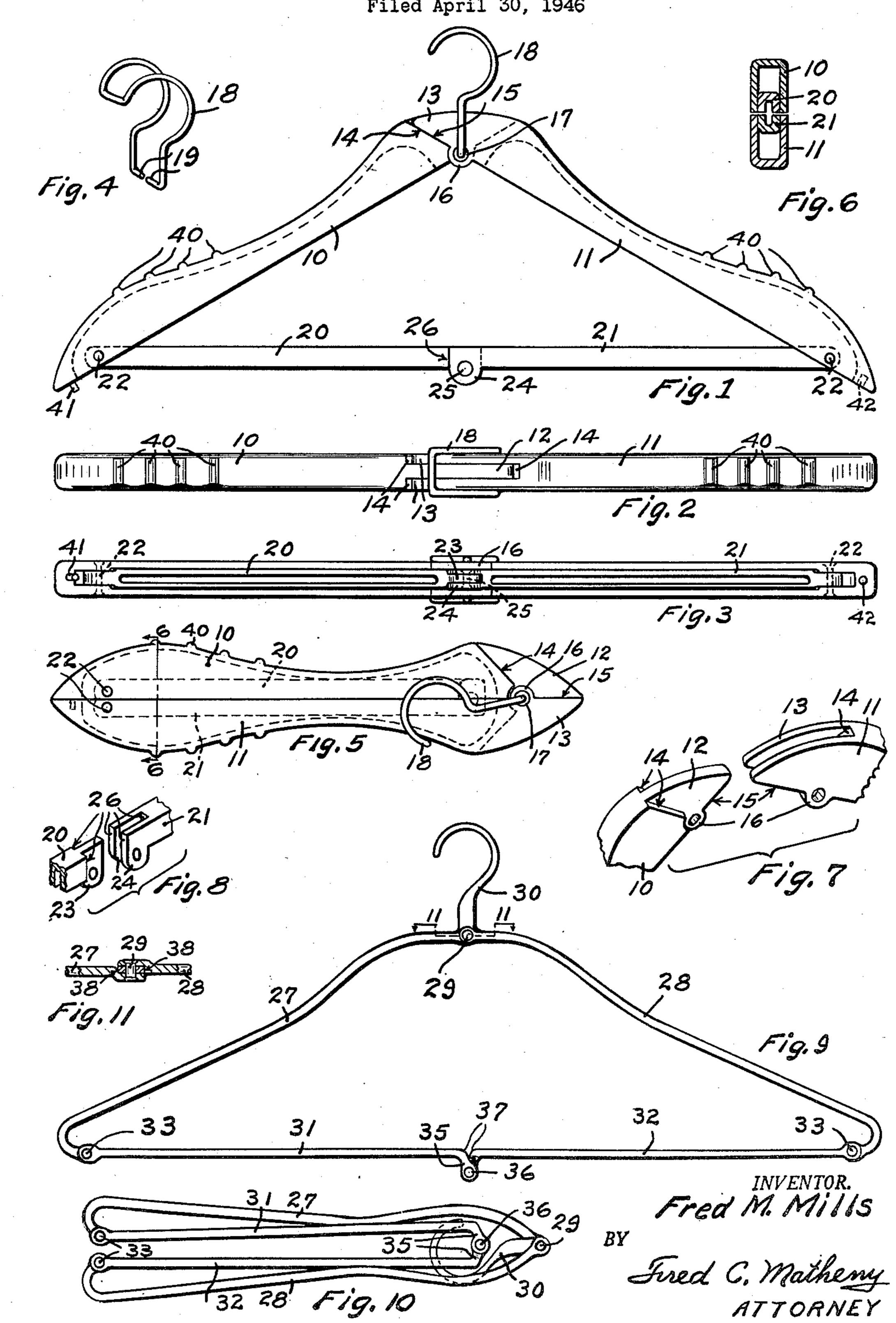
FOLDING GARMENT HANGER

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## UNITED STATES PATENT OFFICE

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## FOLDING GARMENT HANGER

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This invention relates to a folding garment hanger.

An object of this invention is to provide a strong and substantial folding garment hanger that is very compact and occupies very little space when folded.

Another object is to provide a folding garment hanger that is well adapted for either plastic or metal construction.

Another object is to provide a folding garment 10 hanger having a pivotally connected two part hinged spreader bar provided with a medial pivot that passed the center line of its two end pivots to thereby lock the hanger in an open position.

Another object is to provide a folding garment hanger in which two main hanger members have mating upper end portions that interfit tongue and groove fashion and that are pivotally connected together and are provided with shoulders which abut against each other to limit relative 20 angular movement of said main hanger members.

Another object of the invention is to provide a multiple piece folding garment hanger having a relatively wide hook that is pivoted on the same 25 axis as the pivot that connects two parts of the garment hanger and that will fold over the hanger in a very compact manner.

Other objects of the invention will be apparent from the following description taken in con- 30 nection with the accompanying drawings.

In the drawings:

Figure 1 is a view in elevation of a plastic garment hanger constructed in accordance with this invention showing the same in open po- 35 sition.

Fig. 2 is a top plan view of the hanger shown in Fig. 1.

Fig. 3 is a bottom plan view of said hanger. Fig. 4 is a detached perspective view of the 40 hook used on said hanger.

Fig. 5 is a side elevation showing said hanger folded.

Fig. 6 is a cross section on line 6—6 of Fig. 5. Fig. 7 is a fragmentary exploded perspective view of the pivotally connected parts of the main hanger members.

Fig. 8 is a fragmentary exploded perspective view showing the pivot joint means for the bottom spreader bar of the hanger.

Fig. 9 is an elevation of a folding wire hanger made in accordance with this invention, showing the hanger in open position.

Fig. 10 is an elevation showing said wire hanger folded.

Fig. 11 is an enlarged cross section taken substantially on broken line 11—11 of Fig. 9.

Like reference numerals designate like parts throughout the several views.

Figs. 1 to 7 inclusive show a folding hanger comprising two main hanger parts 10 and 11 which are of similar construction except that mating end portions of these parts are of tongue and groove shape with a medial tongue 12 on

one of said main hanger parts, such as the part 10, and two spaced apart members 13 on the other part 11 to receive therebetween the tongue 12.

The mating ends 12 and 13 of the two parts 10 and 11 are interfitted, as shown and each part 10 and 11 has an inclined shoulder 14 adapted to be engaged by an edge 15 of the other part.

The two members 10 and 11 are pivotally connected with each other by a tubular hinge pin or pivot 17 that passes through lobes 16 on the members 10 and 11. A double hook 18, see Fig. 4, fits over the parts 12 and 13 and has two inwardly protruding pins 19 that are adapted to engage within the tubular hinge pin 17 to secure the hook to the hanger. These pins 19 are easily snapped into engaged position by springing the two sides of the hook 18 apart. The hook, being wider than the hanger members, can be folded into a very compact position as shown in Fig. 5.

Obviously the hinge can be formed separable from the hanger members 10 and 11 if desired but in any instance a tubular hinge pin is preferably used.

The two members 10 and 11 are shaped, in outline, like the two sides of a conventional coat hanger and are of channel shaped cross section. as shown in Fig. 6. A spreader bar formed of two parts 20 and 21 is connected with the lower end portions of these members 10 and 11 by pivot means 22. The two spreader bar parts 20 and 21 are of equal length and have downwardly extending lobes 23 and 24 of tongue and groove shape that interfit and are pivotally connected for relative angular movement by a pivot pin 25. The lobes 23 and 24 have shoulders 26 that abut against each other and prevent the two spreader bar parts 20 and 21 from moving downwardly beyond the aligned position in which they are shown in Fig. 1. At the same time the two spreader bar parts 20 and 21 can be angularly moved in the other direction until they lie against each other as shown by dotted lines in Fig. 5. The center of the pivot pin 25 is preferably flush with the lower edge portions of the spreader bars 20 and 21 so as to permit these bars to fold side by side in parallel relation.

50 Preferably ribs 40 are provided crosswise of the upper surfaces of the main hanger members 10 and 11 to prevent garments from slipping off of said members 10 and 11. Also preferably a dowel pin 41 is provided on one member such as 55 member 10 to fit into a hole 42 in member 11 and hold the two parts 10 and 11 against transverse displacement when they are folded.

When the hanger is opened out into the position shown in Fig. 1 the bars 20 and 21 will act as spreader bars to hold the members 11 and 10 extended. In this position the pivot 25 will be a short distance below a straight line passing through the centers of pivots 22 and thus the members 10 and 11 will be locked by reason of

the pivot 25 passing center and the members 10 and 11 can not fold together when subjected to a load. The spreader bar members 20 and 21, when extended, will support garments, such as trousers or skirts hung thereover without sagging. Carments thus hung on the spreader bar members will tend to hold them in a locked position and thus prevent accidental folding of the main hanger members 10 and 11.

The hanger is quickly and easily folded into 10 the very compact position shown in Fig. 5. When extended the hanger is used in the usual manner.

Figs. 9 and 10 show a folding wire hanger made in accordance with this invention. This hanger 15 comprises two main coat hanger parts 27 and 28 pivotally connected with each other by a pivot pin 29 that also supports a hook member 30. Two spreader bar members 31 and 32 are connected by pivots 33 with the curved outer end portions 20 of the main coat hanger parts 27 and 28. The adjoining ends of the spreader bar members 31 and 32 have downwardly extending flattened lug portions 35 that are pivotally connected with each other by a pivot pin 36.

These lugs 35 are shaped to provide shoulders 37 that bump against each other and abut when the spreader bar members are in alignment with each other. These shoulders thus prevent sagging of the spreader bar members 31 and 32 under 30 a garment load but permit these spreader bar members to fold toward the members 27 and 28 and assume the position shown in Fig. 10. The pivot 36 is positioned below a straight line passing through pivots 33 when the spreader bars 35 31 and 32 are in alignment and the main hanger bars 27 and 28 are thus locked against folding movement.

Shoulders 38 on the hanger members 27 and 28, see Fig. 11, abut against the shank of the 40 hook 30, which is positioned between said hanger members 27 and 28. This limits relative angular movement of members 27 and 28, in one direction, beyond the position in which they are shown in Fig. 9 but permits folding movement of these 45 hanger members in the other direction. The hanger shown in Figs. 9, 10 and 11 is used in the usual way when extended.

The foregoing description and accompanying drawings clearly disclose preferred embodiments <sup>50</sup> of my invention but it will be understood that changes in the same may be made within the scope of the following claims.

I claim:

1. A folding garment hanger comprising two 53 main hanger members of molded plastic and of inverted channel shape in cross section to provide grooves in their lower edges; a relatively deep groove of approximately one-third of the thickness of a main hanger member provided medially in the upper end portion of one of said hanger members, said relatively deep groove having flat inside walls and having an inclined bottom wall; a relatively long tongue of approximately one-third the thickness of a main hanger 65 member provided medially on the upper end portion of the other hanger member adapted to fit snugly within the relatively deep groove and having shoulders and a straight bottom edge portion adapted to engage with the bottom edges of the 70 deeply grooved member and with the bottom wall of the relatively deep groove to limit relative angular opening movement of said two hanger members; downwardly extending aligned pivot receiving lobes on each of said main hanger ...

members; a tubular pivot member extending through said lobes and pivotally connecting said two main hanger members, the axis of said tubular pivot being in the planes of intersection of the bottom edges of said two main hanger members and the shoulders provided by the groove and tongue members of the upper end portions of said main hanger members; a hook having two spaced apart sides adapted to fit over the interfitting portions of said two main hanger members and connected at their upper ends by a cross bar; two inwardly directed pins on the lower end portions of the sides of said hook adapted to fit into said tubular pivot member to pivotally secure said hook to said main hanger members; and two spacer bar members of equal length each having an end portion pivotally connected with one of the main hanger members near the lower end of the hanger member, the other end portions of said two spacer bar members having downwardly extending interfitting lobes of tongue and groove shape and said lobed portions having shoulders that abut when the spacer bars are in alignment and said lobed portions being pivotally 25 connected together by a transverse pivot that is positioned below a straight line passing through the pivot connections at the ends of said spacer bars to prevent folding of the spacer bars under load when the hanger is extended.

2. A folding garment hanger comprising two main hanger members of molded plastic and of inverted channel shape in cross section to provide grooves in their lower edges; a relatively deep groove of approximately one-third of the thickness of a main hanger member provided medially in the upper end portion of one of said main hanger members, said relatively deep groove having flat inside walls and having an inclined bottom wall forming a shoulder; a relatively long tongue of approximately one-third the thickness of a main hanger member provided medially on the upper end portion of the other hanger member adapted to fit snugly within said relatively deep groove and having shoulders and a straight bottom edge portion adapted to engage with the bottom edges of the grooved member and with the bottom wall of the relatively deep groove to limit relative angular opening movement of said two hanger members; downwardly extending aligned pivot receiving lobes on each of said two main hanger members; a pivot member extending through said lobes, the axis of said pivot being coincident with the intersection of the planes of the bottom edges of said two main hanger members and with the shoulders formed by the relatively deep groove and tongue portions of the upper end portions of said main hanger members; a foldable hook connected with said pivot member; and two foldable spreader bar members of equal length pivotally connected with each other and with the outer end portions of the respective main hanger members, whereby said main hanger members are held in extended position.

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