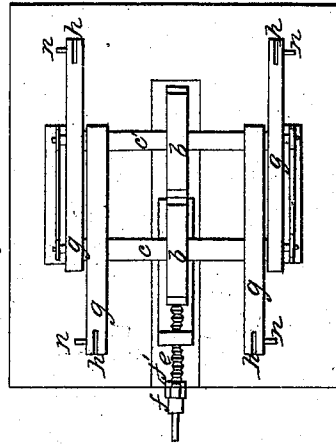
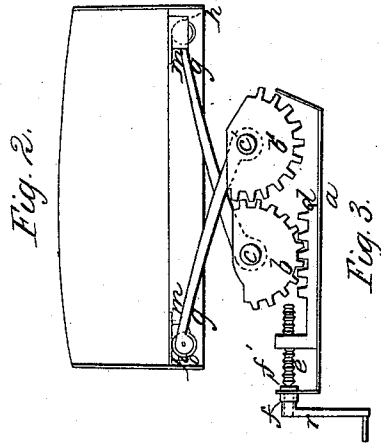
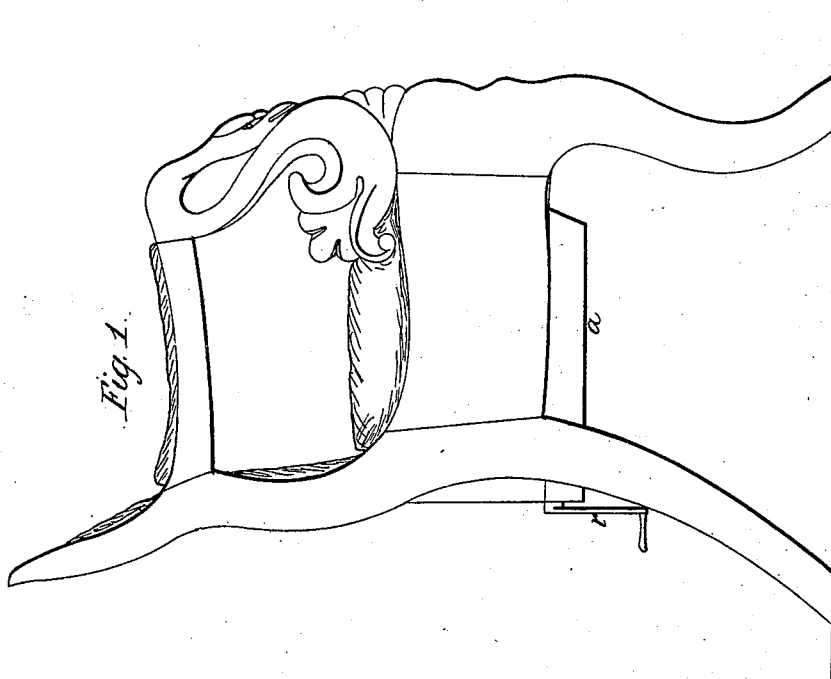


A. M. ASAY.
DENTAL CHAIR.

No. 10,490.

Patented Feb. 7, 1854.



UNITED STATES PATENT OFFICE.

A. M. ASAY, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL CHAIR.

Specification of Letters Patent No. 10,490, dated February 7, 1854.

To all whom it may concern:

Be it known that I, A. MERRITT ASAY, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Dental Chairs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings forming part of this specification, in which—

Figure 1 is a side elevation of the chair. Fig. 2 is a side elevation of the elevating apparatus. Fig. 3 is a plan of the same.

Similar letters in the several figures refer to the same part.

My improvement refers to the method of raising or lowering the seat of dental or other chairs, and consists in connecting the seat with four or more arms of horizontal shafts, so as to give it a vertical motion by the revolution of said shafts, effected by cog wheels upon them, one of which, meshing into a segment rack moved by a screw, operates the whole system.

In the drawings *a* is an iron bottom plate. *b b'* are two segments of cog wheels, the segment *b* secured to the middle of the shaft *c* and the segment *b'* to the middle of the shaft *c'*, the segment *b* meshing into the segment rack *d* movable longitudinally by

the screw *e*, as seen in Fig. 2, the screw being held stationary by the collars *f f'*, while the upper extremity of the rack forms the nut. Fastened to the shafts *c c'* are the arms *g*, having in their extremities most remote from the shafts the rollers *h*, which run in the ways or guides *m*, secured to the seat of the chair, the pins *n* upon which the rollers *h* turn extending beyond the arms, and by means of the flanges *o* keeping the rollers against the ways *m*, so as to draw the seat up or down as the shafts *c c'* revolve. This operation is shown in Fig. 2. When it is required to move the seat vertically, the crank *r* is turned, pushing forward or withdrawing the rack and causing a corresponding revolution of the shafts *c c'*, which by means of the arms *g* elevates or depresses the seat, as may be required.

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

Moving the chair seat vertically by means of screw *e*, wheels *b b'*, shafts *c c'*, rack *d*, and arms *g* substantially as set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

A. MERRITT ASAY.

Witnesses:

JOHN THOMPSON,
J. S. CLARK.