Dec. 13, 1949 R. R. FREUND 2,490,956

EXTENSIBLE BRACE FOR ARTICULATED BEDS

Filed Aug. 11, 1944

FIG. 1

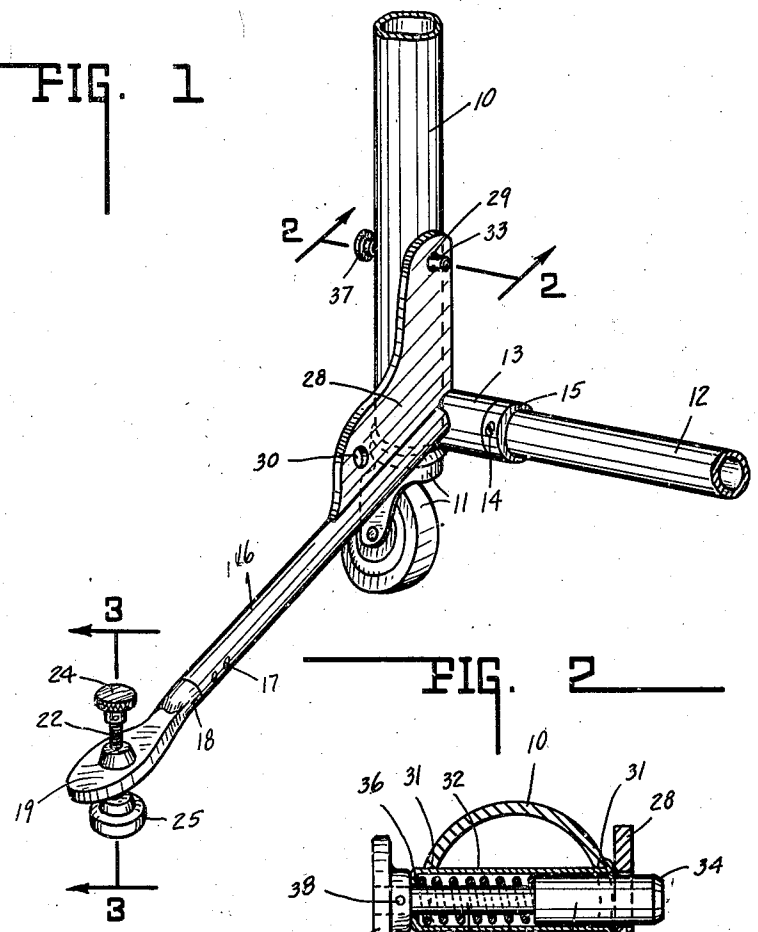
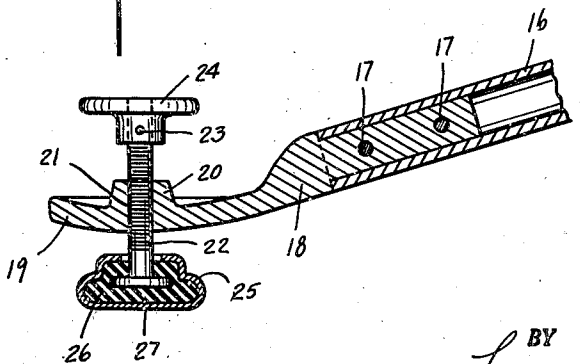


FIG. 2

FIG. 3



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EXTENSIBLE BRACE FOR ARTICULATED BEDS

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2 Claims. (Cl. 5—60)

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This invention relates to a stabilizing extension or brace for a frame leg structure of a device such as an articulated bed wherein the frame is of pedestal type and the bed portions proper project appreciably beyond the frame.

The chief object of the present invention is to prevent overturning and movement of such a device.

The chief feature of the present invention is to provide means which is collapsible or extensible at will and which is positively retained in either the collapsed or extended position.

Another chief feature of the present invention is to provide such a means with an adjustable foot member rest.

Other objects and features of the invention will be set forth more fully hereinafter.

A bed device of the aforesaid character is illustrated in the copending application Serial No. 537,220 filed May 25, 1944, and entitled "Hospitalization bed," now abandoned.

The full nature of the invention will be understood from the accompanying drawing and the following description and claims.

In the drawings—

Fig. 1 is a perspective view of a leg or frame portion of the device equipped with the stabilizing brace structure.

Fig. 2 is an enlarged sectional view taken on line 2—2 of Fig. 1 and in the direction of the arrows.

Fig. 3 is an enlarged central sectional view taken on line 3—3 of Fig. 1 and in the direction of the arrows.

In the drawing 10 indicates a tubular leg portion of a device and the lower end suitably receives a caster structure 11 normally carrying the load imposed upon said leg. Two adjacent legs are suitably joined together by a cross member 12, herein shown as a tube.

Rotatably mounted on member 12 is a sleeve 13, which may bear at one end upon leg 10 on an interposed washer or shim. Secured to cross member 12, as at 14, is a stop collar 15. This limits longitudinal movement of the elongated sleeve upon the cross member.

Projecting transversely of sleeve 13 and rigid therewith is an arm 16, which, see Fig. 3, is tubular and at its free end same has rigidly secured thereto, as at 17, the extension 18. The same is flattened, as it were, as at 19 and includes boss 20 which is bored and threaded as at 21.

A threaded stem 22 is axially adjustable therein and at its upper end has rigidly secured thereto as at 23 the adjusting knob 24. Its lower

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end has suitably secured thereto a glide or foot member 25, which includes cushion material 26. Said glide may rock relative to the stem so that the surface 27 always will engage the supporting surface when the brace is in extended position.

Rigid with sleeve 13 and arm 16 is the plate 28. Herein the plate has two holes 29 and 30 substantially transversely of each other relative to the vertex of the plate. Leg 10 is transversely apertured at 31 and mounted therein and secured to the leg is tube 32 in which is slidably mounted elongated plunger 33, which normally projects beyond one end of said tube 32 and that end adjacent plate 28.

The outer end of the plunger is chamfered as at 34 to facilitate plunger seating in one of the position limiting holes 29 and 30. The other end of the plunger carries stem 35, which projects through coaxially apertured end 36 of tube 32 and said projecting end of the stem mounts hand piece 37 suitably secured thereto as by pin 38.

A coil spring 39 is concentric with the stem and lies between it and tube 32 and one end bears on tube end 36 and the other bears on the plunger. Said spring normally tends to project the plunger outwardly to the extent determined by knob 37 contacting tube end 36. The other end 40 of said tube 32 is flared outwardly for tube mounting and retention purposes.

In Fig. 1 the stabilizing brace is illustrated in extended or bracing relation and locked therein by plunger 33 seating in plate aperture 29. When stabilization is not required or desired, knob 37 is pulled outwardly from leg 10 thereby compressing spring 39 and retracting plunger 33 from aperture 29. Then the arm 16 may be swung upwardly about cross member 12 until said arm lies parallel to leg 10. Thereupon plunger 33 automatically seats in and projects from aperture 30 in plate 28 and retains said brace in the retracted or collapsed position.

Return to bracing position is similarly effected by pulling out on knob 37 and lowering the arm until the plunger 33 again seats in plate aperture 29. When so locked in lower position, if foot member 25 then does not engage the supporting surface (floor), knob 24 is turned to lower the foot member 25 until such floor engagement is effected.

Various mechanical variations or embodiments of the foregoing may be employed, but same, as well as others which will readily suggest themselves to persons skilled in this art, are consid-

ered within the broad scope of this invention, reference being had to the claims appended hereto.

The invention claimed is:

1. In structure having a frame leg, a supporting caster carried thereby, and a transversely disposed portion on the leg adjacent the caster, the combination of a brace arm pivotally mounted upon the transverse portion immediately adjacent the leg and movable into substantially parallelism therewith as well as substantially transverse thereto, the free end of the arm having operative bearing upon a surface engageable by the caster, and means releasably locking the arm in extended relation for bracing purposes.

2. Structure as defined by claim 1 wherein said locking means releasably locks the arm in retracted, collapsed or parallel position.

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