

No. 811,479.

PATENTED JAN. 30, 1906.

N. L. BURKE.  
DENTAL COMPRESS.

APPLICATION FILED JUNE 14, 1905.

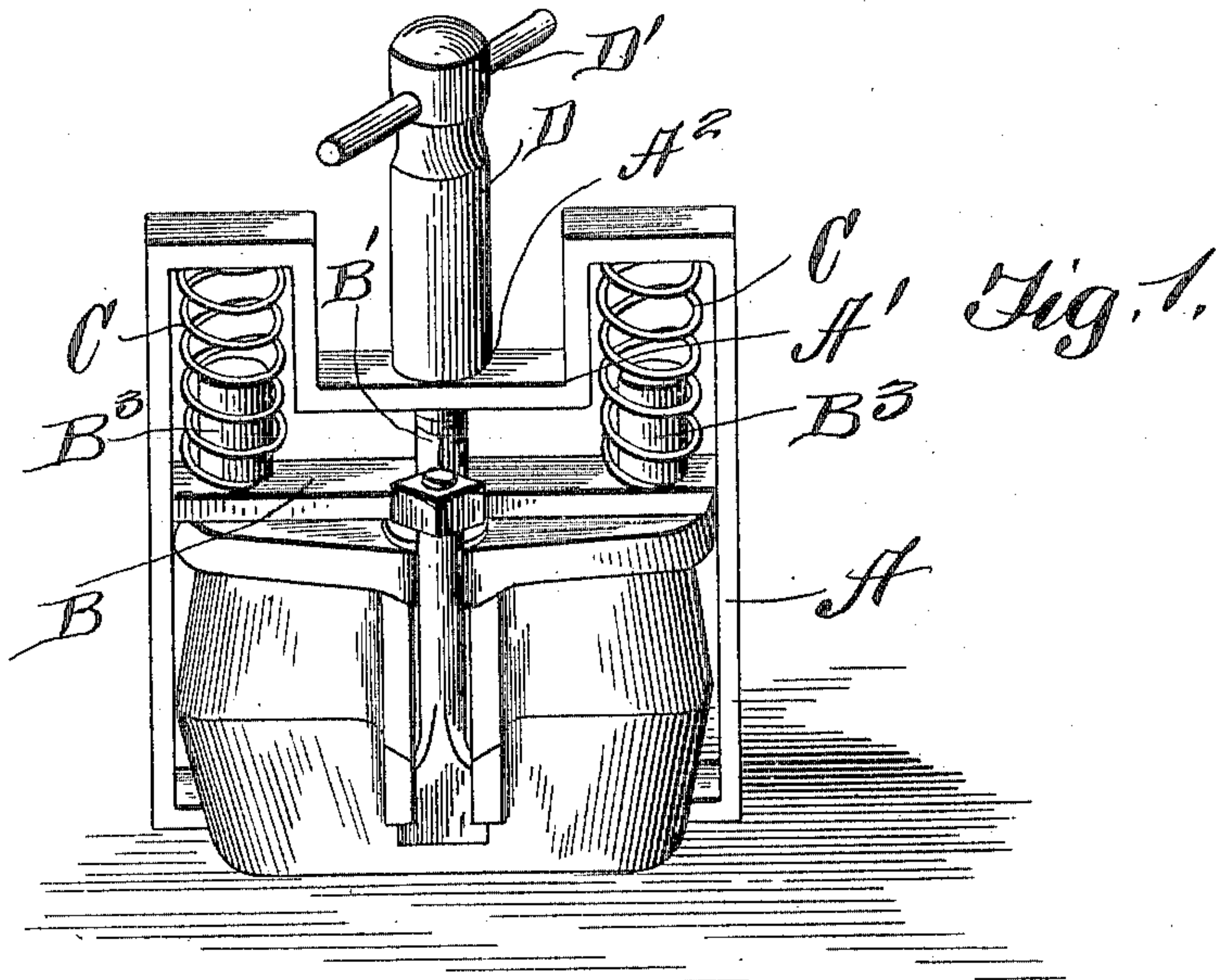


Fig. 2.

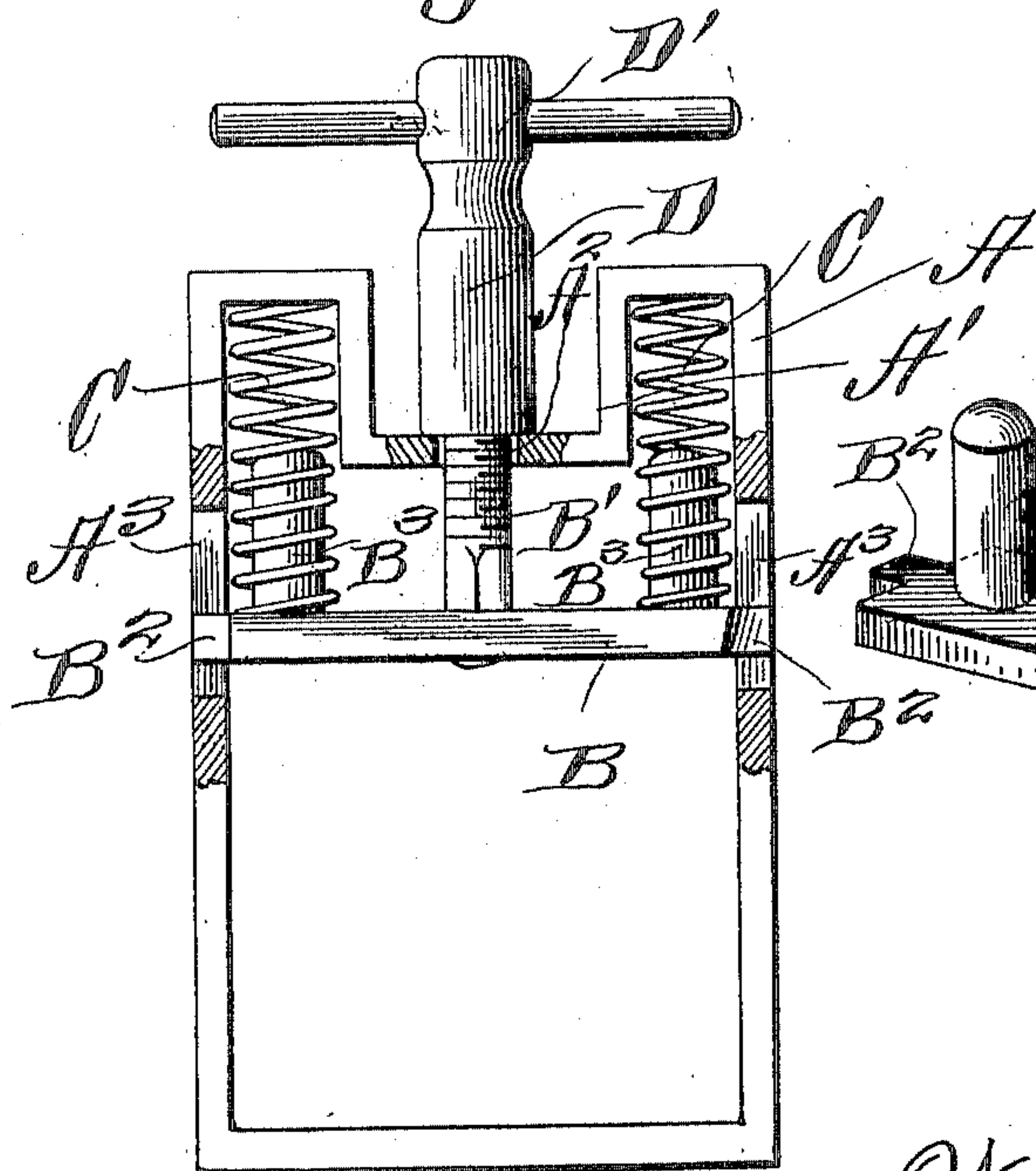
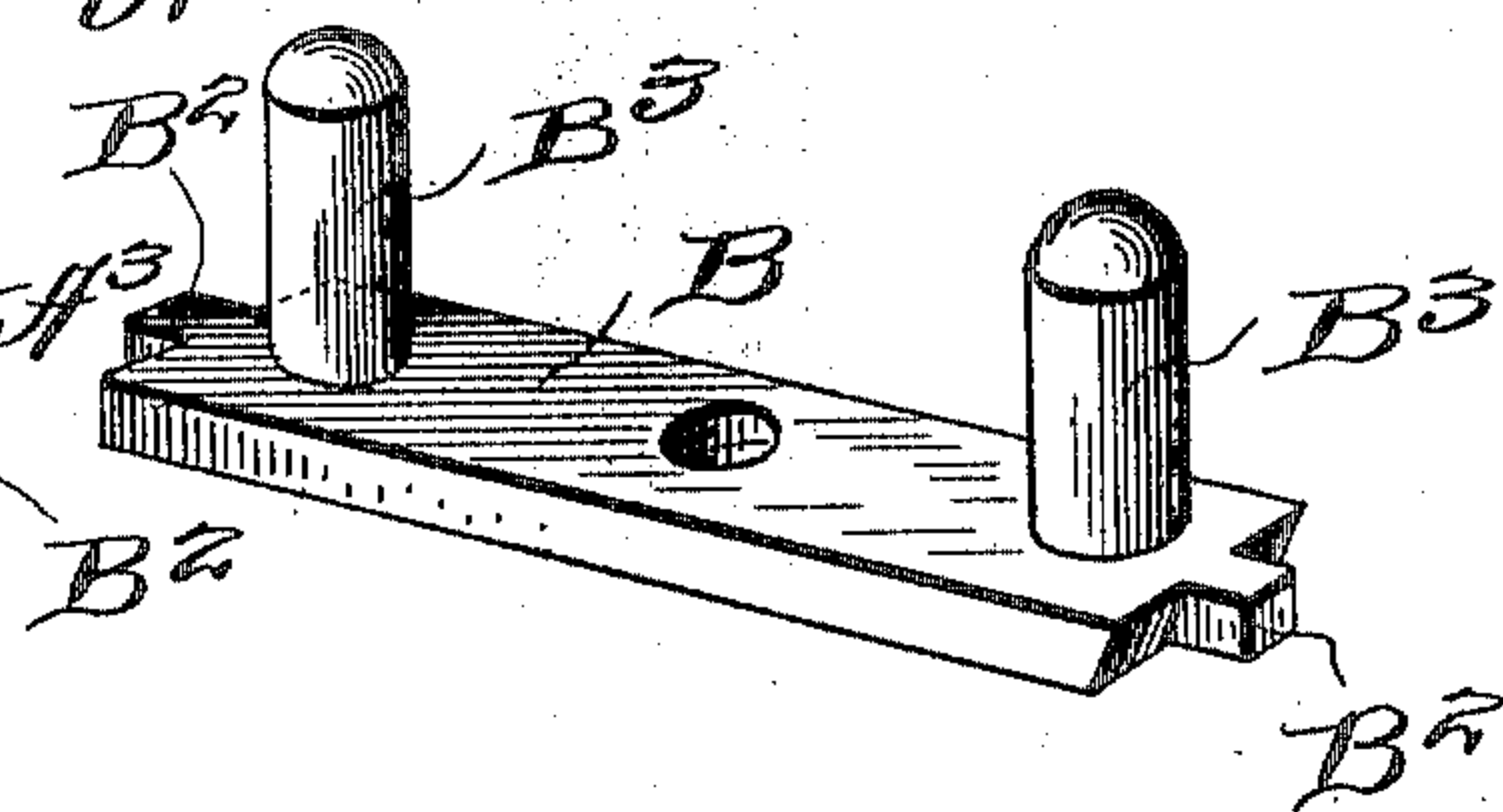


Fig. 3.



Witnesses

Robt A. Boswell,  
Clara S. Davenport.

Inventor

N. L. Burke,  
By Franklin W. Hough  
Attorney



# UNITED STATES PATENT OFFICE.

NATHAN LEWIS BURKE, OF BENTON HARBOR, MICHIGAN.

## DENTAL COMPRESS.

No. 811,479.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed June 14, 1905. Serial No. 265,182.

*To all whom it may concern:*

Be it known that I, NATHAN LEWIS BURKE, a citizen of the United States, residing at Benton Harbor, in the county of Berrien and State of Michigan, have invented certain new and useful Improvements in Dental Compresses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a dental compress, and particularly to a structure in which pressure is automatically applied to the flask while the same is in the vulcanizing-chamber.

The invention has for an object to provide a novel and improved construction of frame adapted to support the sliding cross-bar which bears upon the upper member of the flask and a suitable arrangement of tension-springs between this cross-bar and the top of the frame, together with means for placing said springs under tension.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is a perspective view showing the invention with the dental flask applied thereto. Fig. 2 is a side elevation with parts in section, and Fig. 3 is a detail perspective of the cross-bar removed from the frame.

Like letters of reference refer to like parts in the several figures of the drawings.

The letter A designates a frame, which may be of any desired construction or configuration, preferably of rectangular form and rigid in character. The upper portion of this frame is provided with a depending U-shaped portion A', having an aperture A<sup>2</sup> therethrough, within which the threaded bolt B', extending upward from the cross-bar B, is adapted to slide and is of less diameter than the aperture A<sup>2</sup>. At the opposite ends of the cross-bar are lugs or projections B<sup>3</sup>, disposed in slots A<sup>3</sup> in the side bars of the frame, so as to guide the cross-bar in its reciprocation and limit its movement in opposite directions. For the purpose of exerting a constant and uniform pressure upon this cross-bar springs C are provided at opposite ends of the bar and are disposed at their upper ends in the recesses

provided between the depending portion A' of the top of the frame and the side walls thereof, while the opposite ends of these springs are disposed around posts B<sup>3</sup>, extending from the upper face of the cross-bar upward to the depending portion A' of the top when the bar is at its extreme downward limit of travel. This prevents any accidental displacement of the springs by lateral movement. For the purpose of raising the cross-bar and placing the springs under tension a threaded nut D is provided upon the handle D' and preferably of an elongated character to receive the upper end of the bolt as the bar is drawn upward in the frame.

In the operation of the invention the bar is drawn to its upward limit of movement and the dental flask containing the usual plaster dies and packed with unvulcanized rubber is disposed therein. The threaded hand-nut is then removed and the springs force this cross-bar down into firm contact with the flask or any intervening support. As the rubber within the flask softens under the heat of the vulcanizer the constant pressure of the springs closes the flask to its proper relation and holds it by steady continuous pressure during the entire process of vulcanizing, thus rendering the operation automatic and independent of any subsequent adjustment after the flask is placed within the compress.

The construction of frame having a depending U-shaped portion provides a space within which the threaded bolt may lie beneath the top of the frame, and thus it avoids an extension which would prevent the application of the frame to the ordinary kind of vulcanizers, while its depending portion also provides a seat or recess to receive the upper portion of the closing-springs.

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

1. In a dental compress, a frame and a cross-bar slidably mounted therein, tension-springs extending between said cross-bar and one end of said frame, a threaded bolt extending through the frame from the cross-bar, a handle provided with a nut to draw said bar through the frame and place said springs under compression, lugs extending from the opposite ends of said cross-bar, and adapted to travel in slots or ways in the side walls of the frame.

2. In a dental compress, a frame and a cross-bar slidably mounted therein, tension-



springs extending between said cross-bar and one end of said frame, a threaded bolt extending through the frame from the cross-bar, a handle provided with a nut to draw  
5 said bar through the frame and place said springs under compression, lugs extending from the opposite ends of said cross-bar, adapted to travel in slots or ways in the side walls of the frame, a depending U-shaped  
10 portion at the top of the frame through which

said bolt passes, and posts disposed within the springs at the opposite sides of said depending portion.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 15

NATHAN LEWIS BURKE.

Witnesses:

CHAS. K. FARMER,

W. BURKERT.