

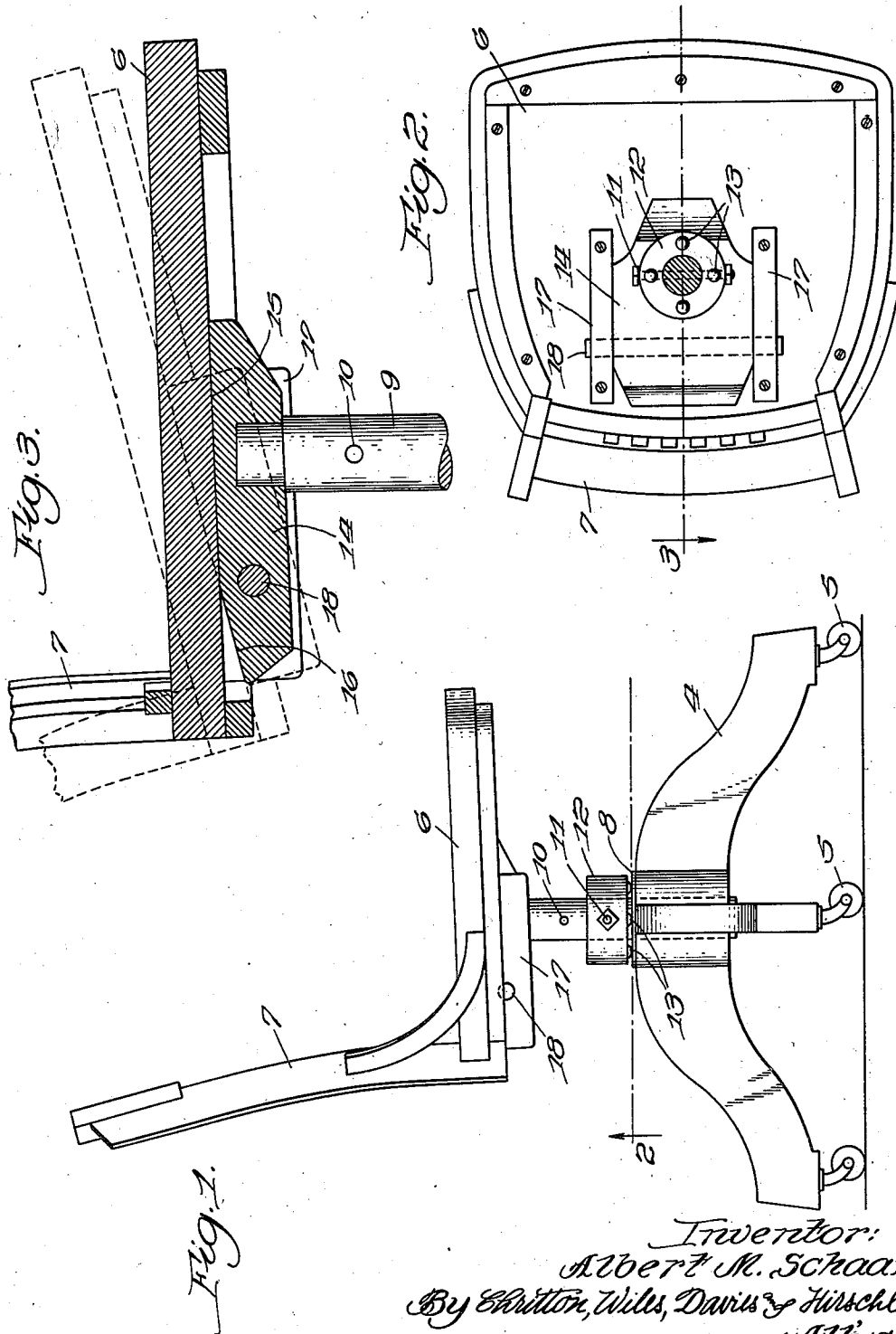
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SWIVEL CHAIR ACTION

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SWIVEL CHAIR ACTION

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1 Claim. (Cl. 155—77)

This invention relates to tilting swivel chair actions, and more particularly to a chair action which does not require the use of a spring.

The primary object of the invention is to provide a simple, comfortable and inexpensive action for a swivel chair which will permit the seat and back portion to be tilted backwardly at will without danger of upsetting.

Most of the tilting swivel chair actions now in use are made of steel and iron and employ strong tension springs to oppose the backward tilting movement. It is difficult to avoid noisy squeaks when the chair is operated and occasionally an extended spring will snap and throw a piece of metal away from the chair in a way that may injure the user. In the present invention, the transverse pivot is so disposed that no springs are necessary and this danger is eliminated.

Another object of the invention is to provide a smooth pivot post which has a simple vertically adjustable thrust bearing and does not require screw threads for its adjustment.

The invention is illustrated in a preferred embodiment in the accompanying drawing, in which—

Figure 1 is an elevational view of a complete chair embodying the invention; Figure 2, a sectional view of the bottom of the chair, taken as indicated at line 2 of Figure 1; and Figure 3, a fragmentary sectional view, taken as indicated at line 3 of Figure 2.

In the embodiment illustrated, the chair has the usual supporting base 4 which may be mounted on casters 5, and by means of the improved action, supports the chair seat 6 provided with a back rest 7. The base has a hollow vertically extending bore, preferably provided at its top with a bearing washer 8.

A pivot post 9 may be made of wood or other suitable material and is provided with several holes 10 adapted to be impaled by a bolt 11 to make a collar shaped thrust bearing 12 vertically adjustable. Preferably, the underside of the thrust bearing is provided with anti-friction domes 13.

A supporting block 14 is rigidly secured to the top of the post and has a top, forwardly extend-

ing, flat, horizontal face 15 adapted to engage the bottom of the chair seat 6 when the chair is in normal upright position. The block also has a rearwardly inclined face 16 adapted to engage the rear portion of the chair seat when it is tilted backwardly. The chair seat is provided with a pair of downwardly extending bars 17 which flank the supporting block 14 and are pivotally connected thereto by means of a transverse pivot 18. It will be noted that the pivot 18 is disposed well back of the pivot post 9 and slightly in rear of the center of gravity of the chair seat and back rest.

The horizontal face 15 and the inclined face 16 meet at a line above and slightly in rear of the center of the pivot 18. This arrangement will cause the chair normally to assume the upright position. However, when a person is seated in the chair, it may readily be tilted backwardly to a desired position, limited by the inclined face 16. The rearwardly inclined position of the chair seat and back is indicated by dotted lines in Figure 3.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom for some modifications will be obvious to those skilled in the art.

I claim:

30. In a swivel chair having a base, seat and back rest, a tilting action comprising: a vertical pivot post journaled in the base and provided at its top with a rigidly mounted supporting block; and a transverse pivot between the supporting block and chair seat disposed back of the center of gravity of the seat and back rest so that the chair will normally assume an upright position without the aid of springs, said supporting block having a top front portion extending in front of the pivot post to engage the bottom face of the chair seat, when the chair is in its normal upright position, and having a depressed rear portion, back of the transverse pivot, to engage the bottom face of the chair seat and limit its backward tilting movement.

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