

J. PETERSON.
 VENDING APPARATUS.
 APPLICATION FILED AUG. 17, 1912.

1,170,667.

Patented Feb. 8, 1916.
 2 SHEETS—SHEET 1.

Fig 1

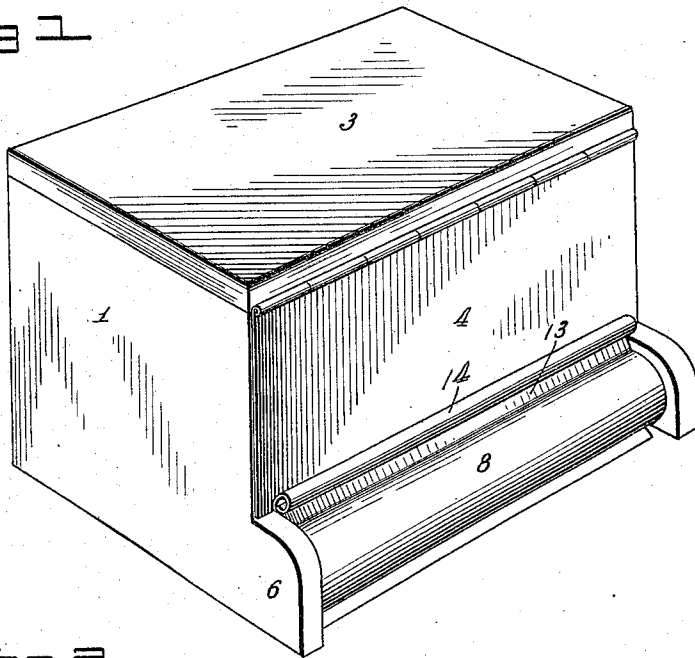
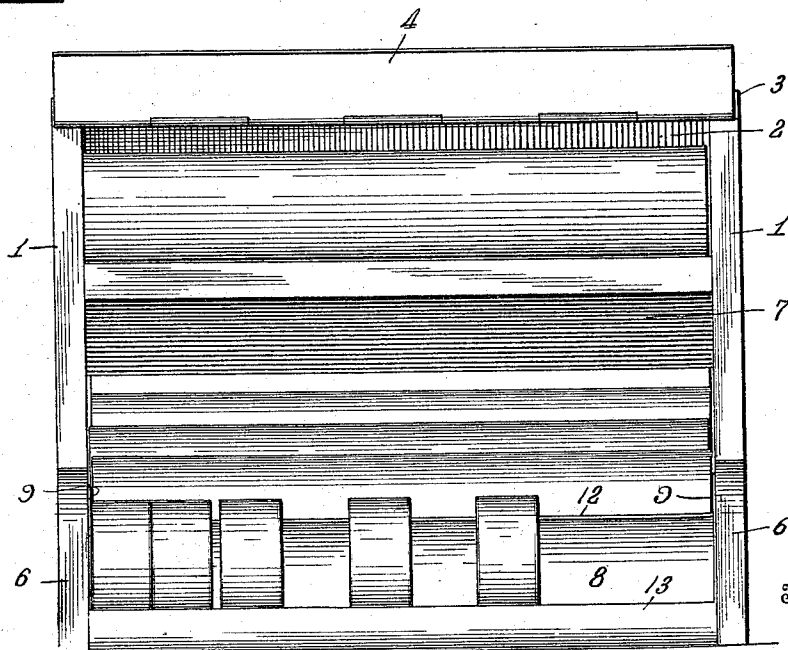


Fig 2



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Fig 3

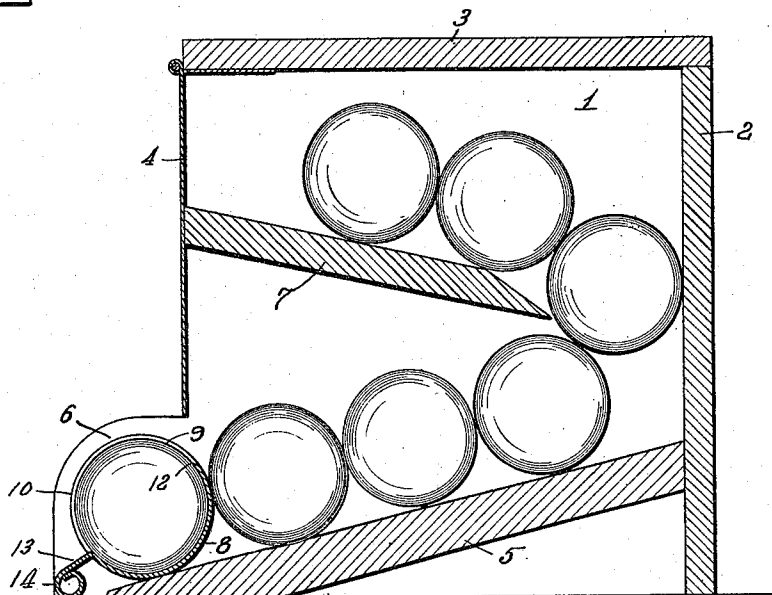


Fig 4

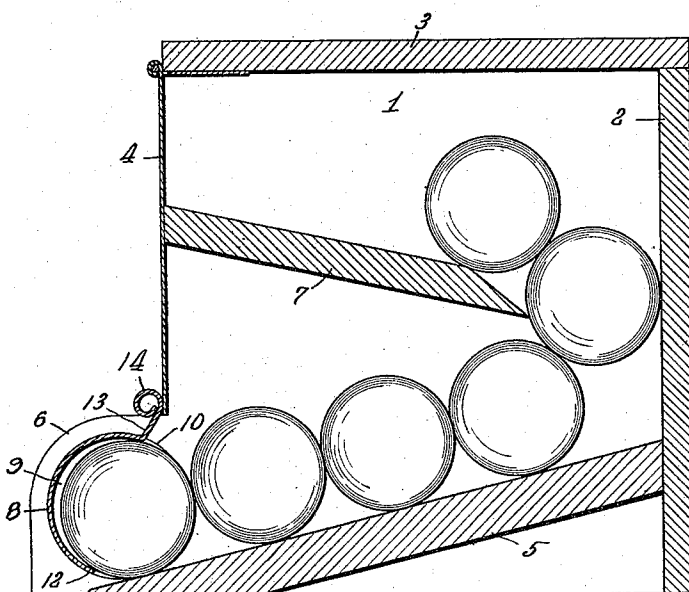


Fig 5

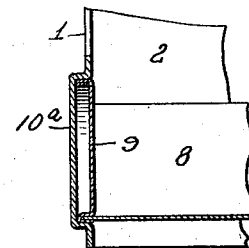
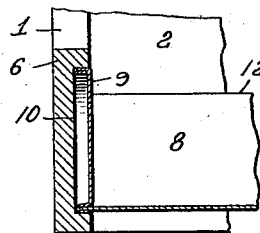


Fig 6 Inventor

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UNITED STATES PATENT OFFICE.

JONATHAN PETERSON, OF BROOKLYN, NEW YORK, ASSIGNOR TO WEYMAN BRUTON COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

VENDING APPARATUS.

1,170,667.

Specification of Letters Patent.

Patented Feb. 8, 1916.

Application filed August 17, 1912. Serial No. 715,600.

To all whom it may concern:

Be it known that I, JONATHAN PETERSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Vending Apparatus, of which the following is a specification.

My present invention relates to certain new and useful improvements in vending apparatus, and more particularly to that type known as "article-delivery" apparatus, wherein provision is made for storing a quantity of the articles to be delivered and for delivering the articles singly, means being also provided for automatically and successively feeding the articles to the delivery means.

Certain manufactured products, such for instance as some brands of "snuff," are now usually put up for sale in small cylindrical boxes, a number of these boxes being inclosed in a sealed wrapper forming a cylindrical roll, this method of packing being employed, in order to prevent the goods from drying out while on the shelf of the dealer, the cylindrical packages or rolls being broken only as the boxes are required, hence all surplus stock may be kept in a fresh state, its original moisture being retained for a considerable period of time.

The object of the present invention is to provide an apparatus especially designed for storing a number of the unbroken cylindrical packages or rolls above referred to and for automatically and successively feeding such rolls to a specially designed delivery trough capable of holding all or a less number of the boxes forming one of the packages or rolls, the said delivery trough being rotatably supported in such manner that it may be moved to a position to expose the boxes to view and to enable them to be readily taken therefrom and which trough may also be moved to a closed position which will carry the boxes within the casing of the apparatus where they will not be appreciably affected by prevailing atmospheric conditions. The said trough is so constructed that when in its open position it will prevent the surplus stock of packages within the casing from moving forward and when in its closed position the loose boxes in the trough will engage the surplus stock to effect this end, but as soon as all the loose boxes are taken

from the trough and the latter is again moved to its closed position, a fresh package or roll will be automatically delivered thereinto.

While I have referred to the apparatus as having been especially designed for the purpose of holding and delivering cylindrical rolls of a particular product, it will of course be manifest that it may be employed for holding and delivering cylindrical packages or articles of any kind without departing from the spirit of the invention.

With these ends in view and in order to enable others to clearly understand, make and use my said invention I will now proceed to describe the same in detail reference being had for this purpose to the accompanying drawing, wherein—

Figure 1 is a perspective view looking toward the front of an apparatus constructed according to the present invention, the delivery trough being closed. Fig. 2 is a front elevation showing the delivery trough open and the front cover raised. Fig. 3 is a central transverse vertical section taken through the apparatus, the delivery trough being open. Fig. 4 is a similar view with the delivery trough in closed position and showing the manner in which the boxes in the trough engage and hold back the supply of packages. Fig. 5 is a detail in section showing one method of rotatably supporting the ends of the delivery trough in the sides of the casing, as when the sides are constructed of wood. Fig. 6 is a similar detail showing a different method of rotatably supporting the ends of the delivery trough, as when the sides of the casing are constructed of metal.

Like reference numerals indicate the same parts of the apparatus throughout the several views.

The reference numerals 1, 1, designate the side walls of the casing, 2 the rear wall, 3 the top wall, 4 the front wall, which is preferably hinged to the top wall 3, and 5 the forwardly inclined bottom wall. The front wall 4 is hinged in order that the cylindrical packages may be readily placed within the casing, and also to enable the dealer to see at a glance the condition of his stock so contained in the apparatus. This front wall is also provided as a convenient

space to receive suitable advertising matter indicative of the goods contained within the apparatus.

The side walls of the casing are each provided at the base thereof with a forward extension 6 for a purpose presently to be described, and the inclined bottom 5 projects forward nearly to the outer edge of the said extensions, the forward end of the bottom wall being beveled off as shown more clearly in Fig. 3.

Within the casing there is a shelf 7 that is located above the bottom 5, but which terminates at a point forward of the rear wall 2, leaving a passageway for free movement of the cylindrical packages contained within the casing, the said shelf 7 being inclined downwardly in a direction opposite to that of the inclined bottom 5, the construction being such that if a number of cylindrical packages are placed upon the inclined shelf 7 and the inclined bottom 4 as shown in Figs. 3 and 4, they will move forward by gravity toward the front of the casing.

The casing may be made of wood or of metal, or partly of wood and partly of metal. In the instance shown the casing is made entirely of wood except as to the hinged front panel 4, which is made of metal.

Rotatably supported in the side extensions 6 is a package delivery trough 8, said trough being substantially semi-cylindrical and closed at its ends by cupped disks 9, which disks fit into circular recesses 10 formed in the inner faces of the side walls 2, the disks fitting loosely into said recesses in such manner that the trough may be easily rotated on its geometrical axis. If the side members of the casing are made of metal instead of wood, as more clearly shown in Fig. 6, then the circular recesses will be formed by stamping outwardly projecting cups 10^a from said walls.

The rotatable delivery trough is so positioned with relation to the forward end of the inclined bottom 5 that the longitudinal edge 12 of the trough, as more clearly shown in Fig. 4, may be moved to a position to bring such edge substantially flush with the upper surface of the said bottom, so that when the trough is moved to closed position, as shown, the foremost cylindrical package resting upon the inclined bottom 5 will roll by gravity into the trough, and by then rotating the trough to bring it to open position, as illustrated in Fig. 3, the package will be exposed to view, and may be readily removed, or if the trough contains separate boxes of the goods from which the package is made up, these boxes may be easily removed as demanded by the trade.

By referring to Figs. 3 and 4, it will be seen that the trough 8, when in its open posi-

tion serves as a barrier to prevent forward movement of the cylindrical packages resting upon the inclined bottom 5 and the inclined shelf 7, and when said trough is in closed position the packages or boxes therein will support the cylindrical rolls within the casing against forward movement, thus the packages within the casing will always be held back by either the trough itself or by the package or boxes within the trough, until the trough is emptied, in which case a package will automatically roll thereinto as soon as the trough is brought to closed position, thus the packages are automatically and successively fed to the trough. Inasmuch as the delivery trough may be readily opened and closed while a broken package of boxes is contained therein, it will be apparent that the goods need not be subjected to atmospheric influences since the trough may be kept closed at all times except when a purchaser calls for a package of the goods.

The delivery trough is preferably made of sheet metal, and is provided at one edge with an extension 13, terminating in a roll 14, said roll when the trough is closed contacting with the lower edge of the hinged front wall 4, so as to hold said wall closed whenever the trough is in closed position.

I prefer to make the front wall 4 of the casing a movable wall instead of, for instance, making the top wall movable, because the casing is especially designed to be placed upon store shelving, so that by hinging the front wall in the manner shown and described, the casing may be opened when it becomes necessary to restock the same with a fresh supply of packages, without removing the casing from the shelving, which it would be necessary to do if the top wall was hinged instead of the front wall.

A vending apparatus of the character herein described affords a convenient means for storing a quantity of goods put up in cylindrical form, and permits of the goods being delivered as required, and at the same time keeps the goods always in a fresh state.

What I claim is:—

The combination with a casing having a front wall and side walls provided with forward extensions projecting beyond the front wall, and an inclined bottom adapted to support a plurality of rows of cylindrical articles and down which bottom the articles may roll by gravity, of a substantially semi-cylindrical trough having its end flush with the side walls of the casing and journaled in the forward extensions of the side walls and adapted to rotate on its longitudinal axis so that when the trough is in its closed position the advanced row of articles will lie therein and at a point forward of the front wall, but between the extensions of the side walls, and a member carried by the trough and extending at an abrupt angle to one of

the longitudinal edges of the trough, said member limiting the opening movement of the trough whereby the articles therein will be exposed to view while held in the trough, said trough in its closed position acting to hold back the remaining articles on the inclined bottom.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

J. PETERSON.

Witnesses:

A. H. BURROUGHS,

L. E. FISHER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."