May 24, 1938. W. A. McEWEN 2,118,320

SELF HELP MERCHANDISING DEVICE

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Fig. 1

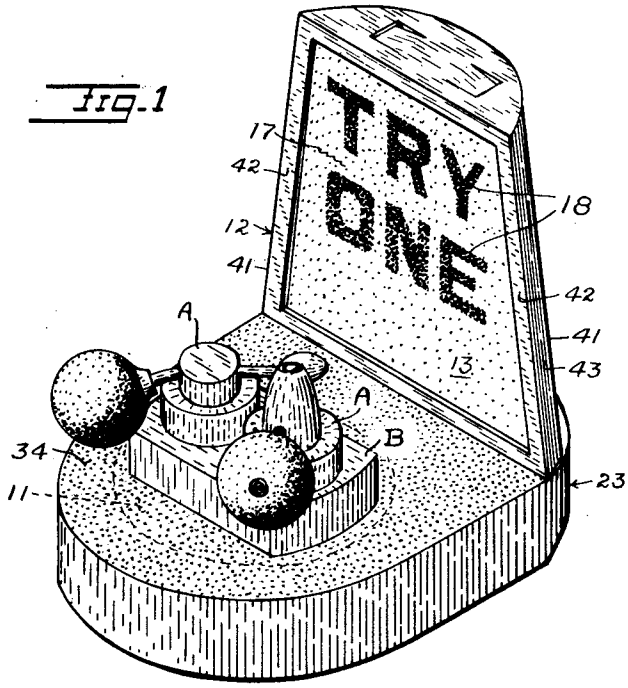
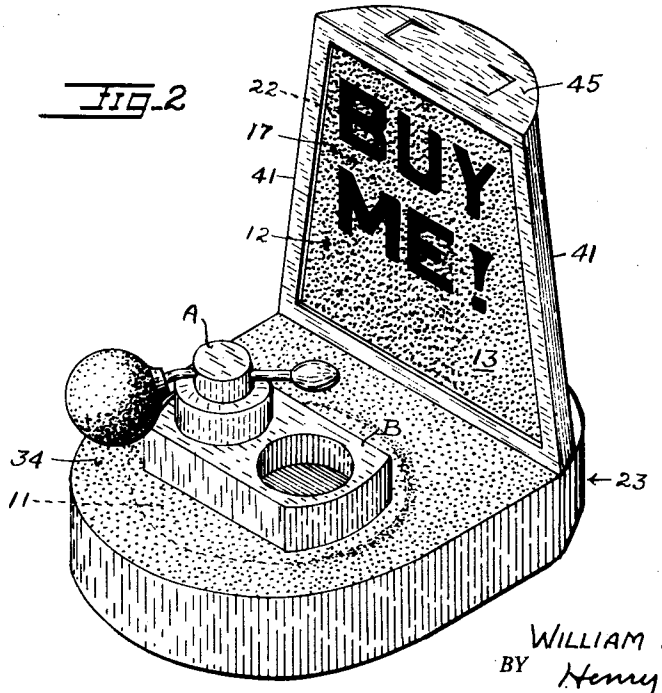


Fig. 2



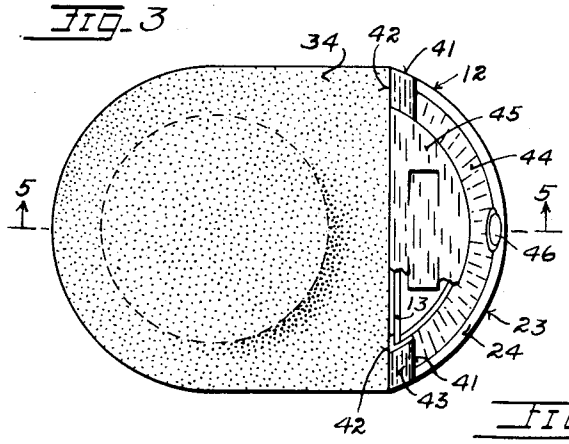
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Fig. 3



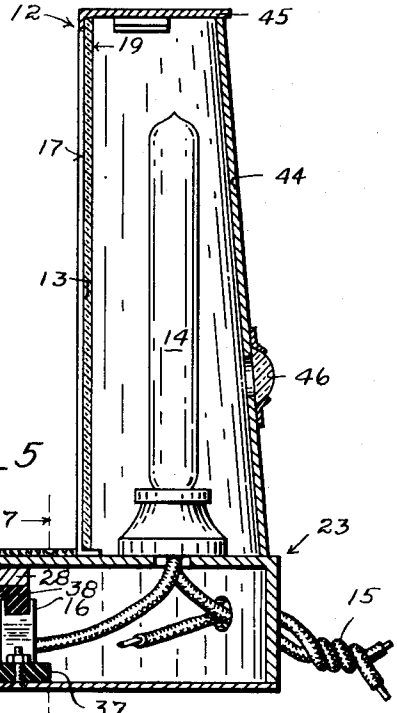


Fig. 5

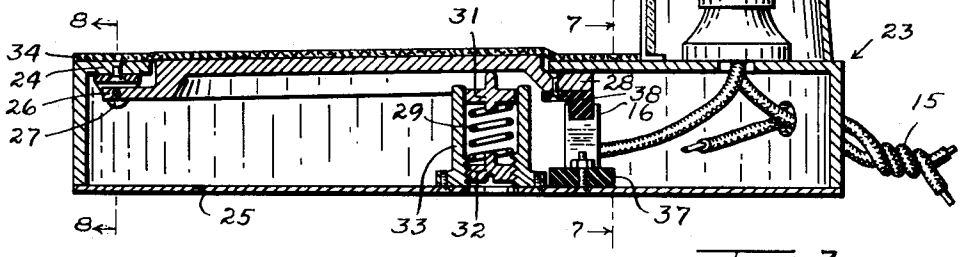


Fig. 4

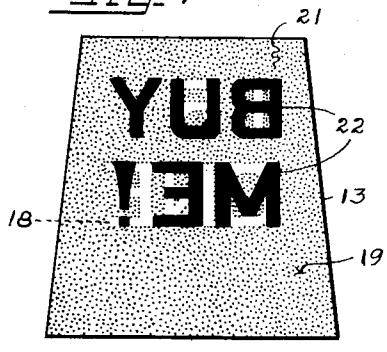


Fig. 7

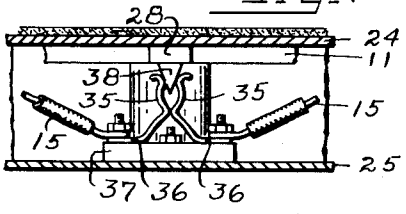


Fig. 8

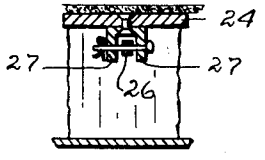
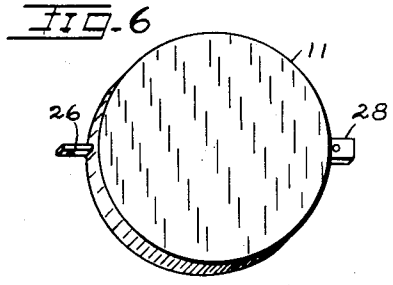


Fig. 6



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UNITED STATES PATENT OFFICE

2,118,320

SELF-HELP MERCHANDISING DEVICE

William A. McEwen, La Grande, Oreg.

Application May 13, 1935, Serial No. 21,195

7 Claims. (Cl. 40—130)

The invention relates to a merchandising device for association with an article of merchandise which is disposed for its removal by a prospective customer.

An object of the invention is to provide an improved merchandising method and means whereby a prospective purchaser is primarily invited to remove and examine an article of merchandise and is thereafter urged to purchase the article under examination, all in accordance with the indications of a changeable sign which is automatically controlled by the respective dispositions of the article.

Another object is to provide a merchandising device of the self-help type whereby the removal of an article from a support therefor is positively and secretly signalled to an attendant.

A further object is to provide a device of the character described wherein the control mechanism is concealed from view.

The device possesses other objects and features of advantage, some of which, with the foregoing, will be set forth or be apparent in the following description of a typical embodiment of the device and in the accompanying drawings, in which,

Figure 1 is a perspective view of a unit embodying the means of the present merchandising device and having a full number of articles of merchandise associated therewith.

Figure 2 is a perspective view of the unit as it appears following the removal of one article of merchandise therefrom.

Figure 3 is a plan view of the unit, the merchandise articles being removed.

Figure 4 is a rear face view of a sign pane of the unit.

Figure 5 is a sectional view at 5—5 in Figure 3.

Figure 6 is a perspective view of a support element of the unit.

Figure 7 is a fragmentary sectional view at 7—7 in Figure 5.

Figure 8 is a fragmentary sectional view at 8—8 in Figure 5.

The means of the present invention essentially comprises a support member 11 which is displaceable under the weight of one or more merchandise articles A, and a changeable sign 12 having its indications controlled in accordance with the number of articles supported by the member 11. In the present embodiment of the invention, the support member comprises a plate for horizontal disposition, the articles A are shown as comprising atomizers, and the changeable sign 12 is of a type in which one set of characters is displayed at the sign front when a pane 13 thereof is illuminated solely from its front side and another set of characters is displayed at the sign front when the pane 13 is illuminated from its rear side. As illustrated, the pane 13 comprises one side of a lamp housing which is generally opaque except at the pane and contains a suitable electric lamp 14 connected in an electric circuit 15 including a control switch 16 which is arranged to be held open when the member is depressed under the weight of articles of merchandise thereon.

As is particularly illustrated, the sign pane 13 has a frosted or ground outer face 17 over which sign characters 18 are delineated with a translucent and colored paint or other coating for visibility of the characters when the pane is illuminated from the outer side only. At its inner face 19, the pane is coated with the same colored paint or coating which provides the characters 18 except that the coating 21 is omitted opposite said characters. The arrangement is essentially such that when the lamp 14 is lit, the illuminated pane shows as being of uniform color for its entire area whereby the characters 18 then become invisible as such. It will be understood that the color value used in coating the back of the pane in complementary relation to the characters 18 would have the necessary relation to the color value at said characters for producing the desired effect of rendering the characters 18 invisible from the front of the pane.

Sign characters 22 are provided at the rear face of the pane 13 independently of the color coating 21 thereon and by the use of a paint or other coating which is opaque, or at least less translucent than the coating 21 and the characters 18. In this manner, the characters 22 are arranged to become visible at the front of the pane and in a colored field whenever the lamp 14 is lit. In the present instance, the illumination for the front of the pane is assumed to be daylight or the normal illumination of a store, it being understood, however, that a special illumination means might be provided for the sign front without effecting the essential operative relations of the changeable sign now described.

In accordance with the present invention, the reading matter provided by the characters 18 preferably provides an invitation to the removal for an examination and/or a trial of an article A, while the reading matter provided by the characters 22 more or less directly suggests a purchase of the article which has been removed.

Since the removal of an article for examination changes the sign indications from an invitation to try to an invitation to buy, the present device is understood to provide a complete merchandising method and means whereby the prospective customer waits on himself and is invited to buy by reason of his own act of removing the article in response to the initial invitation to remove and examine it. This self-selling device is understood to minimize the required services of a clerk, while presenting the suggestion of buying in a wholly impersonal manner. The present provision of the expressions "Try One" and "Buy Me" by means of the characters 18 and 22 respectively is understood as being generally illustrative of any number of suitable expressions which might be used for the described purpose.

The sign 12 may be variously associated with the support 11; in the present instance, the signal and support are mounted on the same base structure 23 whereby a unit is provided for disposal on a counter or show-case or other primary support within reach of prospective customers. The pane 13 is shown as disposed in upright position with its outer face directed toward the support member 11 and providing a background for articles supported on the member.

By particular reference to Figures 5 to 7, inclusive, it will be noted that the base 23 comprises a hollow structure having an upper wall 24 and a lower wall 25. The support member 11 comprises a disc and is mounted for a limited movement thereof in a complementary opening provided in the upper wall 24. As shown, the member 11 is provided with a radial lug 26 at its forward side, said lug extending forwardly beneath the wall 24 to a pivoted connection with an ear 27 which depends from the under side of the wall. At its opposite side, the member 11 is provided with a radial lug 28 which is arranged to engage the under side of the wall 24 as a stop to limit the upward swinging of the member through the wall opening thereat.

The support member 11 is constantly urged to maintain its upward limiting position through the action of an helical compression spring 29 which is operative beneath it at a point adjacent the lug 28. As is particularly illustrated, the spring 29 is interposed between a bearing plate 31 and a fixed plate 32 which provides a seat for the spring. The bearing plate 31 provides a point contact with the under side of the member 11 and the plate 32 is mounted on the base bottom 25. For a reason to be hereinafter brought out, the plate 32 is preferably adjustable with respect to the bottom 25. As shown, the plate 32 threadedly engages in the lower portion of a sleeve member 33 which is mounted on the bottom 25, provides an enclosure for the spring 29 and a guideway for the plate 32, and is of such a height that its top edge may operate as a stop to limit the downward displacement of the member 11.

The mounting of the member 11 is such that the member is chiefly supported on the spring 29 with its upper face substantially flush with the upper face of the top base wall 24 at all times whereby the movements of the member may be less noticeable. For further concealing the member 11 and its movements, a flexible pad 34 of fibrous or rubber composition may be disposed over the member and the upper face of the base wall 24; in this manner, movements of the member 11 will not be observed by the customer, and his attention will not be diverted from the merchandise and the sign. It will be understood that the form and mounting of the member 11 may be varied as long as the present objectives are accomplished.

It will now be noted that the weight of articles to be displayed and sold by the aid of the present device would be variable and that a rack or frame or other base B for the articles may be provided for disposition on the support 11, as is particularly shown. Furthermore, two or more articles A may be initially disposed on the support 11; said articles may be different but are preferably of similar weight. The adjustability of the disposal of the spring seat 32 permits such a regulation of the operation of the spring 29 that the entire supported load, including the weight of the member 11, will depress said member to open the lamp circuit 15 at the switch 16, and the removal of one article will permit the operation of the support spring to raise the member to close the switch 16. It will therefore be understood that the present provision for the adjustment of the spring pressure between the member 11 and the spring seat 32 makes the present apparatus adaptable for carrying out the present merchandising method with articles of a wide range of shapes and sizes and weights therefor.

In its present embodiment, the switch 16 comprises contacts 35 which are arranged to engage to close the lamp circuit thereat whenever the member 11 is in its raised position. As is brought out in Figures 6 and 7, the contacts 35 are provided on spring arms 36 which extend from an insulation base 37 which is mounted on the casing bottom 25. The stop lug 28 of the member 11 carries a nonconducting member 38 at its lower side for wedgedly engaging with and between the arms 36 to separate the contacts 35 whenever the member 11 is depressed under a full and predetermined loading of the merchandise thereon. In this manner, the sign lamp 14 is arranged to be energized to effect the display of the sign characters 22 only when an article A is removed from the member 11; the arrangement is understood to minimize the operating expense for the sign.

Referring to the structure of the sign proper, it is noted that the same essentially comprises an upright frame including angle-section side elements 41 which extend upwardly from the unit base 23 to have front flanges 42 thereof coplanar and rear flanges 43 which are angularly and rearwardly convergent whereby the elements provide V-shaped channels which receive the pane 13 in and between them, and also the side edge portions of an element 44 which provides the back of the lamp housing. As shown, the elements 41 are upwardly convergent, whereby the pane and its frame are trapezoidal in outline. The element 44 comprises a sheet of flexible and opaque material which may be appropriately flexed to its mounted engagement with and between the elements 41 to provide the sign back. A top plate 45 provides a top closure for the housing and is preferably provided with vents for permitting the escape of air heated by the lamp. While the pane 13 is particularly indicated as being of glass or some other rigid and transparent material, it will be understood that the pane might comprise a sheet of appropriate transparency, particularly if it is desired to provide and interchangeably use differently reading signs for the same unit.

If desired, an opening 45 may be provided in the back sign wall 44 whereby the lighting of the lamp by reason of the removal of an article of merchandise may be indicated at the back of

the sign without knowledge of the customer viewing the sign front. With such an arrangement, a clerk in the store may be advised of the removal of the article whereby his attention may be called to the person who removes it, it being understood that the removed article, or a replacement therefor, must be mounted on the member 11 before the sign may display its initial message. A crystal or lens member 46 may be mounted at the opening 45, and said member may be colored for further attracting the clerk's attention.

While I have herein specifically described the use of light-controlled changeable sign in a device for the described purpose, it will be understood that a changeable sign of the mechanically actuated type might be used in mechanical association with a load-sensitive support for carrying out the general method of the present merchandising device.

From the foregoing description taken in connection with the accompanying drawings, the advantages of the construction and method of operation will be readily understood by those skilled in the art to which the invention appertains. While I have presented the features and the principle of operation of a device which I now consider to be a preferred embodiment of my invention, I desire to have it understood that such changes may be made as fall within the scope of the following claims.

I claim:

1. In a self-help merchandising device, a member for supporting an article of merchandise, means yieldingly supporting said member for its limited displacement under the weight of a said article thereon, a sign requiring illumination for rendering its characters visible and referring to the article of merchandise, a lamp arranged for its lighting to illuminate said sign, and means operated by the member to effect a lighting of the lamp solely when said member is in its undisplaced position.

2. In a self-help merchandising device, a displaceable support member for removably carrying an article of merchandise within the reach of a customer and for its displacement from a normal position thereof solely by reason of the disposal of the article thereon, a changeable sign associated with said member and arranged to automatically present different reading matter relating to the article before and after the customer has removed the article from the member, said sign comprising a pane of translucent material for illumination from its front and rear and arranged to display different reading matter thereon when illuminated from its front and rear respectively, and means operated by the members to effect the illumination of a pane side solely for one limiting position of the member.

3. In a self-help merchandising device, a support member for removably carrying an article of merchandise within the reach of a customer and for its depression under the weight of the article thereon, a changeable sign comprising a pane of translucent material for illumination from its front and rear to present different reading matter relating to the article at its front when it is illuminated from its front alone than when it is illuminated from both its front and rear, an electric lamp disposed behind said pane, and switch means controlled by the member and automatically operative to close the lamp circuit while the article is removed from the member.

4. In a self-help merchandising device, a member for supporting an article of merchandise, means yieldingly supporting said member for its limited depression under the weight of said article thereon and its return to its raised position when the article of merchandise is removed therefrom, a sign requiring illumination for rendering its characters visible and referring to the article of merchandise, means operative to illuminate said sign, and a control for said illumination means operated by the member to render the means operative only when the support member is in its said raised position.

5. The structure of claim 4 wherein the illuminating means comprises an electric lamp in an electric circuit, and the control means comprises a switch in said circuit and a switch operating element carried by the member.

6. A merchandising device comprising a member for removably supporting an article of merchandise, means yieldingly supporting said member for its displacement under the weight of said article thereon, a changeable sign arranged for the alternate display of different sets of characters having reference to the merchandise, and a sign control means actuated by the member to effect the display of one set of said characters when the article is supported on the member and another set of said characters when the article is removed from the member, said sets of displayed sign characters respectively suggesting the removal of the article for its examination and the purchase of the removed article.

7. In a self-help merchandising device for use in a store at a point accessible to a customer, a platform for removably and completely supporting a predetermined plural number of articles of merchandise, means resiliently supporting said platform for its displacement under the weight of said number of articles thereon, means to adjust the resistance offered by said support means in such manner that the platform is arranged to rise when solely the lightest article thereon is removed therefrom, a changeable sign displaying one set of characters while the platform is depressed, and means operated by the platform to effect the display of a different set of sign characters when said lightest article is removed from the platform and the platform has risen to its undepressed position.

WILLIAM A. McEWEN.