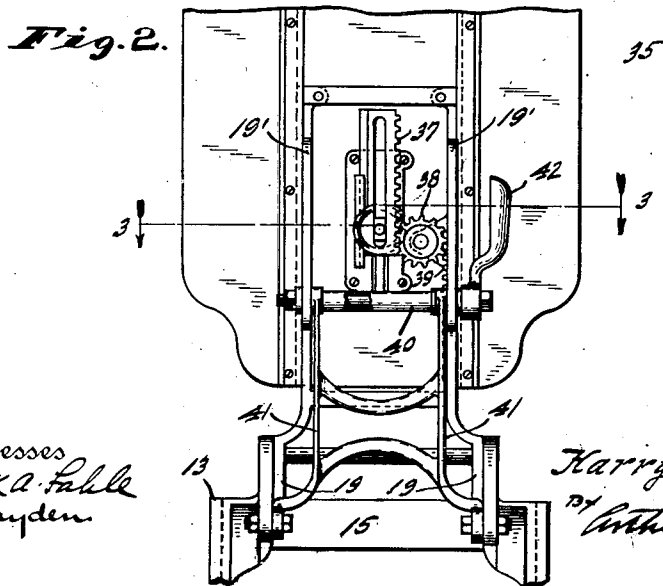
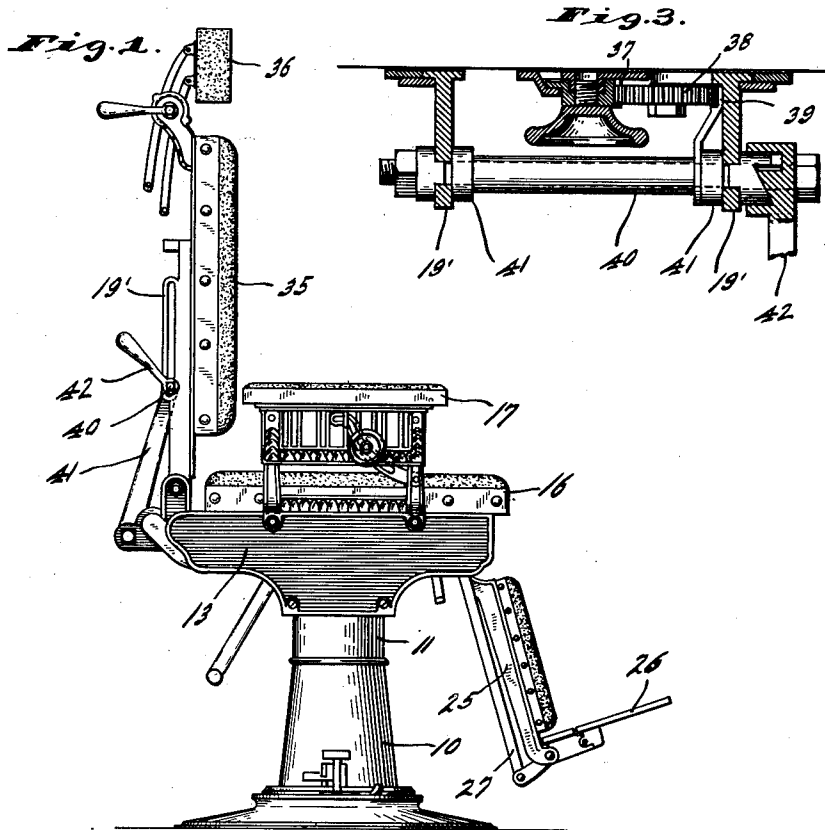


H. S. ALLISON.
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APPLICATION FILED AUG. 14, 1912.

1,111,685.

Patented Sept. 22, 1914.

3 SHEETS—SHEET 1.



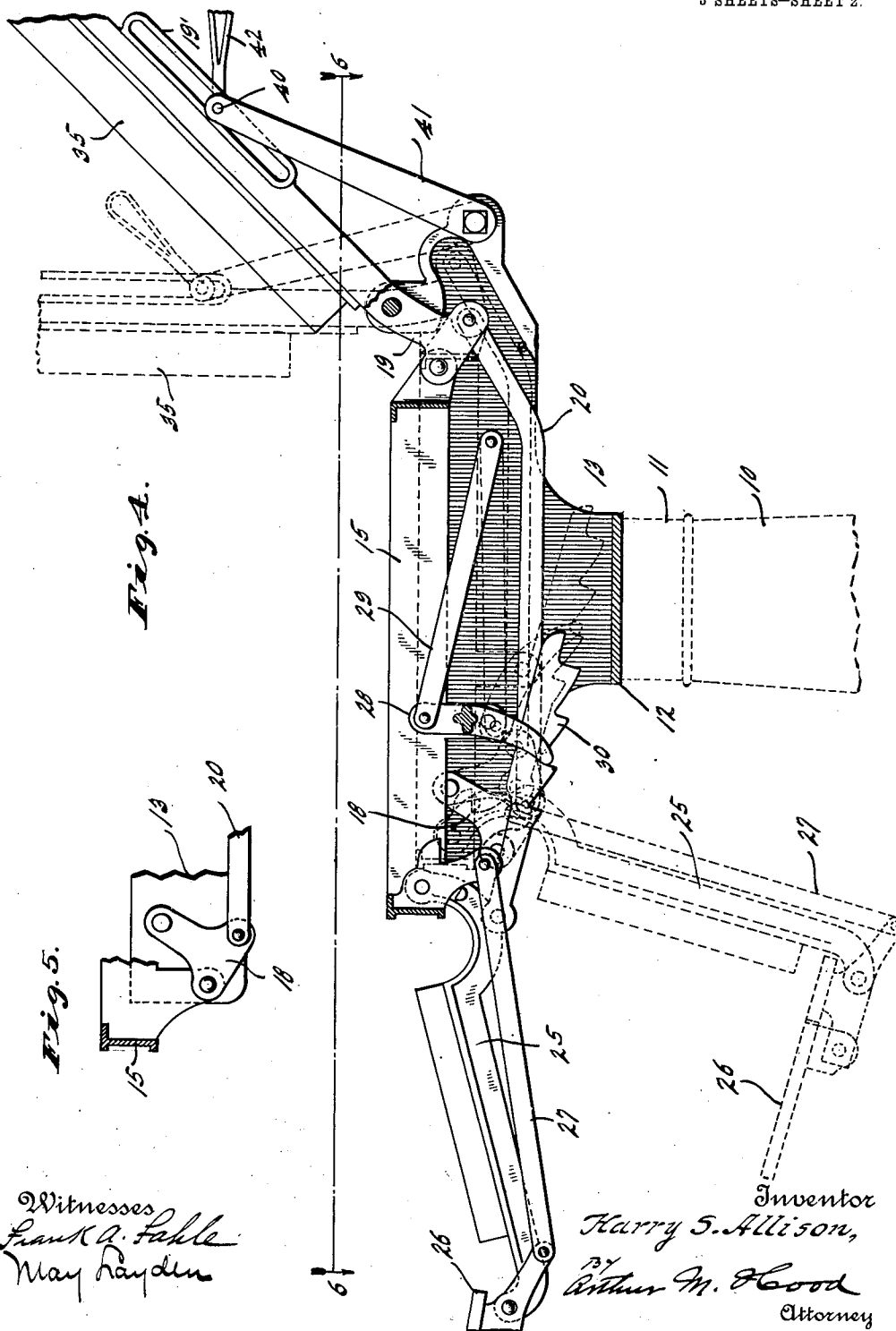
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3 SHEETS-SHEET 2.

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3 SHEETS-SHEET 3.

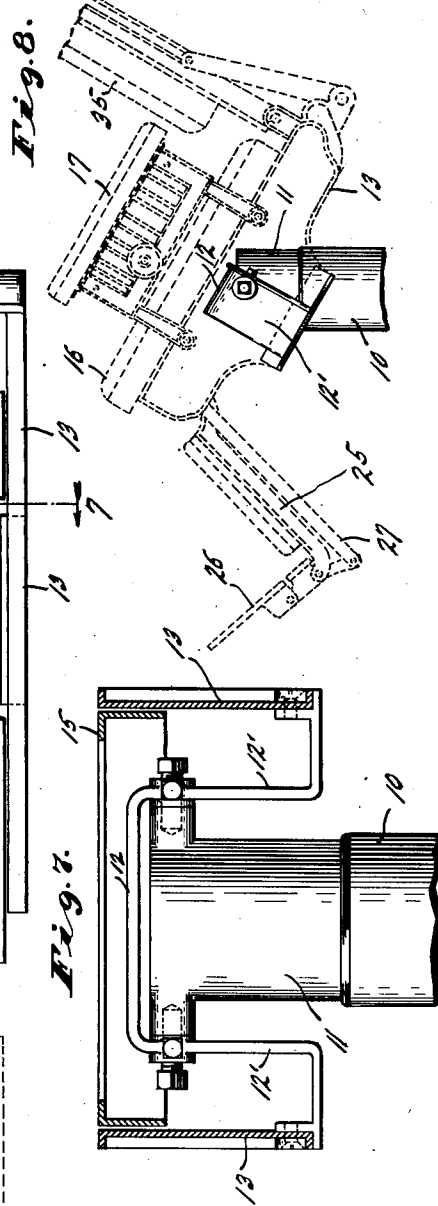
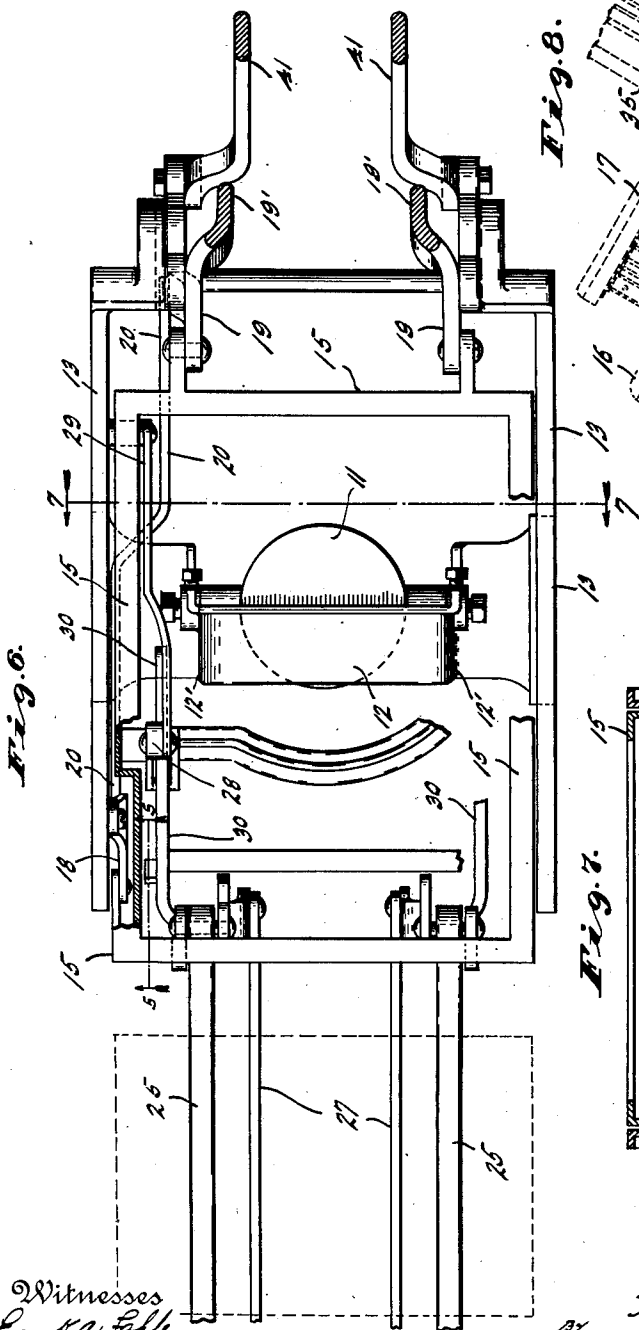
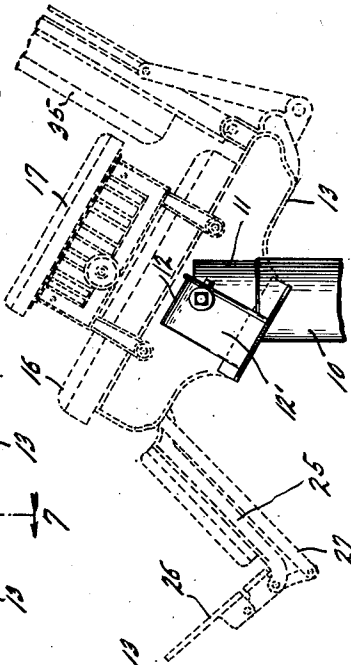


Fig. 8.



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UNITED STATES PATENT OFFICE.

HARRY S. ALLISON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO W. D. ALLISON, OF INDIANAPOLIS, INDIANA.

ADJUSTABLE CHAIR.

1,111,685,

Specification of Letters Patent.

Patented Sept. 22, 1914.

Application filed August 14, 1912. Serial No. 715,011.

To all whom it may concern:

Be it known that I, HARRY S. ALLISON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Adjustable Chair, of which the following is a specification.

It is the object of this invention to provide an adjustable chair, for the use of surgeons and barbers, which when moved from one position to another shall at all times conform to the natural position of the body of the occupant without necessitating any movement on his part, and shall at all times be in balance. Principally, it is desired to obviate the necessity for the occupant's pushing himself upward and backward as the chair's back is tilted to the rear, in order to maintain his head in comfortable position on the headrest.

The accompanying drawings illustrate my invention.

Figure 1 is a side elevation of a chair embodying my invention; Fig. 2 is a partial rear elevation, on a larger scale, of the chair back; Fig. 3 is a section on the line 3-3 of Fig. 2; Fig. 4 is a vertical longitudinal section through the chair, some parts being removed or broken away; Fig. 5 is a section on the line 5-5 of Fig. 6; Fig. 6 is a section on the line 6-6 of Fig. 4; Fig. 7 is a partial section on the line 7-7 of Fig. 6; and Fig. 8 is a partial side elevation showing the seat tilted.

In the pedestal 10 is mounted a post 11, which may be raised and lowered in the pedestal in any suitable manner. A saddle 12 is pivotally mounted on the post 11 substantially at the top of the latter, and has two downwardly projecting arms 12 which at their lower ends bend outward and support the frame 13. This saddle construction allows the pivot for tilting the seat to be close up under the seat, thus permitting a lower position of the seat desired in special nose and throat work, and at the same time affords pockets between the arms 12' and the frame 13 for the passage of various operating bars. The saddle 12 and frame 13 may be locked in desired position in any usual manner.

A seat frame 15, which may be provided with a removable seat 16 having adjustable arms 17, is hung within the frame 13 by links 18 at the front and links 19 at the

back, the links 19 projecting upwardly and being integrally connected to form a back frame 19'. Corresponding front and rear links 18 and 19 are connected by links 20, so that they will swing together and keep the seat frame 15 always substantially parallel to the frame 13.

A leg frame 25 is pivoted to the front end of the seat frame 13, and to the lower end of the leg frame is pivoted a foot piece 26. A link 27 connects each side of this front piece, at the back, to a point on the seat frame 13, so that as the leg frame is tilted relatively to the seat frame the foot piece is oppositely tilted relatively to the leg frame. The tilting of the leg frame relatively to the seat is obtained by a pair of connected levers 28 pivoted to the seat frame 15 and projecting on both sides of the pivots, the upper ends of such arms being connected by links 29 to the frame 13 and the lower ends being provided with pins for engaging teeth on the lower sides of a pair of interconnected bars 30 pivoted to the leg frame 25. Thus the leg frame may be adjusted relatively to the seat frame, and swings relatively thereto as the latter is swung about the pivoted centers of the links 18 and 19. Both the links 20 and 29 and the bars 30 extend through or into the pockets between the arms 12' of the saddle and the frame 13.

A back 35, carrying at its upper end a removable and adjustable head piece 36, is longitudinally slidably mounted on the back frame formed by the upward extension 19' of the links 19. A rack 37 is longitudinally adjustably mounted on the rear of the back 35, to which it may be locked in any position by a hand clamping wheel 37' and meshes with a pinion 38 mounted on the back frame 19. This pinion also meshes, opposite the rack 37, with a rack 39 carried by the clamping rod 40 of a bracing frame 41 pivoted to the frame 13 to the rear of the pivoted points of the links 19. The frames 19' and 41 can be clamped together by the proper manipulation of a clamping handle 42 on the clamping rod 40. When not clamped together, and then only, the back may be tilted relatively to the frame 13, the seat frame 15 and the leg frame 25 at the same time being swung about their pivotal axes. Thus as the back is swung backward, both the seat frame and the leg frame are swung for-

ward and upward, maintaining the chair in balance. As the back swings backward, the back frame 19' moves relatively to the end of the bracing frame 41, the latter moving upwardly along the back frame. As the rack 39 moves upward with the bracing frame 41, the pinion 38 is turned counter-clockwise (Fig. 2) to move the rack 37, and the back 35 with it, downward along the back frame 19'. This downward movement of the back frame accommodates the back 35 and the head rest 36 to the occupant of the chair without the necessity for such occupant to readjust himself in the chair or for the operator to readjust the head rest. As the back is swung upward and forward, the reverse action takes place, the chair being maintained both in balance and in proper adjustment for the occupant.

I claim as my invention:

An adjustable chair, comprising a seat, a back frame angularly adjustable relatively to said seat, a back slidably mounted on said back frame, a bracing frame engaging said back frame at an angle, a pinion carried by said back frame, and two racks carried by said back and said bracing frame respectively and meshing with said pinion on opposite sides of the latter.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this 6th day of August, A. D. one thousand nine hundred and twelve.

HARRY S. ALLISON. [L. S.]

Witnesses:

HENRY H. DA VIE,
ALICE M. COX.