W. F. KOKEN.

JOINTED RECLINING BAR FOR ADJUSTABLE CHAIRS.

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Fig. 1.

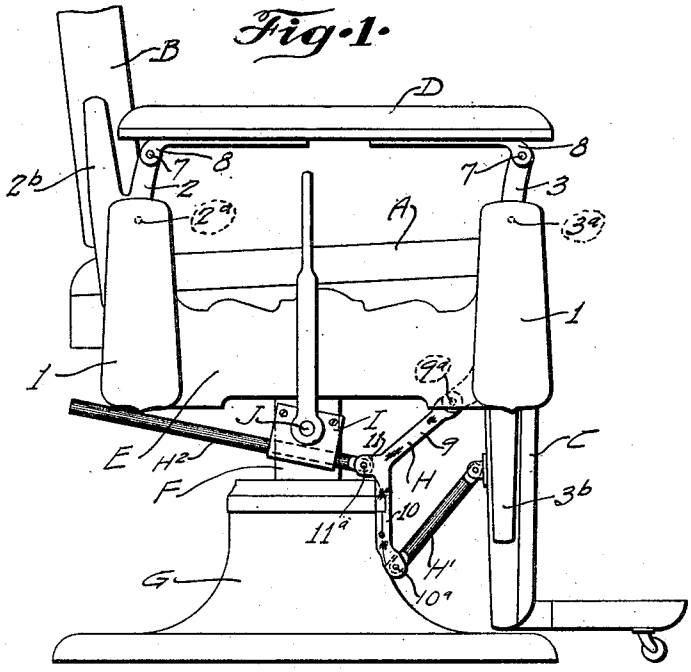
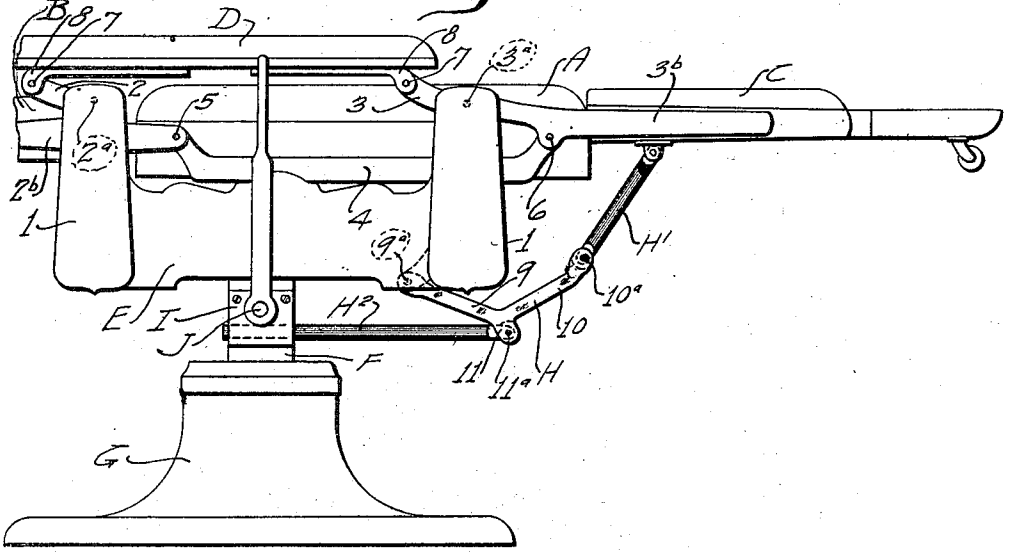


Fig. 2.



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JOINTED RECLINING BAR FOR ADJUSTABLE CHAIRS.

Application filed April 8, 1922. Serial No. 550,778.

To all whom it may concern:

Be it known that I, WALTER F. KOKEN, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Jointed Reclining Bars for Adjustable Chairs, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to chairs of the type that comprise an adjustable back and apron and particularly to the means, commonly referred to as a "reclining bar," that is used in such chairs for holding the back and apron in adjusted position.

One object of my present invention is to provide a reclining bar that permits of a relatively great movement of the apron between its two extreme positions and which is constructed in such a manner that it will not interfere with the movements of the workman standing adjacent the chair when the back and apron are in an upright position.

Another object is to provide a chair of the general type referred to that comprises a seat and an apron, both of which move forwardly relatively to the frame of the chair when the back is lowered or moved downwardly into horizontal alignment with the seat and apron, and means for holding the back, seat and apron in adjusted position, consisting of a jointed reclining bar provided intermediate its ends with a swinging portion that is pivotally connected to the frame of the chair. Other objects and desirable features of my invention will be hereinafter pointed out.

Figure 1 of the drawings is a side elevational view of a chair equipped with a jointed reclining bar constructed in accordance with my invention, showing the back and apron of the chair arranged in an upright position; and

Figure 2 is a side elevational view, showing said back and apron arranged in a horizontal position in horizontal alignment with the seat of the chair.

Referring to the drawings which illustrate the preferred form of my invention, A designates the seat, B the back, C the apron and D the arms of an adjustable chair of the kind that is used by hair dressers, barbers and other specialists. The adjustable elements of the chair above referred to are preferably carried by a frame E mounted on a vertically-adjustable stem F arranged in a base G, the frame E being provided with upwardly-projecting supports 1 on which levers 2 and 3 are pivotally mounted. As my present invention relates to the reclining bar or the means that is used for retaining the adjustable elements of the chair in adjusted position, I have not illustrated all of the parts of the chair, but it will be understood that in practice the frame E of the chair is provided adjacent its rear end with two upwardly-projecting supports, each of which is provided with a pivotally mounted lever 2 that is connected to same by a pivot 2^a, and said frame E is provided adjacent its front end with a pair of upwardly-projecting supports 1, each of which is provided with a pivotally mounted lever 3 that is connected to same by a pivot 3^a. The levers 2 are provided with integral portions 2^b that are rigidly connected to the back B of the chair, and the levers 3 are provided with integral portions 3^b that are rigidly connected to the apron C of the chair. The seat A of the chair is provided at its side edges with longitudinally-disposed bars 4 whose rear ends are pivotally connected at 5 to the lower ends of the levers 2 and whose front ends are pivotally connected at 6 to the levers 3 at points below the pivots or axes 3^a on which the levers 3 swing. The arms D of the chair are pivotally connected to the upper ends of the levers 2 and 3 by pivot pins 7 that pass through depending ears 8 on said arms. When the back and apron of the chair are arranged in an upright position, as shown in Figure 1, the arms D are spaced high enough above the seat A to form supports on which the arms of the occupant of the chair rest comfortably. When the back B is lowered or moved downwardly into a horizontal position, as shown in Figure 2,

the apron C moves forwardly and upwardly, the seat A also moves forwardly and upwardly and the arms D move downwardly and rearwardly into close proximity to the seat, thus producing a chair that is comfortable when adjusted so as to permit the occupant to lie in a horizontal position, due to the fact that the arms D are arranged close enough to the seat to permit the occupant's arms to rest comfortably on said arms D.

My present invention relates to the means that is used for holding the movable elements of the chair in adjusted position. It consists of a jointed reclining bar composed of an intermediate portion H, preferably an oscillating member carried by the frame E of the chair, a front portion H′ that is pivotally connected to the apron C of the chair and a rear portion H^2 that is embraced by a reclining bar clamp I of conventional construction that consists of two spring-pressed jaws mounted on an operating shaft J in such a manner that they can rock or turn on said shaft J sufficiently to permit the rear portion H^2 of the jointed reclining bar to assume an upwardly-inclined position, as shown in Figure 1, or a horizontal position, as shown in Figure 2. The intermediate portion H of the reclining bar is preferably formed by a substantially Y-shaped lever or member having three diverging or angularly-disposed legs 9, 10 and 11, the leg 9 being pivotally connected at 9^a to the frame E of the chair, the leg 10 being pivotally connected at 10^a to the front portion H′ of the reclining bar and the leg 11 being pivotally connected at 11^a to the rear portion H^2 of the reclining bar.

When the back and apron of the chair are arranged in an upright position, as shown in Figure 1, the intermediate member H of the reclining bar occupies the position shown in Figure 1, thus holding the front and rear portions H′ and H^2 of said bar in such a position that the said rear portion will not project beyond the seat A of the chair, and thus interfere with the movements of the workman standing in proximity to the chair. When the back of the chair is lowered the intermediate member H of the reclining bar will swing forwardly and upwardly about the pivot 9^a, and thus increase the length of the reclining bar sufficiently to provide for the forward and upward movement of the apron C into its horizontal position.

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

1. In a chair of the type that comprises an adjustable back and apron that are adapted to be moved from an upright position into a horizontal position, a reclining bar for holding said elements in adjusted position comprising an oscillating member mounted on a part of the chair that is stationary with respect to said back and apron, a clamping device, means co-operating with said clamping device for adjusting and holding said oscillating member, and a link connection between said oscillating member and said apron.

2. In a chair of the type that comprises a frame and an adjustable back and apron on said frame that are adapted to be moved from an upright position into a horizontal position, a reclining bar for holding said back and apron in adjusted position comprising front and rear portions, and an intermediate portion pivotally connected to said front and rear portions and consisting of a member having three angularly-disposed parts and oscillatingly mounted on said frame.

3. In a chair of the type that comprises an adjustable back and apron that are adapted to be moved from an upright position into a horizontal position, a reclining bar for holding said elements in adjusted position comprising an intermediate member of substantially Y-shape in outline, one of whose parts is pivotally connected to a stationary part of the chair, front and rear members pivotally connected to the other parts of said intermediate member, said front member being pivotally connected to the apron, and a retaining clamp co-operating with said rear member.

4. A chair, comprising a frame, an adjustable back and apron combined in such a manner that they move in unison, and means for retaining said elements in adjusted position comprising an oscillating member mounted on said frame, a part pivotally connected to said oscillating member and to said apron, and another part pivotally connected to said oscillating member and arranged to be engaged by a clamp.

5. A chair, comprising a frame, an adjustable back and apron combined in such a manner that they move in unison, an oscillating member mounted on said frame, a link connection between said oscillating member and the apron of the chair, a part pivotally connected to said oscillating member, and a clamping device that co-operates with said part.

6. A chair provided with a frame, an adjustable back, seat and apron combined in such a manner that the seat and apron move upwardly and forwardly when the back is lowered, a jointed reclining bar comprising an intermediate portion pivotally mounted on said frame, a front portion pivotally connected to said apron and a rear portion pivotally connected to said intermediate portion, and a clamping device co-operating with the rear portion of said reclining bar.

7. A chair, comprising a frame, an adjustable back, seat and apron combined in such a manner that the seat and apron move upwardly and forwardly when the back is lowered, an oscillating member pivotally mounted on said frame and comprising a plurality of angularly-disposed portions, a link that connects said oscillating member to the apron, a bar pivotally connected to said oscillating member, and a clamping device that co-operates with said bar, for the purpose described.

WALTER F. KOKEN.