Dec. 24, 1929. M. J. MURPHY 1,740,520

DISPLAY DEVICE

Filed Sept. 18, 1928

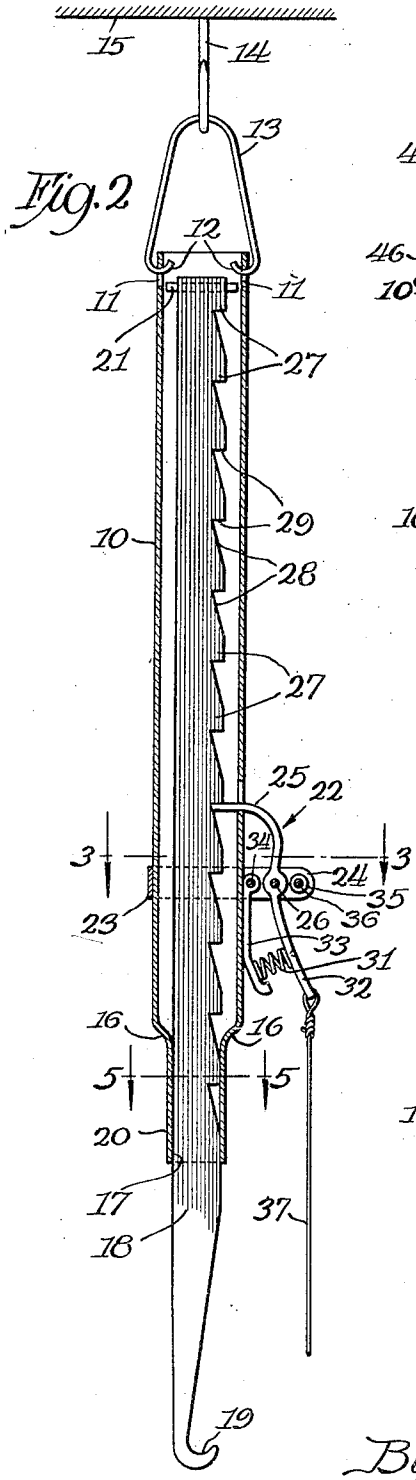


Fig. 2

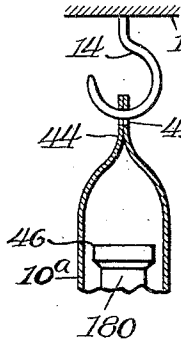


Fig. 6

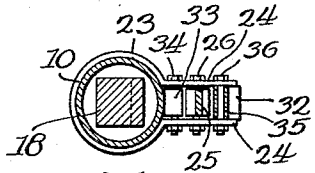


Fig. 3

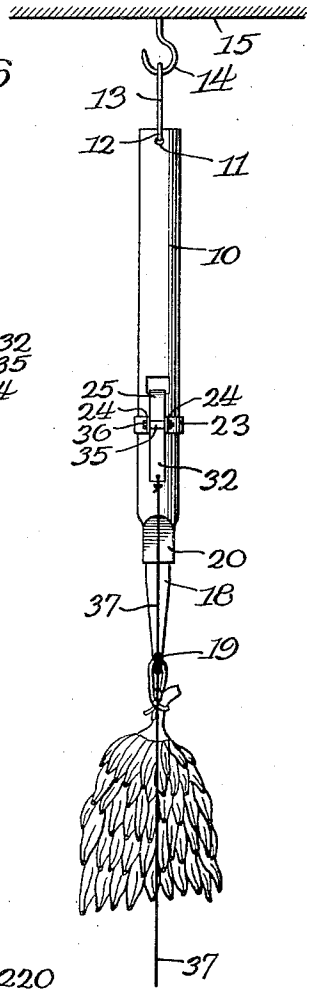


Fig. 1

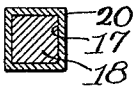


Fig. 5

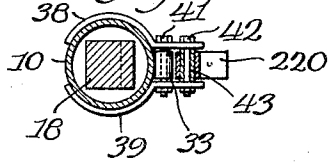


Fig. 4

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UNITED STATES PATENT OFFICE

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DISPLAY DEVICE

Application filed September 18, 1928. Serial No. 306,657.

This invention relates to display devices and more particularly to movable supporting display devices.

One of the objects of the invention is the provision of a new and improved device for supporting fruit and the like together with new and improved means for adjusting the height of the same.

Another object of the invention is the provision of novel means for supporting fruit and the like on display that is provided with new and improved means for attaching the fruit to the device.

A further object of the invention is the provision of a new and improved display device that is cheap to manufacture, easily assembled, simple in construction, readily adjusted; and that is strong and rugged in construction.

Other and further objects and advantages of the invention will appear from the following description taken in connection with the accompanying drawings, in which

Fig. 1 is an elevation of the device showing the same in position for use;

Fig. 2 is a vertical section of the display device;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is a similar section, but showing a modified form of pawl support;

Fig. 5 is a section on line 5—5 of Fig. 2; and

Fig. 6 is a vertical section of the upper end portion of a modified form of the device.

It is common practice in displaying banana bunches and the like, in grocery stores, to employ a rope and pulley or block and tackle mechanism. This arrangement is objectionable because it is more or less difficult to attach the articles to be displayed to the elevating mechanism; too much time is consumed in fastening the parts so that they will hold the article in elevated position; and the device is more or less crude and cumbersome.

The present invention seeks to overcome these difficulties by a device that may be readily attached to the article, that is easily adjusted, and that will automatically hold the article at any adjusted elevated position.

In the form of the device selected to illustrate one embodiment of the invention, the reference numeral 10 indicates what, for convenience, will be termed the body portion. This body portion is tubular and is preferably, though not necessarily, circular in cross section, as clearly shown in Fig. 3. If desired, the body portion may be made from the conventional gas pipe or the like.

The upper end of the body portion 10 is provided with oppositely arranged openings 11 which are adapted to be engaged by the lower curved ends 12 of a supporting bail 13.

When the device is in use, this bail is adapted to be engaged by a hook 14 attached to a suitable support such as the ceiling 15. By means of this arrangement, the body portion 10, when the bail is attached to the hook 14, is free to swing in any direction, whereby there is no danger of breaking the device, which would otherwise be the case were it rigidly attached to its support.

The lower end 20 of the body portion 10 is constricted to form shoulders 16, extending about a rectangular opening 17. Preferably the opening 17 and end 20 are square in cross section as clearly shown in Fig. 5.

Slidably or telescopically mounted within the body portion 10 is a supporting bar or member 18, which is substantially the same shape in cross section as the opening 17. In the form of the device shown in Figs. 2, 3 and 5, which is by way of example only, the member 18 is square in cross section. The cross sectional area of the member 18 is but slightly less than that of the opening 17 whereby the said member is free to slide through said opening into and out of the body portion 10. The lower end of the supporting member 18 terminates in a hook 19 rigidly connected thereto. The width of this hook is such that it may be inserted through the opening 17 from above. The upper end of the member 18 is provided with suitable means for preventing the removal of said member downwardly through the opening 17.

Any suitable means, such as the pin 21, are employed for this purpose. This pin is adapted to engage the shoulder 16 for limiting the downward movement of said member. If desired, the upper end of the member 18

may be enlarged as by being upset instead of employing the pin 21.

Suitable means are provided for holding the supporting member 18 in adjusted position within the body portion 10. As shown, pawl mechanism 22 is employed for this purpose. This mechanism comprises a pawl support or clamping member 23 extending about the body portion 10 and having its free ends 24 extending radially from said portion. A pawl 25 is pivoted as by means of the bolt 26 to the ends 24 of the clamping member 23. The supporting member 18 is provided with downwardly facing teeth 27 which are adapted to be engaged by the inner end of the pawl 25. Each of these teeth has its upper surface inclined, as shown at 28, and its lower surface substantially normal to the axis of said supporting member, as shown at 29.

The pawl is held in engagement with the teeth 27 by a spring 31 which is secured in position between the free end 32 of the pawl 25 and a spring seat 33 which is attached to the ends 24 as by means of a bolt 34, as clearly shown in Fig. 2 of the drawing.

The outer ends 24 of the clamping member are held in spaced relation by a suitable spacer 35 mounted on the connecting bolt 36. The spring seat 33 and the pawl 22 are of less width than the spacer 35 whereby the bolt 34 is used for clamping the member 23 to the body portion 10. The free end of the pawl 25 may be provided with an opening to which the cable 37 may be attached for operating the pawl.

The form of the device shown in Fig. 4 differs from that shown in Fig. 3 in that the pawl support comprises the two sections 38 and 39 which are adapted to be clamped to the body portion 10 by a bolt 41 on which the spring seat 33 is mounted. In this construction, the pawl 220 is rotatably mounted on the spacer 43 which in turn is mounted on the bolt 42 between the ends of the sections 38 and 39.

In the form of construction shown in Fig. 6 the bail 13 is dispensed with. In this form of construction the upper end of the body portion 10^a is flattened as shown at 44 and is provided with an opening 45 which is adapted to engage the hook 14. In this form of construction the upper end of the support 180 may be upset or swaged as at 46 to provide a head for preventing the withdrawal of the support downwardly from the body portion 10^a.

In assembling the device shown in this construction, the support 180 is inserted in the body portion 10^a before the upper end 44 is flattened.

It is thought from the foregoing taken in connection with the accompanying drawings that the construction and operation of my device will be apparent to those skilled in the art, and that various changes in size, shape, proportion and details of construction may be made without departing from the spirit and scope of the appended claims.

I claim as my invention:

1. In a device for supporting banana bunches and the like, a cylindrical body portion, means for suspending said body portion from its upper end, the opposite end of said body portion being provided with a restricted opening, a supporting member having an attaching hook on its lower end, said member being slidably mounted in said opening, teeth on said support, each having a downwardly inclined upper surface and a lower surface substantially normal to the axis of said support, a latch pivotally mounted between its ends on said body portion and engaging said teeth through an opening in the wall of said body portion, a cable attached to the free end of said latch for releasing the same from said teeth for permitting the lowering of said supporting member, and means for preventing the disengagement of said member from said body portion when said latch is released.

2. In a supporting and display device, a body member formed from a length of commercial tubing, means for suspending said member from its upper end, the opposite end of said member being distorted to provide a restricted opening, an elongated support slidably mounted in said opening, teeth on said support, said teeth having their upper surfaces inclined downwardly and their lower surfaces normal to the axis of said support, a hook on the lower end of said support, a latch pivoted between its ends on said member and having its inner end extending inwardly through an opening in said member for engaging said teeth, the opposite end of said latch extending downwardly and outwardly to form a releasing arm, a spring for normally holding said latch yieldingly in contact with said teeth, and a cord secured to said arm for releasing said latch.

3. In a supporting and display device, a body member formed from a length of commercial tubing, the lower end of said member being distorted to provide a restricted opening, an elongated support slidably mounted in said opening, teeth on said support, said teeth having their upper surfaces inclined downwardly and their lower surfaces normal to the axis of said support, a hook on the lower end of said support, a latch supporting member, means for detachably clamping the same to said body member, a latch pivoted between its ends in said latch supporting member, and having its inner end curved and bent inwardly to extend through an opening in said body member for engaging said teeth, the free end of said latch extending downwardly and outwardly to form a releasing arm, a spring carried by said latch supporting member for normally holding said latch

yieldingly in contact with said teeth, a cord secured to said arm for releasing said latch, and means for preventing the disengagement of said support from said body member when said latch is released.

In testimony whereof I affix my signature.

MICHAEL J. MURPHY.