces of the wrapped articles B, such as loaves of bread, to insure the proper retention of the folds of the wrapper at the under side in contact with the bottom of the guideway for the articles.

The parts so far described are indicated by the same reference characters as the same parts illustrated and described in my application 602,062. Other parts of the mechanism included in the machine forming the subject matter of my application 602,062 aforesaid, but not designated in the drawings thereof by reference characters, will now be explained.

Suitably supported by the frame-work are longitudinal bars 125, said bars being beyond the edges of the table or cooling plate 105 hereinbefore described as supported by suitable standards 104. As the wrapped articles, such as loaves of bread, are pushed over the table 105 in the direction of the arrow (Fig. 2), either by direct contact of the hands of the operator or by means of pushers 34, it is of course essential that the end folds of the wrapper shall be held in proper position. This is effected by means of the side plates 126 above the side edges of the table 105 and of course adjustable to vary the space between the plates 126, this being necessary to avoid damage to the articles in case some articles are longer than others. The plates have pins 127 projecting outwardly therefrom, springs 127ª being interposed between the plates 126 and bars 125, the outer ends of said pins passing through the bars 125 and screw-threaded and having nuts 128 whereby the positions of the plates may be adjusted relatively to each other, while at the same time permitting them to yield so that the package which is passed between them will be compressed to a slight degree sufficient to retain the folds in position. The nuts 128 enable the width of the opening or passageway between the side plates to be varied according to the length of the packages that are being passed between them. The ends of the plates 126 where the package enters are slightly turned outwardly, as shown in Fig. 1, to present a flared entrance in order that the end folds of the package may not be damaged.

The top of the tank 95, which I have indicated at 129, constitutes a heating table as hereinafter explained. A portion of this table carries wick material which, if kept saturated with wax such as paraffin, will be heated by the burner 97ª, the table surface 129 being of course also heated. To hold the end folds of the wrapped package in proper position while the package is being passed over the table 129, I provide side plates 130, which of course are yieldingly mounted and adjustable, as by means similar to means for supporting the plates 126. In the drawings I also illustrate some similarly mounted side plates 131, these latter plates being employed when the appliance is used in connection with automatic folding mechanism such as described in my application 602,062. If the sealing and cooling appliance however is used for operation upon hand-wrapped packages, then the plates 131 are not necessary.

When articles such as loaves of bread are wrapped somewhat in the manner indicated at B in the drawings, are placed upon the heating table 129 and pushed in the direction of the arrow in Fig. 2, the wax carried by the wrapper will be melted and diffused so that when the package next passes along the guideway presented by the table 105 and side plates 126, the melted and diffused wax will set, the packages being thereby sealed. If the paper that is employed is not sufficiently heavily waxed to result in a good seal being made, wax supplied to the wicking in the chamber 96 will be kept hot and in sufficiently melted condition to be applied to the bottom of the package as it is pushed over it, the table 129 still further diffusing the wax. Owing to the space existing between the table 129 and the table 105, and the similar spaces existing between the plates 130 and the plates 126, the cooling portion of the guideway is heat-insulated from the heating portion of the guideway. I do not limit myself however to providing a space as just explained, since if the metal of which the guideway is constructed is of sufficiently low conductivity, the heat from the burner 97ª will not be transmitted far enough along the members 105 and 126 to interfere with the cooling action of the farther portion of the guideway, even if no such space as just described exists. In either case, the heating portion of the guideway causes the wrapper to assume and retain a shape completely inclosing the loaf of bread. Then, as the articles are moved along to and over the cooling portion of the table, including the side plates 126, the wrapper has time to sufficiently cool so that it can be removed in sealed condition.

Owing to the fact that the bottom of table or cooling plate 105 is flat, the sides 126 being straight and at a right angle to the bottom, and there being an open space at the top as shown in the drawings, especially Fig. 3, it is entirely feasible to push the wrapped articles along from one end to the other of the guideway, either by direct contact of the hands or by means of pushers such as those illustrated at 34, in such manner that the bottom fold as well as the end folds of the articles are held in folded condition and kept smooth. Moreover this may be done while the articles are still grasped by the hands of the user to avoid any possibility of the articles turning over or becoming twisted, or the folds becoming loosened.

The pressure plate 120 is readily removable, as shown in my said application 602062, so as to leave the top opening entirely unobstructed. Said plate, however, is of such width, as shown in Fig. 1, as to leave an open space each side of it for the movement or passage of the operator's hands grasping a loaf and sliding it along over the bottom portions 129, 105, between the side plates. The frame and legs of the machine which are fully shown in my application 602062, constitute supporting means for all portions of the device, including the outer end and the bottoms of the portions referred to as tables.

Having described my invention, I claim:

1. An appliance of the character described, comprising a straight guideway having a flat stationary bottom and straight sides at a right angle to the bottom, the appliance having a top opening to permit articles to be pushed from one end to the other, and means for heating one end of the guideway while permitting the other end to remain cool.

2. An appliance of the character described, comprising a straight guideway including a bottom and side members, the top being open to permit articles to be pushed from one end to the other, the ends of the side members for the entrance of the articles diverging, and means for heating one end of the guideway while permitting the other end to remain cool.

3. An appliance of the character described, comprising a straight guideway having bottom and sides and top, which is open to permit articles to be pushed from one end to the other, and means for heating one end of the guideway while permitting the other end to remain cool, means being provided for supplying wax at the point where the guideway is heated.

4. A sealing device for wrappers for loaves of bread comprising a table including a bottom and a pair of side walls, said table open at each end, a burner located beneath said table and adapted to heat the bottom and side walls thereof, and a cooling table arranged in longitudinal alinement with and spaced from said heating table, said

cooling table including a bottom and a pair of side walls and open at each end.

5. An appliance of the character described, comprising a straight guideway having a flat stationary bottom and straight sides at a right angle to the bottom, the appliance having a top opening to permit articles to be pushed from one end to the other, means for heating one end of the guideway while permitting the other end to remain cool, and pushers movable from end to end of the guideway.

6. An appliance of the character described, comprising a straight guideway having a flat stationary bottom and straight sides at a right angle to the bottom, said sides being yieldingly mounted, the appliance having a top opening to permit articles to be pushed from one end to the other, and means for heating one end of the guideway while permitting the other end to remain cool.

In testimony whereof I have affixed my signature, in presence of two witnesses.

HENRI A. SÉVIGNÉ.

Witnesses:
A. M. HARRISON,
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