No. 876,982. PATENTED JAN. 21, 1908.

A. R. LERRO.

BARBER'S CHAIR.

APPLICATION FILED FEB. 25, 1907.

5 SHEETS—SHEET 1.

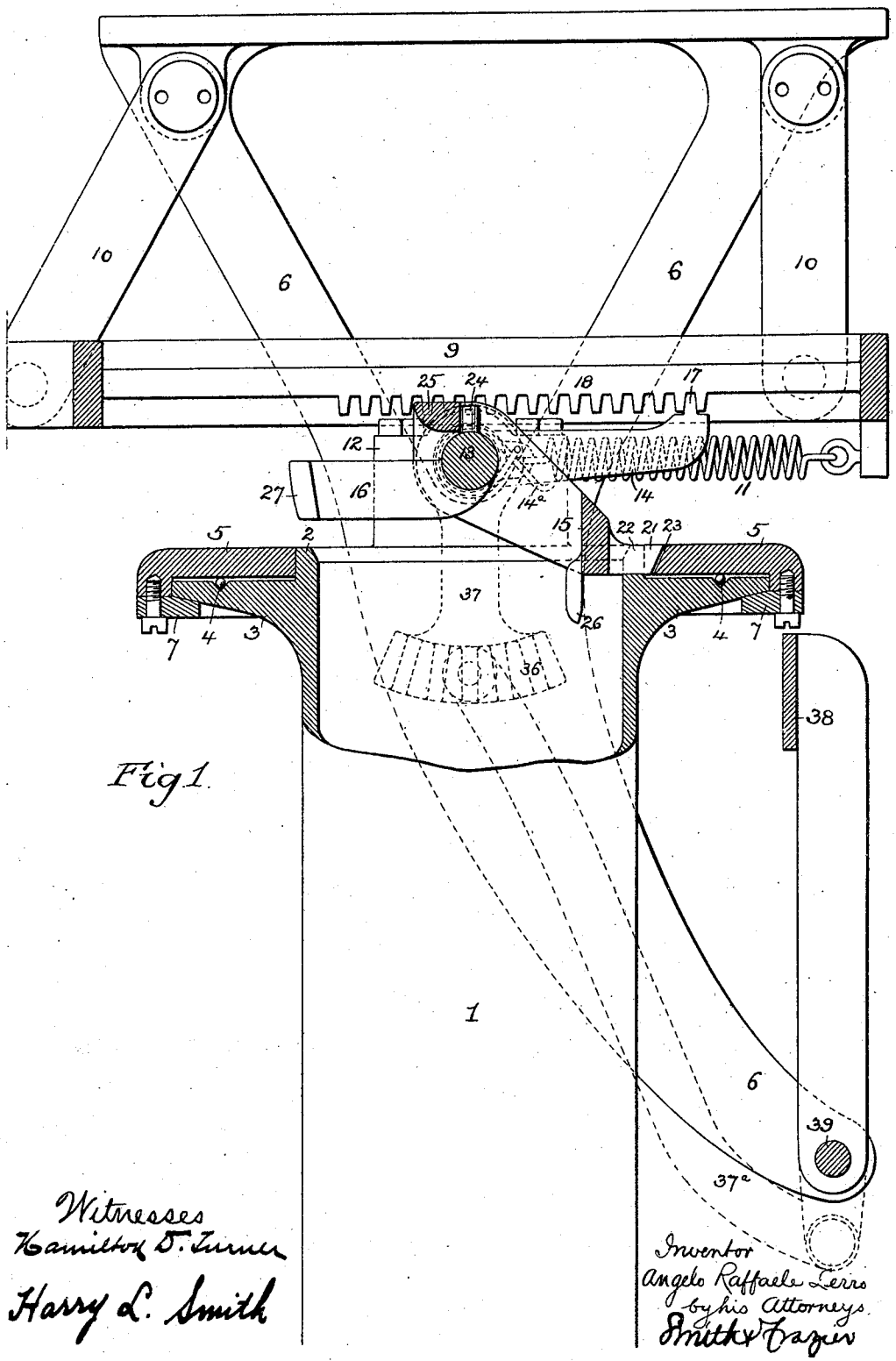


Fig 1.

Witnesses
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5 SHEETS—SHEET 2.

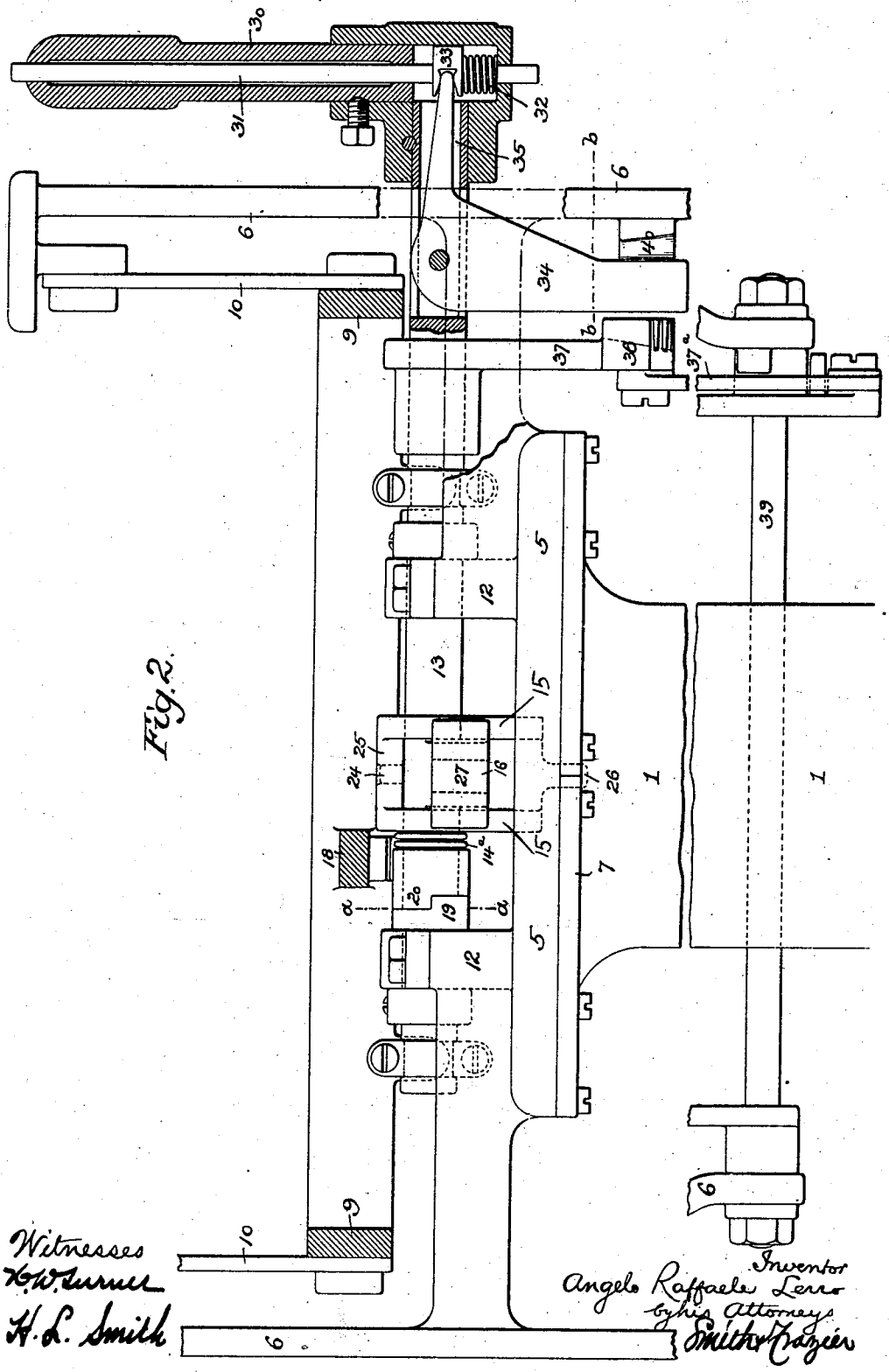


Fig. 2.

Witnesses
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5 SHEETS—SHEET 3.

Fig. 3.

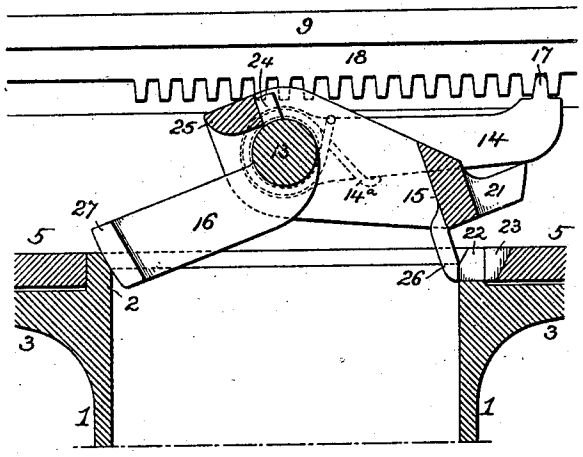


Fig. 4.

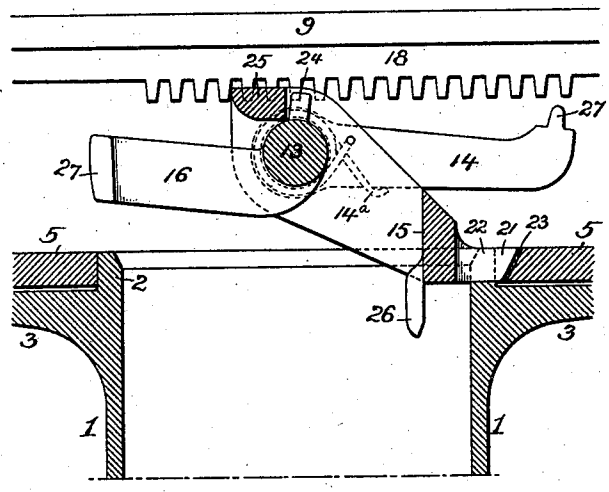


Fig. 5.

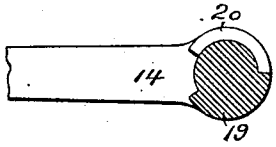
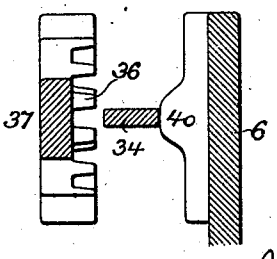


Fig. 6.



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No. 876,982. PATENTED JAN. 21. 1908.

A. R. LERRO.

BARBER'S CHAIR.

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5 SHEETS—SHEET 4.

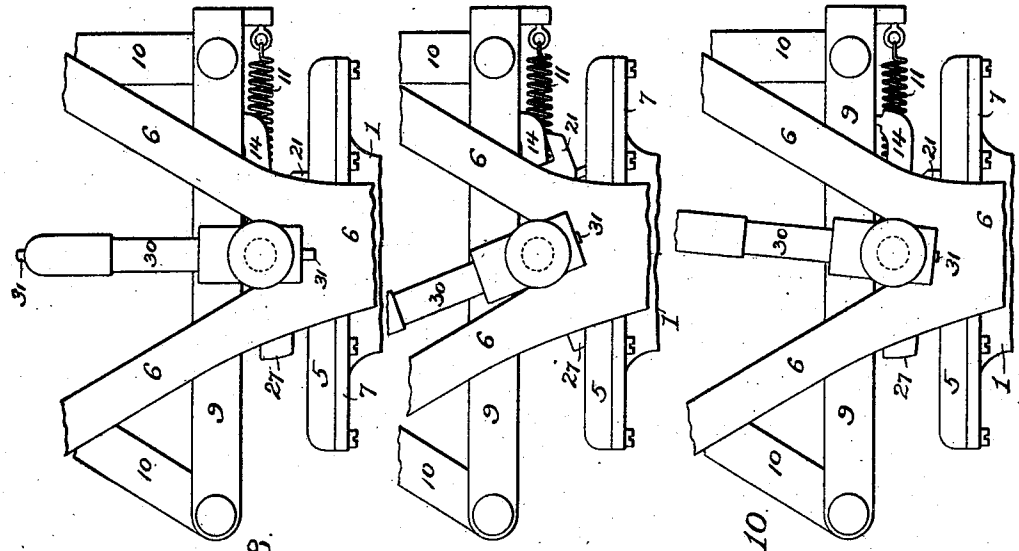


Fig. 8.

Fig. 9.

Fig. 10.

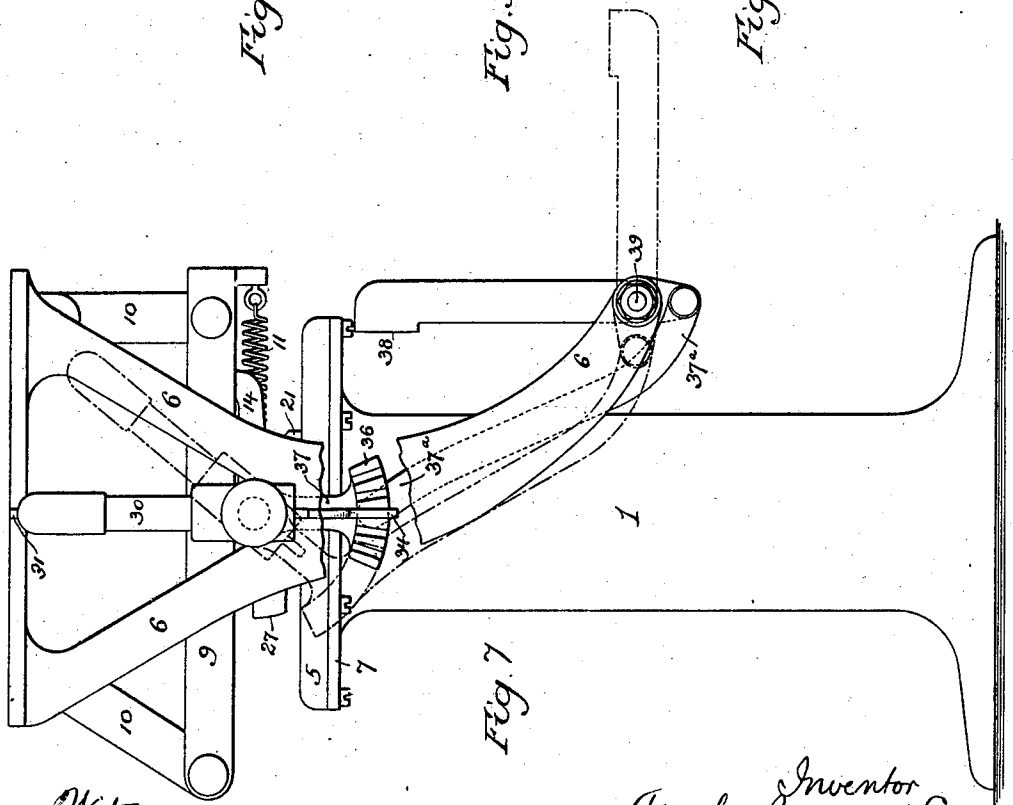


Fig. 7.

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No. 876,982. PATENTED JAN. 21, 1908.

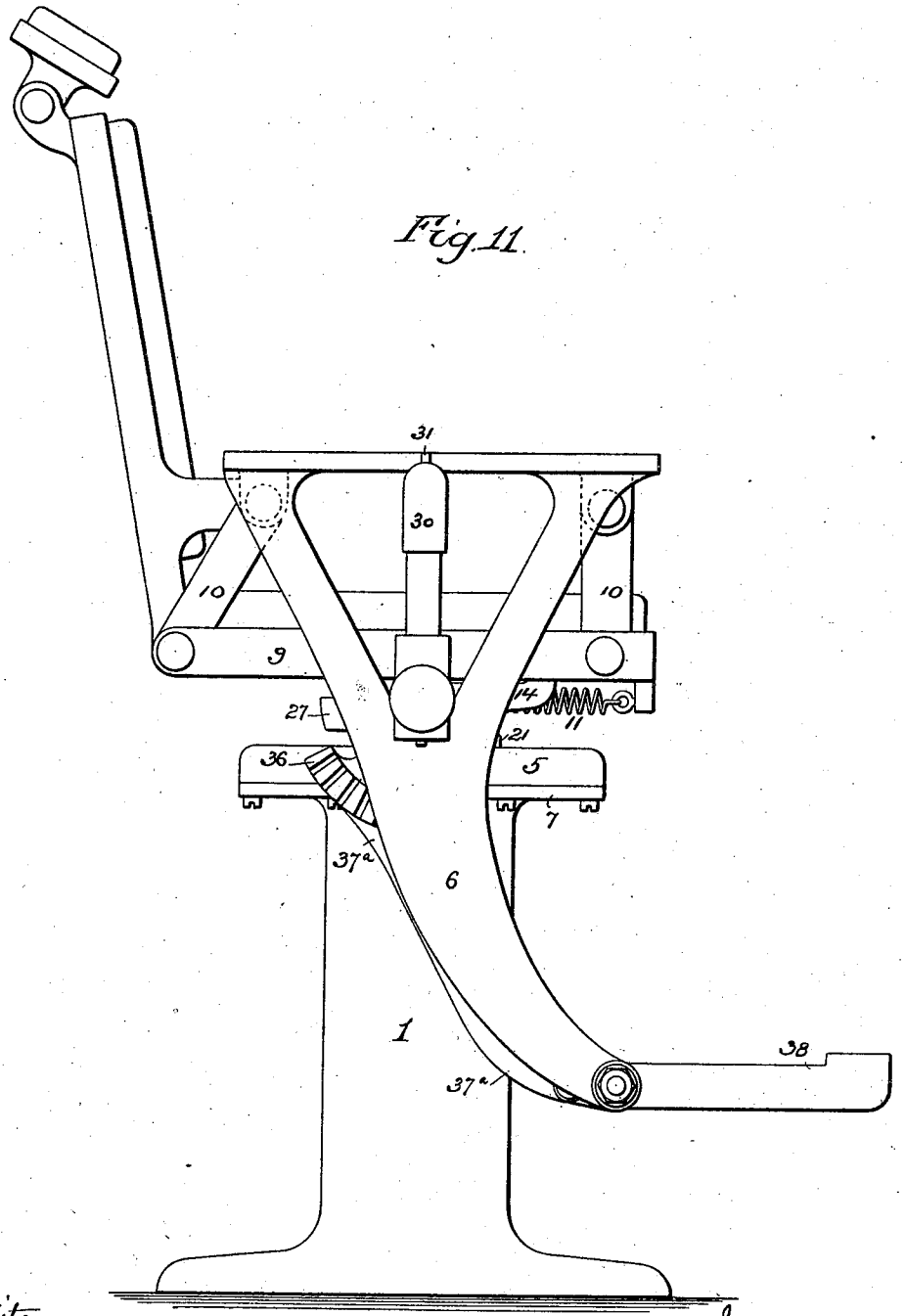
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5 SHEETS—SHEET 5.

Fig. 11.



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UNITED STATES PATENT OFFICE.

ANGELO RAFFAELE LERRO, OF PHILADELPHIA, PENNSYLVANIA.

BARBER'S CHAIR.

No. 876,982. Specification of Letters Patent. Patented Jan. 21, 1908.

Application filed February 25, 1907. Serial No. 359,114.

To all whom it may concern:

Be it known that I, ANGELO RAFFAELE LERRO, a subject of the King of Italy, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Barbers' Chairs, of which the following is a specification.

The object of my invention is to so construct a barber's chair that the various movements of the same may be controlled by a single lever, the seat being firmly locked in any desired position, either forward or backward, and also firmly locked against rotation when in its normal position facing the mirror, or temporarily locked in any other position assumed after partial rotation, and the chair being also provided with a foot rest, movable into and out of position by the same lever which controls the movements of the chair.

In the accompanying drawings: Figure 1 is a vertical sectional view of sufficient of a barber's chair to illustrate my present invention; Fig. 2 is a view of the same partly in transverse section and partly in elevation; Figs. 3 and 4 are vertical sectional views of some of the parts illustrated in Fig. 1, but in a different position from that there shown; Fig. 5 is a section on the line *a*—*a*, Fig. 2, Fig. 6 is a sectional plan view on the line *b*—*b*, Fig. 2. Fig. 7 is a side view, on a smaller scale, of the chair, illustrating, respectively, in full and dotted lines, the two positions of the foot rest and its operating parts, Figs. 8, 9, and 10 are views showing the relation of the operating lever and pawls in their different positions of adjustment, and Fig. 11 is a side elevation of a complete chair.

In the drawing, 1 represents the central post or standard of the chair, provided, at the top, with a vertical flange 2, and a horizontally projecting annular rib or flange 3, the latter having, in its upper face, an annular V-shaped groove for the reception of balls 4, constituting a bearing for a turntable 5, which carries the side supports 6 for the seat of the chair and also the various devices whereby the locking of the seat in its different positions of adjustment is effected, vertical confinement of the turntable 5 to the rib or flange 3 being effected by means of a ring 7, bolted to the turntable and underlapping said flange 3, as shown in Fig. 1.

The seat frame 9 is hung to the side frames 6 by means of links 10, in order that it may be moved backwardly or forwardly, said seat being normally drawn backward by means of one or more coiled springs 11.

Free to turn in suitable bearings 12 on the turntable 5 is a transverse shaft 13 which operates the three pawls 14, 15 and 16 whereby the locking of the seat in its different positions of adjustment is effected, as hereinafter described. The pawl 14 has a tooth 17 which, when the pawl is raised, engages with a rack 18 on the seat frame of the chair, and thereby serves to lock said seat frame in any of its forward or backward positions of adjustment. Said pawl 14 is normally moved into position to engage with the rack by means of a spring 14^a or other suitable device, and is depressed, so as to be disengaged from the rack, by engagement of a segment 19 on the shaft 13 with a corresponding segment 20 on the hub of the pawl, these segments being of such extent that suitable movements of the shaft 13 are permitted, for the purpose of operating the pawls 15 and 16, without any corresponding movement of the pawl 14. (See Fig. 5.) This constitutes a lost motion connection between the pawls. The pawl 15 has a projecting tongue 21, which, when said pawl is lowered, engages with a notch 22 in the flange 2 of the central post and with a coinciding notch 23 in the turntable 5, as shown in Figs. 1 and 4, but said tongue can be lifted free from engagement with these notches whenever it is desired to turn the chair on the post, this movement being effected by contact of a pin 24 on the shaft 13 with a bridge bar 25 at the top of the pawl 15. A depending tongue 26 on the pawl 15 serves, by contact with the inner wall of the post 1, to limit the extent of lift of the pawl 15.

In order to temporarily retain the chair, after it has been turned on the post to any other position than that shown in Figs. 1 and 4, a shoe 27 on the pawl 16 is brought into frictional engagement with the beveled inner wall of the flange 2 at the top of the post, as shown in Fig. 3, this frictional engagement serving to prevent accidental movement of the chair from the position to which it has been adjusted.

The various movements of the shaft 13 which I have described are imparted to it by means of a lever 30 secured to the outer end of the shaft, as shown in Fig. 2, and this lever contains a rod 31 supported upon a spring 32

and having a notched collar 33 which engages with one arm of a trigger lever 34, contained in a slot 35 of the shaft 13, and having a depending arm, which, by depression of the rod 31, can be moved into engagement with a segmental rack 36 on an arm 37 mounted so as to be free to swing on the shaft 13, as shown in Fig. 2. This arm is connected, by a rod 37ª, to a foot rest 38 which is pivotally mounted upon a shaft 39 carried by downward extensions of the side arms 6 of the chair, the parts being so disposed that when the arm 37 is in mid-position, as shown in Fig. 1, the foot rest 38 will be elevated, as shown in said figure, but when the arm 37 is moved in either direction from such mid-position, the supplementary foot rest will be swung down into position for use as shown by dotted lines in Fig. 7.

In order to prevent accidental displacement of the lever 30 from either of its extreme positions a cam 40 is secured to one of the side frames 6, this cam, by preference, having curved faces, as shown in Fig. 6, so that, when the lever 30 is moved without depressing the rod 31, the trigger lever 34 can pass over the cam and will effect automatic depression of the rod 31 and compression of the spring 32, this movement not being sufficient to throw the trigger lever into engagement with the rack 36, or the rod 31 can be partially depressed so as to move the trigger lever out of engagement with the cam 40 when it is desired to move the lever 30 without encountering the resistance of the cam. When the lever 30 is in its foremost position the parts are in the position shown in Fig. 4, the turntable 5 being locked to the post 1 by the pawl 15 and the pawl 14 being free from engagement with the rack 18, so that any desired forward or backward adjustment of the seat of the chair can be effected. The first effect of the backward movement of the lever is to permit the pawl 14 to engage with the rack 18 and thereby lock the seat of the chair in the position to which it has been adjusted, this movement being effected without withdrawing the tongue 21 of the pawl 15 from engagement with the locking notches 22 and 23. The parts are now in the position shown in Fig. 1 and if it is desired to turn the seat of the chair on the post 1 a further backward movement of the lever 30 will cause the pin 24 to act upon the bridge bar 25 of the pawl 15, and thereby raise the tongue 21 of the latter from engagement with the notches 22 and 23 in order to permit such turning movement of the turntable 5, and, when the desired position has been reached, the turntable can be retained in such position by a slight further backward movement of the lever, which will bring the shoe 27 of the pawl 16 into contact with the beveled inner wall of the flange 2 and thereby provide a friction brake for preventing any accidental turning movement of the chair. (See Fig. 3.) When it is desired to turn the chair back to its normal position again the lever 30 is moved forwardly, the first effect of this movement being to raise the shoe 27 of the pawl 16 out of engagement with the beveled wall of the flange 2, and then to drop the pawl 15 so that its tongue 21 will rest upon the top of the flange 2, and as soon as the chair has been turned so as to bring the notch 23 of the turntable into line with the notch 22 of the flange, the finger 21 will drop into said notches and thus lock the chair in position. If the forward movement of the lever is still continued the pawl 14 will be withdrawn from engagement with the rack 18 and the seat of the chair can then be moved backwardly or forwardly, as desired.

The pawls 15 and 16 may, if desired, be reversed on the shaft 13 so as to be operated by a reverse movement of the lever from that which I have shown and described without departing from the essential principles of my invention, and other modifications in the detailed construction of the chair may also be made within the scope of my invention.

I claim:—

1. A barber's chair having a fixed structure, a seat carrying turntable, a pawl thereon for locking the same to the fixed structure when in its normal position, and a supplementary pawl on the turntable for frictionally engaging the fixed structure and retaining the seat when adjusted to another position and when the first pawl is free from engagement.

2. A barber's chair having a fixed structure, a seat-carrying turntable, a pawl on the turntable for locking the same to the fixed structure when in its normal position, a supplementary pawl on the turntable for frictionally retaining the seat when swung to a position other than normal and when the first pawl is out of engagement, and a lever whereby both of said pawls are actuated.

3. A barber's chair having a fixed structure, a forwardly and backwardly adjustable seat mounted upon a turntable and having a rack, a pawl on the turntable for engaging said rack and locking said seat in its different positions of adjustment, another pawl on the turntable for engaging the fixed structure and locking the turntable when the seat faces in one direction, a lever for operating said pawls, and lost motion connections whereby the pawls are actuated in succession by movement of the lever in one direction.

4. A barber's chair having a fixed structure, a forwardly and backwardly adjustable seat mounted upon a turntable and having a rack, a pawl on the turntable for engaging said rack and locking the seat in its different positions of adjustment, a sec-

ond pawl on the turntable for engaging the fixed structure and locking the turntable when the seat is facing in one direction, a third pawl on the turntable for engaging said fixed structure and retaining the seat when it faces in another direction, a single operating lever, and lost motion connections whereby the three pawls are operated in succession by a single movement of the lever in one direction.

5. A barber's chair having a supplementary foot rest pivotally mounted thereon and movable into or out of operative position, a lever at the side of the chair for operating said foot rest, and connecting devices between the lever and the foot rest mechanism, said devices including a clutch whereby said foot rest mechanism can be connected to or disconnected from the lever.

6. A barber's chair having a supplementary foot rest pivotally mounted thereon, an operating lever therefor having a spring-actuated rod, and a trigger lever carried by the shaft of the operating lever and movable into and out of engagement with the foot rest mechanism by movement of said rod in the operating lever.

7. A barber's chair having a seat structure, seat locking devices carried by a transverse shaft mounted on said structure and provided with a lever, a movable projection on said shaft, and a fixed locking cam on the seat structure coöperating with said projection to prevent movement of the shaft from either of its extreme positions until the projection has been moved out of engagement with the cam.

8. A barber's chair having a seat structure, seat locking devices actuated by a transverse shaft mounted on said structure and having an operating lever, a spring-actuated trigger carried by said shaft, and a fixed locking cam on the seat structure co-acting with said spring-actuated trigger to prevent accidental movement of the shaft from either of its extreme positions without yielding movement of the trigger lever.

9. A barber's chair having a seat structure, seat locking devices carried by a transverse shaft mounted on said seat structure and having an operating lever, a spring-actuated trigger lever carried by said shaft, a cam on the seat structure co-acting with said trigger lever to prevent accidental movement of the shaft from either of its extreme positions without yielding movement of the trigger, and a rod carried by the operating lever and serving to actuate said trigger lever so as to move it out of engagement with the cam.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ANGELO RAFFAELE LERRO.

Witnesses:
HAMILTON D. TURNER,
KATE A. BEADLE.