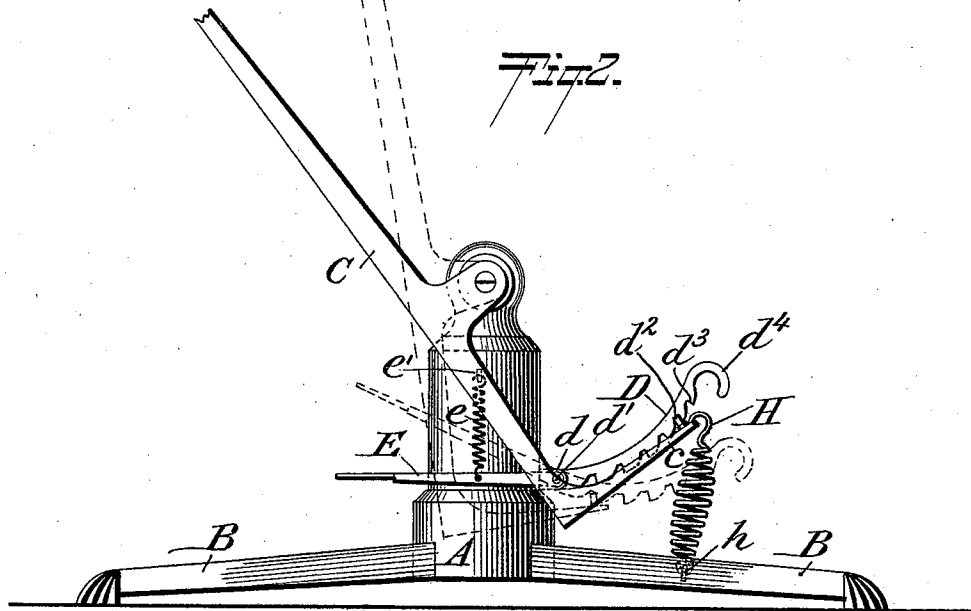
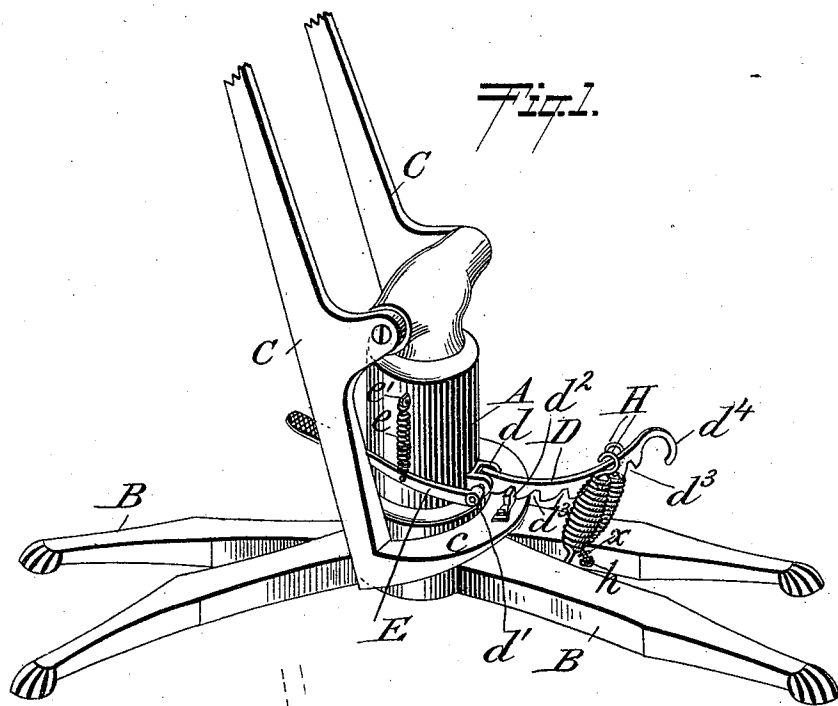


(No Model.)

J. HOOD & S. H. REYNOLDS.  
DENTAL CHAIR.

No. 518,887.

Patented Apr. 24, 1894.



Attest:

J. H. Schott

M. H. Chandler.

Inventors:

John Hood & Stephen H. Reynolds

by M. T. E. Chandler & Co  
attys.

# UNITED STATES PATENT OFFICE

JOHN HOOD AND STEPHEN H. REYNOLDS, OF BOSTON, MASSACHUSETTS.

## DENTAL CHAIR.

SPECIFICATION forming part of Letters Patent No. 518,887, dated April 24, 1894.

Application filed January 17, 1893. Renewed March 29, 1894. Serial No. 505,645. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN HOOD and STEPHEN H. REYNOLDS, citizens of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Dental Chairs, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which it ap-

pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this application. The invention relates to improvements in dental chairs of that class in which the frame

that supports the seat, back, arms, &c., is hinged or pivoted at its lower end to a base suitably supported and in such a manner as to allow the said frame to be tilted backward to any inclination that may be desired.

It has for its object the provision of a locking device whereby the frame can be easily secured in any position to which it might be adjusted, the said device being so constructed as to automatically operate to lock the chair, and to be operated by the foot to release the same. The invention consists essentially of a base suitably supported, of the frame supporting the seat, back, &c., hinged to the said base, of a rack-bar hinged to the base and adapted to engage with a catch secured to the lower end of the frame to hold the latter in any position to which it might be adjusted and of a spring pressed foot-lever connected with the rack-bar by means of which the latter can be disengaged from the catch.

The invention further consists in the novel construction, combination and arrangement of parts such as will be hereinafter more fully described, pointed out in the appended claim and illustrated in the accompanying drawings.

In the accompanying drawings, in which similar letters of reference designate corresponding parts, Figure 1 is a perspective view of the lower portion of a dental chair embodying the invention, only so much of the chair being shown as is necessary for the proper illustration, the frame of the chair which supports the seat, back, &c., being shown in an

upright position. Fig. 2 is a side elevation of the same, showing the frame in a tilted position.

Referring to the drawings by letter, A designates the base supported by the radial legs B, B, and has pivoted to its upper end the sides C, C, which form the frame which supports the seat, back, &c. The lower ends of these side frames are connected by the cross-piece *c* which is so curved as to allow the said frames to be moved to a nearly upright position. To the front of the base the curved rack-bar D is attached, being pivoted at one end between the lugs *d*, *d*, by the bolt *d'* which passes through the said lugs and is firmly secured to the rack-bar. One of the ends of this bolt projects beyond the lug on its respective side and has firmly secured to it the foot-lever E which projects rearward to a point easily accessible to the foot of the operator. The coiled spring *e* is attached at one end to the lug *e'* projecting from the base and at the other end to the foot-lever and tends to hold the latter in an elevated position and consequently, in view of the rigid connection, the rack-bar in a depressed position. To the top of the cross-bar *c*, near its front the catch *d*<sup>2</sup> is attached with which the teeth *d*<sup>3</sup>, *d*<sup>3</sup>, of the rack-bar are adapted to engage. The free end of the rack-bar is curved to form a catch *d*<sup>4</sup> so that if the teeth should not engage with the catch, *d*<sup>2</sup>, or if the frame should be tilted to its full limit, the cross-bar *c* would be caught and the frame held from moving too far. The hook *d*<sup>4</sup> may also serve as a handle for raising the rack-bar.

To the front legs of the chair, the spring-hooks H, H, are attached, being secured to the lugs *h*, *h*, projecting from the inner faces of the said legs, being so secured as to be in an almost upright position, slightly inclined forward. They are held in their upright position by means of the staples *x*—*x*. These spring-hooks serve to ease the strain on the rack-bar for when the frame is tilted far back the cross-bar *c* will engage with the spring-hooks, the latter thereby easing to a considerable extent the strain which would otherwise be exerted upon the rack-bar.

Having thus described our invention, what

we claim, and desire to secure by Letters Patent, is—

In a dental chair, the combination of the base, the frame hinged thereto, the lugs projecting from the base, the rack adapted to engage with the said frame, the bolt passing through the lugs and the inner end of the rack placed between the said lugs to hinge the rack to the base, and the spring pressed foot lever  
10 connected with an end of the said bolt, the

said rack and foot lever being firmly attached to the said bolt, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN HOOD.

STEPHEN H. REYNOLDS.

Witnesses:

EUGENE H. MOORE,

A. B. HAYWARD.