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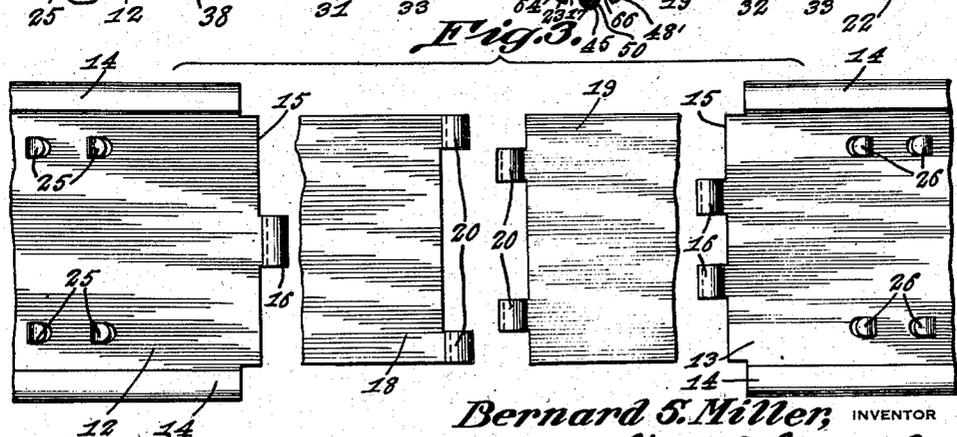
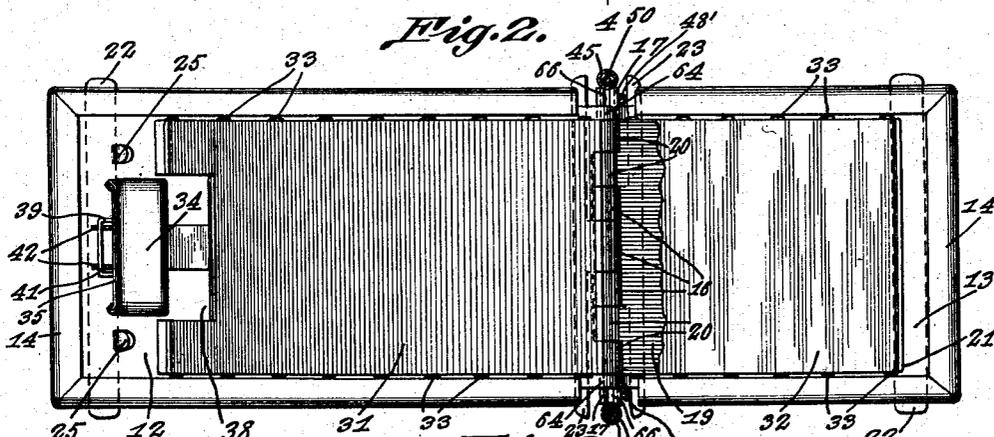
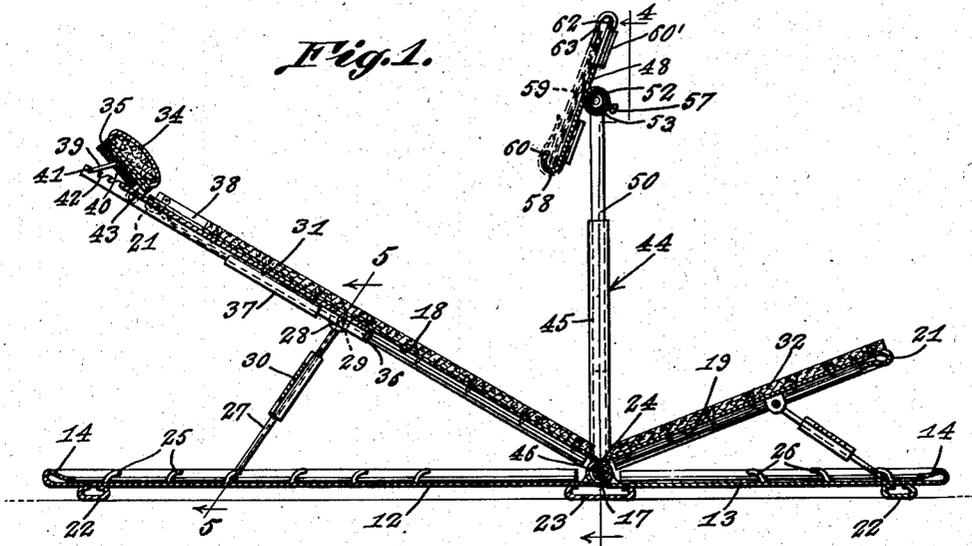
B. S. MILLER

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COMBINED RECLINING CHAIR AND READING STAND

Filed Nov. 18, 1938

2 Sheets-Sheet 1



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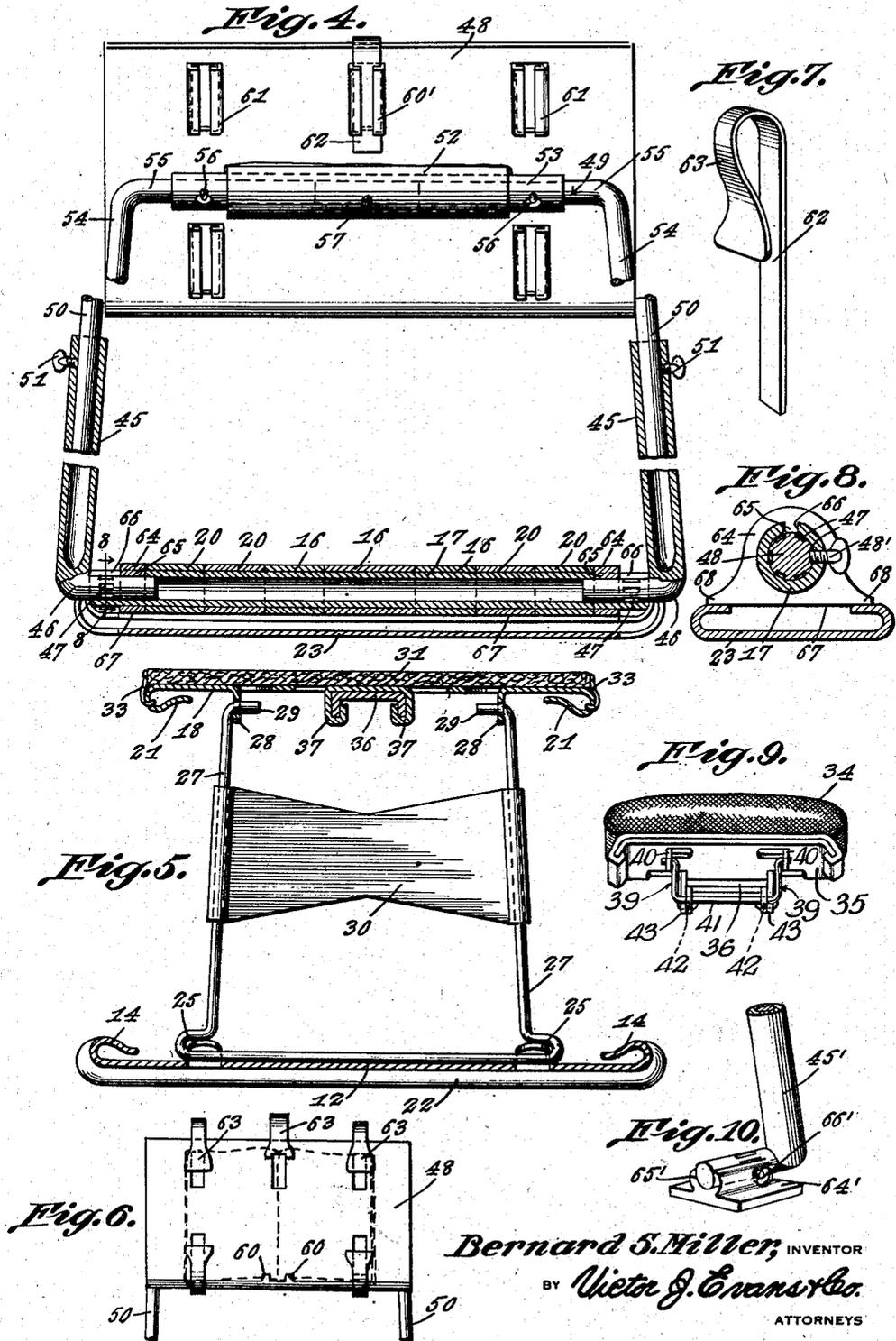
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# UNITED STATES PATENT OFFICE

2,208,945

## COMBINED RECLINING CHAIR AND READING STAND

Bernard S. Miller, Chicago, Ill.

Application November 18, 1938, Serial No. 241,291

9 Claims. (Cl. 155—128)

The present invention relates to a combined reclining chair and reading stand and the primary object thereof is to provide a construction which permits the user to completely relax physically in a semi or fully reclined position while providing means for supporting a book, magazine or other reading matter at the desired distance and proper angle for correct reading.

Another object of the invention is to provide in a single unit, a base member having attached thereto an adjustable seat and back with an adjustably supported reading stand carried by the base member with means for permitting adjustment of any element of the unit independently of the other elements.

A further object of the invention resides in the provision of a reading stand in combination with a reading chair, the reading stand being adjustable and including an adjustably supported book rest having means to firmly retain a book or other reading matter thereon, regardless of the angle to which it is adjusted.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawings which form a part of the application.

In the drawings:

Figure 1 is a transverse sectional view through the device and illustrating the various parts in position for use.

Figure 2 is a top plan view with the adjustable reading stand in section.

Figure 3 is a fragmentary exploded top plan view of the parts comprising the base, seat and back rest.

Figure 4 is a vertical sectional view taken substantially on line 4—4 of Figure 1.

Figure 5 is an inclined vertical sectional view taken substantially on line 5—5 of Figure 1.

Figure 6 is a front elevational view of the reading matter supporting rest.

Figure 7 is a perspective view of one of the elements employed for retaining the reading matter in position on the rest.

Figure 8 is a partial sectional view through the hinging element and taken on line 8—8 of Figure 4.

Figure 9 is a perspective view of the head rest removed from the adjustable back rest, and

Figure 10 is a fragmentary perspective view of a means of supporting one leg of the adjustable reading stand when used in bed.

Referring to the drawings for a more detailed description thereof, the base portion of the de-

vice is formed of a pair of members 12 and 13 preferably constructed of sheet metal and having the edges thereof rolled upwardly and inwardly as indicated at 14, which adds rigidity to the base and also reduces possible damage to bed covers or the like when using the device in bed. The members 12 and 13 are hinged at their respective front ends 15, said ends being formed with rolled edges 16 adapted to interlock and support therein a hollow tubular hinge pin 17.

A pair of members similar to the base sections 12 and 13 form a back and seat for the device and said members are indicated at 18 and 19, respectively. The inner ends of said members are also formed with rolled edges 20 which interlock and are also connected in hinged relation by means of the hinge pin 17. It is readily understood that in assembling, the sections 12, 13, 18 and 19 are arranged in coplanar relation whereby the hinge pin 17 can be inserted through the respective rolled edges 16 and 20. The free edges of the members 18 and 19 are bent inwardly as indicated at 21 for adding rigidity to the device and at the same time presenting a supporting means for said members when disposed in a collapsed or truly horizontal position and resting upon the base sections 12 and 13.

From the above, it is readily apparent that the base sections 12 and 13 can be disposed in a truly horizontal position and may be placed upon a couch, bed or the like. Due to the hinging arrangement provided, said sections will adjust themselves to the shape and contour of the supporting surface. When using the device on a relatively hard surface, the channel-shaped members 22 are positioned beneath each end of the sections 12 and 13 and a relatively larger channel-shaped member 23 is positioned beneath the hinged construction 24. The members may be attached by any desired means so as to be readily removable.

As afore-indicated the back rest 18 and seat 19 are adjustably supported relative to the base sections 12 and 13, respectively, and the means for providing adjustment includes a plurality of struck-up portions 25 arranged on each side of the base 12 and a plurality of similar struck-up portions 26 arranged on each side of the section 13. A substantially U-shaped frame 27 is carried by the back rest 18 and is adapted to be positioned against one pair of the struck-up portions 25 in order to adjust the angularity thereof. Referring to Figure 5 of the drawings, it will be noted that the back section 18 is stamped to provide ears 28 in which the free ends 29 of the

frame 27 are positioned. The ends 29 are frictionally held within the ears and the intermediate portion of said frame engages the struck-up portions 25 as illustrated. A metallic brace 30 is supported substantially centrally of the frame for adding rigidity thereto. A construction similar to the above, which has not been specifically illustrated, is employed for providing the means of adjusting the seat 19.

The back and seat sections 18 and 19, respectively, are provided with removable cushions 31 and 32, said cushions having a plurality of depending straps of the type indicated at 33 in Figure 5, for removably holding said cushions in position. The ends of the straps are formed with hooks which engage suitable openings formed in the rolled portion 21 as clearly illustrated.

An adjustable head rest of the type illustrated in Figure 9 of the drawings is carried by the back rest 18 and if desired the cushion portion 34 may be removable from its support 35. For adjustably attaching the head rest to the back rest, there is provided a slide member 36 which is movable within the guide 37 formed by stamping out a portion of the back member 18. The upper end of the back rest has been cut away as indicated at 38 in Figure 2, for permitting the head rest 35 to be disposed therein when a short bodied person is using the device.

The member 36 and guide 37 permit the head rest to be moved longitudinally of the back rest 18. However, means is also provided for adjusting the angularity of the cushion 34 with respect to the member 36 which includes a substantially U-shaped bail 39 supported in the ears 40. The intermediate portion 41 of the bail 39 is adapted to be disposed within the serrated portions 42 of the member 36. It is readily understood that adjusting the position of the bail within the serrated portion will alter the angularity of the cushion 34. As illustrated in the drawings, the bail 39 is attached to the forward end of the head rest and the rear end of said head rest is pivoted to the member 36 by means of the integrally formed ears 43, which ears serve as a pivot about which the head rest is adjusted.

The reading stand indicated generally by the reference numeral 44 is carried by the tubular hinge pin 17 and comprises a pair of hollow substantially cylindrical-shaped leg members 45 having inwardly extending ends 46 which are frictionally held within each end of the hinge pin 17. It is preferred that the ends of the hinge pin 17 be longitudinally slotted a portion of their length and the ends 46 of the leg members 45 be correspondingly slotted as indicated at 47 to provide the necessary frictional joint. It will thus be seen that the bookrest leg members can be readily secured in the ends of the tubular pin 17 and that said pin will serve as a hinging element for the various parts of the device. Means, however, must be provided to prevent the pin from turning in the rolled edges 16 of the base, as the seat and back members are adjusted. For preventing rotation of said pin there is provided the member 64 more clearly illustrated in Figure 8 of the drawings which is slidably disposed over either or both ends of the hinge pin 17 and which is formed with a tongue 65 adapted to engage the slot 66. When so positioned, the pin 17 will be keyed to the member 64 and thereby held from rotating in the rolled edges 16 at 20. The member 64 has a substantially flat base portion 67 including outwardly extending ends 68 and when said member is po-

sitioned on the pin 17, the portion 67 will rest on the member 23 through the medium of the outwardly extending arms 68 and is preferably secured thereto.

Thumb screws 48' or other fastening means may be employed for adjustably holding the leg members 45 in position within the hinge pin 17 and said fastening means is removed when fixing the member 64 in position on the pin 17. The adjustable top or bookrest 48 is carried by the leg members 45 through the medium of the U-shaped frame 49, the ends 50 of which are positioned within the hollow leg members 45 and retained therein by means of the thumb screws 51 or other fastening means. Referring to Figure 4 of the drawings wherein is illustrated a rear view of the bookrest 48, it will be noted that said bookrest carries a hollow tube-like member 52 in which is positioned a second tube 53 which extends beyond each end of the tube 52. The opposite ends 54 and 55 of the legs 49 project within each end of the tube 53 and are held in position by means of the thumb screws 56. The angularity of the bookrest 48 relative to the legs 49 can be adjusted through the thumb screw 57 which is carried by the tube 52 and engages the tube 53. It will be seen that the bookrest and frame can be adjusted vertically by means of the legs 49 and the entire unit can pivot about the ends 46 of the legs 45. However, when desiring to adjust the position of the bookrest 48 independently of its supporting members, the thumb screw 57 is released whereby said bookrest is free to rotate about the axis of the tube 53. When the occupant of the chair is in full reclining position, the position of the bookrest 48 can be inverted with the book being supported directly above the head of the occupant. It is, of course, to be understood that the position of the bookrest and its supporting stand can be adjusted to meet the requirements of the occupant in the chair regardless of his reclining position.

The bottom edge 58 of the bookrest 48 is rolled upwardly to provide a support for the book 59, thus preventing the book from sliding forward and said edge is also formed with a pair of projections 60, see Figure 6 of the drawings, adapted to engage the cover of the book and hold it firmly in place. Since the bookrest 48 is adapted to assume various positions, it is necessary to provide a means for firmly holding the book and pages thereof in position for best use. The means herein provided for accomplishing this purpose includes a centrally disposed guideway 60' and guideways 61 disposed on each end of the bookrest 48. A clamp 62, shown in Figure 7 of the drawings, is slidable within the guideways and the curved portion 63 engages either the pages or back of the top of the book. The clamps 62 are readily removable to permit the top surface of the bookrest to be used for writing.

The base illustrated in Figure 10 of the drawings is employed when the entire device is used in bed and the occupant has bed covers pulled over him. The small base portion 64' will rest on top of the covers with one leg of the supporting structure 45' attached thereto and within the grooved portion 65' and will be held in place by means of the thumb screw 66'. The other leg of the supporting structure will be attached to the hinge pin 17 as afore-indicated which will be on the opposite side of the occupant.

From the above description taken in connection with the accompanying drawings, it is believed that the utility of the device is readily ap-

parent. The occupant will first adjust the angularity of the seat and back portions relative to the base sections. When reclining thereon the supporting legs of the reading stand will be on opposite sides of the occupant and the bookrest will be positioned directly above him. The angularity of the book rest can be readily adjusted by the occupant while in a reclining position to support the book or other reading matter at the desired distance and proper angle for correct reading. Since the upper surface of the bookrest has no obstructions thereon, it is also adapted for use as a writing desk.

Also it will be understood, of course, by those skilled in the art that variations in the hereinabove described device involving the substitution of substantial equivalents for the devices described are intended to be comprehended within the spirit of the present invention and that the invention is capable of extended application and is not confined to the exact showing of the drawings nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed is:

1. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a back member and a seat member carried by said sections, means for adjusting the angularity of said seat and back members relative to the supporting base, and arms extending vertically from said base and associated with said hinge elements for supporting the reading stand.

2. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular hinge pin engaging said hinge elements, a back member and a seat member pivotally carried by said sections and connected thereto by means of said pin, means for adjusting the angularity of said seat and back members relative to the supporting base, and arms extending vertically from said base associated with said hinge pin for supporting the reading stand.

3. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular hinge pin engaging said hinge elements, a back member and a seat member pivotally carried by said sections and connected thereto by means of said pin, means for adjusting the angularity of said seat and back members relative to the supporting base, and a pair of arms extending vertically from said base for supporting the reading stand, said arms having one end thereof bent inwardly and pivotally attached to the ends of said hollow hinge pin.

4. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular hinge pin engaging said hinge elements, a back member and a seat member pivotally carried by said sections and connected thereto by means of said pin, means for adjusting the angularity of said seat and back members relative to the supporting base, a pair of arms extending vertically from said base for sup-

porting the reading stand, said arms having one end thereof bent inwardly and pivotally attached to the ends of said hollow hinge pin, a second pair of arms adjustably mounted in said first mentioned arms and carrying on the ends thereof a book rest, and means for adjustably mounting the book rest.

5. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular pin engaging said hinge elements, a back member and seat member carried by said base and pivotally connected by said hinge pin, means for adjusting the angularity of said seat and back members relative to the supporting base, said means comprising a substantially U-shaped frame attached to said back and seat members and adapted to engage struck-up portions formed on said base, and arms extending vertically from said base and pivotally connected to said hinge pin for supporting the reading stand.

6. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a pin engageable with and uniting said hinge elements, a back member and seat member carried by said base and adjustable on said hinge pin, means for adjusting the angularity of said seat and back members relative to the supporting base, arms extending vertically from said base and pivotally connected to said hinge pin for supporting the reading stand, said reading stand including a book supporting member mounted on said vertically extending arms, means for adjusting the position of said member on said arms, and means detachably connected to said member for retaining a book thereon regardless of the angularity of said member or the position of said arms.

7. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular hinge pin engaging said hinge elements, a back member and seat member carried by said base and adjustable on said hinge pin, a pair of arms extending vertically from said base for supporting the reading stand, said arms each having one end thereof bent inwardly and pivotally attached to the ends of said hinge pin, the other end of said arms extending inwardly and supporting thereon a tubular sleeve, a second sleeve supported on said first sleeve and carrying a book supporting member, said second sleeve being rotatable on said first sleeve for adjusting the position of said book supporting member, and means detachably connected to said member for retaining a book thereon regardless of the angularity of said member or the position of said arms.

8. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a pin engageable with and uniting said hinge elements, a back member and seat member carried by said base and adjustable on the pin connecting said hinge elements, means for adjusting the angularity of said seat and back members relative to the supporting base, said means including a substantially U-shaped member carried by said seat and back members adapted to engage struck up portions formed on said base, and arms extending verti-

cally from said base for supporting the reading stand.

5 9. A combined reclining chair and reading stand comprising, a supporting base, said base being formed of a pair of connected sections having hinge elements integral therewith, a hollow substantially tubular hinge pin engaging said hinge elements, a back member and seat member

pivotally carried by said sections and connected thereto by said pin, means for adjusting the angularity of said seat and back members relative to the supporting base, means for preventing rotation of said pin upon adjusting said seat and back members, and arms extending vertically from said base for supporting the reading stand. 5

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