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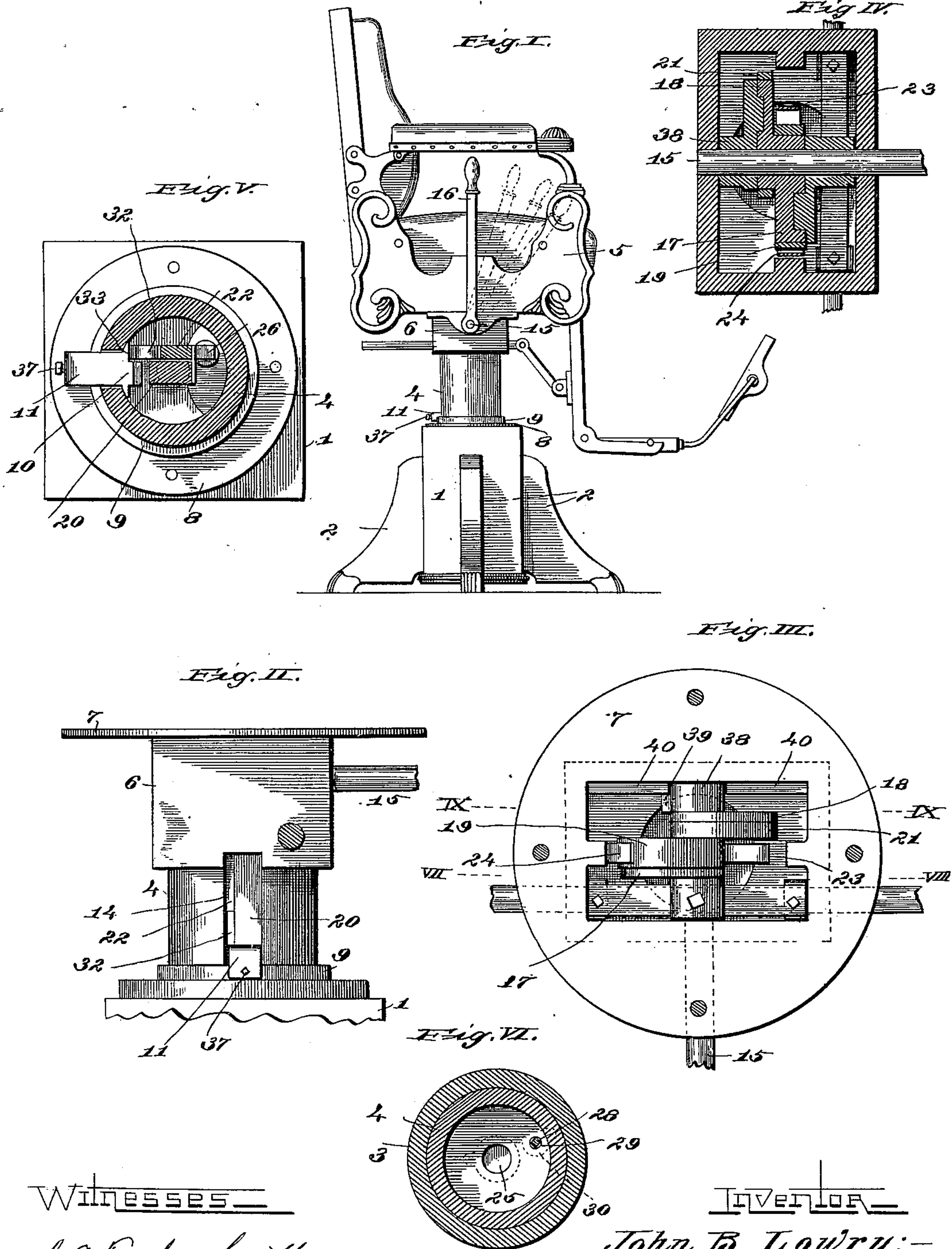
Patented Feb. 27, 1900.

J. B. LOWRY.
BARBER CHAIR.

(Application filed July 31, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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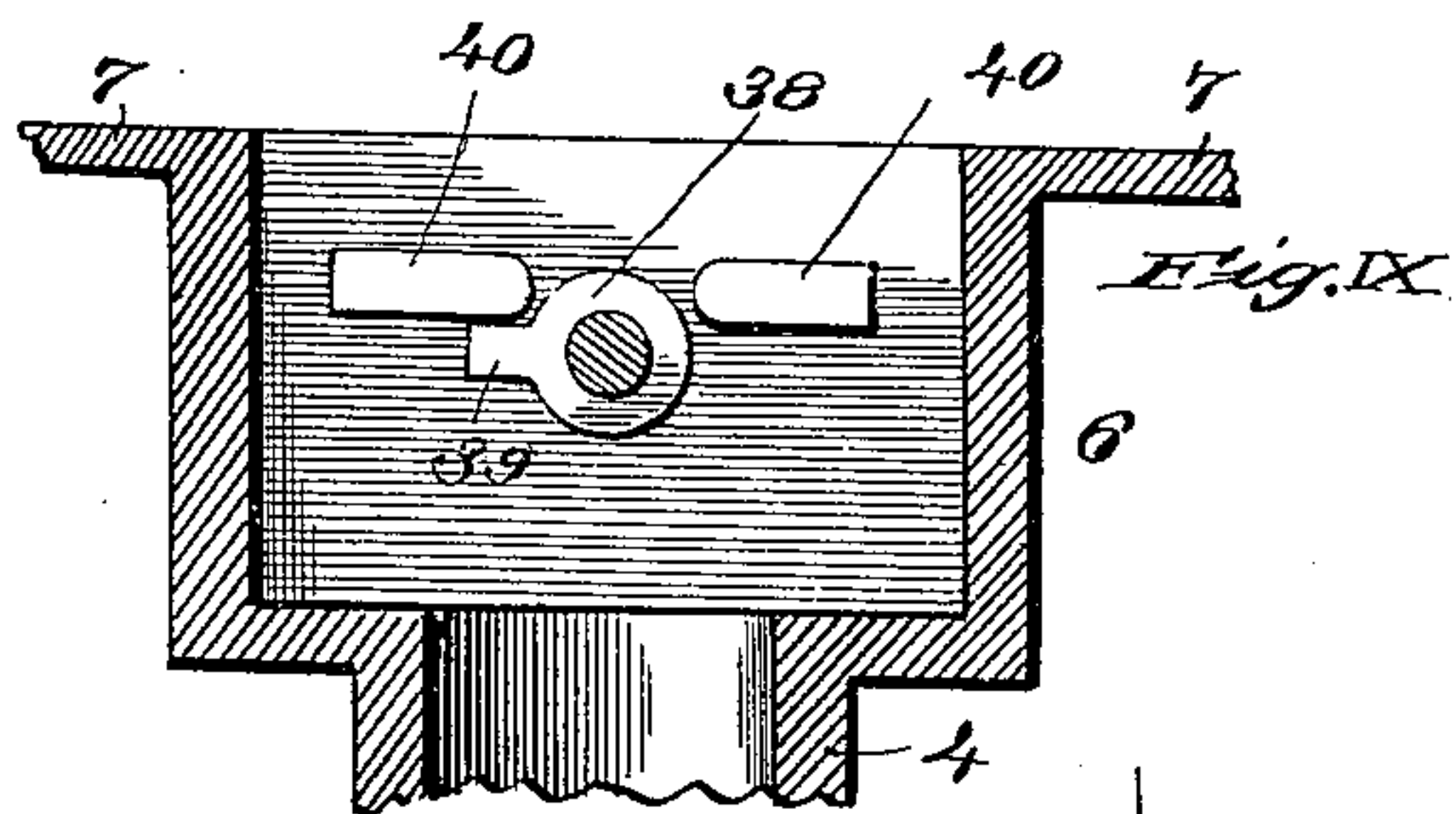
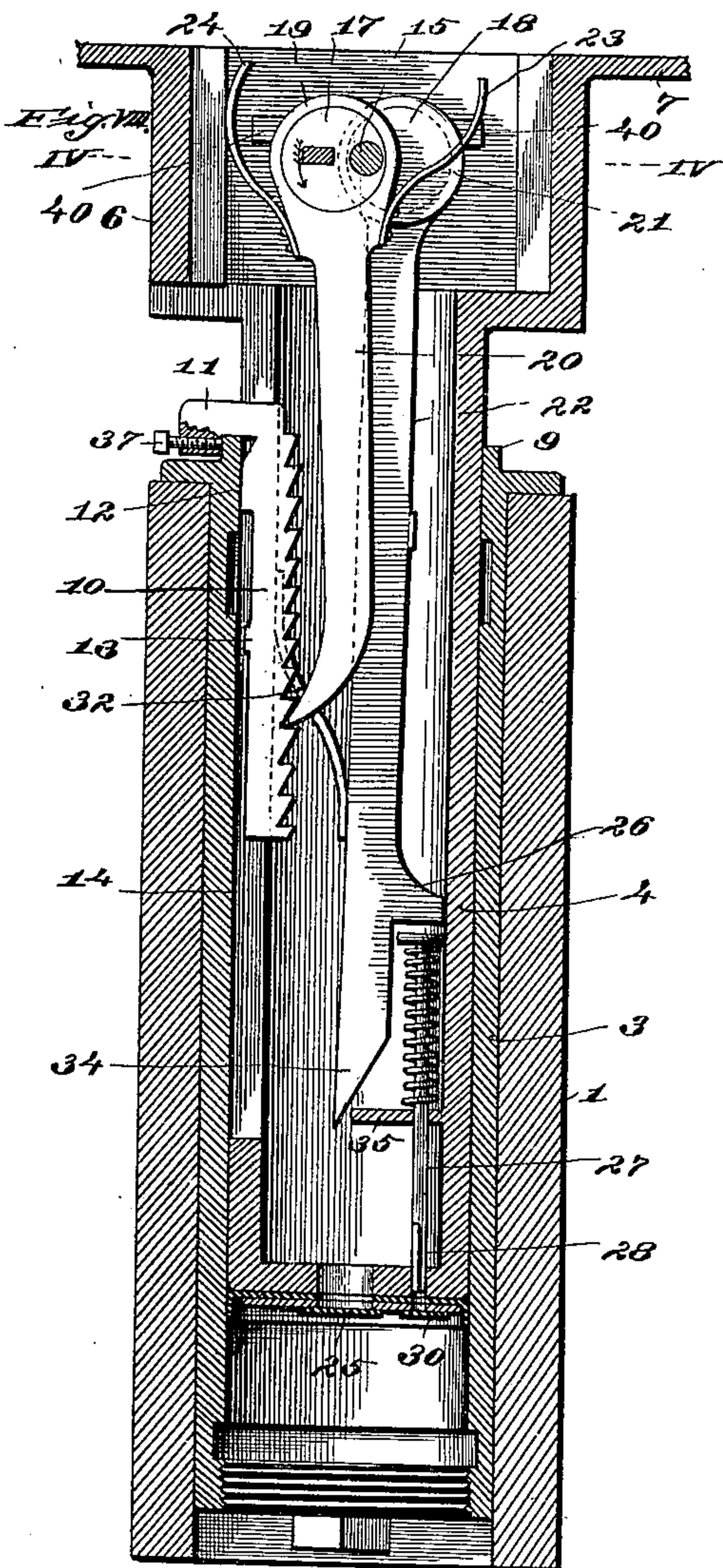
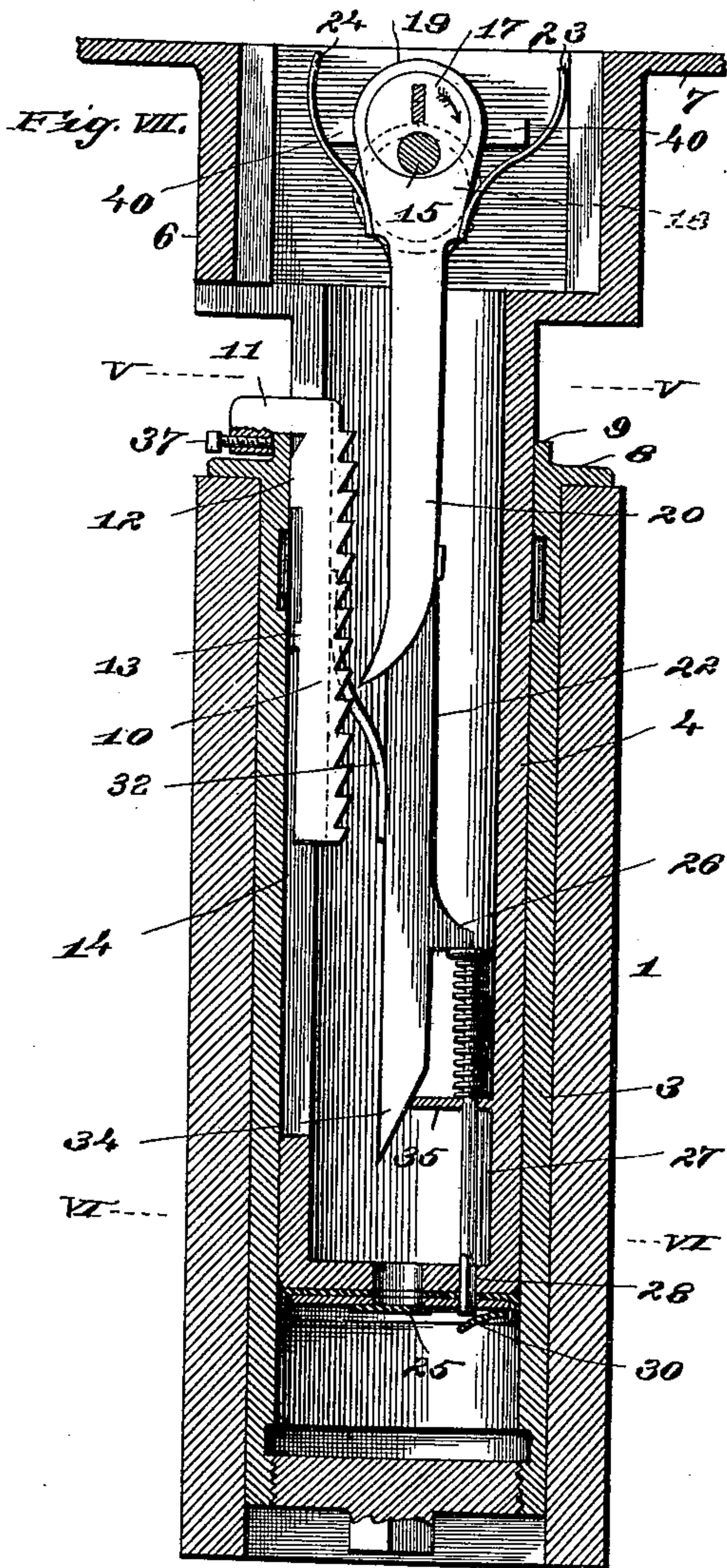
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WITNESSES—

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UNITED STATES PATENT OFFICE.

JOHN B. LOWRY, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE AUGUST KERN
BARBER SUPPLY COMPANY, OF SAME PLACE.

BARBER-CHAIR.

SPECIFICATION forming part of Letters Patent No. 644,526, dated February 27, 1900.

Application filed July 31, 1899. Serial No. 725,600. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. LOWRY, a citizen of the United States, residing at the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Barbers' Chairs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 This invention relates to a barber-chair the seat of which can be raised and lowered, the raising being effected by a mechanical device, while the seat is maintained in its elevated position by confined liquid and the seat
15 is lowered by permitting the liquid to pass from one chamber into another.

The object of my invention is to construct a barber-chair the seat of which can be raised and lowered and to construct such a chair
20 in a manner that will insure a perfect working of the parts with a minimum amount of force being exerted by the operator.

My invention consists in features of novelty hereinafter fully described, and pointed out
25 in the claims.

Figure I is a side elevation of my improved chair. Fig. II is an enlarged detail side view with the seat portion of the chair removed. Fig. III is an enlarged top view with the seat
30 portion of the chair removed. Fig. IV is a horizontal section of the cylinder-head, taken on line IV IV, Fig. VIII. Fig. V is a horizontal section of the cylinder portion, taken on line V V, Fig. VII. Fig. VI is a horizontal section of the cylinder portion, taken on line
35 VI VI, Fig. VII. Figs. VII and VIII are vertical longitudinal sections of the cylinder portion, taken on line VII VIII, Fig. III, the two figures showing the parts in different positions. Fig. IX is a detail vertical section of
40 the cylinder-head.

1 represents the base of the chair, provided with supporting-legs 2 and which is formed hollow to receive an outer cylinder 3, within
45 which is an inner cylinder 4.

5 represents the seat portion of the chair, which is secured to the head 6 of the cylinder 4, the head being provided with a flange 7 to receive the seat 5. The cylinder 3 is formed
50 with a closed bottom and has a horizontal flange 8 at its upper end that rests upon the

top of the base 1. The cylinder has a vertical flange 9 extending above the flange 8.

10 is a rack that is suspended on the flange 9 of the cylinder 3 by means of a notched head 55 11 on the rack that engages the flange 9. The back of the rack is cut away to form shoulders 12 and 13. The shoulder 12 bears against the inner face of the cylinder 3, the rack fitting in a slot 14, formed in one side of the 60 cylinder 4. The head 6 of the cylinder 4 is made hollow, as shown in Figs. VII and VIII, and journaled in this head is a shaft 15, provided at one end with a hand-lever 16. On the shaft 15 are an eccentric 17 and an eccentric 65 18, the eccentric 17 receiving the strap 19 of a pawl or dog 20 and the eccentric 18 receiving the strap 21 of a bar 22. When the parts are in the position shown in Fig. VII, the dog or pawl 20 is moved out of engagement 70 with the rack 10 by means of a spring 23, secured to the dog or pawl and the free end of which when the parts are moved to the position shown in Fig. VII comes in contact with the inner wall of the head of the cylinder 4 75 and forces the lower end of the dog out of engagement with the rack. As the parts are moved from the position shown in Fig. VII toward the position shown in Fig. VIII the spring 23 moves away from contact with the 80 head of the cylinder 4 and a spring 24 on the other side of the dog or pawl comes against the head of the cylinder, as shown in Fig. VIII, and throws the lower end of the dog or pawl into engagement with the rack 10, and 85 the continued movement of the shaft 15 will cause the cylinder 4, which carries the chair-seat, to be elevated. As this elevation takes place oil or other liquid that is contained in the cylinder 4 passes through a flap or other 90 valve 25, located in the bottom of the cylinder 4, into the cylinder 3 beneath the cylinder 4, and as the movement of the cylinder 4 ceases the valve 25 closes and imprisons the oil in the chamber beneath the cylinder 4, 95 thus holding the cylinder and the chair-seat in their elevated position. If when the chair has been raised one notch it is desired to raise it farther, the shaft 15 is turned in the opposite direction to cause the pawl 20 to en- 100 gage the next notch in the rack, and then by turning the shaft in the first-mentioned di-

rection the cylinder and chair-seat are caused to be raised the distance of another tooth of the rack, and thus the seat of the chair may be raised to any elevation desired.

5 When it is desired to lower the chair-seat, the parts are moved to the position shown in Fig. VII, which causes a projection 26 on the arm 22 to engage the head of a spring-sup-
 10 ported rod 27, the lower end 28 of which is made non-circular and passes through a circular hole 29 in the bottom of the cylinder 4. As the parts are brought to the position shown in Fig. VII the projection 26 comes against the end of the rod 27 and forces the lower end
 15 of the rod against a flap-valve 30, that closes the hole 29, and by forcing the valve open, as shown in Fig. VII, permits the oil to flow from the chamber beneath the cylinder 4 into the cylinder through the hole 29, and thus
 20 the seat will descend as fast as the oil passes through the hole 29. When the chair-seat has descended to the desired elevation, the shaft 15 is turned slightly to cause the projection 26 to leave the head of the rod 27, and
 25 the rod being automatically raised by its spring permits the valve 30 to close and the descent of the chair-seat will be arrested. It will thus be seen that while a mechanical force is employed for lifting the chair-seat
 30 the seat is maintained in its elevated position as it is raised and after it has been raised by means of the liquid, and when it is desired to lower the seat the liquid is simply allowed to pass from the cylinder 3 into the cylinder 4
 35 by a slight movement of the lever 16.

In order to lock the chair-seat from rotation when it is desired to do so, I secure a flat spring 32 to a shoulder or ledge 33, formed on the rack to one side of the teeth, as shown in
 40 Fig. V. The free end of this spring presses against the arm or bar 22 when the bar is forced forward by its inclined end 34 coming against a lug 35 on the side of the cylinder 4. As the bar 22 presses against the spring it
 45 causes the upper end of the rack to bite against the upper end of the outer cylinder, the shoulder 12 acting as a fulcrum, thus preventing the cylinder 4 from turning. When the dog 20 engages the rack, the upper end
 50 of the rack in like manner grips the outer cylinder, the seat and inner cylinder thus being prevented from swinging around. When it is desired to permit the seat to swing around, it can be done by moving the shaft
 55 15 to a position that will cause the dog 20 to be disengaged from the teeth of the rack and which will not be sufficient to bring the bar 22 into engagement with the spring 32, a position midway between that shown in Fig.
 60 VII and that shown in Fig. VIII. When the shaft is moved to this midway position, the rack will hang loosely on the flange 9 of the cylinder 3, and the chair-seat can be swung around to any desired position.

65 The object of the shoulder 13 is to prevent the lower end of the rack being moved too

far undersudden jerks on the lever 16, which might break the upper end of the rack.

37 represents a set-screw fitting in the upper end of the rack and the inner end of
 70 which is designed to bear against the flange 9 for the purpose of taking up the wear between the rack and the cylinder 3.

On the shaft 15 is a collar 38, provided with a projection 39, adapted to come in contact
 75 with stops 40 on the inside of the head of the cylinder 4 to limit the movement of the shaft.

While I have described my invention as applied to barber-chairs, yet it is evident that it might be used in connection with dental or
 80 other chairs.

I claim as my invention—

1. In a barber-chair, the combination of an outer cylinder, an inner cylinder to which the seat of the chair is secured, a valve carried by
 85 the inner cylinder to permit a liquid to flow from the inner to the outer cylinder when the inner cylinder is raised, a rack hung upon the outer cylinder and fitting in a slot in the inner cylinder, a rock-shaft journaled in the
 90 head of the inner cylinder, a dog actuated from the rock-shaft, and springs for moving said dog into and out of contact with said rack, substantially as set forth.

2. In a barber-chair, the combination of an
 95 outer cylinder, an inner cylinder provided with a valve to permit a liquid to flow from the inner to the outer cylinder when the inner cylinder is raised, a rack hung upon the outer cylinder and which fits in a slot in the inner
 100 cylinder, a rock-shaft, a dog actuated from the rock-shaft, springs for forcing said dog into and out of engagement with the rack when said shaft is turned, an arm actuated from said rock-shaft and having an inclined
 105 lower end adapted to bear against a projection on the inner cylinder, and a spring secured to said rack and adapted to be engaged by said arm, substantially as and for the purpose set forth.

3. In a barber-chair, the combination of an outer cylinder, an inner cylinder to which the chair-seat is secured, a rack suspended from the outer cylinder and fitting in a slot in the
 115 inner cylinder, a rock-shaft and a dog actuated from the rock-shaft whereby when the dog is caused to engage said rack the chair-seat is elevated and the rack is pressed against the outer cylinder to hold the seat from rotation, substantially as set forth.

4. In a barber-chair, the combination of an outer cylinder, an inner cylinder, a rack carrying a spring and suspended from the outer cylinder and fitting in a slot in the inner
 125 cylinder, a rock-shaft, a dog for engaging said rack actuated from said rock-shaft, and an arm actuated from the shaft and provided with an inclined end, a projection on the inner cylinder with which the inclined end is adapted to engage whereby the arm is forced
 130 against the spring carried by the rack, substantially as set forth.

5. In a barber-chair, the combination of an outer cylinder, an inner cylinder to which the chair-seat is secured having a valve in the bottom thereof, a rack hung from the outer cylinder and fitting in a slot in the inner cylinder, a rock-shaft, a dog actuated from the rock-shaft, and which is adapted to engage said rack, a spring-supported rod, and an arm actuated from the rock-shaft and which is adapted to engage the spring-supported rod to open the valve in the bottom of the inner cylinder, substantially as and for the purpose set forth.

6. In a barber-chair, the combination of an outer cylinder, an inner cylinder, a rack carrying a spring and suspended from the outer cylinder and fitting in a slot in the inner cylinder and having a cut-away portion in its back to form a shoulder 12 that bears against the outer cylinder, a rock-shaft, a dog actuated from the rock-shaft which is adapted to engage said rack, and an arm actuated from the rock-shaft and means whereby the arm is moved toward said rack so as to engage the spring carried by the rack, substantially as and for the purpose set forth.

7. In a barber-chair, the combination of an outer cylinder, an inner cylinder, a rack carrying a spring and suspended from the outer cylinder and fitting in a slot in the inner cylinder and having cut-away portions in its back to form shoulders 12 and 13, a rock-shaft, a dog actuated from the rock-shaft and which

is adapted to engage said rack, and an arm actuated from the rock-shaft and arranged to move toward said rack so as to engage the spring carried by the rack; said shoulder 12 acting as a fulcrum and the shoulder 13 as a stop, substantially as and for the purpose set forth.

8. In a barber-chair, the combination of an outer cylinder, an inner cylinder to which the seat is secured, a rock-shaft having an eccentric, a dog carried by the eccentric on the rock-shaft, a rack with which said dog engages hung upon the outer cylinder and a valve located in the bottom of the inner cylinder whereby, when the seat is raised mechanically, it is supported by liquid and held to any adjustment, substantially as set forth.

9. In a barber-chair, the combination of an inner cylinder, an outer cylinder, valves located in the bottom of the inner cylinder, a rack, a rock-shaft having eccentrics, a dog carried by one of the eccentrics on the rock-shaft and adapted to engage said rack, an arm carried by the other eccentric on the rock-shaft and means whereby the arm is adapted to open one of the valves in the bottom of the inner cylinder to permit the inner cylinder to descend, substantially as set forth.

JOHN B. LOWRY.

In presence of—

E. S. KNIGHT,
N. V. ALEXANDER.