Aug. 2, 1966 G. B. HANSBURG 3,264,033

LEG SUPPORT

Filed April 8, 1965

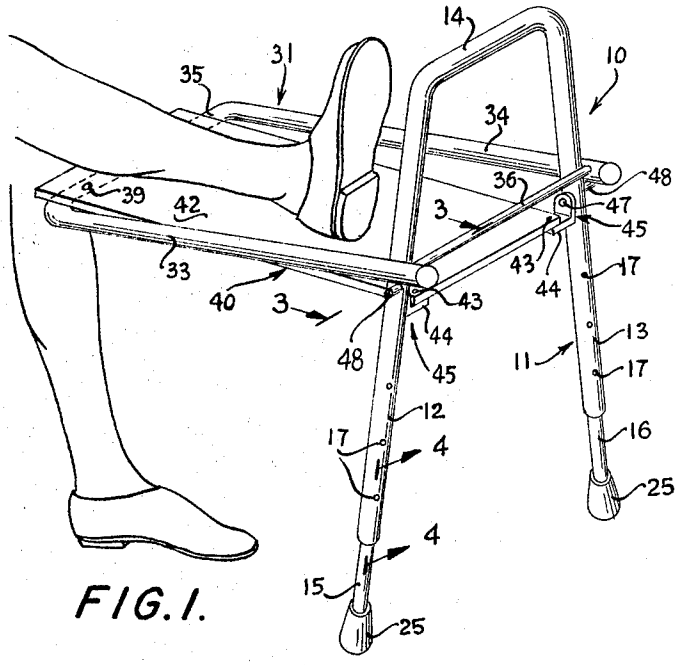
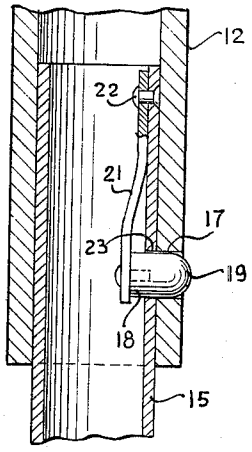


FIG. 1.

FIG. 4.



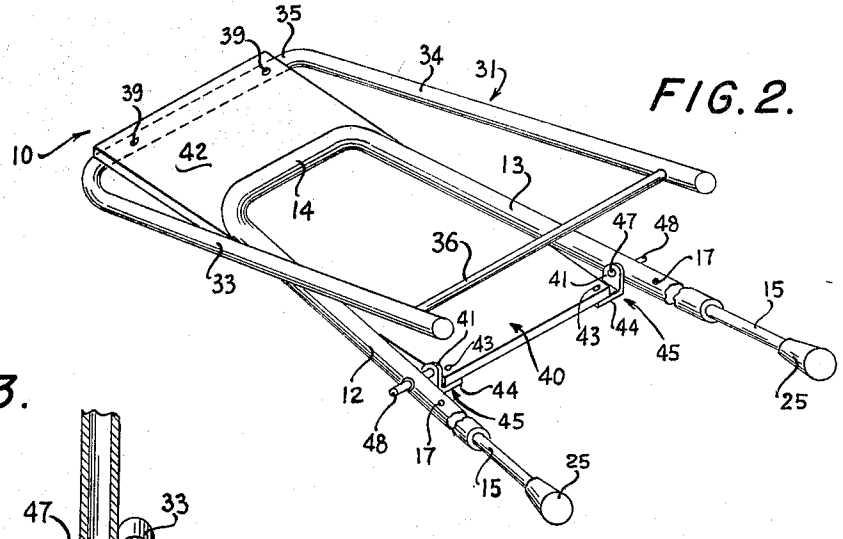
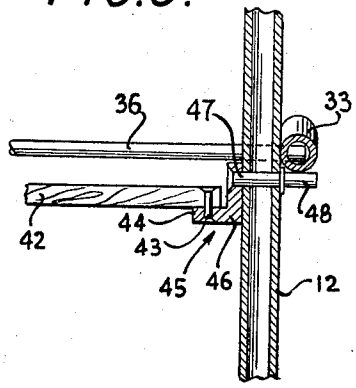


FIG. 2.

FIG. 3.



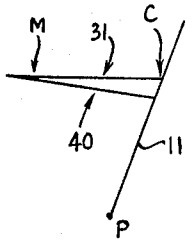


FIG. 5.

INVENTOR
GEORGE B. HANSBURG
BY
Dean, Fairbank & Hirsch
ATTORNEYS

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LEG SUPPORT

George B. Hansburg, Hansburg Acres, Walker Valley, N.Y.

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1 Claim. (Cl. 297—438)

This invention relates to the art of leg supports, more particularly for use in situations where it is desired to maintain the lower porton of the leg and feet in an elevated position.

As conducive to an understanding of the invention, it is noted that a variety of situations exist in which it is necessary or desirable for those suffering from leg ailments to maintain their legs in a horizontal position. Such patients are often confined to bed for this purpose. Confinements to bed is however, not a necessity in a great number of cases and it would suffice if the patient were merely to maintain the afflicted extremity in a horizontal position without being confined to bed. The use of stools and foot rests for this purpose is often not satisfactory due to the fact that such supports may not be of the desired height. Furthermore, due to the weight and bulk of such footrest or stool, its movement to different parts of the home, especially by an invalid, is not always feasible.

It is accordingly among the primary objects of the invention to provide a leg support adapted to maintain the legs of a user in a desired elevated position while seated in conventional chairs, or the like.

Another object of the invention is to provide a leg support which is readily adjustable to any desired height to maintain the leg in desired elevated position.

A further object of the invention is to provide a leg support of the above type which may be fabricated from relatively light weight material without sacrificing structural rigidity.

Another object of the invention is to provide a leg support which may readily be carried from place to place and arranged in desired position.

It is also an object of the invention to provide a leg support which may readily be collapsed to facilitate carrying thereof and storage when not in use.

According to the invention, these objects are accomplished by the arrangement and combination of elements hereinafter described and more particularly recited in the claims.

In the accompanying drawings in which are shown one of various possible embodiments of the several features of the invention;

FIG. 1 is a perspective view of a leg support made in accordance with the teachings of this invention shown in operative position,

FIG. 2 is a perspective view of the leg support of FIG. 1 shown in collapsed carrying or storage position,

FIG. 3 is a cross sectional view taken on line 3—3 of FIG. 1 showing the pivot connection between the support frame and the strut member,

FIG. 4 is a cross sectional view taken on line 4—4 of FIG. 1 through the lower portion of the strut, and

FIG. 5 is a diagrammatic illustration of the forces acting on the leg support.

Referring now more particularly to the drawings, the leg support **10**, as illustratively shown in the drawings, comprises a substantially U-shaped strut member **11** having hollow legs **12** and **13** connected by a transverse base portion **14**. The strut **11** is preferably formed from tubular material, and the legs **12** and **13** are provided with foot portions **15** and **16** respectively, which also are of tubular material, telescopically arranged with respect to the legs **12** and **13** as best seen in FIG. 4.

In the illustrated embodiment, the legs **12** and **13** are formed with a plurality of longitudinally spaced aper-

tures **17** in which spring-pressed detent **18** is engaged. As shown in FIG. 4, the detent illustratively is a rod having its outer end rounded as at **19** and having its other end secured to the free end of a leaf spring **21** secured by rivets **22** within the tubular foot portion at its upper end, the detent **18** being urged through opening **23** in the tubular foot portion into an associated aperture **17** in legs **12** and **13** releasably to retain the foot portion in desired position. Friction shoes **25** are provided at the free end of foot portions **15** and **16**, as best seen in FIGS. 1 and 2.

Mounted on strut member **11** is a support frame **31** of U-shaped configuration having spaced legs **33** and **34** joined by a transverse base portion **35**. Legs **33** and **34** straddle legs **12** and **13** of strut member **11**, and a retaining bar **36** extends between and is secured to the legs **33** and **34** near the free ends thereof.

Secured as by screws **39** to the base portion **35** of support member **31** is one end of an elongated rectangular support panel **42**. The other end of panel **42** at each corner thereof as best seen in FIG. 3, is secured by rivets **43** to the horizontal legs **44** of brackets **45**, the vertical legs **41** of which are pivotally secured to the legs **12**, **13** of strut member **11** by means of transverse pivot pins **47**. Each of the pivot pins **47** has a portion **48** which extends laterally beyond the associated leg **12**, **13** and which forms a stop against which the free ends of the legs **33**, **34** of frame **31** abut to limit downward movement of legs **33**, **34** with respect to legs **12**, **13** of strut **11**.

In use, the leg support is set up from the collapsed position illustrated in FIG. 2 to the operative position illustrated in FIG. 1 by manually gripping base portion **14** of strut **11** and pivoting the strut **11** so that its legs **12**, **13** abut against retaining bar **36** of support frame **31**. When the base portion **14** is separated from base portion **35** to its maximum, as viewed in FIG. 1, the strut member **11**, support frame **31**, and support panel **40** will define a triangle as schematically shown in FIG. 5.

In this operative orientation, the leg support may be positioned adjacent a chair or the like seating surface so that the support panel **40** functions as an extension of the seating surface on which a leg may be supported as seen in FIG. 1. It is found that where the strut **15** is angled to the orientation shown in FIG. 5, the positioning of the leg or legs of the user on the support **40** serves to provide a turning moment M in FIG. 5 which resists the collapsing force C tending to cause the support to fall. As a result, the leg support is maintained stable and serves to support a leg in the desired elevated position.

As will be apparent to those skilled in the art, adjustment of the leg rest to a desired height is readily accomplished by moving the detents **19** inwardly and pushing the foot portions **15** and **16** to a desired position until the detents snap into an opening **17** in the associated legs **12** and **13** so that a desired elevation for the support **40** will be obtained.

When it is desired to move the support or collapse same for storage purposes, this is readily accomplished by merely bringing the base portion **14** of the strut **11** towards the support panel **40** so that the entire supporting structure collapses to the position illustrated in FIG. 2.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope of the claims, it is intended that all matter contained in the above description, or shown in the accompanying drawings, shall be interpreted as illustrative and not in a limiting sense.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

A leg rest comprising a substantially U-shaped strut member having a pair of legs and a base, a substantially

U-shaped frame member having pair of legs and a base, a support member comprising a rectangular panel having one end rigidly connected to the base of said U-shaped frame, the other end of said panel having a pair of L-shaped brackets secured to the respective edges thereof, said brackets being respectively pivotally connected to the legs of said strut member, each of said pivot connections comprising a pin, said brackets being positioned on the inner sides of the legs of the strut member with the pins extending laterally outward beyond the outer sides of the legs of the strut member, the extending ends of said pins defining stops, the legs of said frame straddling the legs of said strut member and being movable with respect thereto, said frame legs being adapted to abut against said stops thereby limiting the movement of said frame member, a cross bar connecting the free ends of the legs of said frame and adapted to abut against the legs of said strut member to retain said support in fixed position with respect to said strut member, said strut member having

hollow legs, a hollow foot member slidably mounted in each of the legs of said strut member, each of said legs having spaced openings along the length thereof and a detent carried by each of said foot members movable into an associated opening in said legs thereby to permit adjustment of the length of the legs of said strut member.

References Cited by the Examiner

UNITED STATES PATENTS

1,979,152	10/1934	Green et al.	297—438
2,735,480	2/1956	Mead	297—438
3,051,527	8/1962	McKenna	297—439
3,119,356	1/1964	Sauer	108—8
3,164,351	1/1965	Rembowski	248—188.4

FRANCIS K. ZUGEL, *Acting Primary Examiner.*

CASMIR A. NUNBERG, *Examiner.*