Jan. 17, 1961 F. D. HOFFMAN, JR 2,968,339

RECLINING CHAIR WITH ADJUSTABLE OTTOMAN BRACKET

Filed Sept. 18, 1957 2 Sheets-Sheet 1

Fig. 1.

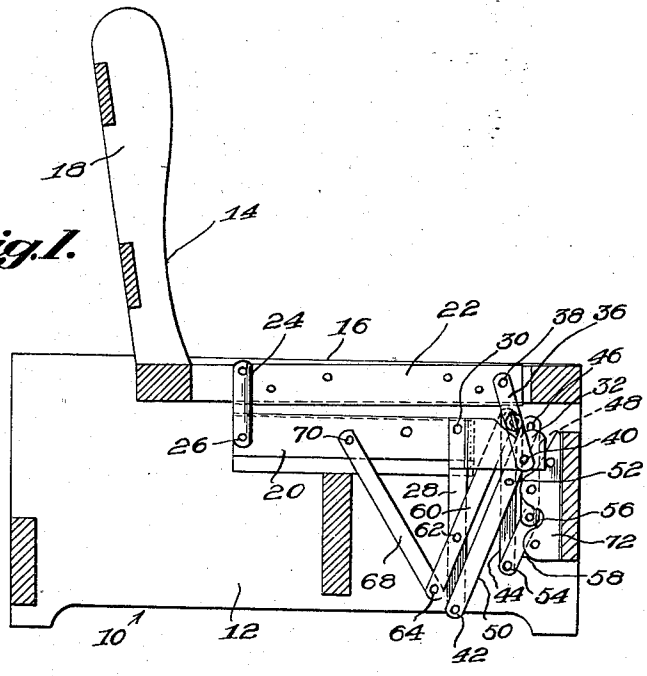
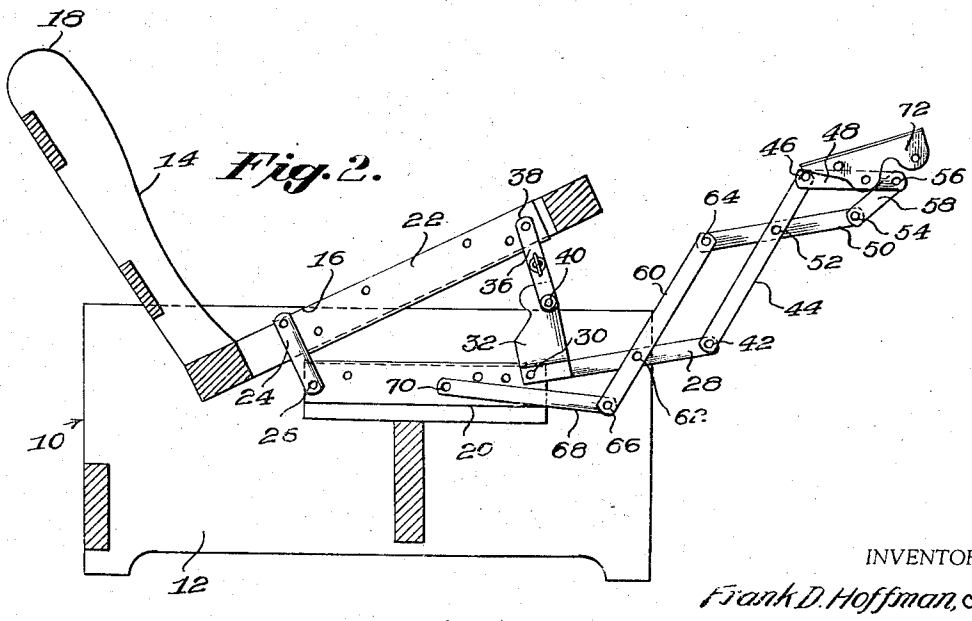


Fig. 2.



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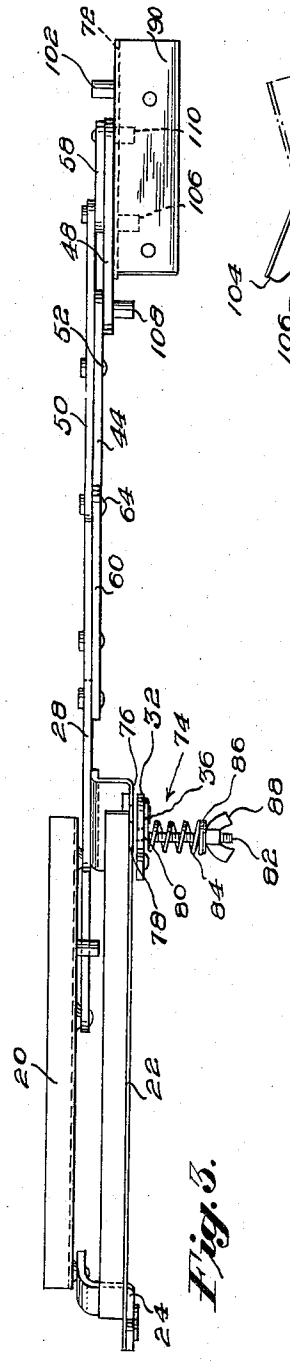


Fig. 5.

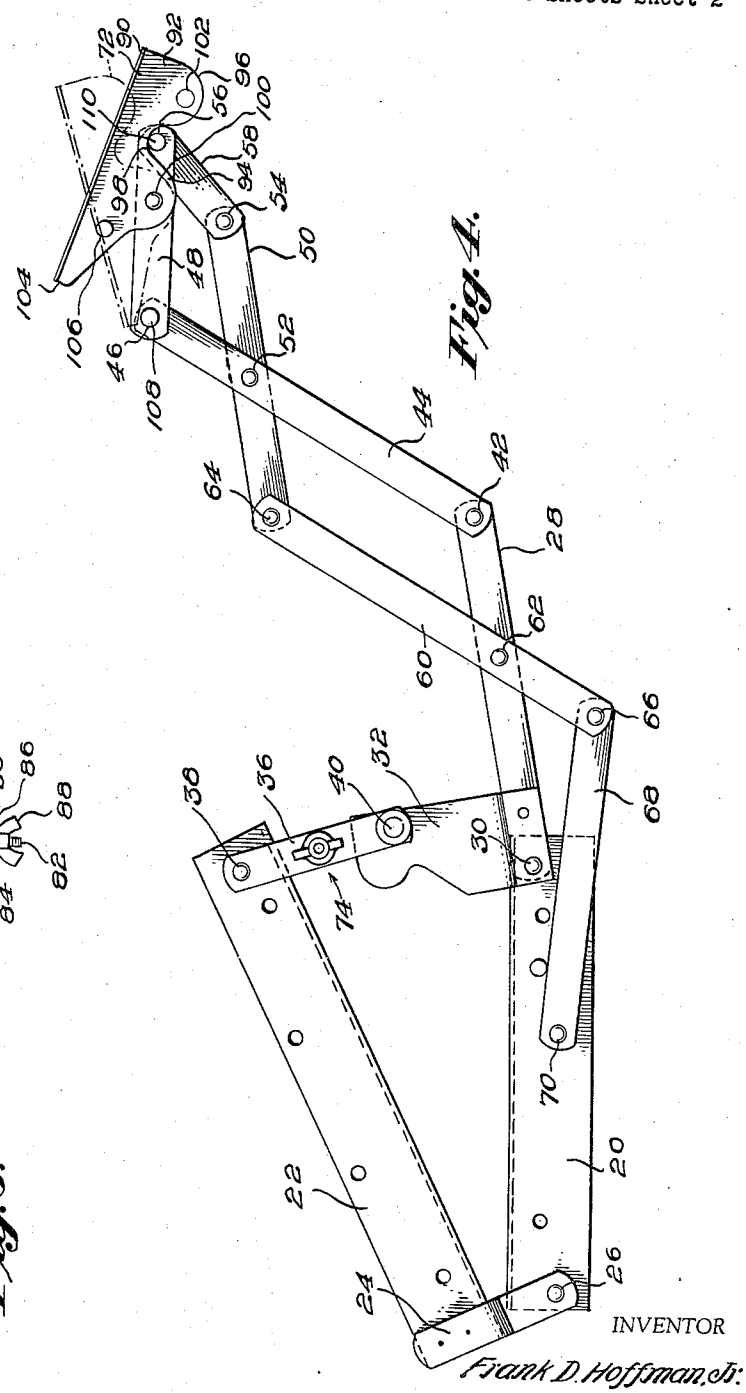


Fig. 4.

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RECLINING CHAIR WITH ADJUSTABLE OTTOMAN BRACKET

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3 Claims. (Cl. 155—106)

This invention relates to reclining chairs, and more particularly to reclining chairs having adjustable ottoman brackets.

Many reclining chairs have been developed with leg rests having an upward and forward movement coordinated with the movement of the chair. In most reclining chairs however, the leg rest is fixed on the operating linkage, limiting the movement of the leg rest independently of the linkage. The desirable feature of adjustability in accordance with the desires of the occupant of the chair is therefore lacking.

An important object of this invention is to provide an ottoman bracket which is adjustable independently of the operating linkage.

Another object of this invention is to provide an adjustable ottoman bracket having movement about its pivot which may be regulated in accordance with the requirements and desires of the individual.

In attaining these objects, one feature of the invention resides in the arrangement of a reclining chair having a reclining member which is movable with respect to the stationary framework and an adjustable ottoman carried by a linkage connected to the reclining member and the stationary framework so that movement of the reclining member to reclining position extends the adjustable ottoman to a position upward and forwardly of the chair. Stops control the ottoman so that in retracted position the bracket extends vertically in front of the chair to form a front panel. Other stops limit adjustment of the ottoman about its pivot point relative to its supporting linkage when in extended position.

These and other objects and advantages of the invention will become apparent from the following specification and drawings wherein:

Fig. 1 is a sectional side view of the reclining chair embodying the invention in its preferred form;

Fig. 2 is a sectional side view of the reclining chair shown in Fig. 1 with one of the operating linkages of the chair and adjustable ottoman brackets fully extended;

Fig. 3 is an enlarged top view of one of the operating linkages shown in Fig. 1;

Fig. 4 is an enlarged side view of one of the operating linkages and adjustable brackets shown in Fig. 1, with the adjustable ottoman bracket shown in both its normal and retracted position.

The reclining chair generally indicated at **10**, has a stationary framework **12** and a reclining member **14** including seat **16** and a back **18** which are rigidly connected and operate as a unit. Attached to the stationary framework **12** is a substantially horizontally extending bracket **20**, preferably of metal construction, extending from the front to the rear of the chair intermediate the height of the stationary framework. A second metal bracket **22** carries a depending arm **24** pivoted to bracket **20** by pin **26** at its end. Reclining member **14** is supported by bracket **20** for pivotal movement relative to the stationary framework **12**.

The linkage system and the frictional resistance adjustment is similar to that shown in my copending patent application Ser. No. 572,346. It will be understood that in describing the operating linkage and ottoman bracket, that there are two such linkage systems and brackets disposed within the framework one on each side of the chair. Included in this operating linkage is a lever **28** which is pivoted at **30** to the front end of bracket **20**. Rigidly secured to lever **28** and extending perpendicularly from it is a crank arm **32** acting, with lever **28**, as a bell crank.

Transmitting movement of the reclining member **14** to lever **28** is an actuating link **36** which is pivoted at **38** to the front of bracket **22**. The opposite end of link **36** is pivoted at **40** to crank arm **32**. Pivoted at **42** to the end of lever **28** is another lever **44** with its opposite end pivoted at **46** to ottoman supporting link **48**. A lever **50** is pivoted at **52** to lever **44** intermediate its own length and also intermediate the length of lever **44**. Pivoted to the outer end of link **50** at **54** and to the end of ottoman supporting link **48** at **56** is a link **58**. A lever **60** is pivoted at **62** to lever **28** intermediate its own length and also intermediate the length of lever **28**. One end of lever **60** is pivoted to an end of lever **50** at **64** and the other end of lever **60** projects beyond lever **28** and is pivoted at **66** to an end of a guide link **68**. The opposite end of guide link **68** is pivoted at **70** to bracket **20** on stationary framework **12**.

Pivoted substantially intermediate ottoman supporting link **48** is an adjustable ottoman bracket **72** which will be described in greater detail later in the specification.

The described operating linkage moves the adjustable ottoman bracket from a retracted position in front of the chair, upward and forwardly to an extended position upon movement of the reclining member **14** to a reclining position, as described and as shown in my aforementioned copending application Ser. No. 572,346.

Generally indicated at **74** is a frictional resistance adjusting means as disclosed in my copending application Ser. No. 572,346, which affords a variable friction resistance to movement at the pivotal connection between the actuating link **36** and crank arm **32**. An arm **76** which is pivotally mounted on the same pivot which connects link **36** to crank arm **32**, is disposed adjacent an opposite surface of the crank arm. As best seen in Fig. 3, the crank arm **32** is disposed between the link **36** and the arm **76**.

At the upper end of the arm **76** is an aperture **78** which corresponds with a similar aperture **80** in link **36** with screw **82** passing through these apertures. A spring biasing device in the form of a spiral spring **84** is disposed co-axially about the screw **82**. The inner end of spring **84** bears against the surface of link **36** while the opposite end bears against a washer **86** which in turn bears against a butterfly nut **88** in threaded engagement with the screw. By adjusting the position of the butterfly nut the pressure of the springs can be adjusted controlling the friction exerted by arm **62** and link **36** on crank arm **30**.

The adjustable ottoman bracket **72**, as best seen in Fig. 4, has a flange **90** cooperating with a similar flange on the linkage at the other side of the chair for supporting an ottoman. A leg **92** integral with and normal to the flange **90** has two ears **94** and **96** which form a recess **98** therebetween. Ear **94** is disposed intermediate the leg **92** and is pivoted at **100** to the supporting link **48** intermediate the length thereof, while ear **96** is disposed at one end of the bracket. Projecting from the outer surface of ear **96** is a stop **102** and projecting from the inner surface of the leg **92** approximately intermediate the pivot point and the other end **104** of the bracket is another stop **106**. It can be seen that stops **102** and **106** are located so that the bracket, when in retracted position, is retained vertically in front of the chair to form, with

the ottoman, a front panel, stop **106** striking against crank arm **32** and stop **102** against lever **58**, as best shown in Fig. 1. On opposite ends of supporting link **48** are located stops **108** and **110**. Although recess **98** accommodates stops **110** when the bracket is in retracted position in front of the chair, the stops **108** and **110** are free from contact with the bracket. Upon movement of the operating linkage, stop **110** on supporting link **48** moves into engagement with the recess **98** formed by the ears **94** and **96**. Upon continued movement of the chair from a retracted position to an extended position, the ottoman bracket is freed from its restrained position in front of the chair and is permitted to move about its pivot taking any position between stops **108** and **110** which limit its pivotal movement. This adjustable feature becomes operative almost immediately upon the movement of the operating linkage from its retracted position and is available whether the operating linkage is fully extended or only partially so. When retracted, stops **102** and **106** secure the ottoman bracket in a fixed, vertical position.

The foregoing description is one embodiment of the invention and it will become apparent to those skilled in the art that various changes and modifications may be made therein without departing from the scope of the invention.

I claim:

1. In a reclining chair having a reclining member supported by a stationary framework and linkage means connected to said reclining member and said framework for moving an ottoman between extended and retracted positions; an adjustable ottoman comprising an ottoman supporting link manipulated by said linkage means, an ottoman supporting bracket pivotally mounted upon said supporting link, a pair of spaced stops on said ottoman supporting bracket engageable with said linkage means to prevent pivotal movement of said bracket upon said supporting link when said ottoman is fully retracted, and means engageable between said bracket and said supporting link to permit limited pivotal movement of said bracket on said link when said ottoman is at least partially extended from said retracted position.

2. In a reclining chair having a reclining member supported by a stationary framework and linkage means connected to said reclining member and said framework for moving an ottoman between extended and retracted positions; an adjustable ottoman comprising an ottoman supporting link manipulated by said linkage means, an ottoman supporting bracket pivotally mounted upon said supporting link, a first pair of stops on said ottoman supporting bracket engageable with said linkage means to prevent pivotal movement of said bracket upon said supporting link when said ottoman is fully retracted, and a second pair of stops on said supporting link engageable with said bracket to permit limited pivotal movement of said bracket upon said link when said ottoman is at least partially extended from said retracted position.

3. In a reclining chair having a reclining member supported by a stationary framework and linkage means connected to said reclining member and said framework for moving an ottoman between extended and retracted positions; an adjustable ottoman comprising an ottoman supporting link, a pin at each end of supporting link pivotally connecting said supporting link to said linkage means, each of said pins projecting outwardly beyond one side of said link, an ottoman supporting bracket mounted upon said one side of said link for pivotal movement relative to said link limited in one direction by abutment between said bracket and one of said pins and limited in the other direction by abutment between said bracket and the other of said pins, and a pair of pins projecting from said bracket and engageable with said linkage means when said ottoman is in said retracted position to prevent pivotal movement of said bracket on said supporting link.

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