

April 15, 1958

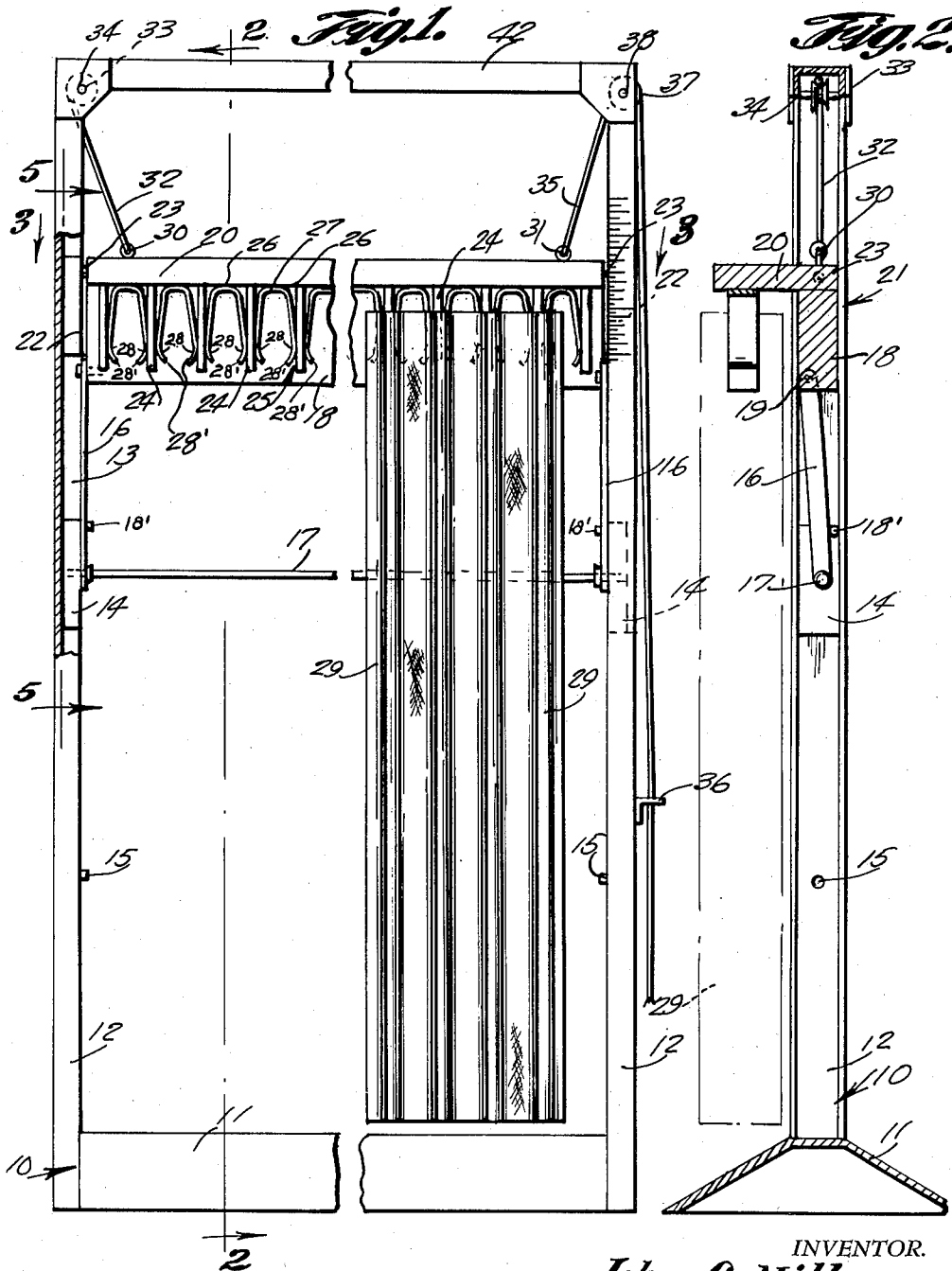
J. C. MILLER

2,830,708

SUPPORT MEMBER OR HOLDER

Filed Dec. 18, 1956

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 3.

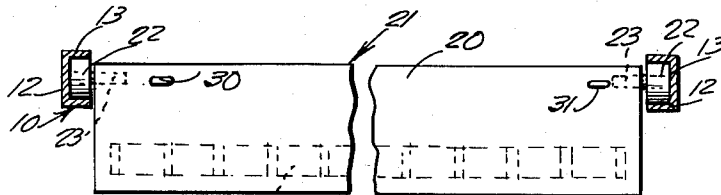


Fig. 5.

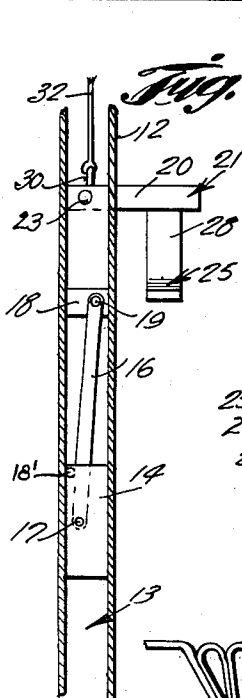


Fig. 6.

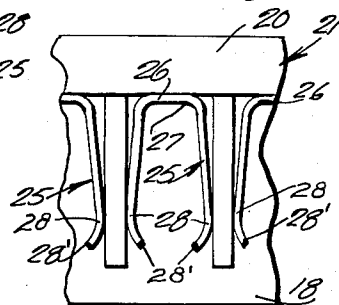


Fig. 4.

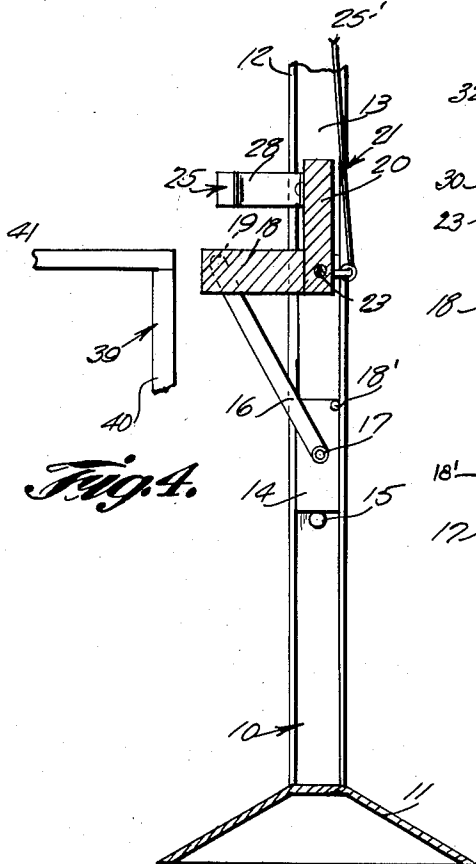
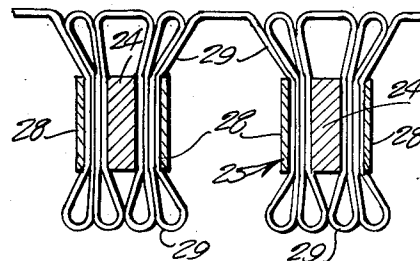


Fig. 7.



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SUPPORT MEMBER OR HOLDER

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4 Claims. (Cl. 211—120)

This invention relates to a support member, and more particularly to a support for draperies, fabrics or the like.

The object of the invention is to provide a support member which is adapted to be used in any desired locality such as a dry cleaning establishment or the like whereby draperies, fabrics or other material can be readily and conveniently supported thereby.

Another object of the invention is to provide a support member or holder which includes a movable carriage that can be manually raised or lowered as desired, the carriage being provided with a plurality of gripping means whereby fabrics can be conveniently supported thereby so that the job of folding or handling the fabrics is greatly simplified.

A further object of the invention is to provide a support member which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same:

Figure 1 is a front elevational view of the support member, constructed according to the present invention, and with parts broken away and in section, and showing some fabric supported thereby.

Figure 2 is a view taken on the line 2—2 of Figure 1 and illustrating in dotted lines the fabric or material being supported.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a fragmentary sectional view illustrating a shifted position of the parts from the position shown in Figure 2.

Figure 5 is a sectional view taken on the line 5—5 of Figure 1.

Figure 6 is a fragmentary elevational view illustrating the gripping means.

Figure 7 is a sectional view showing the gripping means and the fabric arranged therein.

Referring in detail to the drawings, the numeral 10 designates a frame which can be made of any suitable material such as a suitable metal, and the frame 10 includes a bottom piece 11 which has a pair of spaced parallel vertically disposed posts 12 extending upwardly therefrom. The posts 12 may be secured in the bottom piece 11 in any suitable manner, and the posts 12 are U-shaped in cross section so as to define therein a pair of opposed vertical trackways 13, Figure 2. Movably or slidably mounted in the trackways 13 are a pair of blocks 14, there being one of the blocks 14 associated with each of the posts 12. Stop pins or lugs 15 extend inwardly from the posts 12 for limiting downward movement of the blocks 14 in the trackways 13.

Extending upwardly from each of the lower blocks 14 is a link 16, and the links 16 are pivotally connected to the blocks 14 by means of pivot pin 17, there being stop lugs or pins 18' for limiting swinging or pivotal movement of the links 16 about the pin 17.

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Extending between the pair of posts 12 is a movable base 18 which forms part of a movable carriage 21. The upper ends of the links 16 are pivotally connected to the base 18 by means of pins 19. The carriage 21 further includes a body member 20 which is arranged at right angles with respect to the base 18, and the body member 20 is secured to the base 18 in any suitable manner.

Slidably mounted in the trackways 13 are a pair of upper blocks 22 which have the body member 20 pivotally connected thereto through the medium of pivot pins 23. Extending from the body member 20 and secured thereto is a gripping means and the gripping means includes a plurality of spaced parallel pins or fingers 24 which are secured to the body member 20 in any suitable manner. For coaction with the fingers 24 there is provided a plurality of spring members 25 which have a substantial U-shape. Thus, each spring member 25 includes a web 26 which is adapted to be secured to the body member 20 by means of suitable securing elements such as indicated by the numeral 27. Each spring member 25 further includes a pair of spaced apart spring legs 28 which are arranged contiguous to the fingers 24 and which are adapted to coact with the fingers 24 to grip portions of the fabric 29 therebetween.

The rod 17 extends between the pair of lower blocks 14, and the links 16 may be pivotally mounted on the rod or pivot member 17.

Extending from the body member 20 and secured thereto are eye members 30 and 31 which have cables 32 and 35 connected thereto respectively, Figure 1. The cable 32 may be trained over a pulley 33 which is journaled in the upper end of the frame 10 by means of a pin 34. The cable 35 which extends from the eye member 31 may be trained over a pulley 37 which is journaled in the upper end of the frame by means of a pin 38, and the free ends of the cables 32 and 35 are adapted to be manually actuated when the carriage 21 is to be moved. A guide member 36 is provided for retaining the free ends of the cables 32 and 35 in their proper position so that the cables are readily accessible to the user. In Figure 4 the numeral 39 designates a portion of a conventional table which can be used in conjunction with the present invention, and the table 39 includes the usual legs 40 and top piece 41.

From the foregoing, it is apparent that there has been provided a support member which is especially suitable for use in handling fabrics, draperies or the like such as indicated by the numeral 29. In use, the spring members 25 are interposed between the plurality of fingers 24 so that the legs 28 will coact with the fingers 24 to grip the material 29 therebetween as for example as shown in Figures 1 and 7. However, the material 29 can be readily disengaged from the gripping means by simply applying sufficient pressure to the fabric 29 to overcome the resistance of the spring members 25. Furthermore, it will be noted as for example as shown in Figure 6 that the free ends of the legs 28 are curved as at 28' so that the placement of the material between the legs and fingers is facilitated. By arranging the carriage 21 as shown in Figure 4, the job of moving the fabric from the table 39 to the carriage or from the carriage to the table 39 is greatly simplified. In other words, it will be noted for example that the carriage 21 can be moved from the position shown in Figure 4 for example to the position shown in Figure 2. That is, after the fabric has been placed in engagement with the spring members and fingers, then the carriage 21 can be pivoted about an axis extending through the pins 23 so that the fabric 29 can be raised or lowered. With the parts arranged as shown in Figure 2 for example by

gripping the free ends of the cables 32 and 35 the carriage 21 can be raised or lowered so that the material 29 can be supported at different elevations. If desired the free ends of the cables 32 and 35 may be tied or arranged in engagement with the member 36 so as to retain the carriage 21 immobile in its various adjusted positions. The stop members 15 limit downward movement of the blocks 14 and carriage 21. The stop members 18 limit swinging movement of the links 16. Thus, by moving the blocks 14 and carriage 21 downwardly from the position shown in Figure 2 to the position shown in Figure 4 so that the blocks 14 engage the stop members 15, the links 16 can be pivoted outwardly from the position shown in Figure 2 to the position shown in Figure 4 whereby the base 18 and body member 20 will pivot to the position shown in Figure 4 so that the removal or replacement of the material in position with the spring members and fingers 24 is facilitated.

The apparatus of the present invention is adapted to be used for folding pleated drapes in "decorator's fold." The device can be operated by one person whereas previous work of this type has required several persons to perform. Thus, one operator can fold drapes in less time by using the apparatus of the present invention and also, the necessity of hand folding material on a table or counter is eliminated. Furthermore, the device can be used for levelling or measuring draperies as well as folding of draperies so as to assure the customer of a uniform drape to hang in perfect folds. Thus, as shown in Figure 1 the material will be hung so that folds are arranged therein and this is also shown in Figure 7. With the present invention draperies can be folded uniformly and is especially suitable for use by the dry cleaning industry since the work can be performed at less cost and with a saving of time. The device is light in weight, occupies a very small space and can be moved from place to place as desired. Furthermore, the device will hold drapes of different sizes. The parts can be made of any suitable material and in any desired shape or size. The device is constructed so that even extra long drapes will be prevented from touching the floor. The bottom piece 11 increases the ruggedness of the device, and the channels 13 in the posts 12 serve as trackways for the carriage rollers or blocks 14 and 22 so that the blocks can move up and down. The stop members 15 are arranged at a convenient level to permit the carriage to stop at a convenient operating level. The member 36 can be used for securing the carriage lines 32 and 35 in place whereby the carriage can be held at the desired height. The crosspiece 42 extends between the upper ends of the posts 12 and is secured thereto. After the pleated end of the drapery is attached to the carriage, the carriage can move up or down. The spring clasps 25 are adapted to be used for securing the drapery 29 to the pleating pins 24. The blocks 22 and 14 permit the carriage to travel up or down when pulled by the lines 32 and 35.

The present invention is especially suitable for folding draperies in the "decorator's fold" and the device holds the drape in a vertical position while being tied or fastened for packaging. Furthermore, the device will hold the drape in folds while inserting a garment hanger or similar device for delivering and the device requires very little maintenance and the drapes will not be damaged or soiled. The device is especially suitable for use by a dry cleaner since the folding and packaging of material is facilitated. The apparatus can be used with any type dry cleaning press or hand finishing unit or it can be used with a table such as the table 39 shown in Figure 4. Thus, with the present invention the job of packaging will be greatly simplified.

The present invention is an accurate measuring device which can be used before as well as after cleaning draperies and it can be used to assist in folding and is not a folder itself.

I claim:

1. In a support member, a frame including a bottom piece, a pair of vertically disposed spaced parallel posts extending upwardly from said bottom piece and secured thereto, a crosspiece extending between the upper ends of said posts and secured thereto, said posts being U-shaped in cross section and defining opposed trackways, a lower block slidably mounted in each of said trackways, a rod extending between said pair of blocks and secured thereto, a link extending upwardly from each of said blocks and pivotally connected thereto, a movable carriage including a base extending between said pair of posts and pivotally connected to the upper ends of said links, a body member arranged at right angles with respect to said base and secured thereto, an upper pair of blocks slidably mounted in said trackways and having said base pivotally connected thereto, a plurality of spaced parallel fingers extending from said body member and secured thereto, a plurality of spaced parallel U-shaped spring members interposed between said fingers and secured to said body member, eye members extending from said body member and secured thereto, and cables extending from said eye members and secured thereto, and pulleys supported by the upper portion of said frame for engagement with said cables.

2. The structure as defined in claim 1, wherein said spring members each include a web and spaced parallel legs, said legs coacting with said fingers to releasably grip and hold material therebetween.

3. The structure as defined in claim 1, and further including stop lugs extending inwardly from said posts for limiting downward movement of said lower blocks.

4. In a support member, a frame including a bottom piece, a pair of vertically disposed spaced parallel posts extending upwardly from said bottom piece and secured thereto, a crosspiece extending between the upper ends of said posts and secured thereto, said posts being U-shaped in cross section and defining opposed trackways, a lower block slidably mounted in each of said trackways, a rod extending between said pair of blocks and secured thereto, a link extending upwardly from each of said blocks and pivotally connected thereto, a movable carriage including a base extending between said pair of posts and pivotally connected to the upper ends of said links, a body member arranged at right angles with respect to said base and secured thereto, an upper pair of blocks slidably mounted in said trackways and having said base pivotally connected thereto, a plurality of spaced parallel fingers extending from said body member and secured thereto, a plurality of spaced parallel U-shaped spring members interposed between said fingers and secured to said body member, eye members extending from said body member and secured thereto, and cables extending from said eye members and secured thereto, pulleys supported by the upper portion of said frame for engagement with said cables, said spring members each including a web and spaced parallel legs, said legs coacting with said fingers to releasably grip and hold material therebetween, stop lugs extending inwardly from said posts for limiting downward movement of said lower blocks, and stop lugs secured to said lower blocks for limiting pivotal movement of said links.

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