

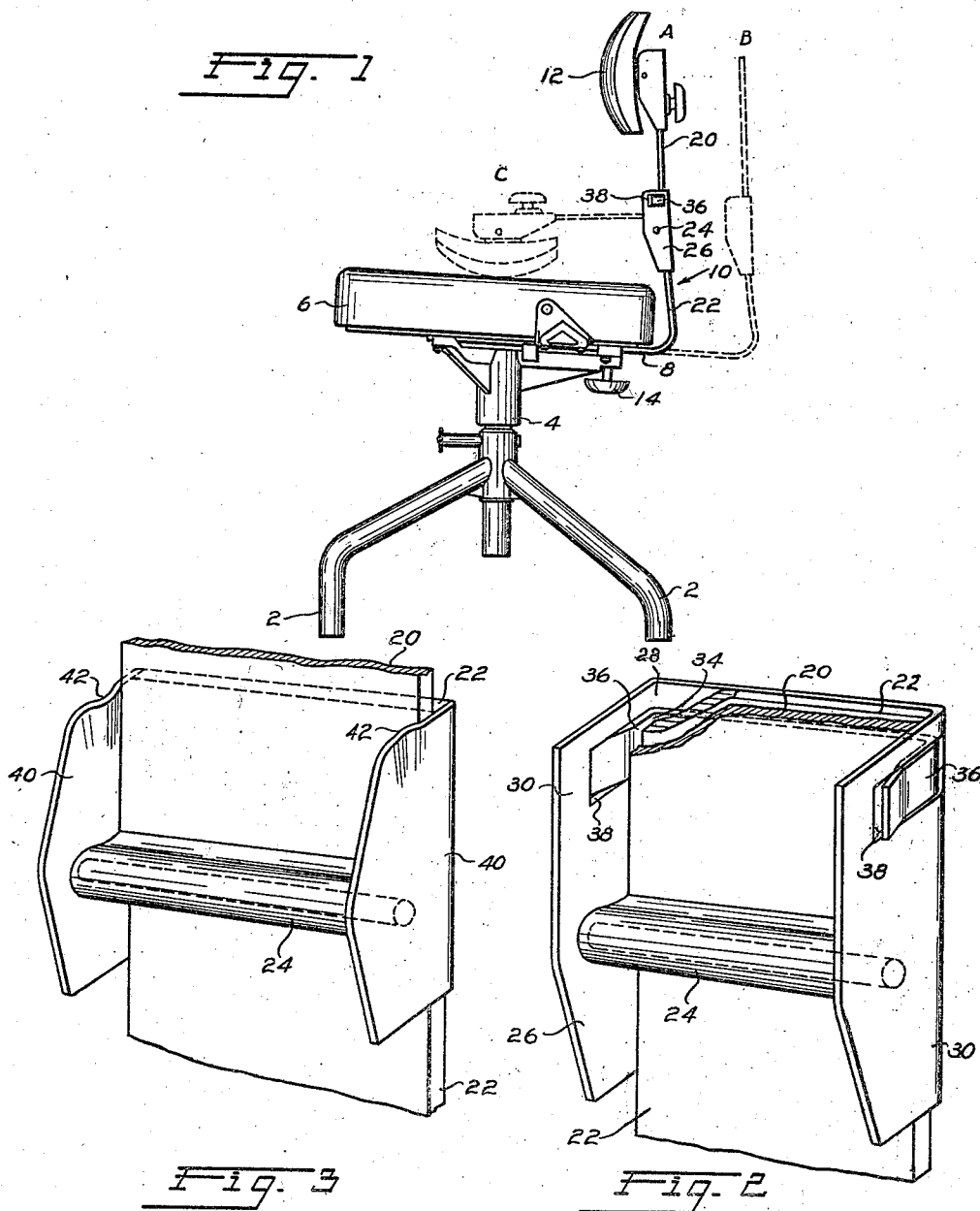
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CHAIR

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CHAIR

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This invention relates in general to chairs, seats, benches and similar devices and more particularly, to devices of that type which have back-rests. All of such devices will be referred to in this application as "chairs."

It is the principal object of the invention to provide a chair having a normally vertical back which forms a back-rest or supports a back-rest at its upper end and which may be moved as by folding, into a lowered position. A further object is the provision of means for firmly but releasably supporting the back in its usual, vertical position.

Other objects and features of novelty of the invention will be made apparent by the following description and the annexed drawing which, it will be understood, are only illustrative of the invention and impose no limitations thereon not imposed by the appended claims.

Referring to the drawing, in which the same reference letter or numeral refers to like parts throughout,

Fig. 1 is a side view of a chair having a back formed in accordance with this invention,

Fig. 2 is a perspective view of the back-retaining device shown in Fig. 1, and

Fig. 3 is a perspective view, similar to Fig. 1, and showing a modified form of the invention.

In the drawing there is illustrated a chair formed in accordance with the invention and comprising legs 2, a vertical standard 4, a generally horizontal seat 6 and a back which, in the disclosed embodiments, is formed of a metal strip having a lower horizontal portion 8 which is attached to the under surface of the seat 6 and a part 10 which extends vertically upwardly at the rear of the seat 6 and supports a back-rest 12 at the upper end thereof. The horizontal part 8 of the back is preferably slidably mounted on the seat 6 whereby it may be adjusted forwardly to position A and rearwardly to position B, as shown in Fig. 1, a clamping device 14 being provided for holding the back in adjusted position.

Means are provided by the invention for permitting the back to be moved to a lowered position as shown at C in Fig. 1. In accordance with the invention the back is formed of an upper part 20 and a lower part 22 which are connected by a horizontal hinge 24 whereby the upper part may be moved about the hinge to a lowered position over the seat 6 as shown at C.

Means are also provided by the invention for normally and usually supporting the upper part 20 of the back in vertical, upwardly-extending position. Such means comprise an elongated de-

vice 26 which is U-shaped in cross-section and the inner face of the bottom wall 28 of which is rigidly attached to the rear face of the lower part 22 of the back in such a manner that the device 5 encloses the part 22 and the side walls 30 thereof extend forwardly of the part 22. The device 26 extends vertically upward above the hinge or pivot 24 whereby it also receives the upper part 20 of the back when the same is in its vertical position A. In order to releasably but firmly hold the part 20 within the member 26 a U-shaped clamp device having a bottom wall 34 and resilient side walls 36 is positioned within such member adjacent the upper end thereof, the width of the clamp device being such that the side walls 15 thereof will be sprung apart by movement of the part 20 between them when the part 20 is moved to or from its vertically-upward position A. In order to accommodate the side walls 36 apertures 20 38 are formed in the side walls 30 of the device 26, within which apertures the resilient side walls 36 of the clamp device are received, as shown in Figs. 1 and 2.

It will be apparent that the upper part 20 of the back may be moved to a vertical position A or to a lowered position C, and that it will be releasably held in vertical position by engagement of its side edges between the resilient side walls 36 of the clamp device. It will also be seen that 30 the channel-shaped device 26 provides a means for supporting the clamp 34, 36 in such a position above the hinge 24 that it will engage the upper part of the back.

In Fig. 3 of the drawing there is illustrated a modified but preferred form of the invention in which the lower part 22 of the back is provided, at and adjacent its upper end, with preferably integral or welded flanges or walls 40 which extend forwardly therefrom and support a pin 24 40 about which the lower end of the upper part 20 of the back is hinged. Above the hinge connection and in a position to engage the side edges of the part 20 when the same is moved to its vertical position A between the walls 40, the walls 40 45 are oppositely indented inwardly, at 42, providing a narrowed part which frictionally and resiliently engages the side edges of the part 20 to releasably hold the same in vertical position.

Chairs formed in accordance with this invention find a particular field of usefulness in aircraft, being used there principally for bombardiers, who must at times operate guns. The invention provides a simple and effective way of removing the back of the chair from the path of 55 gun operation, as is required, while still permit-

ting it to be used as a chair at any time. Another use will be to permit a chair to be entirely positioned beneath a desk or table when it is desirable that it be out of the way.

While we have described and illustrated certain embodiments of our invention, it will be apparent to those skilled in the art that further embodiments may be discovered or modifications made without departing in any way from the spirit or scope of the invention, for the limits of which reference must be had to the appended claims.

What is claimed is:

1. A chair comprising a seat, a back comprising a metal strip having a first part connected to the seat and a second part extending vertically upward at the rear of the seat, said second part comprising an upper part and a lower part, flanges rigidly secured to the sides of the lower part at the upper end thereof and extending forwardly of the latter, a hinge pin supported by said flanges, means for hingedly connecting the lower end of said upper part to said pin whereby the upper part may be moved to a lowered position or to an upper position to contact and be supported by the upper end of the lower part, and means associated with said flanges to releasably hold said upper part in its upper position.

2. A chair comprising a seat, supporting means for the seat, a back comprising a metal strip having a first part connected to the seat and a second part extending substantially vertically upward at the rear of the seat, said second part comprising an upper part and a lower part, a pair of forwardly-extending flanges rigidly secured to the upper end of said lower part, a hinge pin carried by said flanges forwardly of and below said upper end of the lower part, the lower end of the upper part being formed to embrace said pin and provide a hinged connection between said upper and lower parts whereby the upper part may be moved to a lowered position substantially parallel with said seat or to an upper position substantially aligned with said lower part, a substantial portion of the lower end of the upper part contacting and being supported by the upper end of the lower part when in said upper position, and resilient portions associated with the flanges and extending inwardly of the upper ends thereof for releasably maintaining the upper part in its upper position.

3. A chair comprising a seat, supporting means for the seat, a back comprising a first part connected with the seat and a second part extending substantially vertically upward at the rear of the

seat, both said parts being formed of relatively thin metal strips, said second part comprising an upper part and a lower part, means for hingedly connecting said upper and lower parts together whereby the upper part may be moved forwardly and downwardly to a lowered position substantially parallel with said seat or to an upper position in substantial alignment with the lower part so as to be in back-supporting position, said means comprising a channel-shaped clamp device having a rear wall of substantial length rigidly secured to the upper end portion of the lower part and flanges formed integrally with said wall and extending forwardly of said wall and said lower part, a hinge pin supported by said flanges forwardly of said lower part and a substantial distance below the upper edges of the flanges, the lower end portion of the upper part when in its upper position contacting the upper end portion of the lower part throughout a substantial portion of its length and said last-named portion having a part extending forwardly and being hingedly connected with said pin, and means associated with the upper portions of said flanges to engage said upper part when in its upper position to releasably hold it in such position.

4. A chair comprising a seat, supporting means for the seat, a back comprising a lower member and an upper member, said lower member being L-shaped and having a first part connected with said seat and a second part extending upwardly, means for hingedly connecting said members together whereby the upper member may be moved to a lowered position substantially parallel with the seat or to an upper position in substantial alignment with the second part of the lower member so as to be in back-supporting position, said means including spaced-apart flanges rigidly secured to the upper end portion of said second part and extending forwardly thereof, a hinge pin supported by said flanges a substantial distance below the upper edges thereof and forwardly of said second part, the upper member extending downwardly between said flanges and having its lower end portion hingedly connected with said pin whereby a substantial portion of said lower end portion contacts and is supported by said upper end portion of the lower member when the upper member is moved to its upper position, and means associated with the upper portions of said flanges to engage the upper member to releasably hold it in its upper position.

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