June 10, 1930. J. J. O'BRIEN 1,763,318

DISPLAY DEVICE

Filed April 13, 1928 3 Sheets-Sheet 1

FIG. 1.

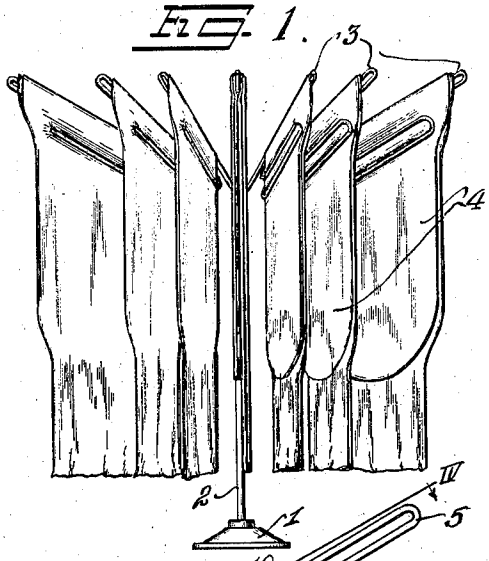


FIG. 2

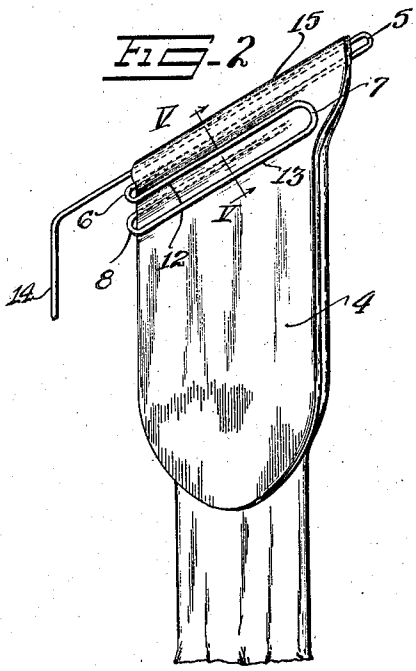


FIG. 3

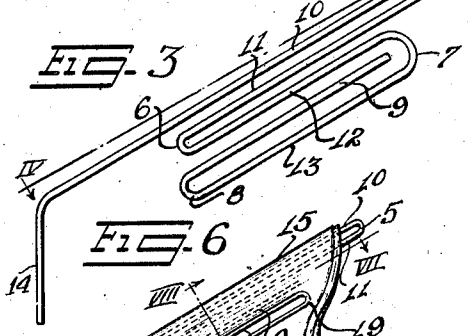


FIG. 6

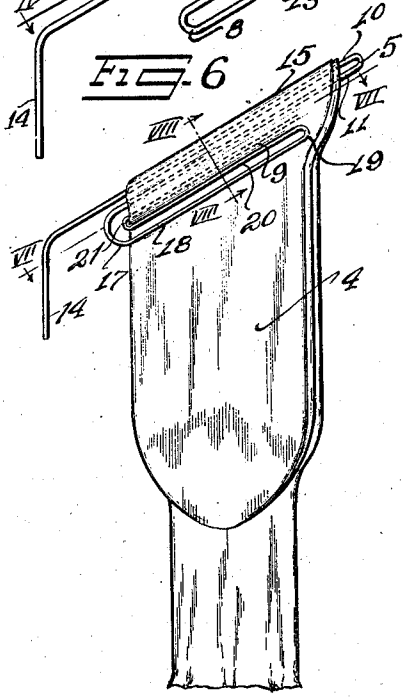


FIG. 4

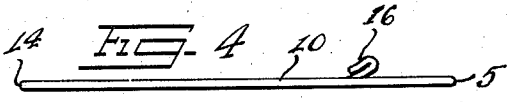


FIG. 5

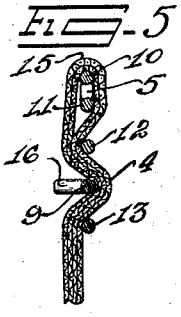


FIG. 8

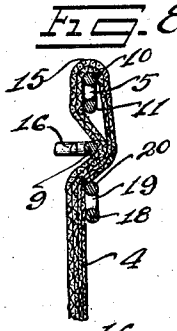
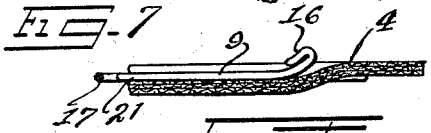


FIG. 7



14

Inventor

James J. O'Brien

Charles Tobey

By

Atty's

June 10, 1930. J. J. O'BRIEN 1,763,318

DISPLAY DEVICE

Filed April 13, 1928 3 Sheets-Sheet 2

FIG. 9

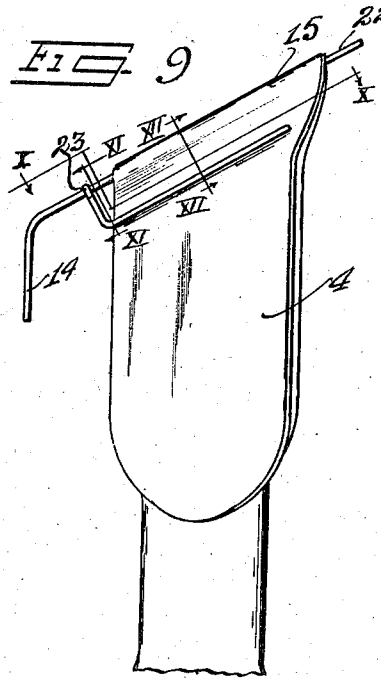


FIG. 10

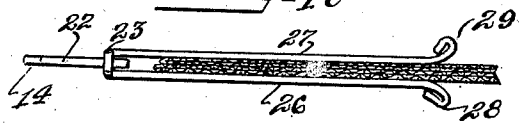


FIG. 11

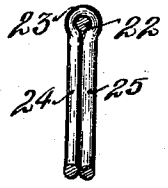


FIG. 12

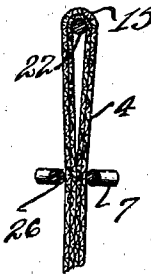


FIG. 13

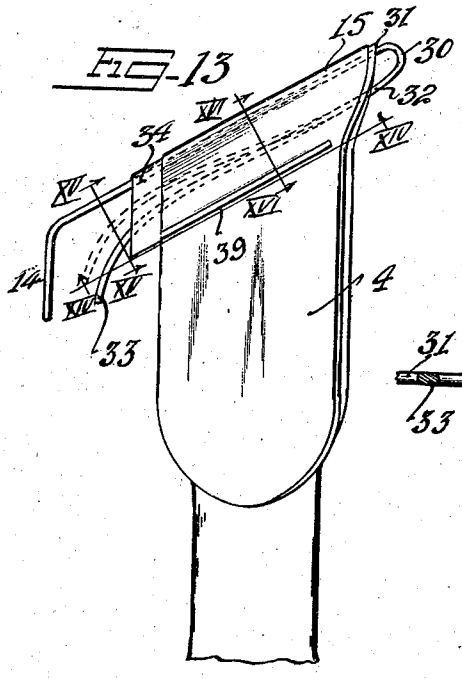


FIG. 15

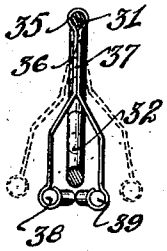


FIG. 16

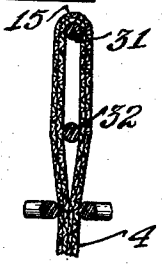
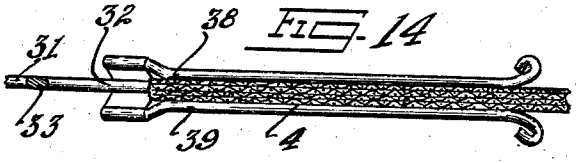


FIG. 14



Inventor

James J. O'Brien

By Charles Sollen

Attys

June 10, 1930. J. J. O'BRIEN 1,763,318

DISPLAY DEVICE

Filed April 13, 1928 3 Sheets-Sheet 3

Fig. 17

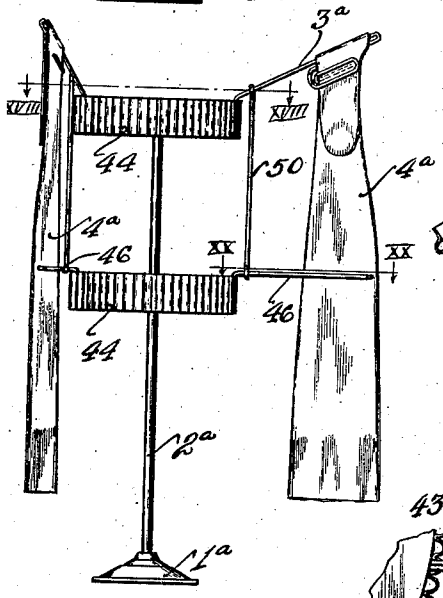


Fig. 18

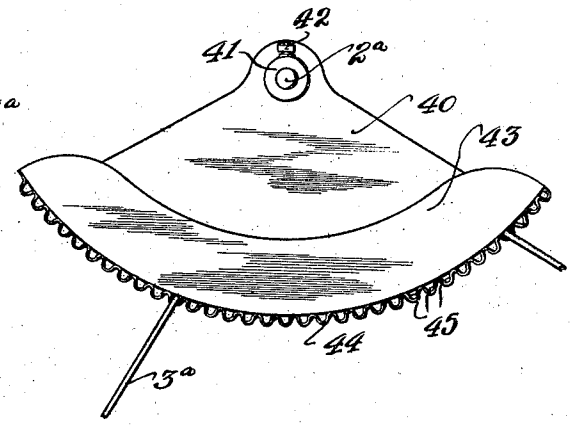


Fig. 20

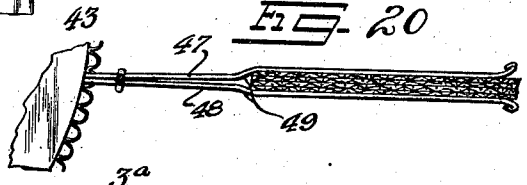


Fig. 19

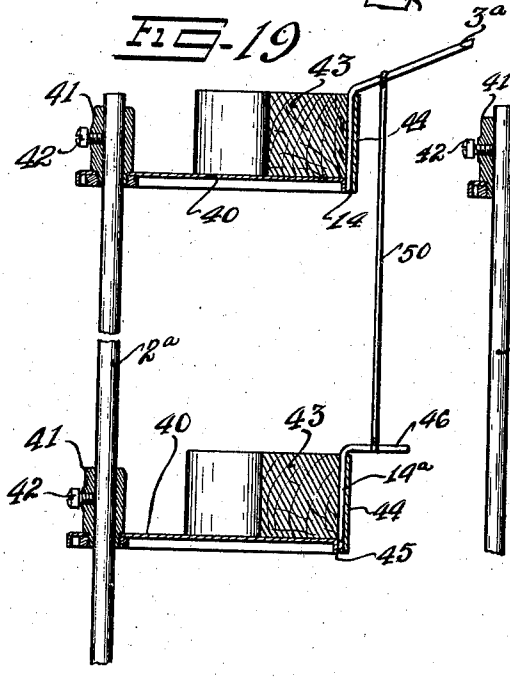
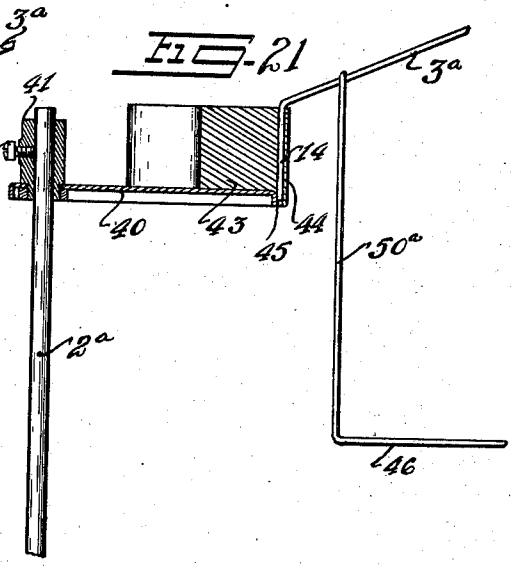


Fig. 21



Inventor
James J. O'Brien
by Charles Campbell
Atty

Patented June 10, 1930

1,763,318

UNITED STATES PATENT OFFICE

JAMES J. O'BRIEN, OF CHICAGO, ILLINOIS

DISPLAY DEVICE

Application filed April 13, 1928. Serial No. 269,724.

This invention relates to improvements in display devices that are used to display merchandise for sale in stores and places of like character, and more particularly to a display device manually operable by the prospective purchaser of the goods, which is highly desirable for the displaying of articles of apparel and especially desirable for the displaying of hosiery, although the device has many and varied uses as will be apparent to one skilled in the art.

In stores and the like where merchandise such as articles of apparel varying in size, it is necessary to keep a large stock of each single style or design of an article in order to have each size thereof available for a purchaser. It has been found highly desirable to dispay in any desired manner a sample of each color combination or style of an article, retaining the various sizes of the article in boxes, cases, and the like. The purchaser, therefore, need only choose the color or style that meets with his liking from those on display, and the proper size of the article will be removed from the stock, without the needless and seemingly endless display of the contents of show case after show case and box after box.

In the past, many and varied devices have been developed for displaying of articles of wearing apparel, but these devices have proven objectionable in most instances, in that they occupied an undesirably large amount of counter or floor space, and if operable by a purchaser, were not as efficiently operable as is desirable. Moreover, these formerly known devices were not adapted for the displaying of articles having a diagonal fold therein, such as hosiery, for instance, which invariably is folded along a diagonal line adjacent the foot portion thereof, and which when mounted on such devices would tend to wrinkle and thereby materially lessen the attractiveness of the display. Further, these previously known devices when actuated rather quickly, permitted certain elongated articles, such as ladies' hose, neckties, or the like, to be thrown outwardly, thereby annoying a purchaser and in many cases injuring or soiling the articles themselves, or permitting the articles to fall from the device.

The present invention is designed to overcome the above noted defects and objections, in the provision of a display device which is freely and easily operable by a prospective purchaser, and which firmly and securely holds the articles to be displayed therein.

The invention also seeks the provision of a display device adapted to hold articles in a rotatable or swingable manner and to prevent such articles from swinging outwardly due to centrifugal force.

A further important object of the present invention is to provide means for frictionally and securely clamping an article to be displayed, at the same time permitting the ready and easy removal or mounting of the article.

A further object of the present invention is to provide means for suspending an article having a diagonal fold therein by firmly holding the article adjacent the fold and permitting the article to hang substantially vertically without the undesirable wrinkling of the same.

While some of the more salient features, characteristics, and advantages, of a device embodying this invention have been above pointed out, others will become apparent from the following disclosures.

The invention includes these and other features of construction and combinations of parts hereinafter described, and shown in a preferred form in the drawings, as more particularly indicated by the claims.

On the drawings:

Figure 1 is a view in elevation showing a device embodying the present invention mounted upon a support or stand and carrying articles to be displayed.

Figure 2 is a view in elevation of one of the devices shown in Figure 1, carrying an article and removed from the stand.

Figure 3 is a view in elevation of the device itself.

Figure 4 is a plan view of the device taken substantially as indicated by line IV—IV of Figure 3.

Figure 5 is an enlarged fragmentary sectional view of the device with the article therein, taken substantially along line V—V of Figure 2.

Figure 6 is a view similar to Figure 2, showing a device of a slightly different form and embodying features of the present invention.

Figure 7 is a sectional view taken substantially along line VII—VII of Figure 6.

Figure 8 is an enlarged fragmentary transverse sectional view taken substantially along line VIII—VIII of Figure 6.

Figure 9 is a view similar to Figure 2, showing a device of still different form embodying features of the present invention.

Figure 10 is a sectional view taken substantially along the staggered line X—X of Figure 9.

Figure 11 is an enlarged transverse sectional view taken substantially along line XI—XI of Figure 9.

Figure 12 is an enlarged transverse sectional view taken substantially along line XII—XII of Figure 9.

Figure 13 is a view similar to Figure 2, showing a still different form of the device embodying features of the present invention.

Figure 14 is a bottom plan sectional view taken substantially as indicated by line XIV—XIV of Figure 13.

Figure 15 is an enlarged transverse sectional view taken along line XV—XV of Figure 13.

Figure 16 is an enlarged transverse sectional view taken along line XVI—XVI of Figure 13.

Figure 17 is an elevational view of a preferred form of stand embodying principles of the present invention, shown supporting an article holding device of a still different form embodying principles of the present invention.

Figure 18 is an enlarged fragmentary plan view taken substantially as indicated by line XVIII—XVIII of Figure 17.

Figure 19 is an enlarged fragmentary vertical sectional view of the structure shown in Figure 17.

Figure 20 is an enlarged fragmentary plan view of a portion of the apparatus shown in Figure 17, taken substantially as indicated by line XX—XX of Figure 17.

Figure 21 is a view similar to Figure 19, showing a slightly different form of construction of the apparatus disclosed therein.

As shown in the drawings:

In the illustrated embodiment of this invention there is shown a stand comprising a base 1 and an upright 2 preferably rotatably mounted therein, on which upright, in any desired manner, are mounted a plurality of flexible and resilient clamping elements 3 from each of which is suspended a pair of hose 4.

As shown in Figures 1 to 5, inclusive, the clamping elements 3 are formed from a single piece of wire, or any desirable flexible substance, which is provided with a plurality of reverse bends therein, in this instance there being an outer bend 5, an inner bend 6, and a larger outer bend 7, to permit the terminus 9 of the rod or wire to extend thereinto after the forming of an inner bend 8. A plurality of elongated substantially parallel portions 9, 10, 11, 12, and 13, are thereby formed, which present opposed surfaces to frictionally engage an article of apparel, in this instance, a pair of hose 4. The clamping element is provided at its inner end with a depending portion 14 which is disposed at an angle to the remainder of the clamping element and by which the clamping element is mounted in the upright 2. When the article to be displayed is a pair of hose, the angle between the clamping element proper and the depending portion 14 is obtuse so that the clamping element will be supported in an obliquely upward position.

It is well known that hosiery is always received by the retail merchant with an oblique fold therein adjacent the foot portion thereof. When the hosiery is mounted or interwoven in the clamping element, the elongated portions 10 and 11, which extend outwardly beyond the remaining portions, and the loop 5 are inserted in this oblique fold 15 so as to be substantially covered thereby, then the thickness of the entire pair of hose is pushed on the inside of the member 9, so that the member 9 will appear externally on one side of the hose and the members 12 and 13 on the opposite side. The terminus at the end of the member 9 is provided with a loop 16 to prevent gouging or tearing of the hose. When the depending portion 14 is mounted on the upright 2, the clamping element will be in a position parallel to the oblique fold in the hose 4 and the hose will hang substantially vertically with no tendency whatsoever to wrinkle. In the event a pair of hose is to be sold directly from the display device, it is simply necessary to slide the hose outwardly until free of engagement with the clamping element. Another pair of hose is easily and readily insertable in the clamping element in the manner hereinbefore described.

It is to be noted that the resiliency of the parallel portions of the clamping element causes the same to firmly and effectively grip the hose thereby eliminating all danger of falling from the device. It is also to be especially noted that the extremities of the inner bends 6 and 8 in the clamping element are on a line parallel to the depending portion 14, whereby only a minimum part of the clamping element will be visible.

In Figures 6 to 8, inclusive, I have shown a slightly different form of clamping ele-

ment, the difference lying in the manner of forming the lower bends in the wire. The depending portion 14, the elongated portions 10 and 11, and the bend 5, are the same as previously described herein. In this instance, however, a large bend 17 is provided at the inner end of the portion 11 to form an elongated portion 18 at the outer end of which a smaller bend 19 is provided to form an elongated portion 20 at the inner end of which another smaller bend 21 is provided which terminates in the elongated portion 9 ending in the loop 16, whereby the portions 9 and 20 are disposed between the portions 18 and 11. In mounting the hose on this clamping element the portions 10 and 11 and bend 5 are inserted in the oblique fold 15 is hereinbefore described and the entire thickness of the hose interwoven between the remaining portions so that the portion 9 will appear on one side of the hose and the portions 18 and 20 with the loop 19, on the other side thereof.

In Figures 9 to 12, inclusive, I have shown another form of clamping element which comprises a rod or wire 22 terminating in the inner end thereof in a depending portion 14 which portion functions the same as hereinbefore described. A second wire is engaged around the wire 22, as indicated at 23, and if so desired welded thereto, so as to form two juxtaposed portions 24 and 25 which are bent to form forwardly extending portions 26 and 27, respectively, provided at the outer ends thereof with loops 28 and 29, respectively. In mounting the hose upon this clamping element the portion 22 is merely inserted in the oblique fold 15 and then the hose is pushed between the clamping portions 26 and 27, whereby the same is securely retained.

In Figures 13 to 16, inclusive, I have shown a still different form of clamping element which comprises a wire reversely bent, as at 30, to provide elongated portions 31 and 32, the latter terminating at its inner extremities in a lever 33. The portion 31 terminates at its inner end in a depending portion 14 similar to that previously described. Adjacent the center thereof, a resilient strip 34 is looped around the portion 31, as at 35, so as to form two depending abutting portions 36 and 37, respectively (Figure 15) which are outwardly bent adjacent the mid-portion thereof to loosely receive the inwardly extending portion 32 therebetween. At the lower extremities the portions 36 and 37 are engaged around the inner extremities of a pair of clamping wires 38 and 39, respectively, adapted for frictional engagement on opposite sides of the hose 4. In mounting the hose on this clamping element, the element 32 is raised by manipulating the lever 33 so as to pass between and spread the abutting portions of the depending members 36 and 37 so as to spread the clamping wires 38 and 39. The portions 31 and 32 are then both inserted within the oblique fold 15 in the hose 4, the clamping wires 38 and 39 embracing opposite sides of the hose, and then the lever 33 is dropped, thereby causing the clamping wires 38 and 39 to effectively grip the hose and securely hold the same.

In Figures 17 to 21, inclusive, I have shown a preferred form of rack or stand for rotatably or swingably supporting a plurality of each or any of the clamping elements hereinbefore described. The stand, in this instance, comprises a base 1^a in which an upright 2^a is fixedly mounted. In this instance, a plurality of supporting plates 40 are adjustably and removably mounted on the upright 2^a in any desired manner or as shown by a collar 41 fixedly secured to each of the plates and maintained in any desired position by means of a set screw 42. Adjacent the forward edge of the plate 40, which is preferably in the shape of a sector, although any equivalent supporting means may be used, is mounted a backing member 43 made of any desirable material, wood being highly suitable for the purpose desired. A corrugated sheet 44 is secured to the forward edge of the backing member 43 in such a manner that alternate corrugations in the strip together with the backing member provide a series of spaced passages or sockets 45, each being adapted to rotatably and swingably receive the portion 14 of a clamping element 3^a therein.

The stand just previously described is equipped with means for effectively supporting ladies' hose or other elongated articles of apparel, although the same may be used if so desired, for supporting men's hose or shorter articles of apparel in a single or plurality of tiers. When it is desired to support ladies' hose, the hose 4^a are interwoven in one of the clamping elements and the portion 14 of the element inserted in one of the sockets 45, so that the hose will be suspended in the manner hereinbefore described. The clamping element 3^a shown in Figure 17 is similar to the element described in Figures 6 to 8, inclusive, with the exception that the elongated portions 9 and 20 of the elements shown in Figure 6, are in reversed order. It is well known that ladies' hose when vertically suspended will tend to distort or wrinkle adjacent the calf of the leg portion of the hose since this portion is relatively wider than the ankle and foot portions. Means are provided in the present instance to maintain the calf portion of the hose in its normal position thereby adding to the beauty of the display. The means, in this instance, comprise an element 46 formed from a wire bent upon itself and downwardly turned at one end to provide a

portion 14ª engageable in one of the sockets 45 in the lower tier on the rack. For this purpose the wire extends outwardly in two portions 47 and 48 which are spread, as at 49, to receive therebetween the calf portion of the hose, thereby preventing the hose from wrinkling. The clamping element 3ª and element 46 are connected in any desired manner or as shown by a rod 50 so that the element 46 will always swing with the clamping element 3ª and so carry the hose 4ª without distorting the same.

In Figure 21 I have shown a rod 50ª fixedly secured to the clamping element 3ª at its upper end, and having the element 46 integral with or attached to its lower end, thereby eliminating the second tier on the stand.

It is to be clearly understood that any of the clamping elements hereinbefore described or clamping elements of like character but differently formed may be mounted in the sockets 45 with or in place of the elements 3ª without departing from the spirit of this invention. It is also to be understood that the angle between the clamping element proper and the mounting portion 14 thereon may be varied as desirable for the support of an article of merchandise.

From the foregoing it will be apparent that I have provided means for effectively displaying articles of merchandise, which means are operable by a prospective purchaser of the article, and effectively and securely hold the article at all times, the article being easily removable therefrom or mountable thereon, and which prevent the article from swinging outwardly to an objectionable extent when the display device is operated. Moreover, the display device shown and described herein is simple in construction and assembly of parts and may be very economically manufactured.

I am aware that many changes may be made and numerous details of construction may be varied through a wide range without departing from the principles of this invention and I, therefore, do not purpose limiting the patent granted hereon otherwise than necessitated by the prior art.

I claim as my invention:

1. In combination, a flexible element having a plurality of vertically spaced integrally connected parallel arms defining oppositely opening adjacent passageways closed at one end thereof, an integral portion depending from said element at an obtuse angle thereto, and support means adapted to receive the said portion alone to maintain the said parallel arms in spaced relation to the support so that an article of apparel may be entered in the passageways defined by the arms.

2. In combination, a flexible and resilient element having a plurality of reverse bends therein to form a plurality of parallel arms defining adjacent oppositely opening passageways closed at one end thereof, an integral portion depending from the said element at an obtuse angle thereto, and support means adapted to receive the said portion alone to maintain the said arms in spaced relation to the support so that an article of apparel may be entered in the passageways defined by the arms.

3. In combination, a support, a flexible element having one of its ends mounted on the support, the other end of the said flexible element being free, the said flexible element having a plurality of bends in offset vertical relation to each other, and a plurality of arms defining adjacent oppositely opening passageways closed at one end thereof.

4. In combination, a support, a flexible element having one end mounted on the support, the said element having a plurality of reverse bends forming a plurality of arms, and the other end of the element being a free-ended arm disposed between a pair of arms.

5. As an article of manufacture, an element having a plurality of vertically spaced integral longitudinal portions for supporting an article of apparel having an oblique fold therein by engagement therewith adjacent said fold, and integral depending means angularly associated with the said element at one end thereof for supporting the latter in such a manner that said article will hang substantially vertically without wrinkling.

6. As an article of manufacture, a flexible element having a plurality of bends all in offset vertical relation to each other and a plurality of vertically spaced parallel longitudinal portions of different lengths for supporting an article of apparel having an oblique fold therein by engagement therewith adjacent said fold, and integral depending means angularly associated with the said element at one end thereof for supporting the latter in such a manner that said article will hang substantially vertical without wrinkling.

In testimony whereof I have hereunto subscribed my name at Chicago, Cook County, Illinois.

JAMES J. O'BRIEN.