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L. A. BECKER
LOADING APPARATUS
Filed July 1, 1931

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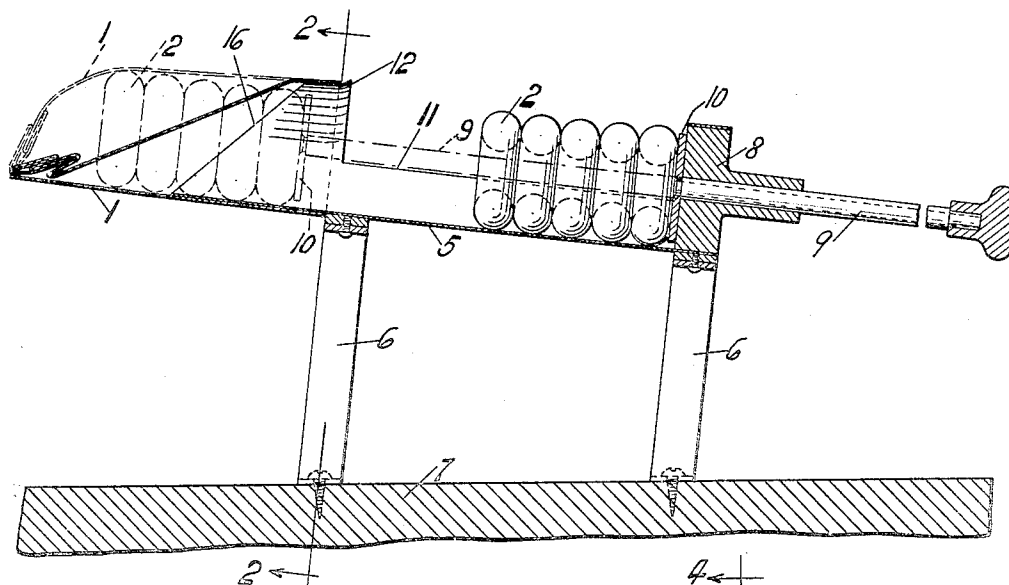


Fig. 1

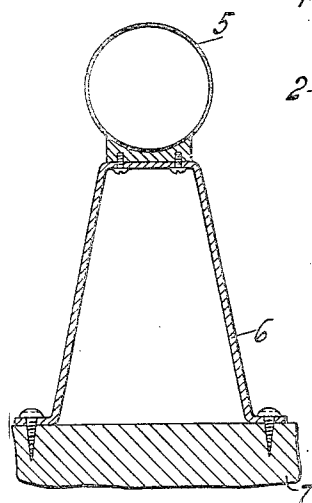


Fig. 2

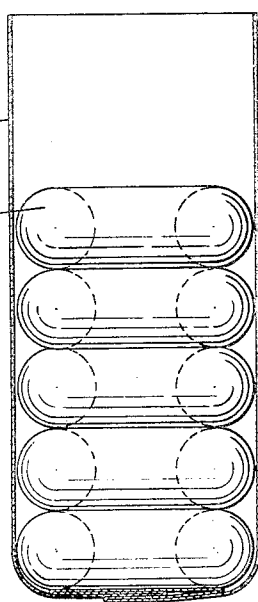


Fig. 4

BY

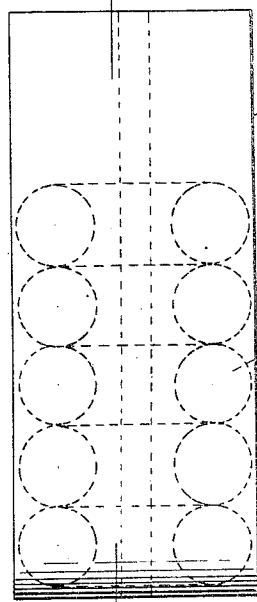


Fig. 3

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LOADING APPARATUS

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The present invention relates to a loading apparatus or device particularly adapted for use in bag filling operations. It is designed and intended for loading edibles in transparent packages, and particularly for the loading of doughnuts in water- and moisture-proof bags.

The packaging of articles such as doughnuts, crackers, cakes and other rather bulky foods in transparent moisture proof bags has assumed large commercial proportions. Large articles such as doughnuts, or the like, fill the bag quite completely, and it is for the purpose of saving the time and expense of the operatives used for this purpose, that the present apparatus has been devised. These bags are quite difficult to open at times, and this delays the operators and increases the expense of loading the bags.

The present apparatus is a simple and convenient means for accomplishing the loading of bags, containers, or the like, with doughnuts, crackers, or other similar articles, and while the description of the device is quite detailed, it will be understood and appreciated that changes or modifications may be made in other embodiments of the invention.

In the drawing in which the best known or preferred form of the device is illustrated: Fig. 1 is a longitudinal section through the device;

Fig. 2 is a cross section on the line 2—2 of Fig. 1;

Fig. 3 is a side view of the loaded bag; and Fig. 4 is a section thereof on the line 4—4 of Fig. 3.

The bag or container which is designed to be filled is indicated by the numeral 1, and is of any preferred form, it being usual to employ a bag made of regenerated cellulose sheeting known in the trade as "Cellophane" for this purpose. These bags are light and flexible, and are difficult to open at times for the insertion of the articles to be contained therein. The articles indicated at 2 are doughnuts which, due to their shape and bulk, and difficult to insert in this type of bag.

The apparatus comprises a tube or shell 5, usually of sheet metal and of a cross section to correspond nearly to the shape of the arti-

cles to be placed in the bags. This shell is supported upon two stands or legs 6, attached to a base 7, and is preferably inclined slightly to allow for the stacking of the articles at the lower end of the tube, which is closed by a head 8, in which is slidably mounted the stem 9 of a plunger 10 against which the articles are stacked. Between the supports the barrel or shell is cut away as at 11, to permit of the insertion of the doughnuts within the shell, the metal of the shell being bent upwardly slightly at the upper end of the opening as shown at 12 to facilitate the movement of the articles into the bags.

The outer or discharge end of the shell is cut away as shown at 16 on a diagonal plane, and the bag or container 1 slipped over the end thereof. The base of the shell continues out to the bottom of the bag to support the doughnuts. When the bag is in position and the required number of doughnuts located in the chamber, the forward movement of the plunger will force the doughnuts outwardly through the mouth of the barrel and into the bag. The air which is forced outwardly with the charge or stack of articles will open up the bag and insure the seating of the articles therein. The bag with the charge therein is then removed and sealed in any well known manner. The tapered end of the shell can be inserted easily within the bag and thus facilitate the loading operation.

What is claimed is:

A device for loading articles in bags or containers, comprising a shell substantially circular in cross section and of uniform width throughout and permanently supported in an inclined position on a base and having an opening through which the articles are introduced and stacked in the lower end of the shell, a plunger mounted in the lower end of the shell and movable longitudinally thereof, the upper end of the shell being open and tapered forwardly to open and receive the containers to provide a support for the articles to the outer end of the shell.

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