

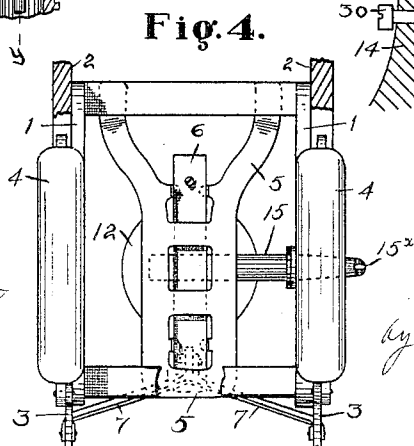
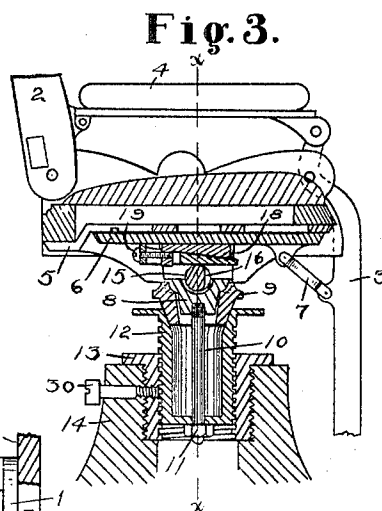
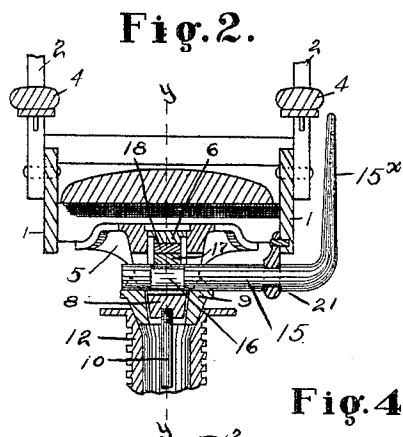
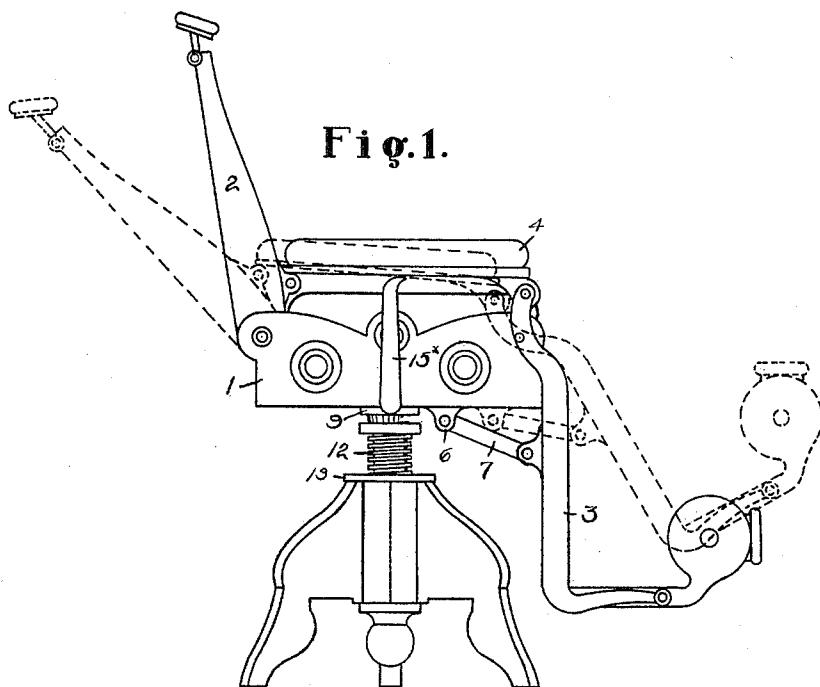
(No Model.)

2 Sheets—Sheet 1.

G. W. ARCHER.
BARBER'S CHAIR.

No. 581,647.

Patented Apr. 27, 1897.



Witnesses;
Thomas Durant
Wallace Mindock

Inventor,
George W. Archer.
by Church & Church
his attys.

G. W. ARCHER.
BARBER'S CHAIR.

No. 581,647.

Patented Apr. 27, 1897.

Fig. 6.

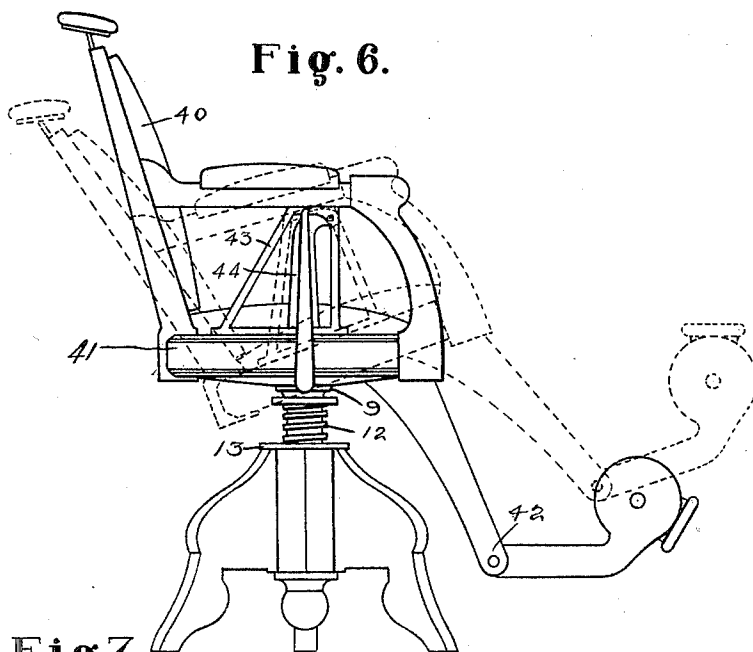


Fig. 7.

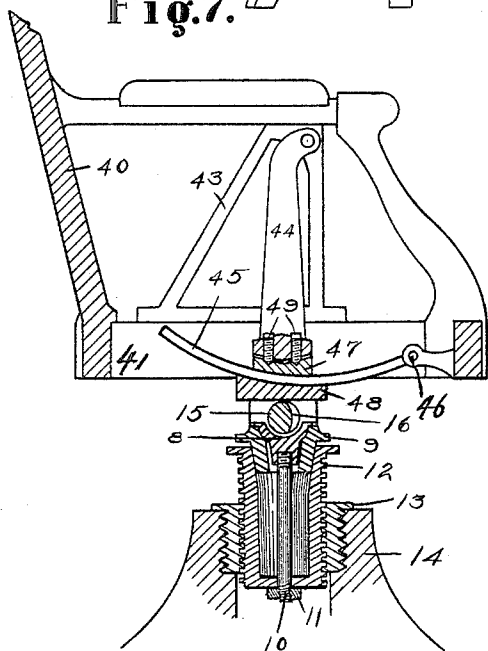
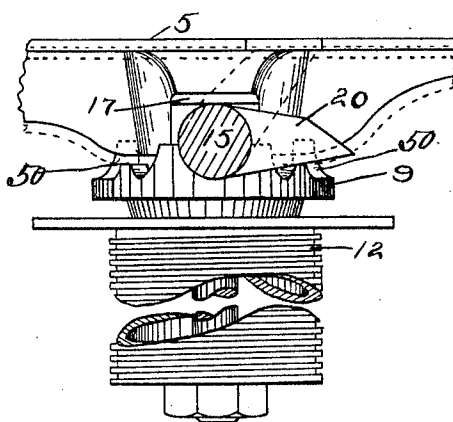


Fig. 5.



Witnesses;
Thomas Durant
Elizabeth Griffith

Inventor,
George W. Archer,
by Charles H. Smith
his atty's.

UNITED STATES PATENT OFFICE.

GEORGE W. ARCHER, OF ROCHESTER, NEW YORK, ASSIGNOR TO THE
ARCHER MANUFACTURING COMPANY, OF SAME PLACE.

BARBER'S CHAIR.

SPECIFICATION forming part of Letters Patent No. 581,647, dated April 27, 1897.

Application filed August 24, 1896. Serial No. 603,812. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. ARCHER, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Barbers' Chairs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My present invention relates to adjustable chairs particularly adapted for barbers', dentists', or surgeons' use, and has for its objects to improve their construction and operation, whereby the various adjustments necessary to place the occupant in comfortable and convenient position are readily accomplished, and to simplify the construction of the device; and it consists in certain improvements and constructions of parts, all as will be hereinafter described, and the novel features pointed out in the claims at the end of this specification.

In the drawings, Figure 1 is a side elevation of a chair constructed in accordance with my invention; Fig. 2, a sectional view on the line *xx* of Fig. 3; Fig. 3, a cross-sectional view on the line *yy* of Fig. 2; Fig. 4, a plan view of the seat-frame with the seat-cushion removed; Fig. 5, a side view of the operating parts of the chair; Fig. 6, a side view of a modification; Fig. 7, a vertical sectional view of the same.

Similar reference-numerals in the several figures indicate similar parts.

While the improvements forming the subject-matter of this invention are applicable to a variety of styles of adjustable chairs, I deem it necessary to show but two, one contained in Figs. 1 to 5, inclusive, in which the seat is not tilted, but the back and foot-rest support are adjustable, and the other in Figs. 6 and 7, in which the seat, back, and foot-rest support are rigidly connected and are tilted together, and will first describe the chair with the non-tilting seat.

Referring to Figs. 1 to 5, 1 indicates the seat-frame of the chair; 2, the back, and 3 the foot-rest support, pivoted to the back and

front of the frame, respectively. 4 indicates the arms, pivoted to the parts 2 and 3 and causing their simultaneous adjustment on their pivots.

5 indicates a frame or spider, upon which the seat-frame 1 is mounted, having a longitudinally-extending way in which operates a movable member 6 in the form of a slide, connected by a link or links 7 with the foot-rest support, and serving when locked to hold the said support and the chair back in any position to which they may be adjusted.

The frame 5 is provided with a boss 8, resting on a collar 9, adapted to receive it, and to this boss is connected a vertical extension or bolt 10, having a nut 11 on its lower end and passing through the lower end of a support in the form of a sleeve 12, threaded into or otherwise adjustably secured in a nut 13, fastened to the base 14, preferably provided with legs.

The lower portion of the frame 5 rests upon the collar 9 and is prevented from independent rotation thereon by suitable engaging lugs 50, and the lower end of the collar is preferably tapered to fit into the correspondingly-tapered upper end of the sleeve 12, the construction being such that while the collar may rotate on the sleeve for the rotary adjustment of the chair when the parts are not clamped rigidly the chair is accurately centered. The upper portion of the frame is provided with a lateral recess for the passage of a shaft 15, having an eccentric cam-surface 16 thereon, said shaft being journaled loosely in half-bearings formed upon the upper edge of the collar 9, as shown in Figs. 2 and 5, and between the cam-surface 16 and the under side of the movable member or slide 6 is arranged an adjustable double wedge, one member 17 of which is prevented from longitudinal movement, while the other member 18 is capable of adjustment by means of the screw 19. This adjustable wedge is simply for the purpose of taking up the wear of the parts and may be dispensed with or modified without materially affecting the operation of the parts. The shaft 15 is provided with an operating arm or handle 15^x, projecting in con-

venient position for the operator at one side of the chair—a stop-arm 20 preventing excessive movement—and is prevented from longitudinal movement by a collar 21, which also serves as a support for the outwardly-projecting portion.

The sleeve or support 12 is secured from rotation in the nut 13 by a bolt 30, but instead of screwing into the nut 13 on the base it could be otherwise connected thereto to cause the vertical adjustment and holding of the chair as a whole.

The operation of the parts will now be understood. When the chair is in use, the lever-arm 15^x is in the position shown in Fig. 1, and the cam 16 presses the wedge tightly against the movable member 6, preventing the tilting of the back, and the collar 9 is drawn down tightly against the upper end of the support or sleeve 12, (the nut 11 engaging the lower end,) thereby preventing the rotary movement of the chair independently of the support; but if it is desired to rotate the chair or adjust the back it is only necessary to turn the shaft backward, bringing the lowest portion of the cam beneath the slide 6, (or the wedge,) when the pressure between the support 12 and the collar and between the cam and movable member 6 will be relieved and the parts will be free to rotate the chair on the support 12 and to adjust the back thereof.

The arrangement whereby the movement of a single part controls both the rotary and tilting adjustments of the chair is eminently desirable, as the operator can quickly put the occupant in the most convenient position.

In the chair shown in Figs. 6 and 7 the back 40, seat-frame 41, and foot-rest support 42 are rigidly connected, and the seat-frame is provided with brackets 43, pivoted on arms 44 on the spider or frame, so that the chair as a whole will pivot or tilt on the brackets, as shown in dotted lines, Fig. 6, and in this construction the curved arm 45, pivoted to the chair at 46, is the movable member which controls the pivotal movement, being held by the cam-shaft in a manner similar to the other form, the bearing-blocks 47 and 48 being employed between the cam and the frame, the block 47 being adjustable by screws 49 to take up wear of the parts. As in the other form, the turning of the cam will not only lock the collar to the support, but govern the tilting movement of the chair as well.

It will thus be seen that as far as the operation of the parts for securing the chair are concerned it is immaterial whether the chair as a whole is adjustable in a vertical plane or not.

I claim as my invention—

1. In a chair, the combination with the base, the support vertically adjustable thereon, a frame capable of rotation relatively to the support and having the downward extension adapted to engage the under side of the sup-

port, a chair supported on the frame and adjustable relatively thereto, and a movable member controlling the adjustment of the chair on the frame, and a single clamping device operating by a movement in one direction to clamp the support, frame and movable member together, substantially as described.

2. In a chair, the combination with the support and the frame rotarily adjustable thereon, and having a portion engaging the under side of the support, the chair adjustable on the frame, the movable member controlling its adjustment, and the clamping-cam carried by the frame operating in a vertical plane, and coöperating with the movable member to clamp the latter to the frame and the frame to the under side of the support, substantially as described.

3. In a chair, the combination with the support and the frame rotarily adjustable on the support and having a portion engaging the under side of the latter, the chair mounted on the frame and the rotary vertically-operated cam arranged between the frame and support to clamp the frame to the support when moved in one direction, substantially as described.

4. The combination with a support, a collar rotatable on the support, a frame vertically adjustable on the collar and having a downward extension adapted to engage the under side of the support, a chair adjustable on the frame and a movable member connected to the chair and controlling its adjustment on the frame, of a clamping device arranged between the collar, frame and movable member, whereby a movement in one direction secures the member to the frame and the latter to the support, substantially as described.

5. The combination with the sleeve, the collar rotarily adjustable thereon, the frame having the downward extension engaging the under side of the sleeve and the rotary shaft on the collar having the cam, of a chair adjustable on the frame and the movable member connected to the chair and operated upon by the cam to clamp the parts together, substantially as described.

6. The combination with the support, the collar rotarily adjustable thereon, the frame having the downwardly-extending bolt and the nut for engaging the support and also having the lateral perforation, of the chair adjustable on the frame, the movable member connected thereto, and the laterally-extending shaft resting on the collar and having the cam operating on the movable member to clamp the parts together, substantially as described.

7. The combination with the support, the collar rotarily adjustable thereon, the frame having the lateral perforations, the bolt and the nut on the bolt engaging the under side

of the support, the chair adjustable on the frame, the movable member connected to the chair, the rotary shaft having the cam and the bearing-block between the cam and movable member, substantially as described.

5 8. The combination with the support, and the collar rotarily adjustable thereon, of the frame connected to the collar to rotate therewith, having the downward extension ar-

ranged to engage the lower side of the support, a chair mounted on the frame, the laterally-extending cam-shaft on the collar engaging the frame for locking the collar to the support, substantially as described.

GEORGE W. ARCHER.

Witnesses:

F. F. CHURCH,
FREDK. ROBBIN.