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A. H. GABB

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ADJUSTABLE BACKREST OR SUPPORT FOR A SEAT

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Fig. 1.

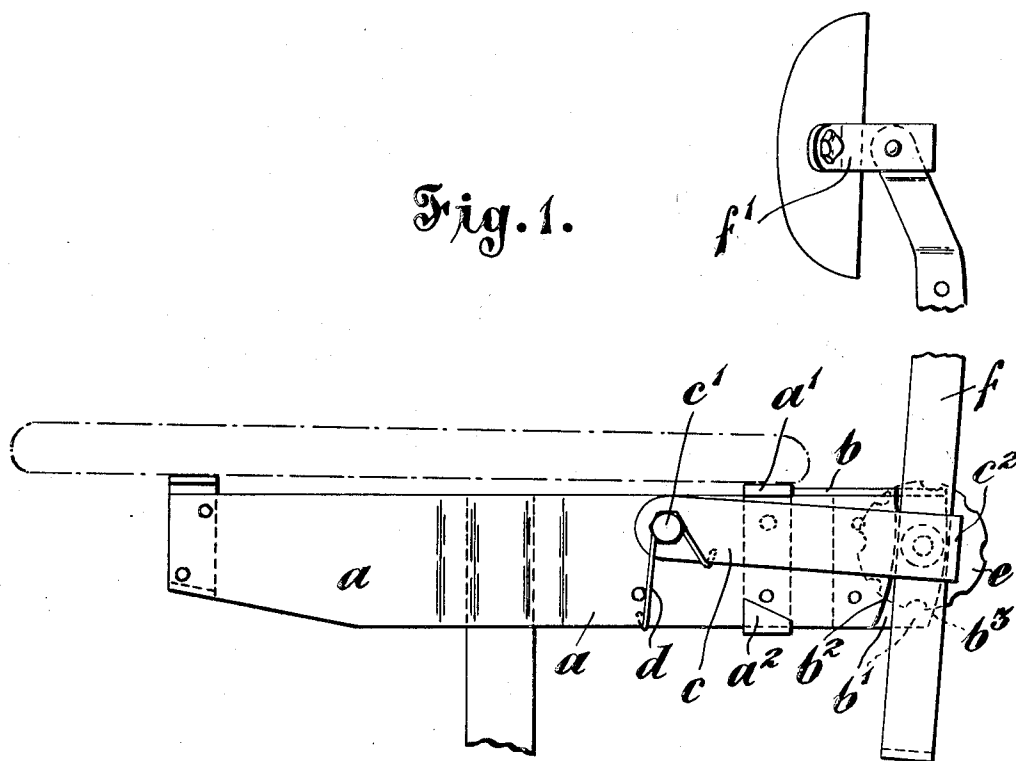
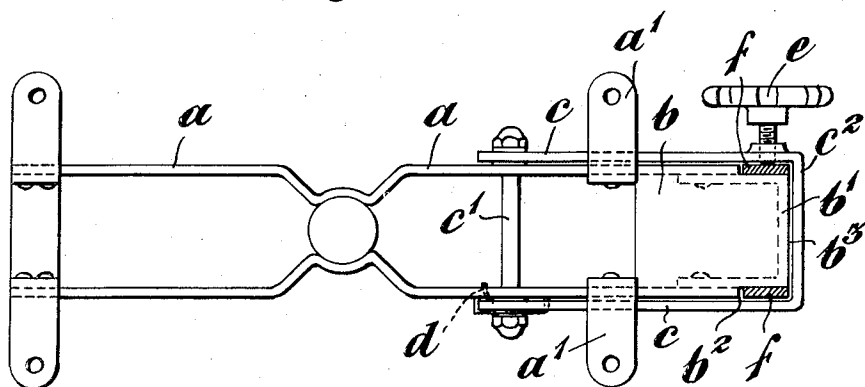


Fig. 2.



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UNITED STATES PATENT OFFICE

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ADJUSTABLE BACKREST OR SUPPORT FOR
A SEAT

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pany (1931) Limited, Birmingham, England, a
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Application May 9, 1932, Serial No. 610,168, and
in Great Britain November 10, 1931

1 Claim. (Cl. 155—157)

The present invention has relation to an adjustable backrest or support for a seat, and has for its object to provide such a device which is capable of a considerable degree of adjustment both vertically and angularly, which is readily manipulated and provides for a correct sitting posture of the user.

According to the present invention the backrest is supported upon a normally vertical or substantially vertical arm adapted to be adjusted about an arcuate, cam or equivalent face provided upon a fixed protuberance and be maintained in its position of adjustment by means of a clamp associated with the aforesaid protuberance and a pivotal link.

The vertical adjustment of the backrest is obtained by releasing the clamp and vertically sliding the arm in relation to the protuberance, whereas inclination is obtained by swinging the arm with a tangential movement upon the arcuate cam or equivalent face, the clamp being correspondingly swung upon its anchoring linkage until it takes effect at the tangential point of contact of the arm whereby it is tightened for retentive purposes.

In order that this invention may be clearly understood and readily carried into practice, reference may be had to the appended explanatory sheet of drawing, upon which:—

Figure 1 is an elevational view and Figure 2 a plan view of an adjustable backrest or support for a seat, constructed in accordance with the present invention.

In a convenient embodiment of the present invention the frame *a* of the seat is provided with an oblong protuberance *b* which extends rearwardly and which terminates in a central nose *b*¹. Both the protuberance and the nose terminate in arcuate, cam or equivalent formations *b*² *b*³ the curvature of such formations being struck advantageously from a point *c*¹ adjacent the centre of the seat to which a U-shaped link *c* is pivotally anchored so that the yoke *c*² is adapted to follow the contour *b*³ of the nose when the link is swung or pivoted.

The pivotal movement of the link *c* is limited in its upward and downward swinging movement by upper and lower projections *a*¹ *a*² provided upon the frame *a*, and the upward movement of the link may be assisted by a spring *d*. One limb of the U-shaped link *c* is provided with a hand screw *e* at a position adjacent the yoke *c*².

The backrest support comprises an elongated U-shaped member *f* constructed of flat strip metal the limbs of which are adapted to slidably

operate on each side of the nose *b*¹ and within the U-shaped pivotal link *c*. The upper extremity of the backrest support *f* may be provided with a pivotal or swivel back support *f*¹ and the lower extremity be constructed of loop formation to prevent its complete separation from the apparatus in an upward direction.

In operation in order to secure the backrest the hand screw *e* is tightened whereby the limbs constituting the backrest are effectively clamped to the nose *b*¹ and any rearward movement prevented by the adjacent part of the backrest engaging the cam face *b*¹.

In order to obtain vertical adjustment the hand screw *e* is released and the backrest *f* slid vertically upwardly or downwardly as may be desired, whereas in order to obtain adjustment with respect to inclination of the backrest, the U-shaped link *c* pivoted to the protuberance is swung to an appropriate angle by the utilization of the hand screw *e* whereby the backrest is caused to obtain a different tangential relationship with the arcuate cam or equivalent faces on the protuberance. The correct adjustment both with respect to elevation and inclination having been obtained, the hand screw is clamped to tighten and set the mechanism.

What I claim as my invention and desire to secure by Letters Patent is:

An adjustable backrest for a seat, comprising a protuberance upon the seat frame having an arcuate-shaped extremity, a nose of reduced width upon said protuberance, a U-shaped link pivoted to said protuberance, a supporting arm of a duplex character operating between the nose and the arms of the link adjacent the arcuate extremity, and a clamping screw upon the link adapted to clamp the arm against the nose in its position of adjustment.

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