Feb. 25, 1958 R. A. GALE 2,824,679

GARMENT HANGER

Filed Jan. 4, 1957 2 Sheets-Sheet 1

Fig. 1.

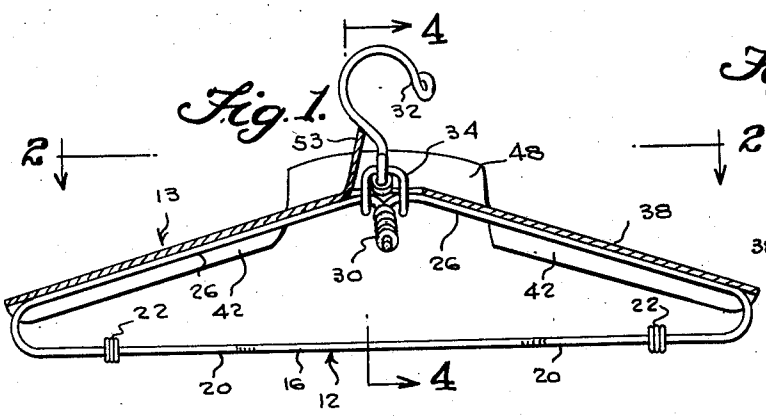


Fig. 4.

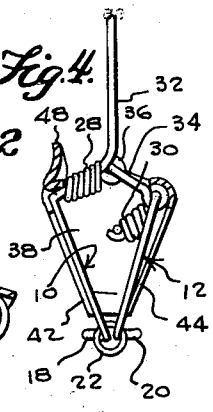


Fig. 2.

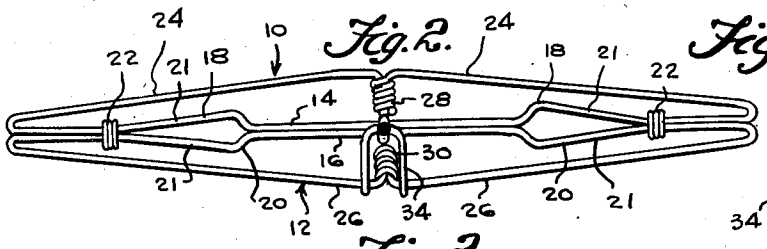


Fig. 5.

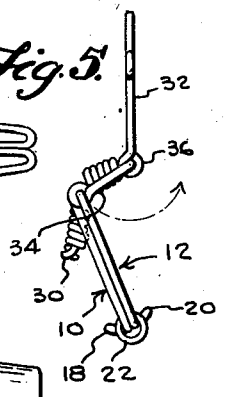


Fig. 3.

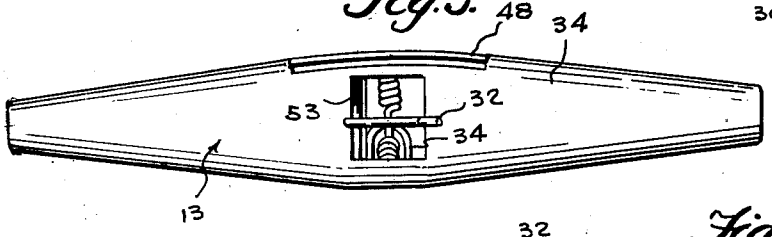


Fig. 7.

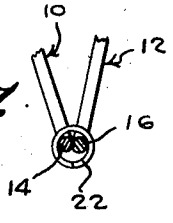
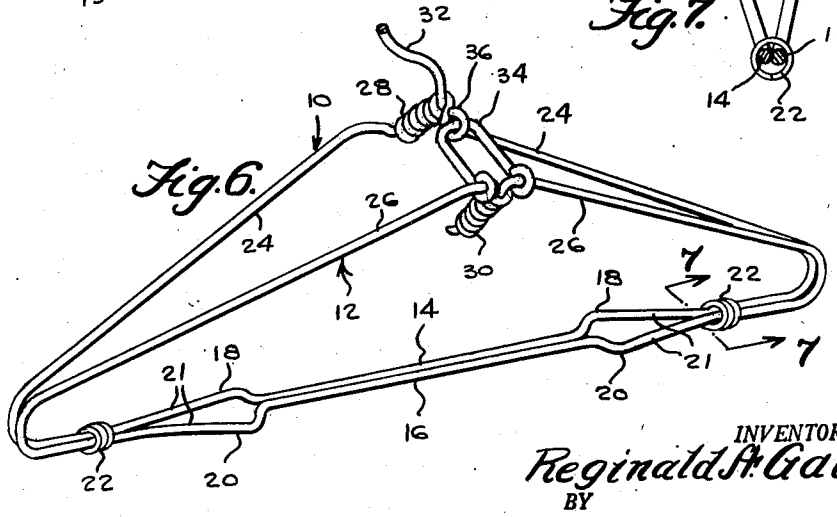


Fig. 6.



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Feb. 25, 1958 R. A. GALE 2,824,679

GARMENT HANGER

Filed Jan. 4, 1957 2 Sheets-Sheet 2

Fig. 8

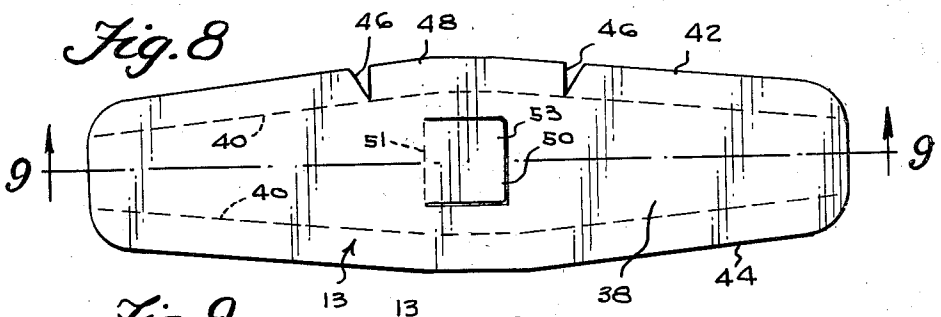


Fig. 9.

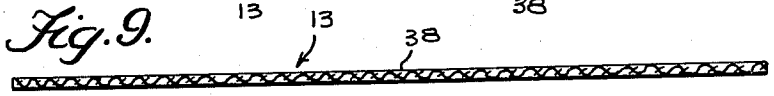


Fig. 10.

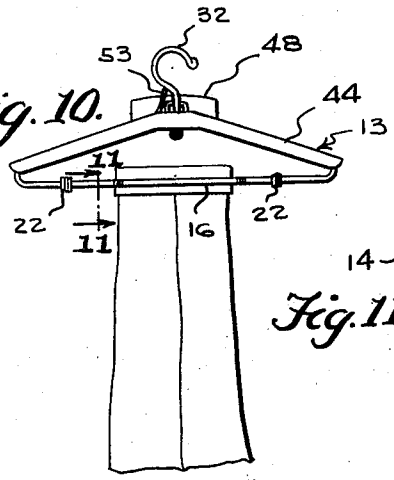


Fig. 11.

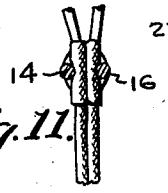


Fig. 12.

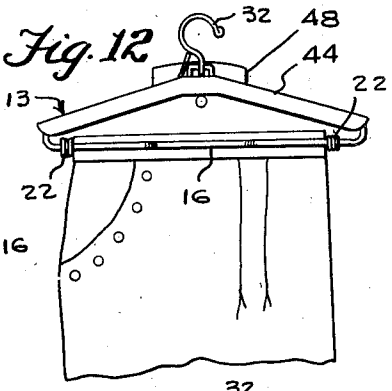


Fig. 13.

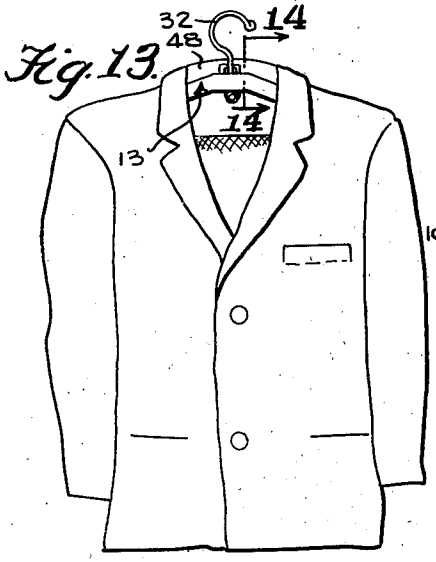


Fig. 14.

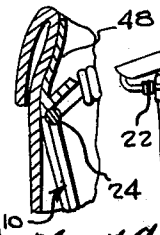
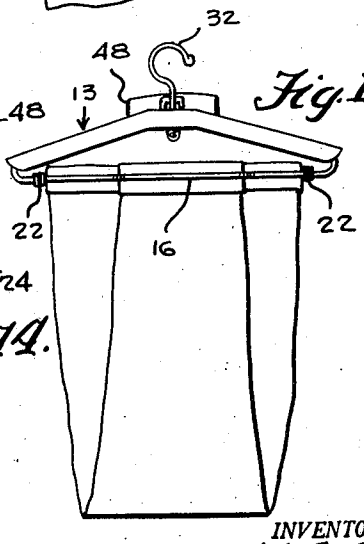


Fig. 15.



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GARMENT HANGER

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Application January 4, 1957, Serial No. 632,539

6 Claims. (Cl. 223—91)

This invention relates to garment hangers, and more particularly, has reference to a hanger collapsible for shipping but adapted to be widened in a transverse direction when in use, despite its formation almost entirely from wire components, for the purpose of affording proper support for the shoulders of a coat or similar garment. The hanger is distinguished from conventional wire hangers in that the invention, when in use, has the characteristic of substantial width as well as length and height, as compared to ordinary wire garment hangers which have a width equal only to the thickness of the single length of wire material generally employed in manufacturing such hangers. In some instances, a cardboard shield is positioned on the coat support arms of a conventional wire hanger, but the width of said shield is decidedly limited, due to the fact that it is supported entirely on the single thickness support arm of the hanger.

In accordance with the present invention, the hanger comprises side-by-side wire frames, pivotally connected for swinging movement about an axis extending longitudinally of the trousers support bar, said frames having coat support arms which are in longitudinal contact when the hanger is folded for shipping or when not in use, said arms being swingable outwardly from one another on pivotal movement of the frames in the manner described, to receive a wide shield which is thus supported along its opposite longitudinal edges to provide a wide support surface for the shoulders of a suit coat or similar garment.

Another object of the invention is to provide a hanger as stated having side-by-side trousers support members, so designed that connecting rings join said members for relative rocking movement about axes extending longitudinally thereof are also used as means for shifting the members toward and away from each other into and out of clamping engagement with a pair of trousers or other garment.

A further object is to provide a garment hanger as described wherein the suspension hook is extended upwardly from one of the pivotally connected frames, with the other frames having a keeper engageable with a hook-like extension of the suspension hook, said keeper being so designed as to limit the outward swinging movement of the coat support members of the frames, the construction further being adapted to insure the disposition of the frames in longitudinally contacting relation when the device is not in use.

Still another object is to provide a hanger as described that can be produced at a very low cost, the cost being little greater than that of a conventional wire hanger and being far outweighed by the benefits to be obtained from the use of the improved hanger constituting the invention.

Another object is to so design the hanger that it will be characterized by a lack of significant bulk or weight, these being factors that contribute markedly to the commercial feasibility of the article, inasmuch as they make for easy packing and shipping.

A further object is to so design the hanger that a cardboard shield, produced at a cost little or no greater than those used on conventional, single-plane wire hangers, will provide a far more efficient support for the shoulder sections of coats and other garments than is afforded by the mentioned conventional cardboard shield, thus eliminating the usual deficiencies noted in conventional hangers and shields, wherein excessive strain, caused by the weight of the garment, is imposed upon a particular section of the garment. This feature is also adapted to allow air to circulate easily within the interiors of damp garments.

A further object is to provide a garment hanger of the character described which will permit trousers to be hung by their cuffs, and which will also allow the trousers and other garments to be hung satisfactorily even though cuffless, this being a feature which is generally found only in relatively expensive garment hangers.

Another object is to provide a hanger that will be characterized by the adaptability of the respective frames to reinforce one another, and by its durability and its maximum resistance to loss of tension, despite the fact that it is capable of manufacture from relatively thin gauge wire.

Still another object is to provide a garment hanger of the character described which will be adapted for supporting any of various types of garments, including skirts, trousers, coats, dresses, etc., without the use of special fastening elements such as safety pins, etc.

Other objects will appear from the following description, the claims appended thereto, and from the annexed drawing, in which like reference characters designate like parts throughout the several views, and wherein:

Figure 1 is a side elevational view of my garment hanger with the cardboard shield shown in section;

Figure 2 is a plan sectional view of the hanger with the shield removed, as seen from the line 2—2 of Figure 1;

Figure 3 is a top plan view of the hanger with the shield applied thereto;

Figure 4 is a transverse sectional view through the hanger on line 4—4 of Figure 1, ready for use with the shield applied;

Figure 5 is a view similar to Figure 4 in which the shield has beben removed and the hanger folded for shipment or storage;

Figure 6 is a perspective view, a portion of the suspension hook being broken away, of the hanger opened for use, with the shield removed;

Figure 7 is a detail sectional view, upon an enlarged scale, taken substantially on line 7—7 of Figure 6;

Figure 8 is a top plan view of the blank from which the cardboard shield is formed;

Figure 9 is a longitudinal sectional view through the blank on line 9—9 of Figure 8;

Figure 10 is a reduced elevation view of the hanger in use supporting a pair of trousers from the cuffs;

Figure 11 is an enlarged, detail section on line 11—11 of Figure 10;

Figure 12 is a view like Figure 10 in which the hanger is in use supporting a skirt;

Figure 13 is a view like Figure 10 with the hanger in use supporting a suit;

Figure 14 is an enlarged, detail section on line 14—14 of Figure 13; and

Figure 15 is a view like Figure 10 in which the hanger is in use supporting a pair of trousers for transport.

Referring to the drawings in detail, the hanger constituting the present invention may appropriately be considered as comprising three main components. These are a main frame 10, an auxiliary frame 12, and a cardboard shield 13.

Frames 10, 12 are each formed from a single length

of wire material, in the shape of a low, isosceles triangle, this being the shape of a conventional wire garment hanger. Thus, the frames **10**, **12** include elongated trousers support members **14**, **16** cooperating to define a trousers bar, said members being disposed in a common horizontal plane.

Adjacent one end, members **14**, **16** are formed with oppositely, outwardly bent obtusely angular portions **18**, **20** disposed in confronting relation. Each of these portions has an inner leg disposed at a relatively steep angle to the length of the associated members **14** or **16**, and a longer outer leg disposed at a shallow, obtuse angle to the length of the associated member. The longer legs have been designated at **21** (see Figure 3), and converge in the direction of the ends of the trousers bar to define a wedge formation on each end of the trousers bar.

Between the portions **18**, **20** and the respective ends of the trousers bar, short lengths of wire are coiled about the members **14**, **16** to provide combination connecting and cam rings **22**. Rings **22** connect the frame **10**, **12** for relative swinging movement about an axis extending longitudinally of the trousers bar defined by members **14**, **16**, that is, the frames can rock transversely toward and away from each other. Further, rings **22** constitute cam rings which when shifted to their Figure 6 positions permit the members **14**, **16** to be spaced away from one another to an extent sufficient to permit the cuffs or other portions of a supported garment to be extended therebetween. Then the rings are shifted toward each other, and riding up on the elongated legs **21** bias the portions **18**, **20** toward each other to cause the midlength portions of the members **14**, **16** to be shifted toward each other, hence to clampably engage the supported garment in a manner to be explained in full detail hereinafter.

The frames **10**, **12** also include downwardly divergent coat supports arms **24** of frame **10**, and similar arms **26** of frame **12**.

The ends of the lengths of wire used in forming frame **10**, at the convergent ends of arms **24** are intertwisted or coiled upon one another, with one of the extremities of the length of wire being extended to form a suspension hook **32** for the garment hanger. As will be noted, the plane of the part of frame **10** that includes member **14** and arms **24** is angularly related to the length of the coiled portion **28** (see Figure 4), and the length of the portion **28** is angular both to the mentioned plane and to the plane of the suspension hook **32**. When the hook **32** is in a vertical plane as it would be when suspended from an overhead bar or the like, not shown (see Figures 4 and 5) the coiled connecting portion **28** extends laterally outwardly from the plane of the hook **32**, declining slightly in a direction away from the plane of the suspension hook. At its outer end, the coiled portion **28**, that connects the suspension hook to the triangular body of frame **10**, merges into said body, and in the mentioned position of the suspension hook said body is disposed in a plane inclined from the vertical and extending into convergence with the plane of the suspension hook at the location of the trousers support bar.

The ends of the lengths of wire used in forming the frame **12** are also coiled about one another to connect the same by a pigtail **30**.

A U-shaped keeper **34**, formed from a relatively short length of wire material, has loops on the outer end of its legs loosely receiving the garment support arms **26** at opposite sides of pigtail **30**. Thus, the keeper **34** is swingable about an axis generally parallel to the axis of relative swinging movement of the frames **10**, **12**, upon the top of the frame **12**. Keeper **34** is adapted to engage at its bight part, a hook-like extension **36** on frame **10**. Extension **36** is constituted from the extremity of the length of wire used in forming the frame **10**, opposite from the extremity of said length used in forming the extension hook **32**.

Due to the construction illustrated and described,

frames **10**, **12** can be swung outwardly from one another about the axis of the trousers bar as shown in Figure 4, so as, when viewed in cross section, to diverge in a direction upwardly from said axis. The suspension hook **32** falls midway between the outwardly swung triangular portions of the frames, with the keepers **34** engaging the hook-like extension **36** in the manner previously described herein.

If, however, it is desired to collapse the device for storage or shipment, frame **12** is swung inwardly toward frame **10** so as to dispose the triangular portions of the frames in face-to-face contact as in Figure 5. Again, the keeper remains in engagement with the hook **36**, to maintain the garment hanger in the collapsed or folded position thereof. It will be seen that a number of the garment hangers under these circumstances can be nested in side-by-side relation, so that a substantial quantity of the same can be shipped or stored together, with a minimum amount of bulk, considering the relatively wide hanger formation resulting when the frames **10**, **12** are swung away from each other (as in Figure 4) for use of the hanger.

The pivotal connection of the keeper to the frame **12**, and the pivotal connection of the frames to each other, are left sufficiently loose to permit the relative swinging movement of the frames between their Figures 4 and 5 positions.

Referring now to the cardboard shield **13**, as shown in Figure 8 the shield in blank is relatively wide, tapering slightly toward its opposite ends, which remain of substantial width but which preferably have rounded corners as shown in Figure 8. The widest area of the shield is at the midlength point thereof.

Defined along the opposite longitudinal edges of the blank are downwardly foldable flanges or lips **42**, **44** respectively extending the full length of the shield and adapted to be folded downwardly along lines **40** that parallel the respective longitudinal edges of the blank.

In the lip **42**, at opposite sides of the midlength point thereof, transverse, V-shaped slits **46** are formed, extending the full width of the lip, and the material between the slits defines a tab **48** which is foldable upwardly, rather than downwardly (see Figures 1, 4, and 10). Medially between the opposite sides of the blank, and also located medially between the ends thereof, is a U-shaped slit **50** the ends of which are connected by a scored line **51**, along which the material of the blank may be folded so that there results a rectangular center tab **53**. Tab **53** can be folded upwardly along the line **51** as shown in Figure 1 when the device is in use, to permit extension of the suspension hook through the opening defined by folding the tab **53**. Alternatively, the tab could be removed in its entirety by being torn along the line **51**. Still further, the tab could be folded downwardly and in these circumstances, the opposite side edges of the tab would limit the swinging movement of the frames **10**, **12** inwardly toward each other from their Figure 4 position, so that they could not accidentally move into a collapsed or folded condition when the hanger is in use, should the keeper **34** become accidentally disengaged from the hook-like extension **36** of frame **10**.

As shown in Figure 9, preferably a corrugated cardboard material is used to provide the body **38** of the cardboard shield. This however, is not critical to the invention and other types may also be employed.

In use of the hanger, it has a considerable versatility as will be noted from Figures 10–15 inclusive. For example, in Figure 10 the hanger is shown in use supporting a pair of trousers A in inverted position, from the cuffs B thereof. The cuffs B, as shown in Figure 11 to particular advantage, are clampably engaged between the members **14**, **16** responsive to the previously described shifting of the cam rings **22** toward each other into camming engagement with the outwardly bowed portions **18**, **20** of the respective members **14**, **16**. To release the trousers,

the rings **22** are merely shifted away from one another to eliminate the clamping engagement of the cuffs by the members **14, 16.**

In Figure 12 the device is shown in use supporting a skirt. In these circumstances, the skirt is clamped between the members **14, 16** in the same manner as the trousers, and it will be apparent that the use of safety pins or other means for insuring that the skirt will remain properly suspended from the hanger is completely eliminated.

The skirt has been designated at C, and includes the waist band D which is gripped between the members **14, 16.**

In Figure 13, the device is shown in use supporting a man's suit including the coat E and the trousers A. The frames **10, 12** are, of course, adjusted away from each other as in Figure 4 with the shield applied. The lips of the shield are bent downwardly as shown in Figure 13. The trousers could be supported as in Figure 10. Alternatively, they can be folded or hung from the trousers bar medially between the upper and lower ends of the trousers as shown in Figure 13.

The arrangement, as will be readily noted, provides a wide area of support for the shoulders of the coat E, in that the wide shield extends the full transverse distance between the garment support arms **24, 26** of the frames **10, 12.** This is of importance, in that it relieves the shoulders of the coat E from excessive strain such as is ordinarily imposed thereupon when the full weight of the coat is suspended from a planiform wire hanger or, for that matter, from the more expensive wooden hangers.

In Figure 14, it will be seen that the tab **48,** projecting upwardly from frame **10,** is adapted to lie against the back of the coat collar, thus preventing the coat collar from wrinkling, folding or becoming misshapened when the coat is supported from the hanger. This provides a desirable stiffener feature on the shield, so that the shield, constitutes not only a wide shoulder support, but also a collar stiffener for a supported garment. The collar has been designated at F, and is disposed in full contact with the tab **48** in the illustrated application of the device.

In Figure 15, the device is shown supporting a pair of trousers G for transport. This arrangement might be desired, for example, when the garment hanger is being used by route men of dry cleaning establishments. The waist of the trousers G is gripped between the members **14, 16,** and further, the trousers are folded medially between their ends so that the cuffs H of the trousers are also engaged between the members **14, 16.**

It will be readily appreciated that the hanger, though capable of being produced by mass production methods at a very low cost, has significant advantages not possessed by a conventional wire hanger or even by more expensive wooden hangers or hangers having special devices for supporting garments. The hanger is fully collapsible and capable of being connected, when collapsed, with other similar hangers. Despite this fact, the hanger is transversely widened to a substantial depth at the shoulder-supporting portion thereof, so that the garments are adapted to be suspended from the hanger neatly and without possibility of wrinkling. The adjustment of the frames for use in this manner is achieved merely by swinging of the frames away from each other between their Figure 4 and Figure 5 positions, and no special latching mechanisms or other locking or adjustments are required.

Still further, despite the low cost of the hanger and the above mentioned features thereof, the hanger has the adaptability for supporting garments in various ways, such as shown in Figures 10–15 by way of illustration of a few examples of use of the hanger. The garments may be supported in such a way as to insure to the maximum extent their being kept in a properly suspended, unwrinkled condition when awaiting wear.

Still further, the use of the double frame arrangement with the frames connected for relative swinging movement imparts durability to the hanger, and an adaptability for the same not to lose its shape despite repeated use thereof. This is achieved while still maintaining the hanger at a relatively small weight and lack of bulk.

The hanger may be used to hang garments like trousers, and skirts while in a folded, collapsed, or export state. This feature should be favorable to cleaners and garment manufacturers who of necessity must hang a great deal of clothing in a limited space. Hanging clothing in this manner, of course, requires no more space than is required in the use of a conventional wire hanger.

It is believed apparent that the invention is not necessarily confined to the specific use or uses thereof described above, since it may be utilized for any purpose to which it may be suited. Nor is the invention to be necessarily limited to the specific construction illustrated and described, since such construction is only intended to be illustrative of the principles, it being considered that the invention comprehends any minor change in construction that may be permitted within the scope of the appended claims.

What is claimed is:

1. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings being freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; and a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction.

2. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings being freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; and a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction, the coat support arms and trousers support member of each frame being disposed in a common plane, the suspension hook being offset inwardly from the plane of the arms and trousers support member of the frame on which the suspension hook is formed, for disposition of the suspension hook between the laterally spaced arms of the frames when the frames are swung relative to one another in said direction.

3. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and

a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings being freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction, the coat support arms and trousers support member of of each frame being disposed in a common plane, the suspension hook being offset inwardly from the plane of the arms and trousers support member of the frame on which the suspension hook is formed, for disposition of the suspension hook between the laterally spaced arms of the frames when the frames are swung relative to one another in said direction; and a shield having a center opening receiving said suspension hook, said shield being of a width sufficient to bridge the distance between the laterally spaced coat support arms of the respective frames with the longitudinal edge portions of the shield supported upon said arms.

4. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction, the coat support arms and trousers support member of each frame being disposed in a common plane, the suspension hook being offset inwardly from the plane of the arms and trousers support member of the frame on which the suspension hook is formed, for disposition of the suspension hook between the laterally spaced arms of the frames when the frames are swung relative to one another in said direction; and a shield having a center opening receiving said suspension hook, said shield being of a width sufficient to bridge the distance between the laterally spaced coat support arms of the respective frames with the longitudinal edge portions of the shield supported upon said arms, said shield including depending longitudinal lips at its opposite sides extending in substantial longitudinal contact with the respective coat support arms of the frames.

5. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings being freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction, the coat support arms and trousers support member of each frame being disposed in a common plane, the suspension hook being offset inwardly from the plane of the arms and trousers support member of the frame on which the suspension hook is formed, for disposition of the suspension hook between the laterally spaced arms of the frames when the frames are swung relative to one another in said direction; and a shield having a center opening receiving said suspension hook, said shield being of a width sufficient to bridge the distance between the laterally spaced coat support arms of the respective frames with the longitudinal edge portions of the shield supported upon said arms, said shield including depending longitudinal lips at its opposite sides extending in substantial longitudinal contact with the respective coat support arms of the frames, the shield further including a tab extendable downwardly from one edge of said center opening to be disposed in the space between the arms of the respective frames, whereby to limit said arms against movement toward each other when the shield is supported upon the arms.

6. A garment hanger comprising a pair of frames each including downwardly divergent coat support arms and a trousers support member connected between the divergent ends of the arms, said members having adjacent their respective ends laterally, outwardly projecting portions, corresponding projecting portions of the frames being transversely aligned and having surfaces converging toward the adjacent ends of the members; rings loosely receiving said members adjacent the ends thereof and connecting the frames for relative swinging movement in a direction transversely thereof about an axis extending longitudinally of said members, to space the arms of one frame laterally from the corresponding arms of the other frame, said rings being freely slidable along the members to ride onto said surfaces and thereby cammingly bias the members transversely toward each other into gripping relation to a garment disposed therebetween; a suspension hook projecting upwardly from one of the frames and including a hook-like extension at its base; a keeper pivoted on the other frame and adapted for engagement in said hook-like extension to limit swinging movement of the frames in said direction, the coat support arms and trousers support member of each frame being disposed in a common plane, the suspension hook being offset inwardly from the plane of the arms and trousers support member of the frame on which the suspension hook is formed, for disposition of the suspension hook between the laterally spaced arms of the frames when the frames are swung relative to one another in said direction; and a shield having a center opening receiving said suspension hook, said shield being of a width sufficient to bridge the distance between the laterally spaced coat support arms of the respective frames with the longitudinal edge portions of the shield supported upon said arms, said shield including depending longitudinal lips at its opposite sides extending in substantial longitudinal contact with the respective coat support arms of the frames, the shield

further including a tab extendable downwardly from one edge of said center opening to be disposed in the space between the arms of the respective frames, whereby to limit said arms against movement toward each other when the shield is supported upon the arms, the shield including on one longitudinal edge thereof, medially between the opposite ends of the shield, an upwardly projecting tab adapted to engage against the inner surface of the collar of a supported garment to hold said collar against wrinkling.

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