Feb. 27, 1951 W. S. ROBINSON 2,543,202

GARMENT SUPPORT FOR AUTOMOBILES

Filed June 24, 1949

FIG. 1

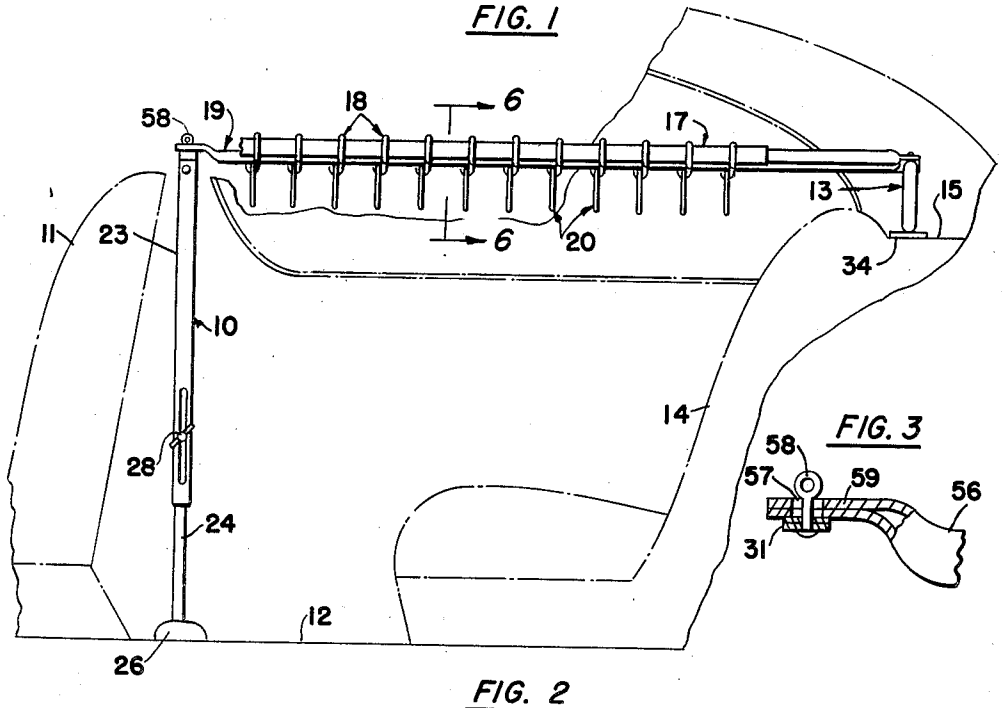
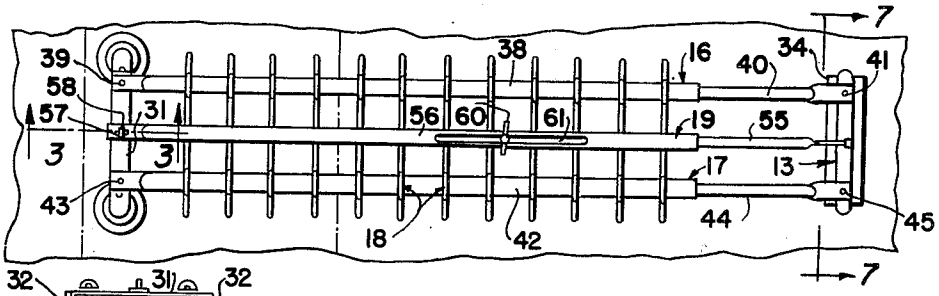


FIG. 3

FIG. 2



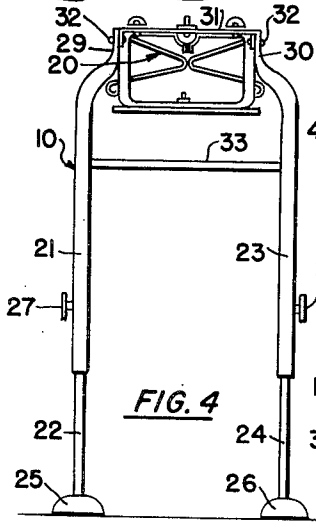


FIG. 4

FIG. 5

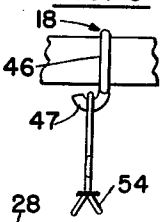


FIG. 7

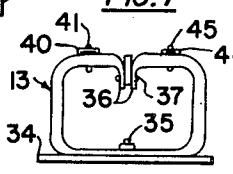
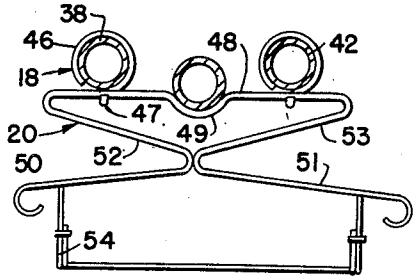


FIG. 6



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Patented Feb. 27, 1951

2,543,202

UNITED STATES PATENT OFFICE

2,543,202

GARMENT SUPPORT FOR AUTOMOBILES

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Application June 24, 1949, Serial No. 101,189

8 Claims. (Cl. 224—29)

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This invention relates to garment supports, and more particularly to a support for carrying garments inside an automobile body.

It is among the objects of the invention to provide a garment support which will fit into the rear portion of an automobile body and occupy a minimum amount of space so that at least one-half of the automobile rear seat will be available for passenger occupancy, which is fully adjustable to fit automobile bodies of different sizes and shapes, which can be easily installed in and removed from an automobile body without any material modification of the body structure, which will support a large number of garments in suspended condition, so that the garments will not be crushed or wrinkled, and which is of simple and light weight construction, durable in use and economical to manufacture, and may be locked to hold garment hangers thereon against rattling or vibration and to prevent unauthorized removal of the hangers and the garments thereon.

Other objects and advantages will become apparent from a consideration of the following description and the appended claims in conjunction with the accompanying drawing, wherein:

Figure 1 is an elevation of a fragmentary portion of the interior of an automobile body showing a garment support illustrative of the invention operatively mounted therein;

Figure 2 is a top plan view of the garment support illustrated in Figure 1;

Figure 3 is a longitudinal cross-section on an enlarged scale of a fragmentary portion of the garment support and is taken substantially on the line 3—3 of Figure 2;

Figure 4 is a front elevation of the garment support;

Figure 5 is a side elevation on an enlarged scale of a fragmentary portion of the garment support;

Figure 6 is a transverse cross-section on an enlarged scale on the line 6—6 of Figure 1; and

Figure 7 is an elevation of the rear portion of the garment support.

With continued reference to the drawing, the garment support comprises, in general, a front stand 10 for disposition in the automobile body in substantially vertical position immediately to the rear of the front seat 11 of the body, and with its bottom end resting on the body floor 12, a rear stand 13 for disposition in substantially vertical position in the body immediately to the rear of the rear seat 14 with its bottom end supported on the platform 15 at the rear of the automobile rear seat, a pair of adjustable rods

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16 and 17 extending in spaced-apart, substantially parallel relationship between the upper end of the front stand 10 and the upper end of the rear stand 13, a series of garment hanger supporting hooks 18 on each of the rods 16 and 17, and a locking bar 19 pivotally connected at one end to the rear stand 13 at the top end of such rear stand and bearing at its opposite end on the top end of the front stand 10, and a plurality of garment hangers 20 carried by the hooks 18.

The front stand 10 comprises a pair of spaced-apart, substantially parallel legs, one of which comprises an upper, tubular member 21 and a lower, tubular member 22 telescopically received in the lower end of the member 21, and the other of which comprises an upper, tubular member 23 similar to the member 21, and a lower, tubular member 24 similar to the member 22 and telescopically received in the lower end of the member 23. A foot 25 is provided on the lower end of member 22 and a similar foot 26 is provided on the lower end of the member 24. The feet 25 and 26 rest upon the floor 12 of the automobile body immediately to the rear of the front seat 11 of the body and, if desired, may be weighted so that they will firmly engage the surface of the body floor. The tubular member 21 is provided with a screw-threaded aperture receiving a set screw 27, and the tubular member 23 is provided with a similar aperture receiving a set screw 28, the set screws 27 and 28 being located near the lower ends of the members 21 and 23, respectively, and operative to clamp the upper and lower, tubular members in adjusted position, so that the height of the front stand 10 can be adjusted to the size and shape of the automobile body, and particularly to the height of the platform 15 above the floor 12 of the body.

At their upper ends the tubular members 21 and 23 are bent inwardly and flattened, as indicated at 29 and 30, respectively, and a flat bar 31 extends between the upper ends of the members 21 and 23. This bar has perpendicularly-disposed end portions which contact the inner sides of the flattened upper end portions of the members 21 and 23 and suitable fastening means, such as the rivets 32, are inserted through the members 21 and 23 near their upper ends and through the perpendicularly-disposed end portions of the bar 31 to rigidly secure the bar to the tubular members 21 and 23 at the upper ends of the latter. A transverse brace 33 extends between the members 21 and 23 substantially parallel to and spaced downwardly from the bar 31

and this brace is rigidly connected at its opposite ends to the members 21 and 23, respectively.

The rear stand 13, particularly illustrated in Figure 7, may conveniently comprise a length of tubing bent to substantially rectangular form. The tubing is flattened at the bottom end of the stand and provided with a centrally-located aperture and a flat plate 34 is disposed between the bottom end of the stand 13 and the platform or deck 15 and is secured to the stand by suitable means, such as the rotatable button 35 which extends from the plate through an elongated aperture in the bottom end of the stand and is rotatable to releasably lock the stand to the plate. The plate 34 may be permanently attached to the platform or deck 15 of the automobile at the rear of the rear seat 14, and the stand 13 may be secured thereon or removed therefrom, as may be desired.

The two ends of the length of tubing come together substantially at the center of the top end of the rear stand 13, and the tubing is flattened at its ends and these flattened end portions are turned downwardly in spaced-apart, substantially parallel relationship to each other, as indicated at 36, and are provided with registering apertures to receive a pivot pin or rivet 37 which pivotally connects the locking bar 19 at one end to the rear stand 13.

The rod structure 16 comprises an outer, tubular member 38 which is flattened adjacent its front end and bears upon the upper surface of the bar 31 near the upper end of the tubular member 21 of the front stand. This outer rod member 38 is rigidly connected at its front end to the top end of the front stand 10 by suitable means, such as the rivet 39. A rear tubular member 40 is telescopically received in the rear end of the front or outer tubular member 38 and this rear tubular member 40 is flattened near its rear end and secured to the upper end of the rear stand 13 by a suitable fastener, such as the rivet 41.

The rod structure 17 comprises a front, outer tubular member 42 similar to the member 38, which member 42 is flattened near its front end and secured to the bar 31 near the upper end of the tubular member 23 of the front stand by a suitable fastener, such as the rivet 43. The rod structure 17 further comprises the inner, rear tubular member 44 telescopically received in the rear end of the outer tubular member 42 and flattened near its rearward end. The flattened rearward end of the member 42 rests upon the upper end of the rear stand 13, and is secured thereto by a suitable fastener, such as the rivet 45.

The hooks 18 are arranged in transversely-aligned pairs, each pair including a hook on the rod structure 16 and a complementary hook on the rod structure 17 and the pairs of hooks are uniformly spaced apart longitudinally of the front tubular members 38 and 42 of the rod structures 16 and 17, respectively. Each of the hooks 18, as particularly illustrated in Figures 5 and 6, may conveniently comprise an annular or ring portion 46 surrounding and secured to the corresponding tubular member 38 or 42, and a curved hook portion 47 disposed at the lower side of the corresponding tubular member 38 or 42, and having its free end spaced from the tubular member a distance only sufficient to permit a garment hanger 20 to be engaged with the hooks.

Each of the garment hangers 20 comprises a wire or rod structure including a substantially straight top bar 48 having at its mid-length location an arcuately-curved depression 49, a pair of garment shoulder bars 50 and 51, and diagonal portions 52 and 53 connecting the inner ends of the shoulder bars 50 and 51, respectively, with the adjacent outer ends of the top bar 48. If desired, a trouser or skirt support structure 54 may be secured to the shoulder bars 50 and 51 to depend therefrom, and the hanger may carry a suitable garment-enclosing bag made of flexible, dust and moisture-impervious material.

The locking bar 19 comprises a rear, inner tubular member 55 having at one end a flattened portion received between the flattened, downturned ends 36 of the rear stand 13 and pivotally secured to the rear stand by the pin or rivet 37, and a front or outer, tubular member 56 which telescopically receives, at its rear end, the inner, tubular member 55. At its forward end the member 56 is flattened and provided with an elongated aperture 57 and bears upon the top surface of the bar 31 between the front ends of the rod structures 16 and 17. A rotatable button 58 is secured to the bar 31 to extend through the slot 57 at the front end of the locking bar 19, and this button may be rotated to releasably lock the front end of the locking bar to the top end of the front stand 10. If desired, the buttons 35 and 58 may be provided with apertures to receive padlocks, so that the garment support can be locked in the automobile and the locking bar 19 can be locked in position, engaging the garment hangers 20 to prevent unauthorized removal of the hangers from the support. At its front end the front, outer member 56 of the locking bar is curved upwardly to the flattened portion 59, so that when the front end of the locking bar is held in contact with the cross-bar 31 by the button 58, the locking bar will seat in the depressions 49 in the top bars 48 of the garment hangers and firmly support the hangers against rattling and vibration. The adjustable construction of the rod structures 16 and 17 and the locking bar 19 permits longitudinal adjustment of the support to compensate for differences in the distances between the rear of the front seat and the rear of the back seat in different automobile bodies, and to facilitate installation and removal of the support.

Relative movement between the front stand 10 and the rear stand 13 is precluded by a set screw 60 which extends through an elongated slot 61 in the outer, tubular member 56 of the locking bar, and is threaded into the inner member 55 of the locking bar near the forward end of such inner member. This set screw 60 bears upon the outer, tubular member 56 at opposite sides of the slot 61, and thus locks the members 55 and 56 together in adjusted, longitudinal position and, when the forward end of the locking bar is secured to the top bar 31 of the front frame 10, precludes relative movement between the front and rear frames.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is, therefore, to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description, and all changes which come within the meaning and range of equivalency of the claims are, therefore, intended to be embraced therein.

What is claimed is:

1. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body, a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, and means carried by said front stand at the top end thereof and engageable with said locking bar at the opposite end of the latter to releasably lock said locking bar in position to engage garment hangers carried by said hanger-supporting hooks.

2. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body, a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, said hooks being arranged in spaced-apart pairs of transversely-aligned hooks with one hook of each pair carried by each of said rod structures, a plurality of garment hangers supported by said hooks and each including a top bar engaged by the hooks of a corresponding pair of hooks and having an arcuate depression at its mid-length location, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, said locking bar being engageable in the arcuate depressions in the top bars of said garment hangers to secure said hangers against rattling or vibration, and means carried by said front stand at the top end thereof and engageable with said locking bar at the front end of the latter to releasably lock said locking bar in hanger-engaging position.

3. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body, a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, and means carried by said front stand at the top end thereof and engageable with said locking bar at the opposite end of the latter to releasably lock said locking bar in position to engage garment hangers carried by said hanger-supporting hooks, said front stand comprising a pair of spaced-apart, substantially parallel legs each including an upper tubular member and a lower member telescopically received in the lower end of the upper tubular member, means carried by each upper member and engaging the respective lower members to secure the two members of each leg in various positions of longitudinal adjustment, a foot on the lower end of each lower member, a bar connecting the upper ends of said upper members, and a brace extending between and secured to said upper members at a location spaced from said bar.

4. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body, a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, and means carried by said front stand at the top end thereof and engageable with said locking bar at the opposite end of the latter to releasably lock said locking bar in position to engage garment hangers carried by said hanger-supporting hooks, said rear stand comprising a generally rectangular structure having a flattened bottom end provided with an elongated aperture and flattened, down-turned portions adjacent the mid-length location of its upper end, said down-turned portions being disposed at respectively opposite sides of and pivotally secured to said locking bar at the rear end of the latter, a plate disposed below said flattened bottom end, and a rotatable button extending from said plate through the elongated aperture in the flattened bottom end of said generally rectangular structure.

5. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body, a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, and means carried by said front stand at the top end thereof and engageable with said locking bar at the opposite end of the latter to releasably lock said locking bar in position to engage garment hangers carried by said hanger-supporting hooks, each of said rod structures comprising a tubular front member, and a rear member telescopically received in the rear end of the respective front member.

6. A garment support for mounting in an automobile body comprising an adjustable front stand for substantially vertical disposition in an automobile body with its bottom end resting on the floor of such body, a rear stand for disposition in substantially vertical position in an automobile body with its bottom end resting upon the platform at the rear of the rear seat of such body,

a pair of adjustable rod structures extending in spaced-apart, substantially parallel relationship between the top ends of said front and rear stands, a series of spaced-apart, hanger-supporting hooks on each rod structure, a locking bar disposed between said rod structures and pivotally connected at one end to the top end of said rear stand, and means carried by said front stand at the top end thereof and engageable with said locking bar at the opposite end of the latter to releasably lock said locking bar in position to engage garment hangers carried by said hanger-supporting hooks, said front stand comprising a pair of spaced-apart, substantially parallel legs each including an upper tubular member and a lower member telescopically received in the lower end of the upper member, means carried by each upper member and engaging the respective lower member to secure the two members of each leg in various positions of longitudinal adjustment, a foot on the lower end of each lower member, a bar connecting the upper ends of said upper members, and a brace extending between and secured to said upper members at a location spaced from said bar, said rear stand comprising a generally rectangular structure having a flattened bottom end provided with an elongated aperture and flattened, down-turned portions adjacent the mid-length location of its upper end, said down-turned portions being disposed at respectively opposite sides of and pivotally secured to said locking bar at the rear end of the latter, a plate disposed below said flattened bottom end, and a rotatable button extending from said plate through the elongated aperture in the flattened bottom end of said generally rectangular structure, and each of said rod structures comprising a tubular front member, and a rear member telescopically received in the rear end of each front member.

7. A garment support for disposition in an automobile comprising stands adapted to be supported in upright position and at spaced apart

locations on the structure of the automobile, a pair of rods extending in spaced apart and substantially parallel relationship between the top ends of said stands and secured at their opposite ends to said stands, a series of spaced apart hanger supporting hooks on each rod, a locking bar pivotally connected at one end to one of said stands and disposable between said rods to lock hangers on said hanger hooks, and locking means engageable between the other of said stands and said locking bar at the other end of the latter to releasably lock said locking bar in position between said rods.

8. A garment support comprising series of spaced apart hooks, a supporting structure supporting said series of hooks in spaced apart and substantially parallel relationship to each other, hangers supported by said hooks each by hooks disposed one in each series of hooks, a locking bar connected at one end to the supporting structure at one end of the series of hooks and engageable with said hangers in opposition to said hooks to lock said hangers on said hooks against unauthorized removal, and locking means engageable between the other end of said locking bar and said supporting structure for releasably locking said locking bar in engagement with said hangers.

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