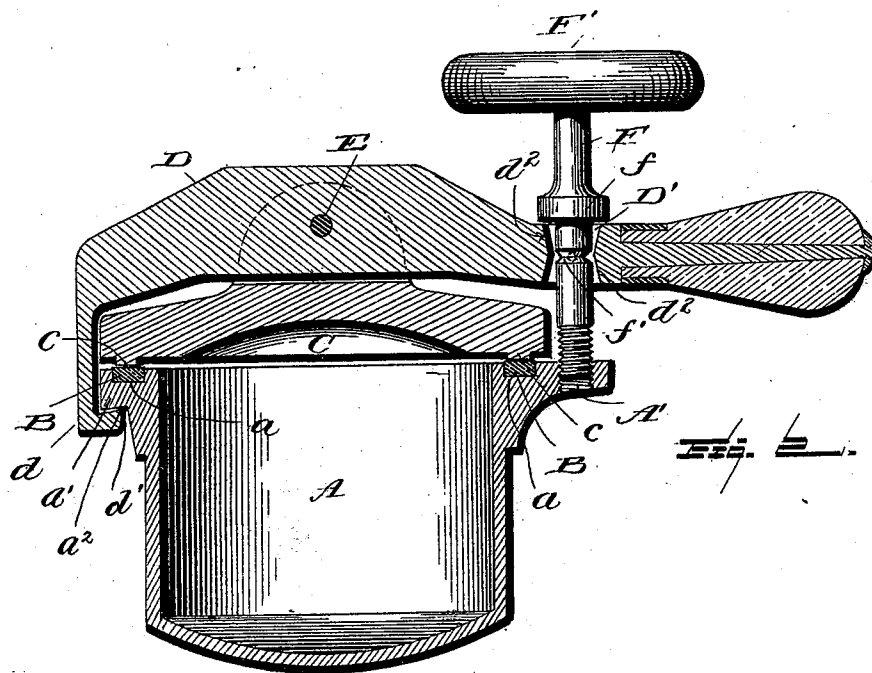
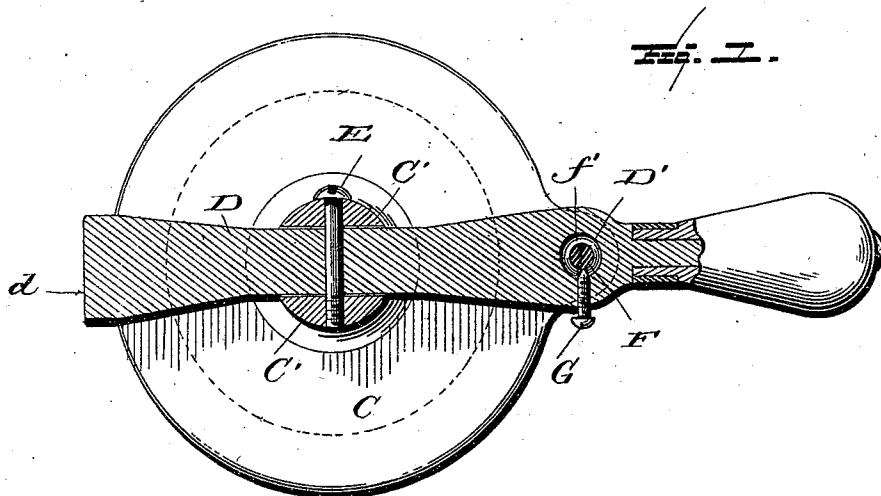


(No Model.)

C. A. DAVIS.  
DENTAL VULCANIZER.

No. 516,700.

Patented Mar. 20, 1894.



Witnesses:

Louis C. Mills.  
A. L. Hough

Inventor:

Charles A. Davis,  
by Franklin H. Hough Attorney.

# UNITED STATES PATENT OFFICE.

CHARLES ATWATER DAVIS, OF PASADENA, CALIFORNIA.

## DENTAL VULCANIZER.

SPECIFICATION forming part of Letters Patent No. 516,700, dated March 20, 1894.

Application filed December 13, 1893. Serial No. 493,559. (No model.)

### *To all whom it may concern:*

Be it known that I, CHARLES ATWATER DAVIS, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Dental Vulcanizers; and I do 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 certain new and useful improvements in "vulcanizers, more particularly to that class of vulcanizers used by dentists, and it has for its objects among others to provide a simple and cheap construction whereby universal movement of the cover and yoke is permitted in order to attain a perfectly uniform and tight fit or joint on the packing around the upper part of the body portion of the vulcanizer. I mount a yoke on the cover in such a manner as to allow the two to be removed and handled together and yet perfect freedom of the one upon the other is possible. The yoke has a lug that engages beneath a lug or flange on the boiler or body portion. Novel means are employed for holding the cover in its closed position. I aim further at improvements in the minor details of construction.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a horizontal section through the yoke, looking downward. Fig. 2 is a central vertical section through the vulcanizer.

Like letters of reference indicate like parts in both of the views.

Referring now to the details of the drawings by letter, A designates the body portion or boiler of any suitable form and construction except as hereinafter specified. It is formed upon its upper end or face with an an-

nular groove or channel *a* in which is seated a packing B of any well known or preferred character suited to the purpose. This boiler is provided at its upper edge with the flange *a'* which at one point is extended and provided with a screw-threaded opening A' and at other points with an undercut shoulder *a*<sup>2</sup> as seen best in Fig. 2.

C is the cover of any suitable construction, preferably provided with a depending annular rib *c* as seen in Fig. 2 to engage the packing, and centrally upon its upper face with flanges or ears C' between which is mounted for free and easy movement the yoke D which is mounted on the pin or bolt E which is held in the said flanges or ears and which thus serves as a support and pivot for the yoke. By this means the yoke and cover in use form one piece and they may be removed together and still the pressure is equally distributed when the cover is screwed down to place. This yoke has at one end a downwardly-extending lug *d* which is provided with a lateral inwardly-extending terminal portion *d'* as seen in Fig. 2 to engage under the shoulder *a*<sup>2</sup> of the body portion or boiler as shown best in Fig. 2. The opposite end of the yoke is provided with a vertical opening D' as seen in Fig. 2 which is reamed out in either direction from the center upon inclined lines or tapered as seen at *d*<sup>3</sup>, to allow of the necessary play of the bolt.

F is the bolt which is screw threaded at one end to engage the threaded opening in the flange of the boiler and at its other end provided with some means for the manipulation thereof; a wheel F' is preferable, which may be of any suitable form or construction. This bolt is provided with a plain portion above the screw threads which passes loosely through the opening in the yoke and above the same has a shoulder *f* as seen best in Fig. 2 which rests upon the upper face of the yoke. The pressure on the yoke is exerted by the shoulder bearing upon the said yoke.

In order to facilitate the removal of the cover the bolt is provided with a slot or annular groove *f'* as seen in Fig. 2 into which engages the inner, preferably tapered, end of the set screw G; when the bolt is unscrewed it will not retreat from the yoke, being there

held by the set screw and thus causing the entire cover to be lifted from the packing and boiler.

The ease with which the device may be used recommends it to the trade, and its simplicity is a safeguard against inoperativeness from derangement of parts. It is simple, cheap of manufacture, not liable to get out of order, and in practice will be found most efficient for the purposes for which it is intended.

What I claim as new is—

The combination with the boiler having a flange with shoulders, and a lug with screw threaded opening, of the cover, the yoke pivotally mounted on the cover and having a de-

pending portion with lateral extension, and a horizontal handle with double tapered hole, the bolt passed loosely through said hole and threaded into the lug of the boiler and provided with a wheel, and with an annular groove and a set screw in the handle engaging said groove, all substantially as shown and described.

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

CHARLES ATWATER DAVIS.

Witnesses:

M. T. BLY,

ANN E. DEAN.