Nov. 5, 1929. P. W. OLSON 1,734,179

BACK REST CONSTRUCTION

Filed Feb. 18, 1927

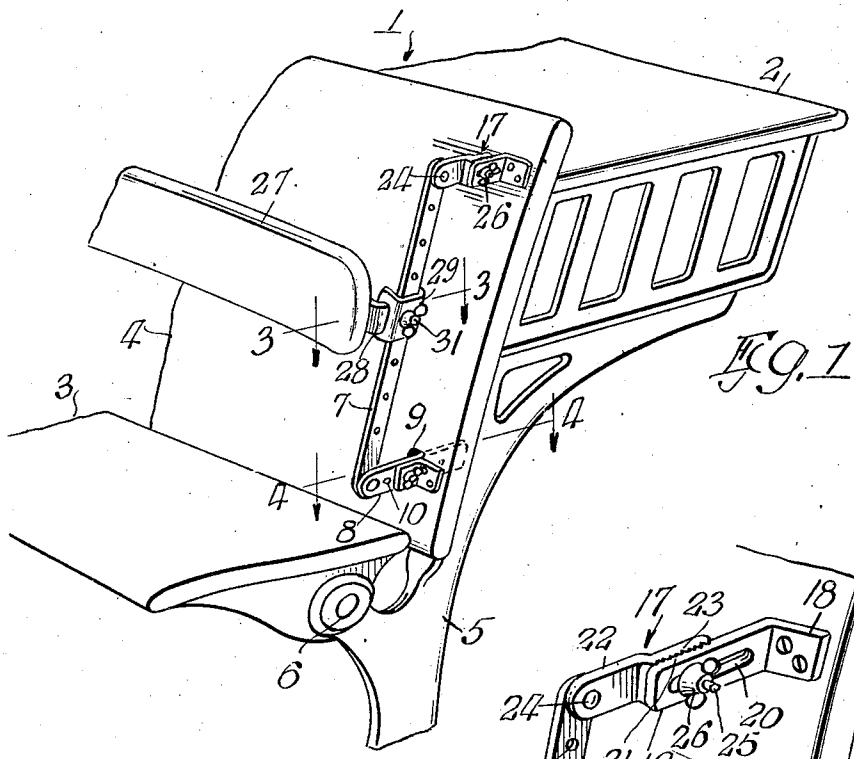


Fig. 1.

Fig. 2.

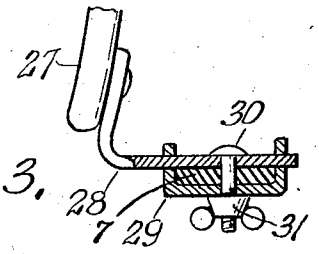


Fig. 3.

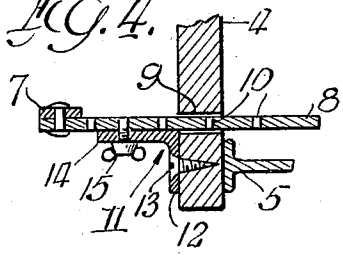


Fig. 4.

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UNITED STATES PATENT OFFICE

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BACK-REST CONSTRUCTION

Application filed February 18, 1927. Serial No. 169,180.

This invention relates to improvements in back rest constructions and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The primary object of the invention is to provide a simple and efficient construction making up a back rest for use in connection with a chair or like seating device, which may be readily adjusted to meet the convenience of the occupant.

A further object of the invention is to provide such a construction that includes a pair of substantially upright side arms or risers, each of which is pivoted at one end to a part of the seating device in connection with which it is employed and the other end of which may be swung forwardly or rearwardly to provide the desired angular position of said arms, a back rest member being so associated with said arms as to be adjustable lengthwise thereof to bring the back rest member into the desired height above the seat.

These objects of the invention, as well as others together with the many advantages thereof will more fully appear as I proceed with my specification.

In the drawings:

Fig. 1 is a fragmentary perspective view showing one end of an ordinary school desk to which has been applied, one form of my improved back rest construction.

Fig. 2 is a detail perspective view of an enlarged scale of parts shown in Fig. 1 and which will be more fully referred to later.

Figs. 3 and 4 are detail horizontal sectional views on enlarged scales through parts shown in Fig. 1, the planes of said sections being indicated by the lines 3—3 and 4—4 respectively of Fig. 1.

The invention is herein illustrated as being applied to an ordinary school desk and seat and will be so described, but this is to be considered as by way of illustration only and not by way of limitation because the improved construction may also be employed in connection with other types of seating devices where the peculiar characteristics of said construction make it advisable to do so.

Referring now in detail to that embodiment of the invention illustrated in the drawing: 1 indicates as a whole an ordinary school desk which includes a rear horizontal desk portion 2, a front seat member 3 and a substantially upright member 4 forming the front for the desk and the back for the seat. The desk and said upright member are usually fixed at their ends, each to an upright side frame member or casting 5, while the seat is preferably pivoted thereto as at 6 so as to be swung into and out of operative position. The structure just described is all well known and is to be taken as typical of a school desk such as is found in nearly all class rooms. In this instance the desk as a whole is to be considered as a seating device and a support or frame upon which my improved back rest construction may be readily mounted.

My improved back rest arrangement includes a substantially upright arm or riser 7, one at each end of the desk. Preferably this arm is made of strip metal, pivoted at its bottom end to a vertically edgewise disposed, rearwardly extending flat bar 8 that passes rearwardly through an opening 9 in the upright member 4 near its bottom edge adjacent one end of said member. This bar has a plurality of longitudinally spaced holes 10 therein. Fixed to the front face of the upright member 4 adjacent one side of said opening is an angle clip 11, with one leg 12 thereof fixed to said member as by a screw 13, and the other leg 14 of which extends forwardly from said member 4 along side of the bar 8. A butterfly bolt 15 is threaded into said leg 14 to enter into any one of the holes 10 in said bar 8.

The arm 7 has a plurality of longitudinally spaced openings 16 therein and the top end of said arm is attached to the forward end of an extensible or longitudinally adjustable arm indicated as a whole by the numeral 17. As best shown in Fig. 2, this extensible arm includes an L shaped rear bracket with a short foot 18 and a right angled leg 19 which is longitudinally slotted as at 20. One side of said leg has transverse corrugations thereon as indicated at 21. The other member of this arm comprises a flat bar 22, the rear end of which is transversely corrugated as at 23

and to the front end of this member the top end of the arm 7 is pivotally connected as by a rivet 24. A bolt 25 is inserted through the rear end of the member 22 and this bolt which also extends through the slot 20 has a winged nut 26 threaded thereon. By loosening this nut and moving the member 22 in one direction or the other the desired effective length of the arm 17 as a whole may be readily brought about. After this, the nut is threaded up tight on the bolt. Of course the interengaging corrugations prevent endwise slipping of the parts 19 and 22 when the nut is tightened up. By the construction just described the angular position of each side arm as well as its spaced relation with respect to the upright member 4 may be readily determined.

Associated with the side arms is a back rest member 27 which is of a length substantially equal to the distance between the side arms. This back rest member is rearwardly bowed and may or may not be cushioned on its front side. Fixed to the rear side of this back rest member at each end thereof, is a short rearwardly extending arm 28. Said arm extends through the slotted ends of a shallow U shaped clip 29, the clip being movable longitudinally of the arm 7. A bolt 30 is inserted through the arm 28 and then through the desired hole 16 in said arm 7 and also through the plate part of the clip 29 to receive a winged nut 31. By loosening the nut and withdrawing the bolt and then sliding the clip up or down upon the arm, the desired elevated position of the back rest member with respect to the seat 3 may be attained.

It is apparent from the foregoing that the back rest member is universal in its adjustment so that it may be readily moved into that position most convenient and comfortable to the occupant.

This construction may be readily manipulated and consists of but a few parts which cannot easily get out of order.

While in describing my invention, I have referred in detail to the form and arrangement of the parts thereof, I do not wish to be limited thereto except as may be pointed out in the appended claims.

I claim as my invention:

1. A back rest construction embodying therein, side arms pivoted at one end to a support, means operatively connecting said support and arm for holding the arm in the desired angular position, a member longitudinally adjustable along said arm and including parts engaging opposite edges of said arm, and a back rest member operatively connected at one end to said parts of said longitudinally adjustable member.

2. A back rest construction embodying therein, side arms pivoted at one end to a support, means operatively connecting said support and arm for holding the arm in the desired angular position, a member longitudinally adjustable along said arm and including parts engaging opposite edges of said arm, a back rest member operatively connected to said parts of said first mentioned member and a nut and bolt passing through other parts of said first mentioned member and said arm respectively for securing said first mentioned member in the desired position with respect to said arm.

3. In combination with the back member of a school desk, a bar extending through a part of said back member, and adjustable with respect thereto, a side arm pivoted at one end to said bar, a longitudinally extensible member carried by the back member and to which the other end of the side arm is pivoted, and a back rest member operatively connected to the side arm for adjustment longitudinally of said side arm.

4. In combination with the back member of a school desk, a bar extending through an opening in the bottom end of said back member, an angle bracket fixed to the back member adjacent said opening, means connecting said bar and bracket to determine the effective length thereof, a side arm pivoted at its bottom end to said bar, an extensible member fixed to the back member near its top end and to which the other end of the side arm is operatively connected, and a back rest member secured to said side arm for longitudinal adjustment thereon.

5. In combination with the back member of a school desk, a bar extending through an opening in the bottom end of said back member, an angle bracket fixed to the back member adjacent said opening, means connecting said bar and bracket to determine the effective length thereof, a side arm pivoted at its bottom end to said bar, a bracket fixed to the top end of said back member, a member associated therewith and extending forwardly therefrom, said bracket and member having corrugated engaging surfaces and a bolt and slot adjustable connection, the top end of said side arm being connected to said member, and a back rest member operatively connected at one end to the side arm for longitudinal adjustment along the side arm.

6. In combination with a seat and a member at the back thereof, side arms pivoted at one end with respect to said back member, means connecting the other ends of said side arms to said back member in a manner permitting an angular adjustment of said arms with respect to said back member, a clip member including spaced portions engaging and projecting at their ends beyond opposite edges of said arms, a back rest member, a rearwardly projecting arm at each end of the back rest member extending through the pro-

jecting ends of said clip member and means for securing said clip member and rearwardly projecting arm of the back rest member to an associated side arm.

In testimony whereof, I have hereunto set my hand, this 14th day of February, 1927.

PERCY W. OLSON.