(No Model.)

H. D. JUSTI.

DENTAL OR OTHER CHAIR.

No. 382,473. Patented May 8, 1888.

Fig. 1.

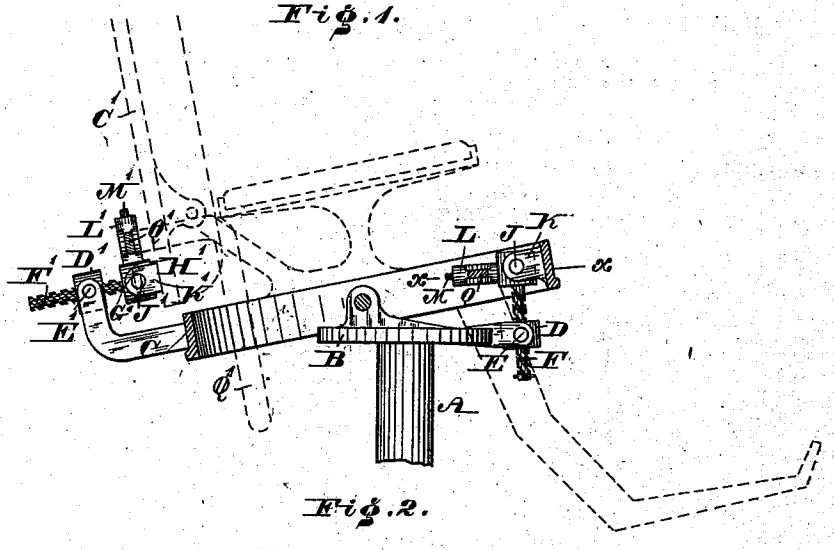


Fig. 2.

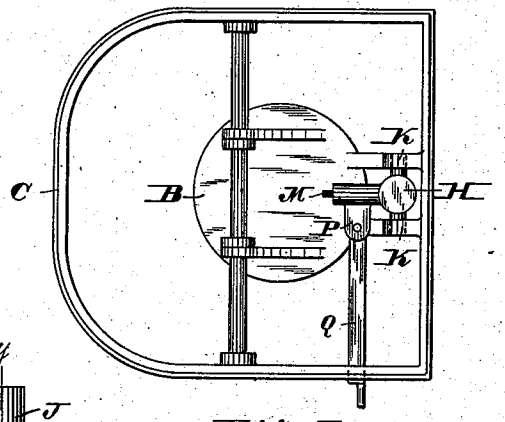


Fig. 3.

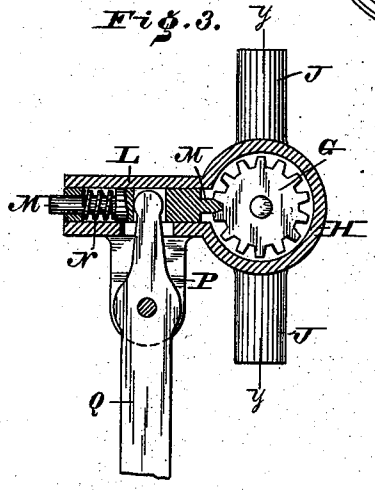
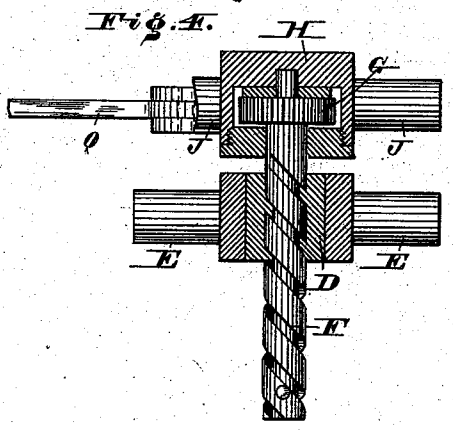


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY D. JUSTI, OF PHILADELPHIA, PENNSYLVANIA.

DENTAL OR OTHER CHAIR.

SPECIFICATION forming part of Letters Patent No. 382,473, dated May 8, 1888.

Application filed December 12, 1887. Serial No. 257,638. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. JUSTI, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Dental or other Chairs, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of means for conveniently adjusting the seat and back of a dental or other chair, as will be hereinafter fully set forth.

Figure 1 represents a side elevation of a portion of a chair embodying my invention. Fig. 2 represents a top or plan view thereof. Fig. 3 represents a horizontal section thereof on line *x x*, Fig. 1, on an enlarged scale. Fig. 4 represents a vertical section thereof on line *y y*, Fig. 3.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A represents the standard of a dental or other chair. To the top of said standard is secured a shelf, B, to which is pivoted the seat C of the chair, whereby said seat may be readily tilted as desired.

D represents a nut, from whose sides project the journals E, the latter being mounted on the front end of the shelf B. Fitted within the nut D is a screw-shaft, F, to whose upper end is keyed or otherwise firmly secured a spur-wheel, G, which is located within a box, H, said box having projecting from its sides the journals J, which are mounted in the ears K, secured to the inner face of the frame of the seat C, it being noticed that the upper end of the screw-shaft F is mounted in the box H, as most clearly shown in Fig. 4.

Projecting rearwardly from the box H is a tubular guide, L, within which is fitted a tooth or dog, M, whose point engages with either of the teeth of the wheel G and is held in contact with the same by the action of the spring N, which is located within the guide L and bears against said dog.

On the side of the guide L is an ear, P, which forms a bearing for the lever Q, one end of which passes through the side of the guide L and engages with the dog M, the opposite end of said lever being accessible at the side of the chair.

The operation is as follows: The lever Q is moved so as to withdraw the dog M from engagement with the wheel G, and the seat may now be tilted up or down as required. When the screw-shaft F is raised with the front end of the seat, it rotates in the nut D as it is drawn through said nut. The same result is accomplished when said end of the seat is lowered, the shaft in either case controlling the motion of the seat, so that abruptness of the same is prevented and the occupant of the seat cannot be violently thrown backward or forward. When adjustment of the seat is obtained, the lever Q is let go, whereby the dog M engages with the adjacent tooth of the wheel G, thus preventing return of the latter and of the screw-shaft, whereby further ascent or descent of the seat, as the case may be, is prevented, it being evident that the dog M is adapted to engage with either of the teeth of the wheel G, so that the seat may be adjusted with nicety relatively to the number of teeth on said wheel G. Owing to the journals E J of the nut D and box H, respectively, said parts D H turn on their bearings as the seat is tilted, thus preventing binding of or strain on the screw-shaft F. The back C′ is pivoted to the frame of the seat C, and its angle may be changed as desired, said back and frame having connected to them the box H′ and nut D′, with the journals J′ E′, the ears K′, screw-shaft F′, wheel G′, guide L′, dog M′, spring N′, ear P′, and lever Q′, said parts being similar to those employed for adjusting the seat C; but, as is evident, the screw-shaft occupies somewhat of a horizontal position and the other parts are harmoniously arranged in relation thereto, so that the screw-shaft F′ may be rotated as the back is moved on its pivot, its wheel G′ being adapted to be locked and unlocked by the action of the dog M′ similar to the dog M of the wheel G.

I am aware that it is not new to construct a dental chair with a tilting seat having an adjustment therefor consisting of a screw-shaft connected with the part to which the seat-frame is pivoted and working in a swinging nut having its journal-bearings rigidly attached to the seat-frame, and therefore do not claim the same.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A chair having a frame pivoted to a sup-

port, a nut having journal-bearings in said support, ears secured to the frame, a box having journal-bearings in said ears, a screw-shaft working in said nut, a spur or toothed wheel secured on said shaft so as to rotate therewith and in said box, a tubular guide leading into said box, a dog in said guide, and a pivoted lever engaging said dog, said parts being combined substantially as and for the purpose set forth.

2. A chair having a standard with shelf thereon, a frame pivoted to said standard, the nut D, having journals E, with bearings in said shelf, the ears K, secured to the inner face of the said frame, the box H, having journals J, with bearings in said ears, the screw-shaft F, with spur-wheel G in said box, the tube L, the dog M, with spring N working in said tube L, and the lever Q, pivoted to the ear P of said tube L, said parts being combined substantially as described.

HENRY D. JUSTI.

Witnesses:
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