Dec. 30, 1924.

W. S. SMITH

1,520,970

DISPENSING DISPLAY RACK

Filed Jan. 30, 1924

2 Sheets-Sheet 1

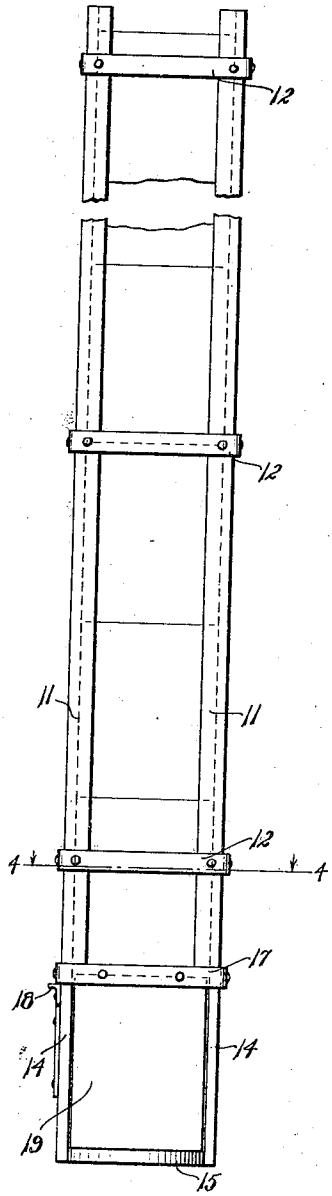


Fig. 1.

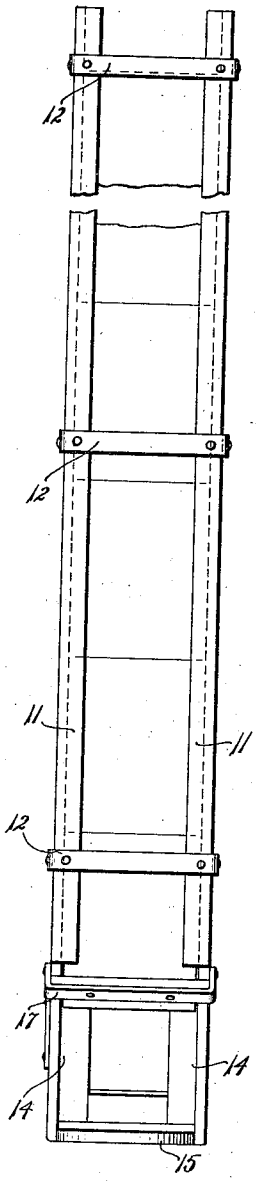


Fig. 2.

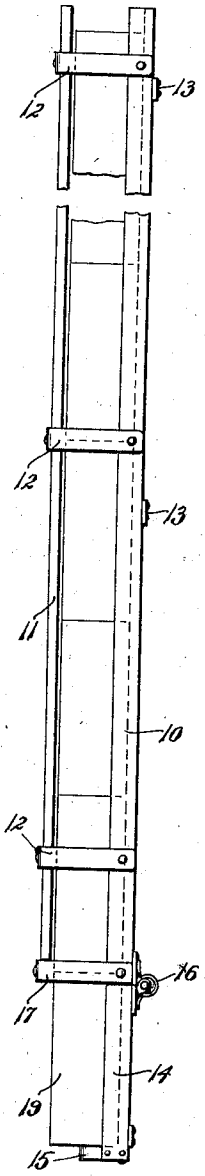


Fig. 3.

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WITNESSES.

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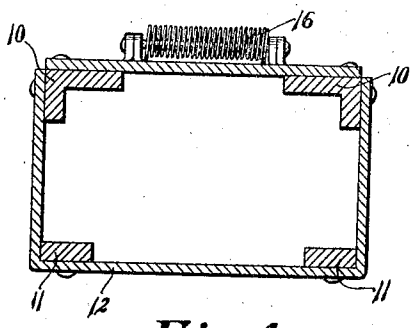


Fig. 4.

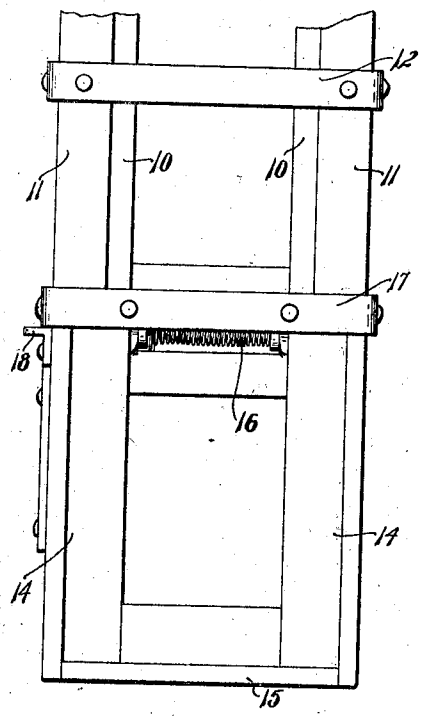


Fig. 5.

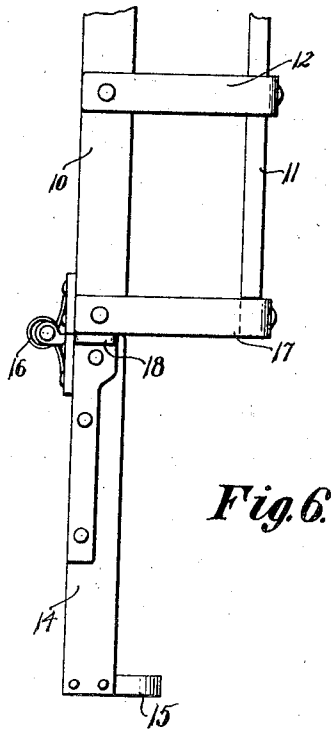


Fig. 6.

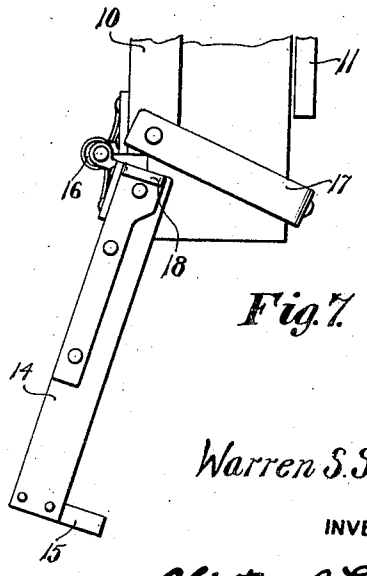


Fig. 7.

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Patented Dec. 30, 1924. 1,520,970

UNITED STATES PATENT OFFICE.

WARREN S. SMITH, OF BANGOR, PENNSYLVANIA.

DISPENSING DISPLAY RACK.

Application filed January 30, 1924. Serial No. 689,533.

To all whom it may concern:

Be it known that I, WARREN S. SMITH, a citizen of the United States, residing at Bangor, in the county of Northampton and State of Pennsylvania, have invented new and useful improvements in Dispensing Display Racks, of which the following is a specification.

It is the purpose of this invention to provide a dispensing rack primarily intended for use in grocery stores and the like, the rack being designed to support a column of packages or articles adapted to be singly dispensed by removing the lowermost package from the rack, means being provided to check and hold the column of packages within the rack while the lowermost package is being removed therefrom and subsequently allow the column of packages to be moved downwardly through the rack so that the next package in order will be properly positioned to permit it being conveniently removed from the rack when desired.

The nature and advantages of the invention will be better understood when the following detailed description is read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawing forming part of this application, like numerals of reference indicate similar parts in the several views, and wherein:

Figure 1 is a view in elevation of the rack showing the manner in which the column of articles are supported thereby.

Figure 2 is a similar view showing a hinged section swung to a position to allow the lowermost article to be removed, and the active position of the pivoted yoke.

Figure 3 is a detail view of the rack.

Figure 4 is a sectional view taken on the line 4—4 of Figure 1.

Figure 5 is an enlarged fragmentary front elevation of the rack showing the normal position of the hinge section, and also the normal position of the pivoted yoke.

Figure 6 is a fragmentary view showing the device in side elevation and the normal position of the hinge section of the rack.

Figure 7 is a fragmentary detail view showing the position occupied by the hinged section of the rack after the article has been removed therefrom and also the position occupied by the yoke for supporting the column of packages within the rack as specified.

The rack forming the subject matter of the present invention is preferably rectangular in cross section, and is made up of spaced pairs of parallel members, one pair of the members being indicated at 10 and the other pair at 11. All of these members are properly secured together by metallic U-shaped members 12 and cross strips 13. It will be noted that each of the members 10 is substantially L-shaped in cross section to form a guide for the articles supported within the rack and adapted to slide therethrough to be dispensed. The rack includes a hinged section made up of spaced parallel members 14 which are of the same cross sectional configuration as the members 10, and normally arranged in end to end relation therewith, thereby forming a continuity of the members 10. The members 14 of this hinged section are connected at their lower ends by an end wall 15 upon which the lowermost article of the column of articles arranged within the rack reposes. A spring 16 surrounds the pivot for the hinged section and exerts a pressure against the latter for normally holding it in the position shown in Figures 1 and 3.

Pivoted on the lower ends of the members 10 is a yoke 17 which as above stated is used to check the fall of the column of articles through the rack, when the lowermost article is removed therefrom. While this yoke is freely pivoted, it is normally maintained in the position shown in Figures 1 and 3 by a lug 18 arranged at one side of the hinged sections of the rack, and allowed to gravitate to an active position when the hinged section is swung to the position shown in Figures 1 and 2.

In practice, boxes of corn flakes or other merchandise are arranged in superimposed relation within the rack, with the lowermost article or package 19 reposing upon the end wall of the hinged section of the rack. The normal position of this hinged section is in alignment with the members 10, at which time the lug 18 carried by said section bears against the pivoted yoke to hold the latter spaced from the packages or boxes arranged within the rack. Now, when it is desired to dispense the merchandise, the hinged section is swung rearwardly upon its pivot to allow the lowermost package 19 to be removed from the end wall of said section. Manifest-

ly, when the hinged section is moved to this position, the lug 18 is operated from the pivoted yoke, and the latter immediately gravitates to the position shown in Figure 2, that is obliquely with respect to the adjacent package, and bears against the latter in a manner to support the entire column of packages from sliding through the rack. It is of course to be understood, that the hinged section is moved backwardly by the hand of the user, and held in this position until the lowermost package has been entirely removed, whereupon the hinged section is released and automatically returned to its normal position through the instrumentality of said spring. When the section returns to normal position, the lug 18 again contacts the pivoted yoke, elevating the latter in spaced relation to the adjacent package, thereby allowing the entire column of packages to slide through the rack until the lowermost package engages the end wall of the hinged section. In addition to the convenience with which articles of merchandise of this character can be dispensed, it will be further noted that the rack provides a simple and neat support for such merchandise, and can be conveniently carried from place to place and arranged in this position in the store. Of course any suitable means may be employed for suspending the rack from a wall or shelf or any other support.

While it is believed that from the foregoing description, the nature and advantages of the invention will be readily apparent, I desire to have it understood that I do not limit myself to what is herein shown and described, and that such changes may be resorted to when desired as fall within the scope of what is claimed.

Having thus described the invention, I claim:

1. A display and dispensing device comprising an elongated frame like structure designed to receive a column of packages, a hinged section depending from the rear of said frame and normally in vertical alignment therewith, said section being designed to support said column and adapted to be swung rearwardly upon its hinge to release the lowermost package, gravity means automatically operable to engage and hold the column immovable, while said hinged section occupies an inactive position, and means carried by said section for returning the said gravity means to normal position when said section is returned to its normal position, whereby the column of packages is allowed to slide through the frame into said section.

2. A display and dispensing device comprising an elongated frame like structure designed to receive a column of packages, a hinged section depending from said frame and designed to support said column, resilient means for normally holding the hinged section in vertical alignment with the frame, said section being adapted to be swung rearwardly of said frame to release the lowermost package for removal therefrom, a freely pivoted member supported by the frame and adapted to gravitate from a horizontal to an inclined position and engage and hold the column immovable while the lowermost package is being removed, and a lug projecting from said section and arranged to engage and return said member to normal position when said section is returned to its normal position, whereby the column is allowed to slide through the frame into said section.

3. A display and dispensing device comprising an elongated frame like structure designed to receive a column of packages, adapted to be singly dispensed therefrom, a hinged section depending from the frame and designed to support said column of packages, resilient means for normally holding the section in longitudinal alignment with said frame, said section being adapted to be swung upon its pivot at an inclination to the frame to release the lowermost package for removal, a yoke pivoted on the frame and normally supported by said hinged section in spaced relation to the packages, said yoke gravitating to an active position to engage and hold said column of packages when said hinged section is swung upon its pivot to an inactive position, and said yoke being released with the return of the hinged section to normal position for the purpose specified.

In testimony whereof I affix my signature.

WARREN S. SMITH.