Aug. 8, 1939. J. F. JOHNSON 2,168,710

LEG-SUPPORTED STRUCTURE

Filed July 21, 1937 2 Sheets-Sheet 1

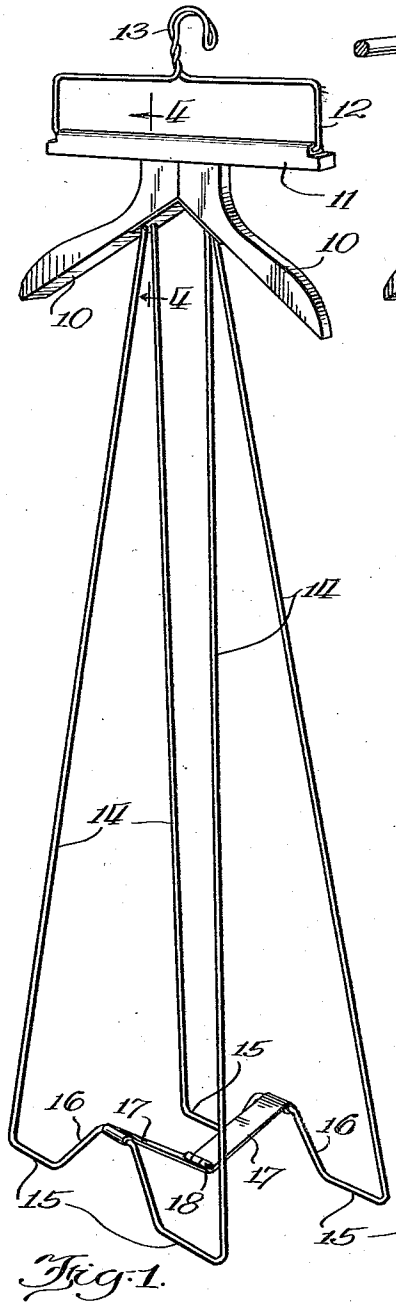


Fig. 1.

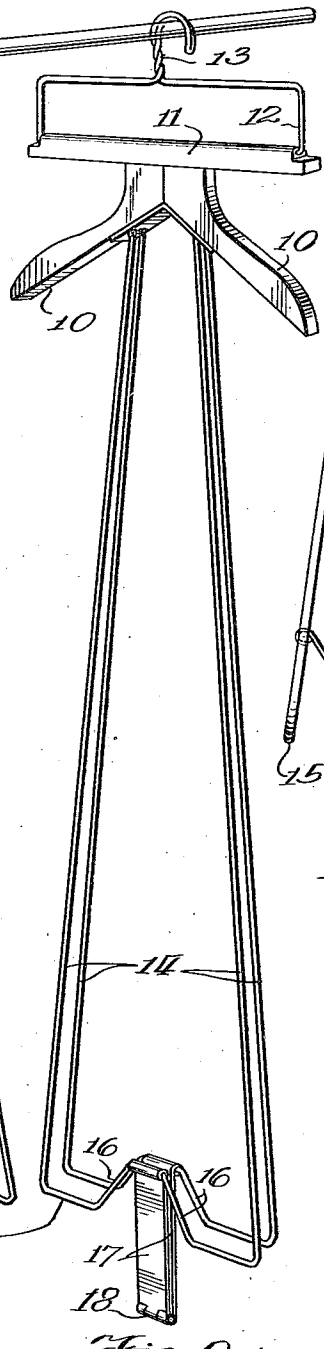
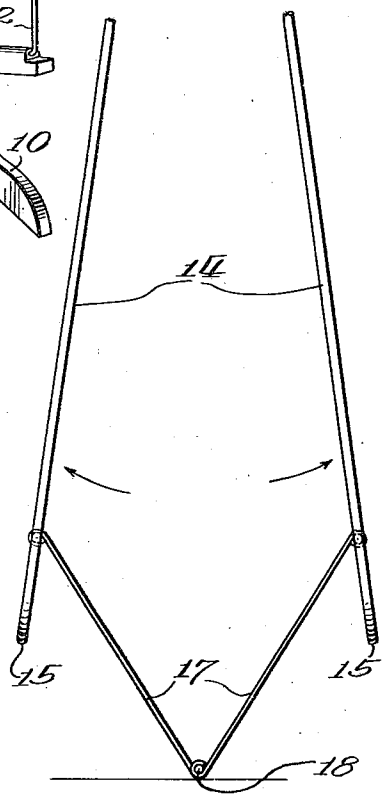


Fig. 2.

Fig. 3



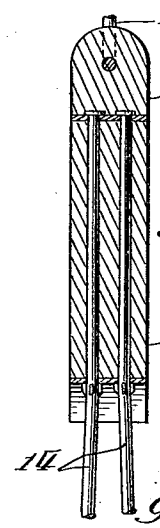


Fig. 4

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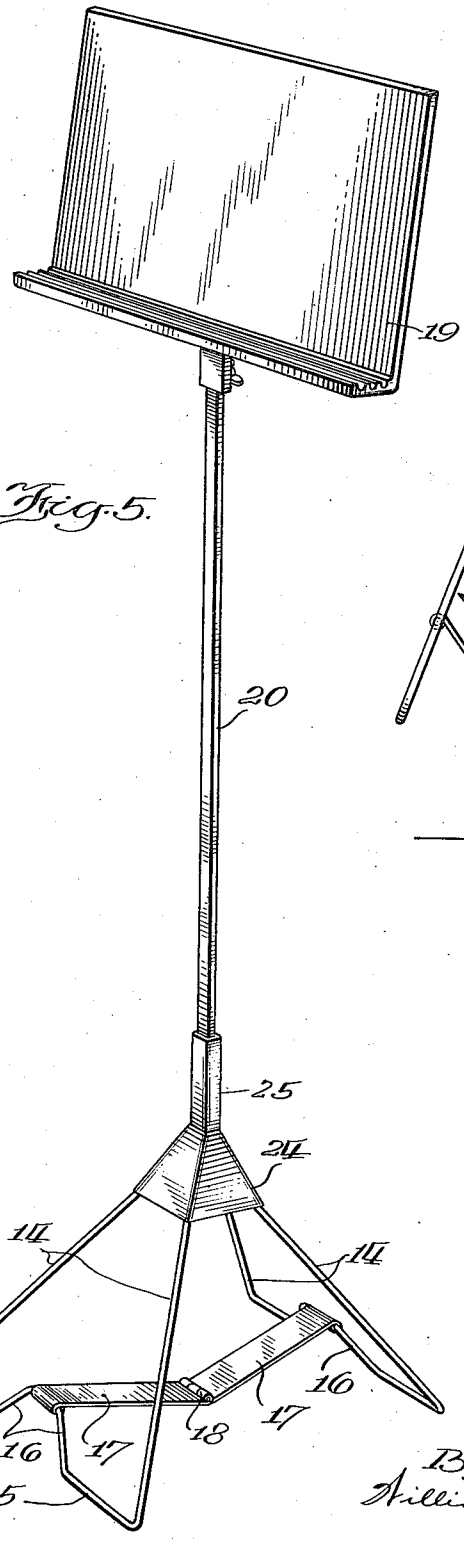


Fig. 5.

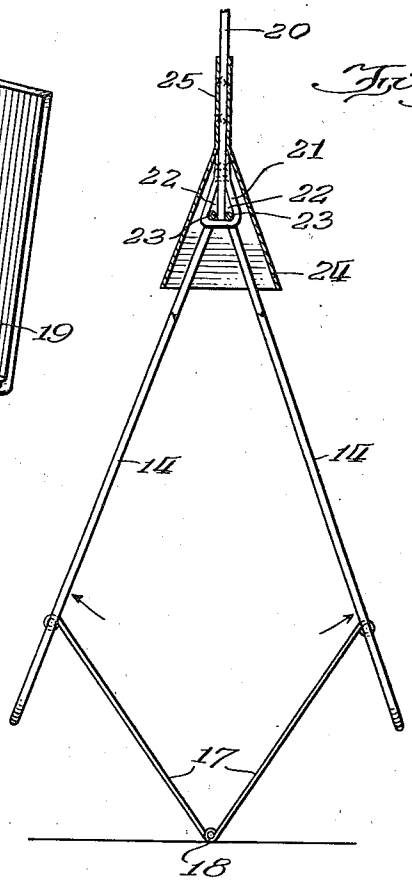


Fig. 7.

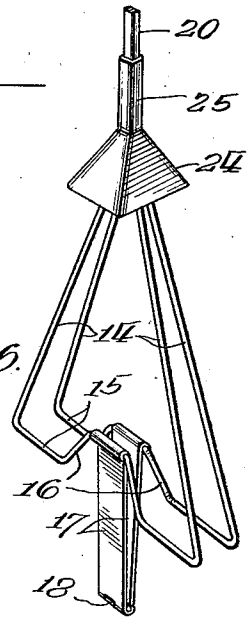


Fig. 6.

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2,168,710

UNITED STATES PATENT OFFICE

2,168,710

LEG-SUPPORTED STRUCTURE

Jonas F. Johnson, Chicago, Ill., assignor, by direct and mesne assignments, to Joseph A. Anderson, trustee, Chicago, Ill.

Application July 21, 1937, Serial No. 154,695

1 Claim. (Cl. 248—171)

My invention relates to leg-supported structures and is particularly concerned with the improvement of structures which are supported by two legs which may lie relatively close together when not in use and which may be separated and moved to appropriate load supporting positions.

The principal object of my invention is to provide leg separating devices functioning automatically to move the legs to or toward their separated or load supporting positions while the legs are being deposited on a floor, or similar surface.

The aforesaid leg separating devices, being carried by and movable with respect to the legs, are adapted to extend below the lower ends of the legs, when the latter are in their non-separated positions, for engagement with a supporting surface on which the legs are to be deposited,—the engagement of such devices with the supporting surface resulting in appropriate movement of the legs, to or toward their load supporting positions, in the relatively short time interval between the engagement of the floor by the separating devices and the engagement of the floor by the legs.

In each of the hereinafter described preferred embodiments of my invention, there is a link associated with each leg, each link having one of its ends pivotally connected to its associated leg and having its other end pivotally connected with the other link,—the arrangement being such that the links lie relatively close to each other, and depend below the legs, when the legs are in their non-separated positions. When the legs are being deposited on a floor, or other supporting surface, the pivotally connected ends of the links engage such supporting surface ahead of the legs and preferably perform their leg separating function before the legs themselves touch the supporting surface. In this event there is no necessity for sliding the legs, relatively to each other, on the floor or other supporting surface, in order to get them into appropriate separated or load supporting positions.

In the accompanying sheets of drawings,

Fig. 1 is a perspective view illustrating the improvements of the present invention applied to a pair of legs associated with a garment hanger;

Fig. 2 is a similar view illustrating the positions occupied by the legs and their separating devices when the coat hanger, and parts carried thereby, are supported from above;

Fig. 3 illustrates the legs, and their separating devices, as they appear immediately after the separating devices have engaged a floor or other supporting surface, while the legs are being deposited upon such supporting surface;

Fig. 4 is a detailed section taken on the line 4—4 of Fig. 1, and looking in the direction indicated by the arrows;

Fig. 5 is a perspective view, illustrating the improvements of the present invention applied to a pair of legs associated with a music rack;

Fig. 6 illustrates the legs and leg separating devices of Fig. 5, as they appear when the legs are in their non-separated positions, i. e., when the legs are held in suspension from above;

Fig. 7 illustrates the legs and leg separating devices of Figs. 5 and 6, as they appear immediately after the engagement of a floor, or other supporting surface, by the leg separating devices, and before the legs themselves have been deposited on such supporting surface.

Similar characters of reference indicate similar parts throughout the several views.

The garment hanger of Figs. 1, 2, and 4, and the music rack of Fig. 5, are merely illustrative of a large variety of structures which may comprise supporting legs equipped with the improvements of the present invention.

On the first sheet of the drawings, I have illustrated a garment hanger comprising the usual carriers 10 for shouldered garments, and the bar 11, over which other garments may be extended. Bail 12, pivoted to the ends of the bar 11, is provided with the customary hook 13 to facilitate suspension in the usual manner of the hanger and parts and garments carried thereby.

I have provided the hanger with relatively long legs 14 whereby it may be supported from a floor, e. g., at a point adjacent a tailor's pressing table. Each of the legs as illustrated, may consist of a single piece of appropriately bent wire having its extremities satisfactorily attached (see Fig. 4) to the garment hanger. However, I do not limit myself to any particular means or method for attaching the legs to the coat hanger, or other structure, with which they are associated. Each leg 14 is preferably generally triangular in shape, i. e. having its side members converging upwardly. Such triangular conformation of the legs makes for maximum leg strength.

The legs 14 lie relatively close together, as depicted in Fig. 2, when hanging in suspension from the garment hanger. However, they are adapted to move apart, to appropriate load supporting positions, as depicted in Fig. 1.

I shall now describe the means whereby such

separation of the legs is automatically effected when and while the legs are being deposited upon a floor, or other supporting surface.

The portion of wire or reach member constituting the lower or foot portion of each leg is preferably conformed to provide the spaced toes **15** separated by an upwardly turned offset **16**. At **17** are links which have their contiguous ends hingedly connected together at **18**,—the other ends of such links being hingedly connected to the horizontal stretches of the offsets **16**, there being one link directly associated with each leg. When the legs **14** occupy the positions depicted in Fig. 2, the links **17** take positions, relatively close to each other, such that their hingedly connected ends lie substantially below the lowermost portions of the legs.

Now let us assume that the leg equipped coat hanger (or other structure with which the legs are associated) is to be deposited on a floor or other supporting surface indicated at **18**. As the legs approach the floor, the hingedly connected ends of links **17** engage the floor and swing the legs apart, as indicated by the arrows in Fig. 3. By the time the legs touch the floor, they have arrived at their fully separated, or appropriate load supporting positions, as depicted in Fig. 1.

When the garment hanger (or other structure for which the legs **14** are provided) is lifted so that the legs **14** clear the floor, the legs swing by gravity to the non-separated positions of Fig. 2, and the links **17** take the positions illustrated in the same figure.

In the arrangement of Figs. 5, 6, and 7, a music rack **19** is suitably attached to the upper end of a rod or standard **20**. Welded or otherwise secured to the lower end of the rod or standard **20**, is a generally U-shaped element **21** which provides eyes **22** for the reception of the upper portions **23** of wire legs **14**. Except for the manner of their attachment to the structure with which they are associated, the legs **14** of Figs. 5 and 6 are generally similar to the correspondingly designated legs of Figs. 1 to 4 inclusive, and are provided with separating devices in the nature of hingedly connected links **17** which function substantially, and for the same purpose, as do the similarly designated links of the earlier figures.

In the arrangement of Figs. 1 to 4 inclusive, the maximum separation of the legs is determined solely by the links **17**. But in the arrangement of Figs. 5 to 7, the maximum separation of the legs is determined by a frusto-conical apron **24**, which is carried at the lower end of the rod or standard **20**, and flares downwardly to embrace the upper portions of the legs **14**. Apron **24** is provided with an integral sleeve **25**, which closely fits and may be spot welded or otherwise secured to the rod or standard **20**.

While I have illustrated my invention in several practical embodiments thereof, I appreciate that the details of the leg-separating devices, and the legs with which they cooperate, may vary within the limits of my invention as defined by the appended claim. By "stand" as the term is used in the appended claim is meant any leg-supported structure in which my present invention is embodied.

What I claim as new and desire to secure by Letters Patent of the United States is:

A stand comprising a pair of leg members having their upper ends in close proximity and so connected to an associated structure that the lower ends of said legs may assume separated load-supporting positions and swing together when suspended from above; each of said legs being formed of wire conformed to provide a pair of spaced apart side members and a reach member which extends between the side members and comprises a link-engaging portion lying somewhat above the lower extremities of the side members; and a pair of links having hingedly connected ends, the other ends of such links being pivotally connected with the link engaging portions of the reach members; the hingedly connected ends of such links hanging below the lower extremities of the legs when the legs swing together upon being suspended from above.

JONAS F. JOHNSON.