Dec. 13, 1955 A. LORENZ 2,726,709

ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON

Filed Jan. 21, 1953

Fig. 1.

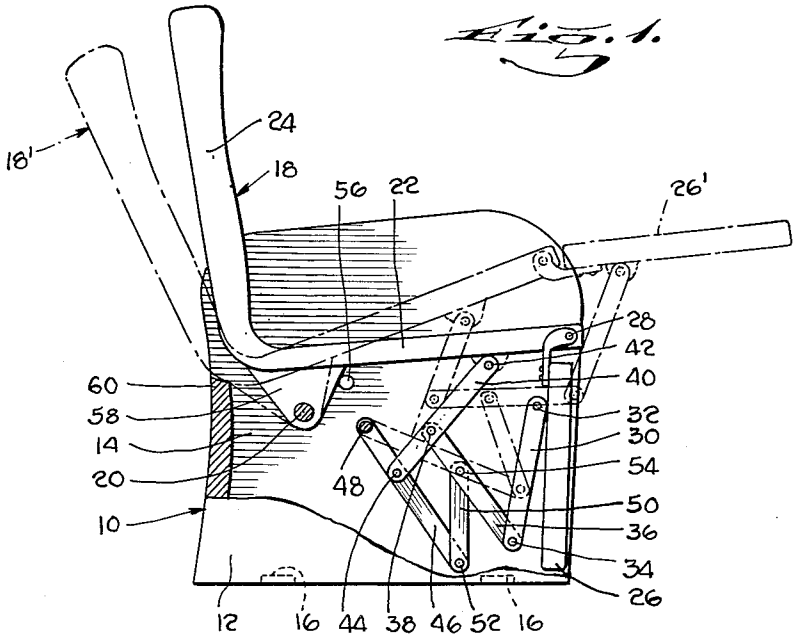
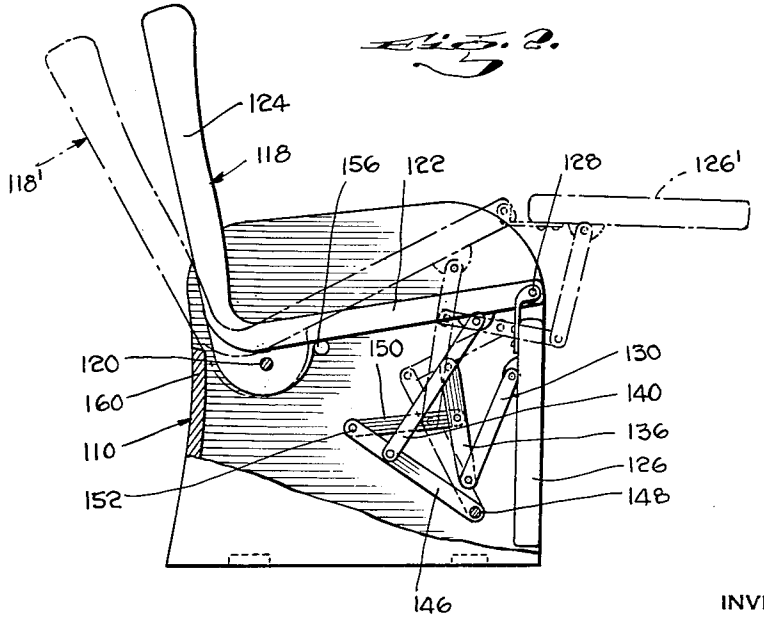


Fig. 2.



INVENTOR
ANTON LORENZ
BY
ATTORNEY

United States Patent Office 2,726,709 Patented Dec. 13, 1955

2,726,709

ARTICLE OF REPOSE FOR SUPPORTING THE BODY OF A PERSON

Anton Lorenz, Buffalo, N. Y.

Application January 21, 1953, Serial No. 332,375

4 Claims. (Cl. 155—106)

This invention relates to articles of furniture, and more particularly to a reclining article of furniture wherein a unit comprising a seat and a back-rest is swingably mounted on a support and a leg-rest pivoted to the seat is controlled by a controlling mechanism in dependence on movements of said unit.

An object of the invention is to provide a controlling mechanism for a swingable leg-rest in above described type of articles of furniture, by means of which the leg-rest may be brought into a substantially horizontal position while the seat-back-rest unit is swung through a comparatively small angle about its pivot on the support.

A further object of the invention is to improve on the construction of reclining articles of furniture as now customarily made.

Other objects and structural details of the invention will be apparent from the following description when read in conjunction with the accompanying drawings forming part of this specification, wherein:

Fig. 1 is a side elevational view of a reclining armchair according to the invention, a portion of a side frame being broken away, and

Fig. 2 is a side elevational view of a different embodiment of a reclining armchair according to the invention, a portion of a side frame being broken away.

Referring now to Fig. 1, 10 generally indicates a support having side frames **12** and **14** connected with each other by cross bars **16**. The arm-rests are included in the side frames.

18 generally indicates a unit swingably mounted on the support **10** at **20**. Said unit **18** comprises a seat **22** and a back-rest **24** integral with each other.

A leg-rest **26** is swingably mounted on the front portion of the seat **22** at **28**. The upper end of a controlling link **30** is pivoted to a lug of the leg-rest **26** at **32**. The lower end of said controlling link **30** is pivoted at **34** to the lower end of a controlling arm **36**. The upper end of said controlling arm **36** is pivoted at **38** to a connecting link **40** intermediate the ends theerof. The upper end portion of said connecting link **40** is pivoted to the seat **22** at **42**. The lower end portion of said connecting link **40** is pivoted at **44** to a controlling element **46** swingably mounted with its upper end portion on the support **10** at **48**. The lower end portion of said controlling element **46** is pivoted to the lower end of a controlling bar **50** at **52**. The upper end of said controlling bar **50** is pivoted to the controlling arm **36** at the point **54** said point being located between the pivots **34** and **38** of said controlling arm **36**.

The sitting position of the movable members of the chair is limited by a stop **56** arranged on the support for abutting cooperation with a lug **58** of the seat-back-rest unit **18**. When said unit **18** is swung to a reclined position, for example the extreme reclined position **18'** shown in dash and dot lines, the leg-rest **26** is brought into the position **26'** by the above described controlling mechanism **30, 36, 40, 46, 50**. The extreme reclined position **18'** of the unit is limited by the upper edge of the rear wall **60** of the support **10** which comes into abutting engagement with said unit.

The controlling mechanism **30, 36, 40, 46, 50** according to the invention permits a comparatively fast initial upward movement of the leg-rest **26**, so that the latter reaches a substantially horizontal position while the seat-back-rest unit **18** is swung through a comparatively small angle. In other words the elevated substantially horizontal position **26'** of the leg-rest is obtained while the back-rest is only slightly reclined.

According to the embodiment shown in Fig. 2 again the unit **118** comprising the seat **122** and the back-rest **124** is swingably mounted on the support **110** at **120**. The leg-rest **126** is swingably mounted on the seat **122** at **128** and controlled by a controlling mechanism comprising the controlling link **130**, the controlling arm **136**, the connecting link **140**, the controlling element **146** and the controlling bar **150**. The arrangement of the members of said controlling mechanism substantially corresponds to the arrangement of the members of the controlling mechanism shown in Fig. 1 with the exception that according to Fig. 2 the lower end of the controlling element **146** is pivoted to the support at **148** and the upper end of said controlling element **146** is pivoted to the controlling bar **150** at **152**.

A movement of the unit **118** from the sitting position shown in full lines in Fig. 2 into the extreme reclined position **118'** shown in dash and dot lines causes a lifting of the leg-rest **126** into the position **126'** through the medium of the controlling mechanism **130, 136, 140, 146, 150**. The sitting position is limited by the stop **156** and the extreme reclined position is limited by the upper edge of the rear wall **160** of the support **110**.

I have described preferred embodiments of my invention but it is understood that this disclosure is for the purpose of illustration and that various omissions or changes in shape, proportion and arrangement of parts as well as the substitution of equivalent elements for those herein shown and described may be made without departing from the spirit and scope of the invention as set forth in the appended claims.

What I claim is:

1. An article of repose for supporting the body of a person, comprising in combination: a support, a unit including a seat and a back-rest rigid with each other, said unit being rockably mounted on said support, a controlling element swingably mounted on said support, a connecting link, one end portion of said connecting link being pivoted to said seat, the other end portion of said connecting link being pivoted to said controlling element, a controlling arm pivoted at one of its end portions to said connecting link, a controlling bar, one end portion of said controlling bar being pivoted to said controlling arm, the other end portion of said controlling bar being pivoted to said controlling element, a leg-rest swingably mounted on the front end portion of said seat, and controlling means interposed between said controlling arm and said leg-rest for effecting movements of the latter in coordination with said controlling arm.

2. In an article of response as claimed in claim 1, the swingable connection of said controlling element with the support being at the upper portion of said controlling element, and the pivotal connection between said controlling bar and said controlling element being at the lower end portion of the latter.

3. In an article of repose as claimed in claim 1, the swingable connection of said controlling element with the support being at the lower portion of said controlling element, and the pivotal connection between said controlling bar and said controlling element being at the upper end portion of the latter.

4. An article of repose for supporting the body of a person, comprising in combination: a support, a unit including a seat and a back-rest rigid with each other, said unit being swingably mounted on said support, a controlling element swingably mounted on said support, a connecting link, one end portion of said connecting link being pivoted to said seat, the other end portion of said connecting link being pivoted to said controlling element, a leg-rest swingably mounted on the front end portion of said seat, a controlling link pivoted at one of its ends to said leg-rest, a controlling arm being pivoted

to the other end portion of said controlling link, the other end of said controlling arm being pivoted to said connecting link, and a controlling bar, one end of said controlling bar being pivoted to said controlling arm, the other end of said controlling bar being pivoted to said controlling element.

References Cited in the file of this patent

UNITED STATES PATENTS

2,647,559 Richardson ---------- Aug. 4, 1953