T. N. BEARFIELD.

AUXILIARY BACK REST FOR CHAIRS.

APPLICATION FILED DEC. 7, 1914.

1,215,467. Patented Feb. 13, 1917.

Fig. 1.

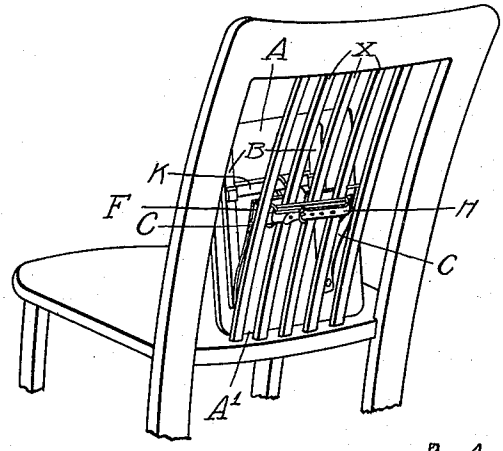
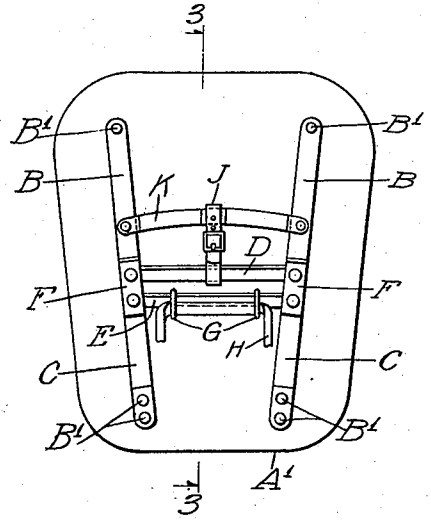


Fig. 2.



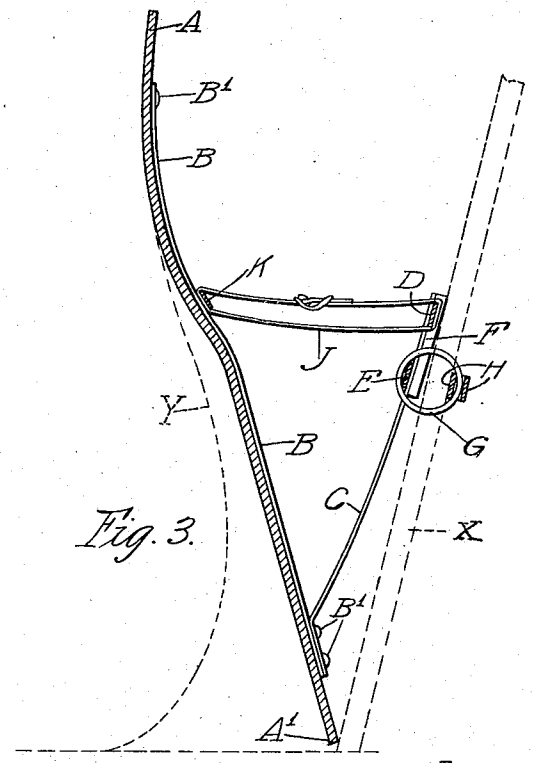


Fig. 3.

Witnesses:

Inventor.
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by Burton & Burton
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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AUXILIARY BACK-REST FOR CHAIRS.

1,215,467. Specification of Letters Patent. Patented Feb. 13, 1917.

Application filed December 7, 1914. Serial No. 875,782.

To all whom it may concern:

Be it known that I, THOMAS N. BEARFIELD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Auxiliary Back-Rests for Chairs, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an auxiliary yielding back rest adapted to be applied to any ordinary straight-backed chair to increase the comfort afforded thereby. It consists of the features and elements described and shown in the drawings as indicated by the claims.

In the drawings:

Figure 1 is a rear perspective view of a chair showing the device embodying this invention applied thereto.

Fig. 2 is a rear elevation of the device removed from the chair.

Fig. 3 is a vertical section taken as indicated at line, 3—3, on Fig. 2, indicating in dotted lines the relation of the device to the chair-back and to the back of the occupant.

As shown in the drawings, this device comprises a back panel, A, which may be formed of heavy laminated paper, fiber board, or any other suitable material, reinforced by a pair of vertical frame members, B, B, secured to the panel, A, by means of rivets, B^1, shown in Fig. 2. At the lower end of each of the frame members, B, there is riveted the end of an upwardly-extending spring arm, C, which is bent away from the frame member, B, just above its point of attachment thereto, so as to diverge upwardly from the back panel, A. (See Fig. 3). The upper ends of the springs, C, C, are connected by cross ties, D and E, and these joints are preferably covered with felt or leather pads, F to prevent marring the spindles, X, X, of the chair back. The cross tie, E, carries a pair of loops, G, through which the attaching strap, H, passes. The loops, G, may be spaced as desired to fit the openings formed in the chair back by the spindles, X, X, or by such panel arrangement as may be present, and with the strap, H, passed through the loops, G, at the opposite side of the chair back from the cross tie, E, the whole device may be firmly secured by tightening the strap, H. With the strap, H, thus secured to the chair-back, the lower edge, A^1, of the back panel, A, will be in contact with the back of the chair, as indicated in Fig. 3, while the panel, A, will extend obliquely upward for yielding contact with the back of the occupant, indicated by the dotted outline, Y. The angle of divergence between the springs, C, C, and the members, B, B, will be initially made to give the desirable maximum amount of forward extension of the back-rest from the chair back, but this extension may be decreased by an adjustable limit strap, J, which connects the cross tie member, D, with a cross-tie, K, extending between the frame members, B, B. The strap, J, being flexible, will in no way interfere with the yielding action of the back-rest when pressure is exerted upon it tending to close the angle between the members, B and C.

It will be seen that this appliance furnishes a simple and inexpensive means of converting any ordinary chair into a comfortable working seat for persons engaged in sedentary occupations, as for example, stenographers and bookkeepers. Preferably the frame members, B, B, and the cross member, K, are made of the same spring material as the arms, C, C, so that when the back panel, A, is formed of somewhat flexible sheet material, the device need not be upholstered in any way, but will yield and conform to the user to afford the desired comfort. As indicated in Fig. 2, the cross member, K, may be initially curved back from its ends to its middle portion to render the back panel, A, somewhat concave at its front surface, while the upper portions of the members, B, B, are also bent to give the back panel a more form-fitting contour at the small of the back (see Fig. 3). This construction permits the device to be made of minimum thickness, so that when the user desires to throw it practically out of service and lean against the chair back, X, the auxiliary back rest will collapse into so small a space as to be hardly noticeable.

I claim:

1. A back rest device comprising upright spring arms, a back panel to the lower portion of which the lower ends of said spring arms are secured with their free upper ends diverging from the panel but adapted to yield toward it, and means for fastening said upper ends of said arms to a chair back.

2. A back rest device comprising upright spring arms, a back panel to the lower portion of which the lower ends of said spring arms are secured with their free upper ends diverging from the panel but adapted to yield toward it, a cross tie connecting said upper ends of said arms, and means on the cross tie for fastening the device to a chair back.

3. A back rest device comprising upright spring arms, a back panel to the lower portion of which the lower ends of said spring arms are secured with their free upper ends diverging from the panel but adapted to yield toward it, a cross tie connecting said upper ends of said arms, a pair of loops loosely carried on said cross tie, and a securing strap adapted to be passed through said loops.

4. A back-rest device comprising an attaching element composed of two upright spring arms and a cross-tie connecting their upper ends; a back panel composed of flexible sheet material and a frame work of flat spring members to which said material is secured, the spring arms of the attaching element being secured to the frame members of the back panel near the lower edge thereof, said spring arms diverging upwardly from the panel above their points of attachment thereto, and being adapted to yield for rendering the device resilient, together with means for securing the cross-tie of said attaching element to a chair back.

5. A back rest device comprising two upright spring arms, a back panel composed of flexible sheet material and a framework of flat spring members to which said material is secured, the spring arms being attached to the frame members of the back panel near the lower edge thereof with their free ends diverging from the panel but adapted to yield toward it, a cross tie connecting said free upper ends of the spring arms, and means on said cross ties for fastening the device to a chair back.

6. A back-rest device comprising an attaching element composed of two upright spring members and a cross-tie connecting their upper ends; a back panel composed of flexible sheet material and reinforcing means therefor, including two upright spring members and a cross tie connecting their upper portions, said upright members of the attaching element being secured at their lower ends to the lower portions of the upright reinforcing members of the back panel and diverging upwardly from the point of attachment for positioning the back panel resiliently; a flexible strap connecting the cross tie of the back panel with the cross tie of the attaching element for limiting the degree of divergence, and means for securing said attaching element to a chair back.

In testimony whereof I have hereunto set may hand at Chicago, Illinois, this 30th day of November, 1914.

THOMAS N. BEARFIELD.

Witnesses:
ROBT. N. BURTON,
EDNA M. MACINTOSH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."