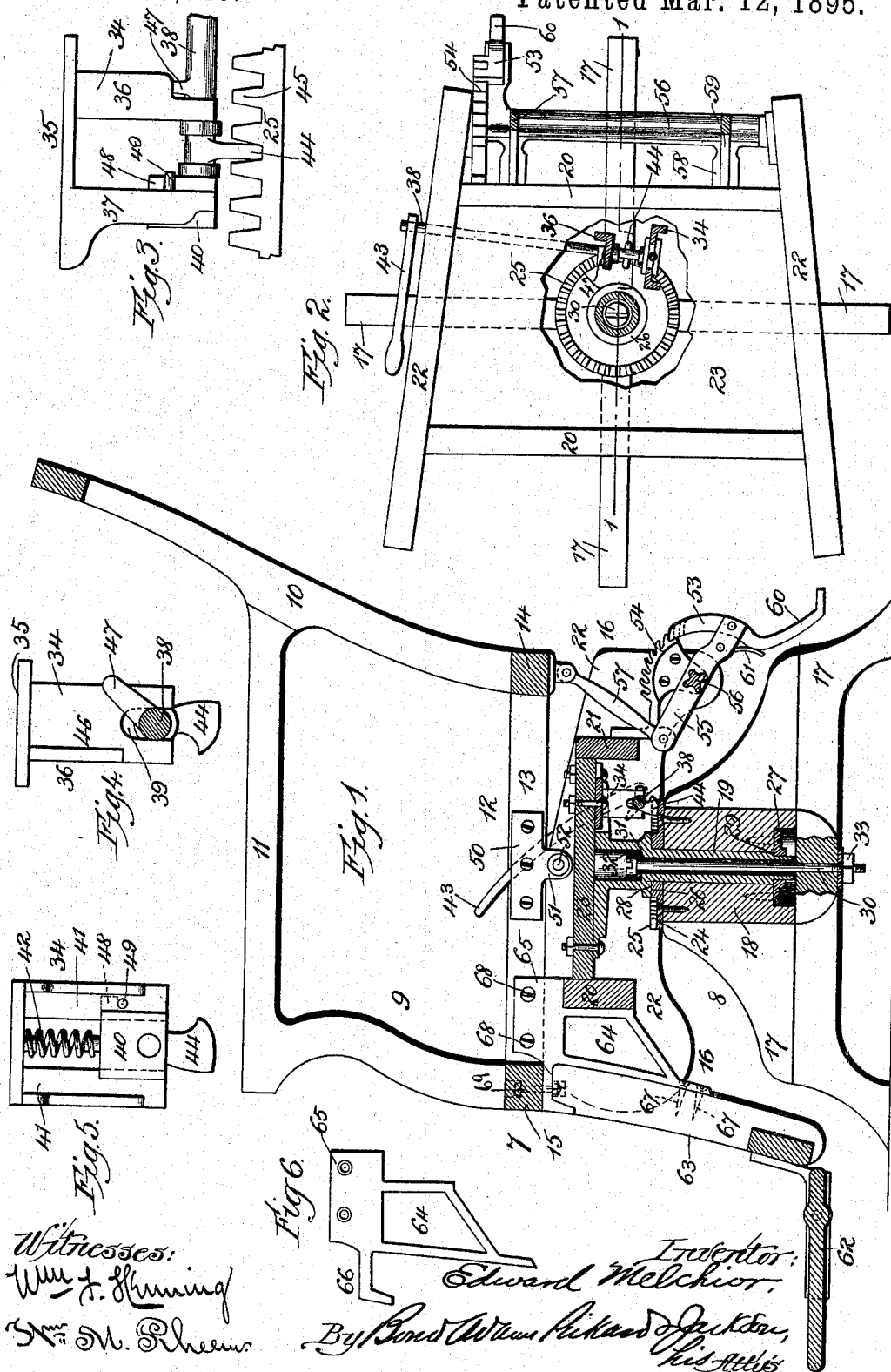


(No Model.)

E. MELCHIOR.
BARBER'S CHAIR.

No. 535,546.

Patented Mar. 12, 1895.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD MELCHIOR, OF CHICAGO, ILLINOIS.

BARBER'S CHAIR.

SPECIFICATION forming part of Letters Patent No. 535,546, dated March 12, 1895.

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To all whom it may concern:

Be it known that I, EDWARD MELCHIOR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Barbers' Chairs, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section of the chair upon line 1—1 of Fig. 2. Fig. 2 is a top or plan view of the base of the chair with the seat removed and with part of the seat-supporting frame cut away. Fig. 3 is an enlarged detail, being a rear view of the locking device and support and of a portion of the circular rack. Fig. 4 is an enlarged detail, being an end view of the locking device seen from the right of Fig. 3. Fig. 5 is an end view of the locking device seen from the left of Fig. 3; and Fig. 6 is a detail, being a view of the brace which supports the side pieces of the foot rest.

My invention relates to chairs, and particularly to that class known as barbers' chairs.

The objects of my invention are to improve the construction of barbers' chairs; to provide a chair which is capable of being tilted and also revolved upon its base; to provide improvements in the devices by which the chair may be tilted back; and to provide improved devices by which the chair may be revolved.

A further object of my invention is to provide a new and improved tilting and revolving chair with improved devices for locking the chair at any desired point when revolved, and devices for locking the chair at any desired point when tilted.

I accomplish these objects as hereinafter specified and as illustrated in the drawings.

That which I regard as new will be set forth in the claims.

In the drawings, 7 indicates the chair, consisting of a base 8 and a seat 9.

10 indicates the chair back, and 11 the arms.

The seat-back and arms are rigidly secured together, and are secured upon a frame 12 consisting of side pieces 13, back piece 14, and front piece 15.

The base 8 comprises a rotary seat supporting frame 16 and legs 17. As is shown in Fig. 1, the legs are secured to a block 18 in the usual manner. The block 18 is provided with a cylindrical opening passing ver-

tically through it to receive the pivot 19 carried by the seat supporting frame 16, as hereinafter described.

20—21 indicate cross pieces, which are secured to the side pieces 22 of the seat supporting frame 16.

23 indicates a top which is secured between the cross-pieces 20—21 and the side pieces 22. The pivot 19 is bolted or otherwise secured to the bottom of the top piece 23, and passes downward through the cylindrical opening in the block 18.

24 indicates a cylindrical plate, which is secured to the top of the block 18 and is provided with an annular rack 25 upon its upper surface, and with a circular bearing surface 26 within said annular rack.

27 indicates a plate, which is secured in the block 18 near its lower end, and is provided with a circular opening in its center somewhat smaller than the cylindrical opening through the block 18, to form a bearing surface for the pivot 19, as hereinafter described and as shown in Fig. 1.

The pivot 19 is provided near its upper end with a circular shoulder 28 adapted to rest and bear upon the bearing surface 26 of the circular plate 24. The pivot 19 is also provided near its lower end with a circular shoulder 29 adapted to rest upon and bear against the upper surface of the plate 27. The pivot 19 is also bored longitudinally to permit the passage through it of the securing bolt 30. The upper end of the bore through the pivot 19 is provided with a shoulder 31.

32 indicates a washer, which rests upon the shoulder 31 in the pivot 19. The bolt 30 passes through the pivot 19, with its head resting upon the washer 32, and through the bottom of the chair, where it is secured by a nut 33. The pivot 19, secured to the top 23, and with its shoulders 28—29 resting upon the plates 26—27 respectively, forms a turn-table upon which the seat and its supporting frame turn.

34 indicates a casting, consisting of a top 35 and two downward depending arms 36—37. The casting 34 is secured to the bottom of the top piece 23 above the annular rack 25.

38 indicates a rock-shaft, which is journaled in one of the side pieces 22, passes through a slot 39 in the arm 36 of the casting 34, and is

journalled at its other end in a sliding block 40. The block 40 is provided with grooves in its sides which slide over guides 41 in the arm 37 of the casting 34.

5 42 indicates a spiral spring, which bears against the under surface of the top 35 of the casting 34, and against the upper surface of the sliding block 40, so that when said sliding block 40 is raised the spring will force it
10 back again.

43 indicates a lever, which is mounted upon the outer end of the rock-shaft 38.

44 indicates a pawl or dog, which is rigidly mounted upon the rock-shaft 38 and is adapted
15 to engage with the teeth 45 of the annular rack 25.

46 indicates a shoulder upon the back of the arm 36 of the casting 34.

47 indicates an ear mounted upon the rock-shaft 38, and of sufficient length to engage
20 with the shoulder 46 when the hand lever 43 is thrown backward, operating to prevent the hand lever 43 from being thrown too far over.

The sliding block 40 is provided with a lug
25 48, which engages with a pin 49, passing through the arm 37 of the casting 34, to prevent the sliding blocks 40 from falling out of the guides 41.

50 indicates plates which are secured to the side pieces 13 of the seat 9. The plates 50 are provided with an ear 51 which is journalled
30 upon pivots 52 secured to the side pieces 22.

The seat 9 is held in position by means of a pawl 53, which engages with a segmental
35 rack 54 secured to one of the side pieces 22, as is best shown in Fig. 1. The pawl 53 is mounted upon a lever 55 carried by a shaft 56 mounted between the side pieces 22 of the seat supporting frame. The lever 55 is connected
40 by a link 57 to the rear bar 14 of the seat frame 12. I prefer to mount a second lever 58 upon the opposite end of the shaft 56 and connect such lever by a link 59 to the end bar 14, as the action is thereby rendered
45 smoother. If necessary, however, a single lever and link may be used, in which case such lever and link would be arranged centrally of the shaft 56.

The lower end of the pawl 53 is extended
50 downward, forming a foot lever 60, by means of which the pawl 53 may be thrown out of engagement with the teeth of the rack 54.

61 indicates a spring exerting an outward pressure upon the foot lever 60, thereby holding
55 the pawl 53 in engagement with the teeth of the rack 54. When the foot lever 60 is pushed inward the pawl 53 is thrown out of engagement with the teeth of the rack 54, permitting the chair seat to be tilted backward
60 into an inclined position, and to be locked at any desired angle by releasing the foot lever 60. When it is desired to push the chair back again to a less inclined or to a horizontal position, the foot lever 60 is pushed inward, freeing
65 the pawl 53 from the rack 54, and is then pushed downward. This throws the inner end of the lever 55 upward, carrying with it

the link 57, which forces the back of the chair upward into a less inclined or horizontal position, as may be desired. 7c

62 indicates a foot rest, which is secured upon the lower ends of arms 63.

64 indicates a brace, which is provided at its upper portion with a plate 65, and with a projection 66. The projection 66 extends forward, and at its outer end is bent downward to
75 embrace the top end of the arm 63, forming a shoulder within which the upper end of the arm 63, which is cut to fit the shoulder, rests. The braces 64 are secured to the backs of the
80 arms 63 by screws 67 passing through the lower ends of the braces 64 into the arms 63, the upper ends of the arms 63 resting in the shoulders formed by the projections 66, which latter are attached to the front piece 15 by bolts 69. 85
The braces 64 are secured to the side pieces 13 of the seat frame 12 by screws 68 passing through the plate 65. By this construction, the arms 63 of the foot rest are secured to the seat frame, the shoulder formed by the arms
90 66 preventing the upper ends of the arms 63 from being split. The back of the brace 64 is adapted to rest against the cross bar 20, forming a brace for the foot rest and arms 63 and preventing it from being broken off when
95 a person steps upon the foot rest to get into the chair.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination in a chair, of a chair
100 base, a rotatable seat frame journalled to the chair base and provided with pendent arms 36 and 37, one of which is vertically slotted, a vertically spring-yielding block 40 arranged in the said slotted arm, a horizontal rock-shaft
105 journalled in said spring-yielding block and in the rotatable seat frame and provided with a pawl or dog, an annular rack mounted on the chair base and with which the said pawl or dog is adapted to engage, a stop for limiting
110 the axial rotation of the rock-shaft to insure the proper engagement of the pawl or dog with the rack, a lever for turning the rock-shaft, a tilting chair seat pivoted to the rotatable seat frame, and lever mechanism for tilting
115 the chair seat and locking it in the desired position, substantially as described.

2. The combination with a chair base, of a seat frame rotatably mounted on said base, a tilting chair seat mounted on said seat frame,
120 an annular rack mounted on the said base concentric with the center of rotation of said seat supporting frame, a support 34 mounted on said seat frame, a vertically spring-yielding block 40 mounted on said support, a rock-shaft
125 38 journalled near its outer end in said seat frame, and at its inner end in said vertically spring-yielding block 40, a dog 44 secured to said rock-shaft and adapted to engage with said annular rack, and a lever
130 mounted upon said rock-shaft whereby said dog may be thrown into and out of engagement with said annular rack, substantially as described.

3. The combination with a chair base, of a seat supporting frame rotatably mounted on said base, a tilting chair seat mounted on said seat-supporting frame, an annular rack mounted on said base concentric with the center of rotation of said seat supporting frame, a support 34 mounted on said seat frame, a vertically yielding block 40 mounted on said support, a rock-shaft journaled near its outer end in said seat frame, and at its inner end in said vertically yielding block 40, a dog 44 secured to said rock-shaft and adapted to engage with said annular rack, a stop 47 rigid on said rock-shaft and adapted to engage with said support, and a lever mounted upon said rock-shaft, whereby said dog may be thrown into and out of engagement with said annular rack, substantially as described.

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Witnesses:

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