Dec. 26, 1939. S. G. ALLAN 2,184,374

SHIRT BOARD

Original Filed June 13, 1936 2 Sheets-Sheet 1

Fig. 1.

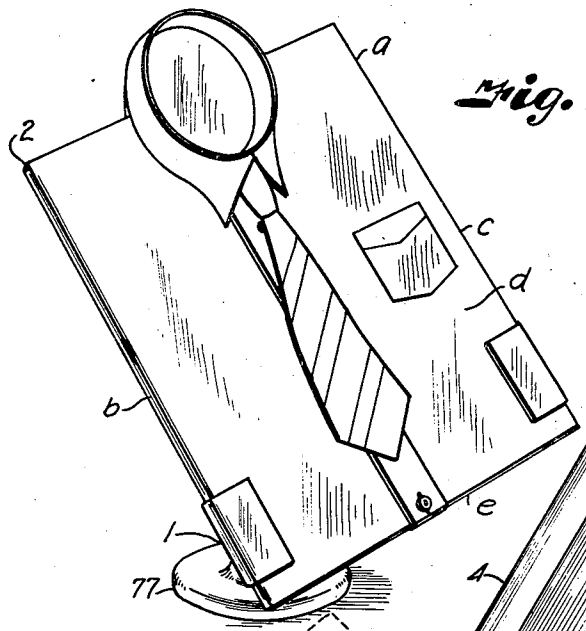


Fig. 2.

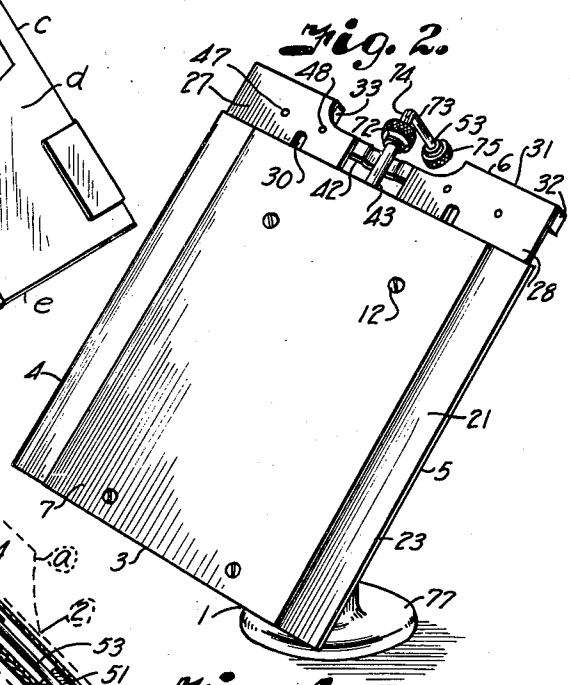


Fig. 3.

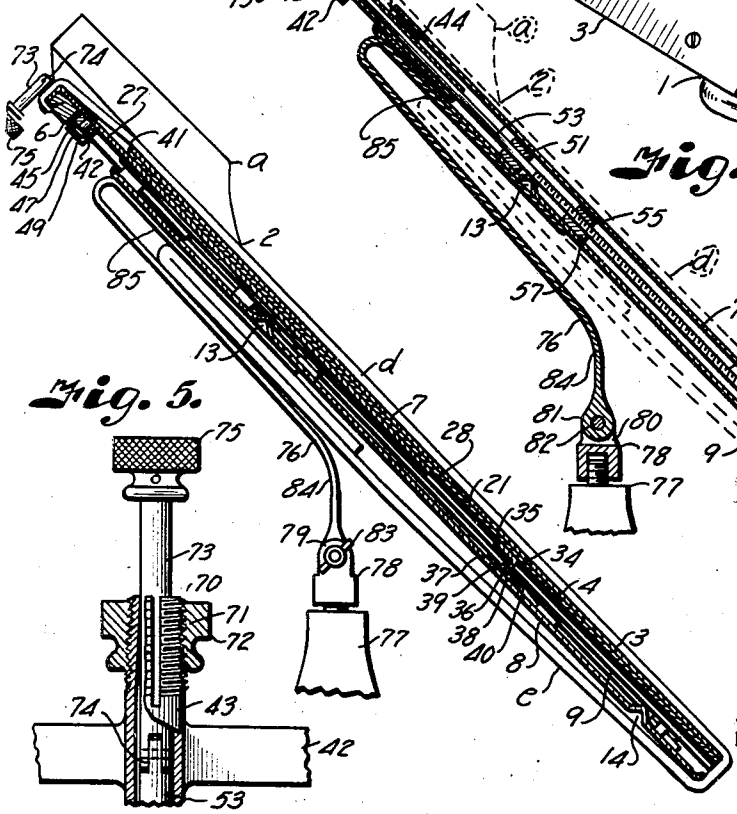


Fig. 4.

Fig. 5.

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Fig. 6.

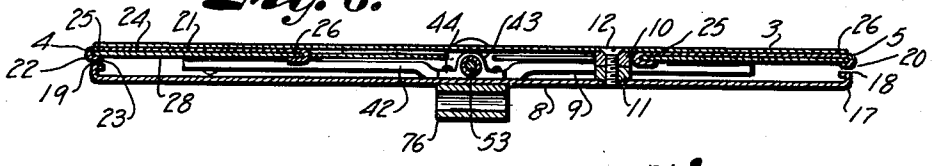


Fig. 7.

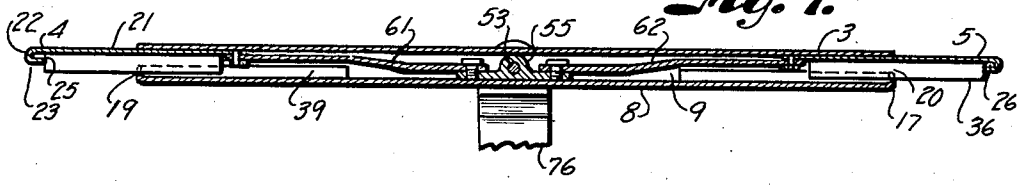


Fig. 8.

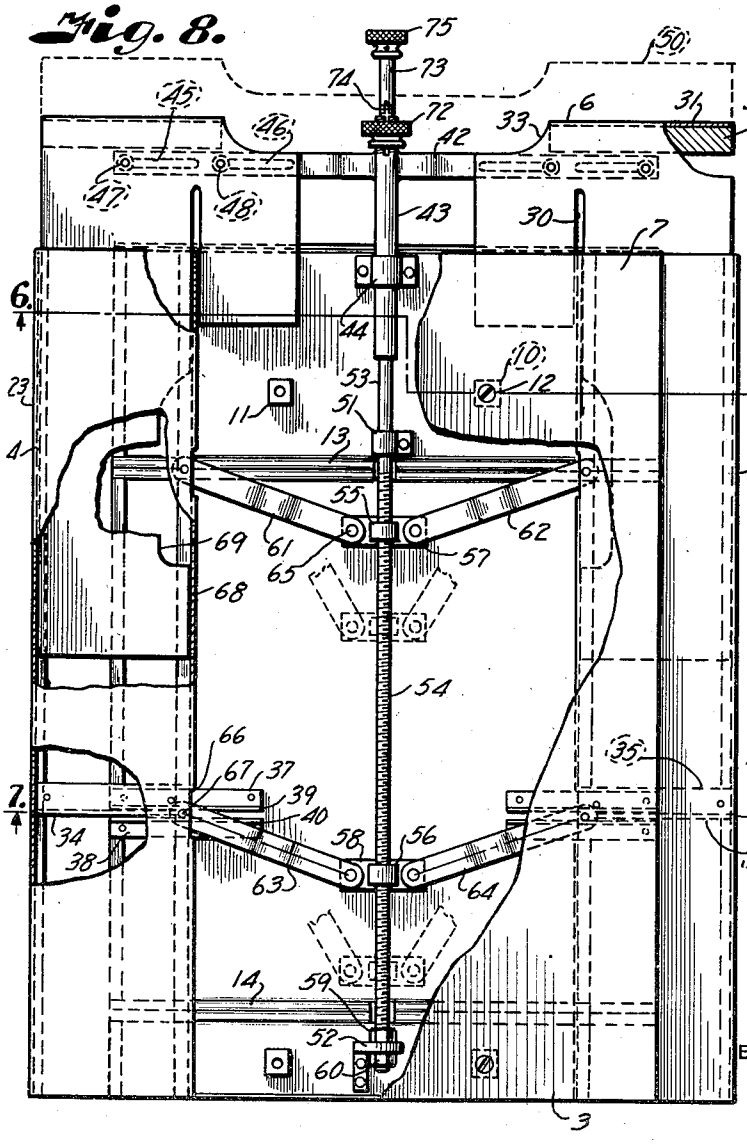
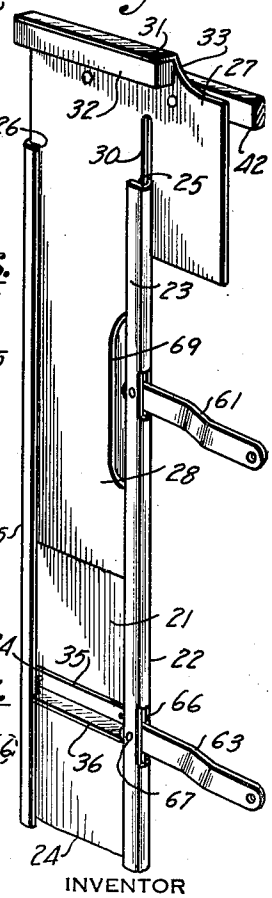


Fig. 9.



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Patented Dec. 26, 1939

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UNITED STATES PATENT OFFICE

2,184,374

SHIRT BOARD

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Application June 13, 1936, Serial No. 85,119
Renewed June 8, 1939

9 Claims. (Cl. 223—71)

This invention relates to a display board and particularly to those for displaying shirts and similar garments that are folded at the factory to the size of their containers and secured in folded condition by numerous pins. Garments distributed by their respective manufacturers are usually folded to different sizes so that the merchant in making a display finds it necessary to unpin the garments in order that they may be fitted to the display board of a standard form and repinned thereover. This method is not only destructive to the garment but it requires much time and skill on the part of the merchant to effect a neat display of the garment.

It is, therefore, the principal object of the present invention to provide a display board constructed so that it may be inserted within the folds of a garment and adjusted thereto without undoing the original pinning.

It is also an important object of the invention to provide a relatively inexpensive display board with simple and readily operated adjustment features.

In accomplishing these and other objects of the invention, as hereinafter pointed out, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a shirt as it appears when displayed on a board embodying the features of the present invention.

Fig. 2 is a perspective view of the board with the shirt removed.

Fig. 3 is a vertical section through the board illustrating application of the shirt displayed thereon.

Fig. 4 is a similar section but taken through the central portion of the board.

Fig. 5 is a detail view of the clamp for retaining the adjusting screw in a selected position.

Fig. 6 is a horizontal section through the board on the line 6—6 of Fig. 8.

Fig. 7 is a similar section on the line 7—7 of Fig. 8.

Fig. 8 is a front view of the board, parts of which are broken away to better illustrate the construction.

Fig. 9 is a perspective view of one of the adjustable side wings of the board.

Referring more in detail to the drawings:

1 designates a board for displaying folded garments such as a shirt 2 and includes a substantially flat body section 3 provided with adjustable side wings 4—5 and shoulder wings 6. The body section 3 includes a rectangular front plate 7 of smaller dimensions than the corresponding dimensions of the smallest garment to be displayed on the board, and which forms a flat surface for supporting the front of the garment in flat condition. Cooperating with the plate 7 is a rear plate 8 of corresponding size but spaced therefrom to provide a compartment 9 in which the adjustable features of the board are enclosed as later described.

The plate 8 is spaced from the plate 7 by means of abutting lugs 10 and 11 that are fixed to the inner sides of the respective plates and secured in abutting relation by suitable fastening devices, such as screws 12 or by welding. The plates 7 and 8 are preferably formed of thin material and in order to enhance their rigidity the rear plate 8 is provided with inwardly extending transverse ribs 13 and 14 at points inset from the respective ends thereof, and the side edges 15 and 16 are flanged laterally as at 17, and then retractively within the compartment 9 as at 18, the flanges 18 being spaced from the side edges of the front plate to provide slotted openings 19 and 20 through which the side wings are adjustably projected as now to be described.

The side wings 4 and 5 are best illustrated in Fig. 9 which shows them as being formed of an elongated strip 21 conforming in length to the length of the body section of the board. The side edges of the strip are bent laterally as at 22 to terminate in flanges 23 that are spaced from the body portions 24 of the strips to form guide channels 25 and 26 to slidably mount the shoulder wings 6. The shoulder wings 6 include substantially angle-shaped plates 27 having depending leg portions 28 slidably mounted within the guide channels, and laterally extending portions 29 having slots 30 extending upwardly therein in alignment with the inner side edges of the leg portions of the plate. The upper edges of the plates are provided with lateral flanges 31 extending across a portion thereof to support pinning strips 32 which are preferably formed of soft material, such as wood or the like.

From the inner edges of the flange 31, the corners of the plates are cut away as at 33 to form a recess to accommodate the clamping feature of the adjusting screw whereby the respective wings are adjusted in projecting relation with the body section. The side wings slide through the slotted openings 19 and 20 in bearing contact with the inner face of the plate 7 and with the ribs 13 and 14 so that the body portions 24 thereof form substantial continuations of the supporting surface of the plate 7 when the

wings are projected. The side wings are supported in proper relation with the ends of the body section by means of angle-shaped cross members 34 having one of their flanges 35 riveted or otherwise secured to the inner face of the body portions 24 and the other flanges 36 projecting laterally therefrom to slidably engage between the flanges 37 and 38 of spaced angle-shaped guides 39 and 40 attached to the inner face of the rear plate 8, as best shown in Figs. 3 and 8.

The shoulder wings are slidable through a slot 41 that is formed between the upper edges of the plates 7 and 8, and are adjustably carried on a cross arm 42 that is rigidly supported on a tubular post 43 having sliding engagement in a bearing bracket 44 attached to the inner face of the rear plate 8 at a point adjacent its upper edge and midway between the side edges thereof.

The respective ends of the cross arm 42 have pairs of slotted openings 45 and 46 to accommodate headed guide pins 47 and 48 projecting laterally from the shoulder wings, the heads 49 of the pins engaging the front face of the cross arms at the edges of the slotted openings to adjustably retain the shoulder wings so that they can be moved laterally with the side wings and vertically upon sliding movement of the tubular post 43 within the bracket 44, as shown by the dotted lines 50 in Fig. 8.

Extending through the tubular post 43 and having rotative support in a bearing 51 at a point adjacent the rib 13, and in a bearing 52 at the lower end of the body section, is an adjusting shaft 53 having a threaded portion 54 formed thereon between the bearings 51 and 52 to accommodate internally threaded nuts 55 and 56 forming a part of cross heads 57 and 58. The shaft 53 is retained against longitudinal movement with respect to the body section by means of stop nuts 59 and 60 engaging the respective ends of the bearing 52 as shown in Fig. 8.

Connected with the cross heads 57 and 58 are toggle arms 61—62 and 63—64 having pivotal connection with the side wings 4 and 5. The inner ends of the toggle arms are pivotally engaged with the cross head by headed screws or the like 65 having their shanks extended through openings in the arms and into threaded openings of the cross heads. The outer ends of the arms extend through slots 66 formed in the inner longitudinal guide flanges of the side wings and are connected with the wings by pins 67 as best shown in Fig. 9.

The inner edges 68 of the leg portions of the shoulder plates are cut away adjacent the pivotal points of the toggle arms 61 and 62 as illustrated at 69, to provide for reciprocal movement of the shoulder plates when they are moved within the guides of the side wings.

In order to support the shoulder wings in adjusted position and to prevent rotation of the shaft 53 after adjustment, the post 43 is provided with a slotted extension 70 that is externally threaded as at 71 to accommodate a clamping nut 72 which is adapted to contract the slotted end of the post about the shaft 53. The shaft 53 projects from the post 43 and carries an extension 73 that is hingedly connected thereto, as at 74, and carries a knob 75 on its free end whereby the shaft may be rotated by loosening of the clamping nut 72. The body section of the board is preferably supported at an inclined angle on a bracket 76 adjustably pivoted on a stand 77. The stand 77 may be of any suitable construction and carries a yoke-shaped clamp 78 having clamping ears 79 and 80 to engage the opposite sides of the bearing portion 81 of the bracket when the pivot screw 82 is tightened by adjustment of a wing nut 83. The bracket curves upwardly and laterally from the bearing portion thereof, as at 84, to terminate in a retractively extending portion 85 that is spaced therefrom to pass the folded back portion of a shirt or the like as later described, the attaching portion 85 being secured to the outer face of the rear plate 8 at the midpoint adjacent its upper end, as best shown in Figs. 6 and 7.

In displaying a garment on a board constructed and assembled as described, it being assumed the garment is a shirt *a* folded and pinned by the manufacturer so that the sleeves and side portions *b* and *c* thereof underlie the front *d* and are covered by the fold *e* of the tail portion of the shirt, the board is adjusted as follows:

The clamping nut 72 is loosened to permit rotation of the shaft 53 by manipulation of the knob 75. Upon rotating of the shaft in the proper direction the toggle arms are actuated to adjust the side wings so that the board is of narrower width than the front of the shirt. The shirt is then applied by sliding it upwardly over the lower edge of the board so that the board enters between the front *d* and the side folds *b* and *c*. The knob is again rotated to actuate the toggle arms so that the side wings are moved outwardly to snugly engage the side folds of the shirt and to spread the front smoothly over the supporting surface of the front plate 7. The cross bar 42 is then raised to a proper position so that the shoulder wings carried thereby support the shoulder portions of the shirt in the plane of the front *d*, whereupon the clamping nut is retightened to retain the cross arm in adjusted position and prevent accidental rotation of the shaft 53.

If the knob 75 projects above the collar, the shaft extension is broken on the hinge connection 74, as shown in Figs. 3 and 4, so that it does not project thereabove. If desired the shoulder portions of the shirt may be pinned to the pinning strips 32 to retain them smoothly against the shoulder wings.

When a shirt is thus applied it is supported in a neat, attractive manner without unpinning the folds of the manufacturer, for the reason that the board may be readily adjusted thereto.

When the shirt is to be removed, the clamping nut may again be loosened to slide the shoulder wings downwardly within the slot at the upper edge of the body section whereupon the adjusting screw may be rotated to retract the side wings. The shirt may then be removed from off the lower edge of the board in exactly the same condition as when it was removed from the box in which it was received by the merchant. The board thus provides for display of shirts and the like without unpinning the 18 to 27 pins that are inserted by the manufacturer in retaining the folds of the garments, as well as the repinning operations which ordinarily require twice the number of the original pins plus the pins required in refolding the shirt so that it may be returned to its box for sale. The board also eliminates loss to the merchant because of mark-down due to damage to the shirt produced by the many pins and eliminates the necessity of ironing and cleansing operations that are ordinarily required to put the garment back into saleable condition.

From the foregoing it is obvious that I have provided a display board that is readily adjusted to the folds of a garment so that the garment

may be neatly displayed thereon without unpinning of the folds.

What I claim and desire to secure by Letters Patent is:

1. A board for displaying shirts and like garments in folded condition including a flat body section, plate-like side wings extensively supported on the body section, means for adjusting the side wings to vary the width of the board to correspond with the width of the folded garment supported by the board, interconnected shoulder wings of similar plate-like character and having slidable support on the side wings, and means for adjusting the shoulder wings for varying the length of the board to correspond with the length of the folded garment.

2. A board for displaying shirts and like garments while in folded condition including a flat body section, side wings extensibly supported on the body section and having substantially parallel side edges to engage within side folds of the garment, toggle arms connecting the side wings, means for actuating the toggle arms to adjust position of the wings relatively to the body section, shoulder wings having side edges aligning with the side edges of the side wings, and having sliding support on the side wings, and means for adjusting the shoulder wings relatively to the body section.

3. A display board including a body section having front and rear plates spaced apart to form a compartment having open sides, side wings projectable through said open sides of the compartment, a threaded shaft rotatably supported in the compartment, cross heads having threaded connection with the shaft, toggle arms connecting the cross heads with the side wings, means for rotating the shaft to effect adjustment of the side wings relatively to the body section, shoulder wings movable with the side wings, and means for slidably moving the shoulder wings on the side wings to provide a rectangular board adjustable in width and length to a folded garment placed on the board.

4. A display board including a body section having front and rear plates spaced apart to form a compartment having open sides, side wings projectable through said open sides of the compartment, a threaded shaft rotatably supported in the compartment, cross heads having threaded connection with the shaft, toggle arms connecting the cross heads with the side wings, means for rotating the shaft to adjust the side wings relatively to the body section, shoulder wings adjustably slidable on the side wings, a cross bar having adjustable connection with the shoulder wings, means concentric with the threaded shaft for adjustably supporting the cross bar on the body section, and means for retaining the shoulder wings in adjusted position.

5. A display board including a body section having front and rear plates spaced apart to form a compartment having open sides, side wings projectable through said open sides of the compartment, a threaded shaft rotatably supported in the compartment, cross heads having threaded connection with the shaft, toggle arms connecting the cross heads with the side wings, means for rotating the shaft to adjust the side wings relatively to the body section, shoulder wings adjustably slidable on the side wings, a cross bar having adjustable connection with the shoulder wings, a tubular post slidable relatively to the shaft for supporting the cross bar on the body section, and means for clamping the post to the shaft for retaining the shoulder wings in adjusted position.

6. A display board including a body section having front and rear plates spaced apart to form a compartment having open sides, side wings projectable through said open sides of the compartment, shoulder wings adjustably slidable on the side wings, a cross bar having adjustable connection with the shoulder wings, means for adjusting the side wings including the shoulder wings laterally from said body section, and means for moving the cross bar to and from the body section to slidably move the shoulder winds on the side wings.

7. A board for displaying shirts and like garments while in folded and pinned condition, including a pair of flat board-like side wings adapted to be inserted between the front and tail portions of the folded garment and having side edges arranged to engage within the side folds of said garment, means spreadingly connecting said side wings to vary the width of the board in correspondence with the width of the folded garment, flat shoulder wings having movable support on the respective side wings to vary the lenth of the board in correspondence with the length of the folded garment, and means adjustingly retaining said wings.

8. A board for displaying shirts and like garments while in folded and pinned condition, including a pair of flat board-like side wings adapted to be inserted between the front and tail portions of the folded garment and having side edges arranged to engage within the side folds of said garment, toggles spreadingly connecting the side wings, shoulder wings movably carried on the respective side wings to engage shoulder portions of the folded garment and movable laterally with the side wings, a support, toggle actuating means on the support having connection with said toggles, and means selectively retaining said shoulder wings in adjusted position on the side wings.

9. A board for displaying shirts and like garments while in folded and pinned condition, including a pair of flat board-like side wings adapted to be inserted between the front and tail portions of the folded garment and having side adges arranged to engage within the side folds of said garment, toggles spreadingly connecting the side wings, shoulder wings movably carried on the respective side wings to engage shoulder portions of the folded garment and movable laterally with the side wings, a support, a rod rotatably carried on the support and having threaded engagement with said toggles, a tubular member slidable on said rod, arms on the tubular member and having lost motion connection with the respective shoulder wings, and means adjustingly retaining said tubular member in a selected position on said rod to retain the shoulder wings in adjusted position relatively to the side wings.

STEPHEN G. ALLAN.