E. G. WATKINS.

CHAIR.

APPLICATION FILED JULY 3, 1913.

1,196,050. Patented Aug. 29, 1916.

Fig. 1.

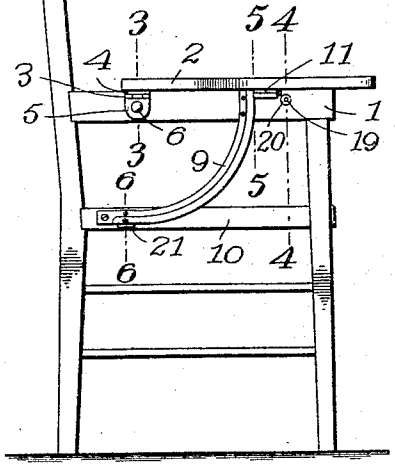


Fig. 2.

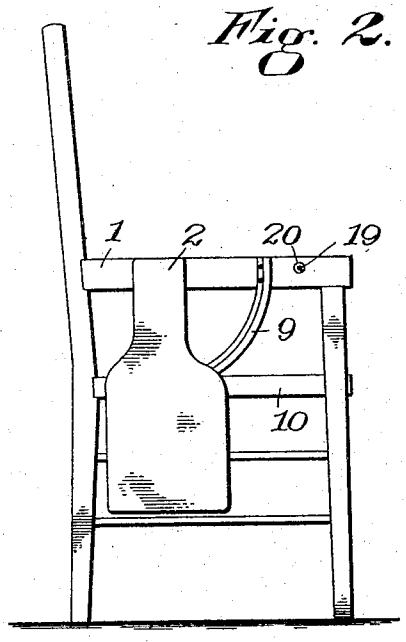


Fig. 3.

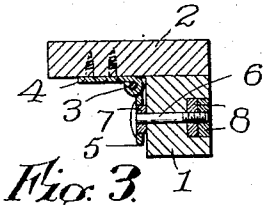


Fig. 4.

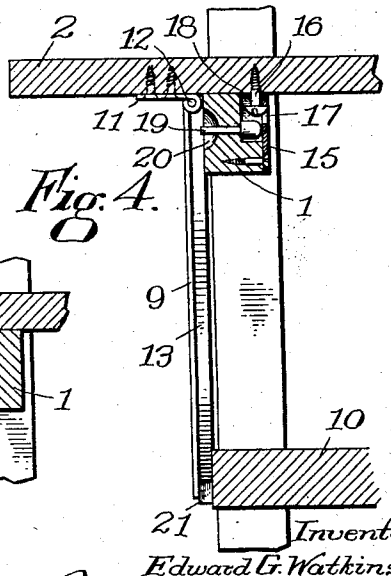


Fig. 5.

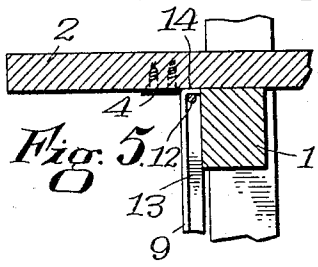
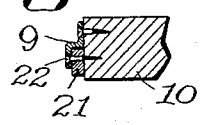


Fig. 6.



Witnesses.

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CHAIR.

1,196,050. Specification of Letters Patent. Patented Aug. 29, 1916.

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To all whom it may concern:

Be it known that I, EDWARD G. WATKINS, a citizen of the United States, residing at Gardner, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Chairs, of which the following, together with the accompanying drawing, is a specification.

My invention relates to chairs and more particularly to that class of chairs which includes a tablet or shelf adapted to serve as a support for books, papers and other objects being used by one sitting in the chair.

One object of the invention is to provide a chair with a tablet or shelf which may occupy a substantially horizontal position over one arm of the chair so as to support objects within convenient reach of one sitting in the chair, and which may also be swung down out of the way when its use is not desired, the construction and arrangement of the parts which permit the tablet to be moved from one of these positions to the other constituting the main features of the invention.

This type of chair is used principally in school rooms and lecture halls where it is desirable that the construction be substantial so as not to be broken or get out of order easily, and where it is also desirable that the tablet may be moved easily and quickly from one position to the other.

Another object of the invention, therefore, is to provide a chair with a tablet which may meet these requirements.

Further objects and advantages will appear from the following description taken in connection with the accompanying drawing, in which—

Figure 1 is a side elevation of a chair equipped with a tablet or shelf in accordance with my invention, the tablet being shown in position for use; Fig. 2 is a view similar to Fig. 1, but with the tablet shown after it has been swung down beside the chair so as to be out of the way; Fig. 3 is a detail sectional view on the line 3—3 of Fig. 1; Fig. 4 is a detail sectional view on the line 4—4 of Fig. 1; Fig. 5 is a detail sectional view on the line 5—5 of Fig. 1; and Fig. 6 is a detail sectional view on the line 6—6 of Fig. 1.

Like reference characters refer to similar parts in the different figures.

In the form of the invention shown in the drawing the chair includes an arm 1 formed with a substantially horizontal plane top surface and a substantially vertical plane outer side surface as shown in Figs. 3, 4 and 5. The tablet or shelf 2 is a single integral piece of material, such as wood, comparatively narrow at one end but broadened out considerably at the other end as is usual. Referring to the tablet 2 in the position in which it is shown in Fig. 1, its narrow or rear end is pivotally attached to the arm of the chair by a peculiar form of hinge 3, one leaf 4 of which is secured rigidly to the under surface of the shelf and the other leaf 5 of which is pivotally attached to the arm 1 by the horizontal bolt 6. A round washer 7, slightly thicker than the leaf 5 of the hinge, is confined between the head of the bolt 6 and the outside face of the arm 1, and a hole in the leaf 5 of the hinge fits over this washer so that the leaf may turn thereon in a vertical plane, the washer acting as a spacer between the arm and the head of the bolt so as to permit the hinge to turn freely. The bolt is secured in place by nuts 8. The bolt 6 is at a proper distance below the upper face of the arm 1 to permit the tablet 2 to rest upon the arm as shown in Fig. 3. When the use of the tablet is not desired, it is rotated into a vertical plane about the horizontal axis of the hinge 3, thus closing the leaves 4 and 5 of the hinge together, and then it is dropped in this vertical plane about the horizontal axis of the bolt 6 into the position shown in Fig. 2, the leaf 5 of the hinge turning about the bolt 6 and the washer 7 during this latter motion.

The arcuate guide and support 9 is provided for the forward portion of the tablet 2. The guide is attached at its upper forward end to the arm 1 and at its lower rear end to the seat 10 and it is curved concentrically with the axis of the bolt or pivot 6. A small plate 11, secured to the lower face of the tablet 2 toward its forward end, carries a small pin 12 in alinement with the axis of the hinge 3 and projecting slightly rearwardly from the plate so as to catch under the outer edge of the guide 9, this outer edge of the guide being offset from the inner edge thereof, as shown in Fig. 6, so as to provide a space 13 within which the pin or projection 12 may travel. The offset outer edge of the support 9 thus acts as a guide for the forward portion of the tablet

2 and prevents its being accidentally forced sidewise of the chair so as to injure or break the hinge 3.

The upper end of the offset outer edge of the support 9 is bent over toward the arm 1, as shown in Fig. 5, to form a stop 14 at the upper end of the path of the pin 12. When the tablet is raised in a vertical plane from the position shown in Fig. 2, the pin 12 will strike this stop 14, after which the tablet is turned into a horizontal position across the upper face of the arm 1, the engagement of the stop 14 with the pin 12 preventing its being turned beyond this position. As shown in Fig. 5, the pin 12 is separated slightly from the tablet 2 to provide space for the stop.

The tablet 2 may be so formed that gravity alone will be sufficient to maintain it normally in its horizontal position, but accidental pressure upon its outer edge, as by laying a book thereon, would tend to tip it so as to allow objects to slide therefrom. In order to overcome this objection, there is provided a locking means including the spring 15, secured at its lower end to the inner face of the arm 1, and the screw 16 carried by the lower face of the tablet 2. The spring 15 is provided with an opening 17. When the tablet is turned into its horizontal position, the head of the screw 16 passes into a recess 18 in the arm 1 and strikes the spring 15, causing its upper end to move away from the arm until the head of the screw has reached the opening 17 when the spring will move back toward the arm so as to engage the head of the screw and lock the tablet securely in position. A slidable rod 19, with its inner end in engagement with the spring 15 and enlarged to prevent its accidental withdrawal from the arm 1, extends outwardly into a depression 20 in the outer face of the arm. Pressure upon the outer end of this rod 19 will cause it to move the spring 15 away from the arm so as to become disengaged from the screw and allow the tablet 2 to be tipped from its horizontal position.

At the rear lower end of the guide 9 a stop 21, of leather or other suitable material, is provided for the pin 12 to strike against when the tablet is dropped. This stop 21 is in the form of a washer lying at the lower rear end of the space or passage 13 and is secured in position under the offset outer edge of the guide 9 by a screw 22 passing through the outer edge of the guide and the washer into the seat 10 of the chair.

As shown in the drawing, the outer edge of the tablet 2 extends beyond the axis of the hinge 3 so as to serve as a stop by striking against the side of the chair when the tablet is raised from its normal horizontal position into a vertical position about the hinge. This prevents injury to the hinge by turning the tablet too far and it also indicates automatically when the tablet has reached the proper position from which it may be dropped beside the chair.

While I have shown and described the details of one form of my invention, I do not wish to be limited to such details as certain changes may be made without departing from the spirit of the invention; but

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a chair, a tablet, a double pivotal connection between the tablet and the body of the chair, a guide carried by the side of the chair, and means carried by the tablet in alinement with one of the axes of said connection and engaging the guide to guide the tablet about the other axis of the connection.

2. In a chair, an arm, a tablet pivoted to the outer face of the arm so as to lie normally across the upper face thereof, a catch at the inner face of the arm to lock the tablet in said normal position and means for releasing the catch extending from the catch to the outer face of the arm.

3. In a chair, an arm, a tablet pivoted to the outer face of the arm so as to lie normally across the upper face thereof, a catch at the inner face of the arm to lock the tablet in said normal position, the arm having an opening from the catch to the outer face of the arm, and a slidable rod in said opening for releasing the catch.

4. In a chair, an arm, a tablet, a leaf hinge having one leaf attached to the tablet and the other leaf pivoted to the arm, a guide attached to the outer face of the arm, and a projection attached to the tablet and engaging the guide, the tablet projecting beyond the axis of the hinge to strike against the side of the chair when the main portion of the tablet is turned upwardly and outwardly.

Dated this 27th day of June, 1913.

EDWARD G. WATKINS.

Witnesses:
CHARLES A. BROWN,
FLORENCE L. MOORE.

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