June 13, 1933. M. O. BRENNAN 1,913,828

MEANS FOR WRAPPING FOOD PRODUCTS

Filed March 2, 1928 2 Sheets-Sheet 1

Fig. 1.

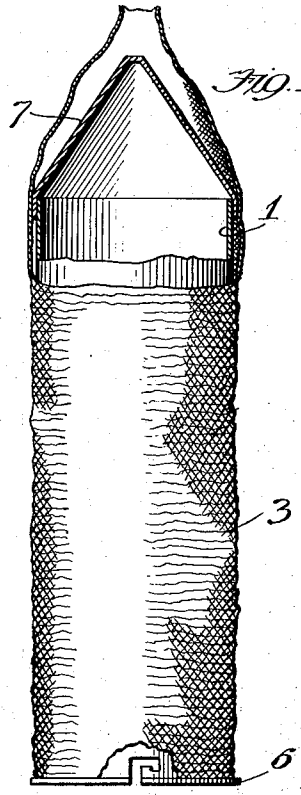


Fig. 3.

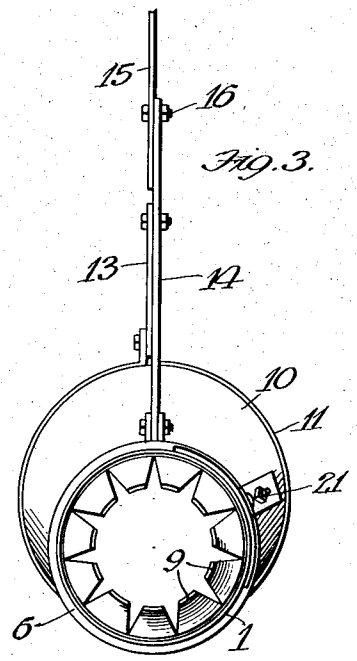
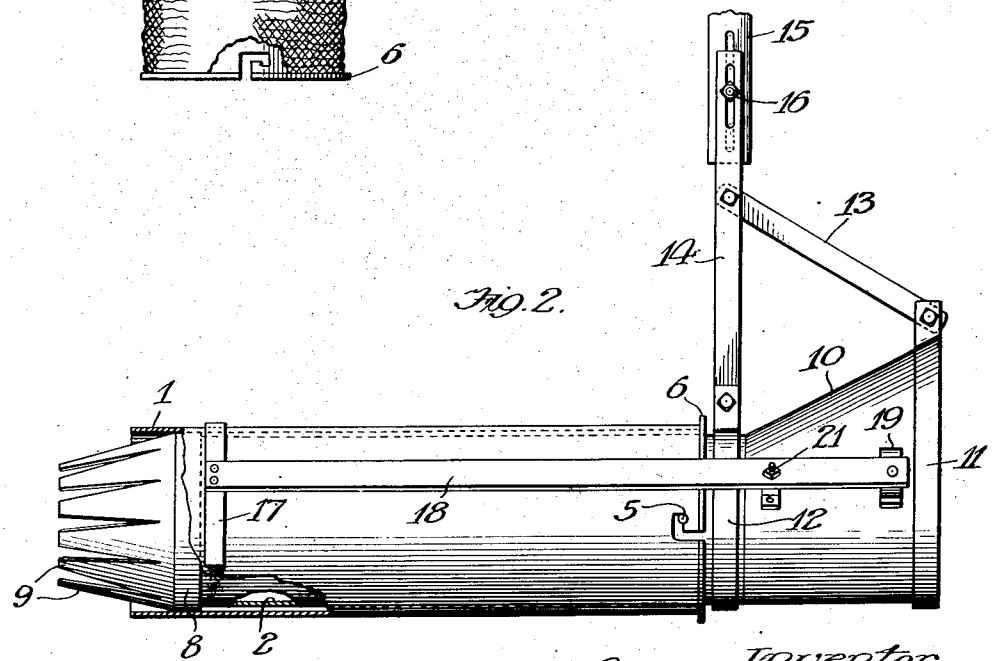


Fig. 2.



Witnesses
Martin H. Olsen.
Wm. E. Anderson

Inventor
Mark O. Brennan
By Lemmler & Lemmler,
Atty's.

June 13, 1933. M. O. BRENNAN 1,913,828

MEANS FOR WRAPPING FOOD PRODUCTS

Filed March 2, 1928 2 Sheets-Sheet 2

Fig. 4.

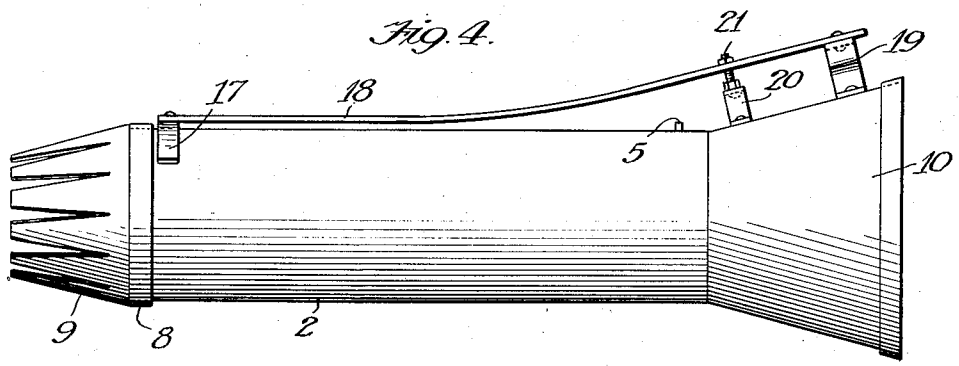
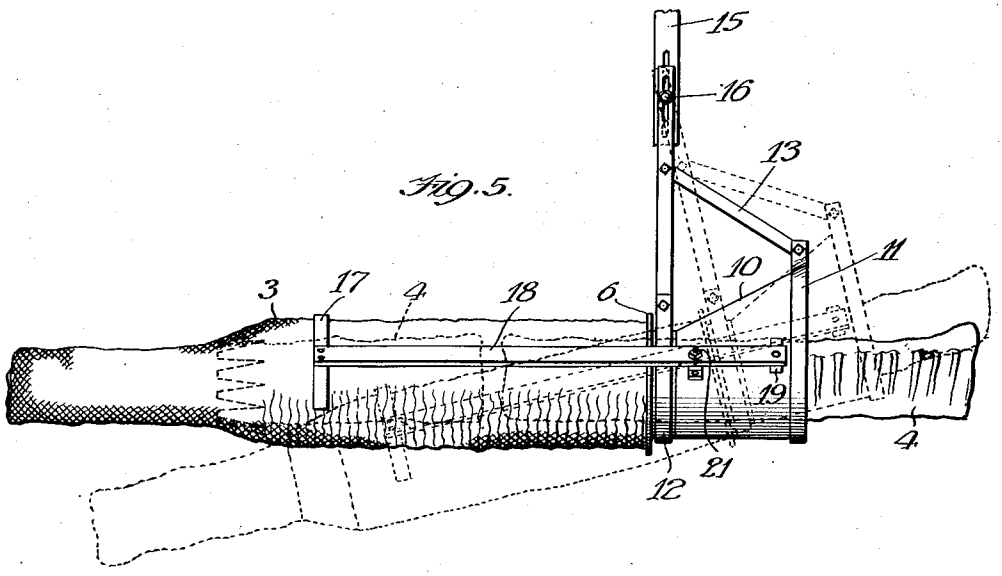


Fig. 5.



Witnesses
Martin H. Olsen
Wm. E. Anderson

Inventor
Mark O. Brennan
By Rummler & Rummler,
Atty's.

Patented June 13, 1933

1,913,828

UNITED STATES PATENT OFFICE

MARK O. BRENNAN, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO INDUSTRIAL PATENTS CORPORATION, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE

MEANS FOR WRAPPING FOOD PRODUCTS

Application filed March 2, 1928. Serial No. 258,636.

The main objects of this invention are to provide an improved method of wrapping a food product in a covering of flexible material; to provide an improved method of applying a tubular covering of cloth or the like to a food product; to provide an improved method of wrapping a fresh cut of meat in a tubular covering of elastic fabric; and to provide an improved form of apparatus for carrying out said improved method.

An illustrative embodiment of an apparatus adapted to carry out the improved method is shown in the accompanying drawings, wherein:

Figure 1 is a side elevation, partly in section, of one of the improved magazines as it appears when being loaded with a supply of tubular covering material.

Fig. 2 is a side elevation of the apparatus, partly broken away for the sake of clearness.

Fig. 3 is an end view of the same, taken from the left of Fig. 2.

Fig. 4 is another side elevation of the device.

Fig. 5 is a view similar to Fig. 2 but showing the tubular covering material compacted on the magazine and a portion thereof covering one end of a pork loin, represented in dotted outline, a tilted position of the device being also shown in dotted outline.

The improved method and means herein disclosed may be used for wrapping various kinds of articles but are intended principally for use in wrapping food products such as fresh meats and particularly cuts of fresh pork.

Frequently, in freezing meat for storage purposes, it is wrapped in paper to exclude the air. After the freezing process, when the paper wrapper is removed, much of the paper adheres to the meat and its removal necessitates scraping the meat. For this reason, before applying the paper wrapper, it has been customary to wrap the meat first in a sheet of cheesecloth or similar sheet material. However, the wrapping of the meat in the cloth sheet has not been entirely satisfactory because it was a slow process, and frequently resulted in two or more sheets of cloth being wrapped around a cut of meat, due to the difficulty of separating the top sheet from the stack.

The improved method embodying this invention consists in moving the cut of meat or other article through a hollow magazine and, as it emerges from the magazine, applying thereto a covering of tubular material which is stored on the magazine. It has been found that the best results are obtained by the use of a knitted fabric which is light and comparatively inexpensive and which possesses the desirable elasticity which permits it to follow the contour of the meat.

The apparatus herein shown for carrying out this improved method comprises a pair of concentrically arranged tubular members 1 and 2. The member 1 forms a magazine for storing a supply of tubular knitted fabric 3 and the inner member 2 forms a guideway for guiding cuts of meat 4 into wrapping position at the outlet of the mazazine. The members 1 and 2 are detachably secured together by a bayonet slot connection 5 to permit ready removal of the magazine 1 when empty, for replacement by a loaded magazine on which a new supply of covering has been compacted. This construction permits a considerable saving of time in the operation of the device because, while one magazine is being used others are being loaded for subsequent use.

In the form shown, the magazine 1 is cylindrical and open at both ends. Formed at one end thereof, is a peripheral flange 6 against which the covering material 3 is compacted, as shown in Figs. 1 and 5. The other end of the magazine 1 is adapted to receive a conical cap 7, which is slipped over the outlet of the magazine while the covering material is being compacted onto the outer surface of the shell as shown in Fig. 1. When the shell has been loaded, the cap 7 is removed.

The guideway 2 is also cylindrical and is provided at its outlet end with compressing means comprising a cap 8 having a plurality of resilient fingers 9 extending inwardly into position to compress the meat as it emerges from the guideway. The outer end of the guideway 2 is enlarged to provide a hopper 10 through which the meat is fed.

The device is supported by a hanger comprising a pair of split rings 11 and 12, which embrace the hopper 10 and which are secured to links 13 and 14 respectively. The link 14 is adjustably secured to a bracket 15 by a pin and slot connection 16 which permits the members 1 and 2 to be supported at the desired position relative to the horizontal.

Located outside of the magazine 1 is a friction element 17 for resisting the withdrawal of the covering from the magazine in order to permit the outer portion thereof to be stretched as it is being applied to the meat. The element 17 is arcuate so as to conform to the magazine and is rigidly mounted on one end of a resilient bar 18. The other end of the bar 18 is supported on a resilient bracket 19 mounted on the hopper 10. Also mounted on the hopper 10, is a tensioning device 20 having a nut 21 engaging the bar 18 for varying the pressure exerted by the element 17 against the covering material.

In operation, a loaded magazine is placed on the inner member 2, with the friction grip 17 bearing against the covering material adjacent the outer edge thereof. A cut of meat is then moved through hopper 10 and guideway 2 and, as it emerges from the compressor 8, an operator draws the advanced portion of the covering 3 over the meat, as shown in Fig. 5, simultanneously stretching the portion as it is being applied. When the cut of meat has been withdrawn from the fingers 9, the portion of the covering applied thereto is severed from the tubing and the ends thereof are pressed inwardly against the ends of the meat. With this improved method and apparatus, the cuts of meat may be wrapped in rapid succession.

Although but one specific embodiment of this invention has been herein shown and described, it will be understood that numerous details thereof may be altered or omitted and steps in the method varied without departing from the spirit of this invention as defined by the following claims.

I claim:

1. A device of the class described comprising a pair of concentrically arranged tubular members, the outer of said members forming a magazine for storing a covering material, the inner of said members forming a guideway for guiding an article into wrapping position at one end of said magazine, and resilient means adjacent the outlet of said guideway for compressing articles emerging therefrom.

2. A device of the class described comprising a pair of concentrically arranged tubular members, the outer of said members forming a magazine for storing a covering material, the inner of said members forming a guideway for guiding an article into wrapping position at one end of said magazine, and means for supporting said tubular members in various angular positions relative to the horizontal.

Signed at Chicago this 18th day of February, 1928.

MARK O. BRENNAN.