

No. 776,833.

PATENTED DEC. 6, 1904.

A. GOEBEL.  
DENTAL VULCANIZER.  
APPLICATION FILED MAY 18, 1904.

NO MODEL.

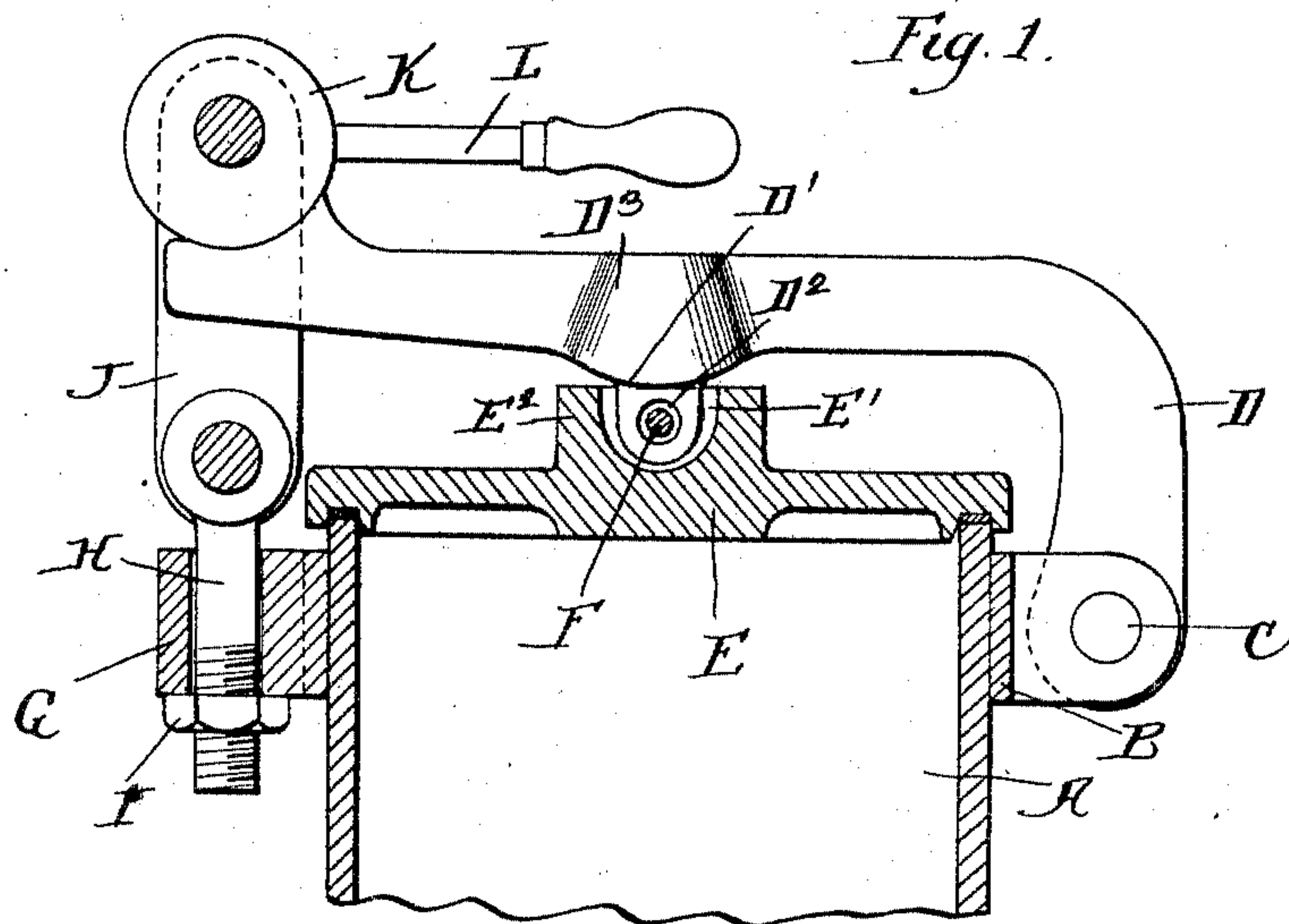
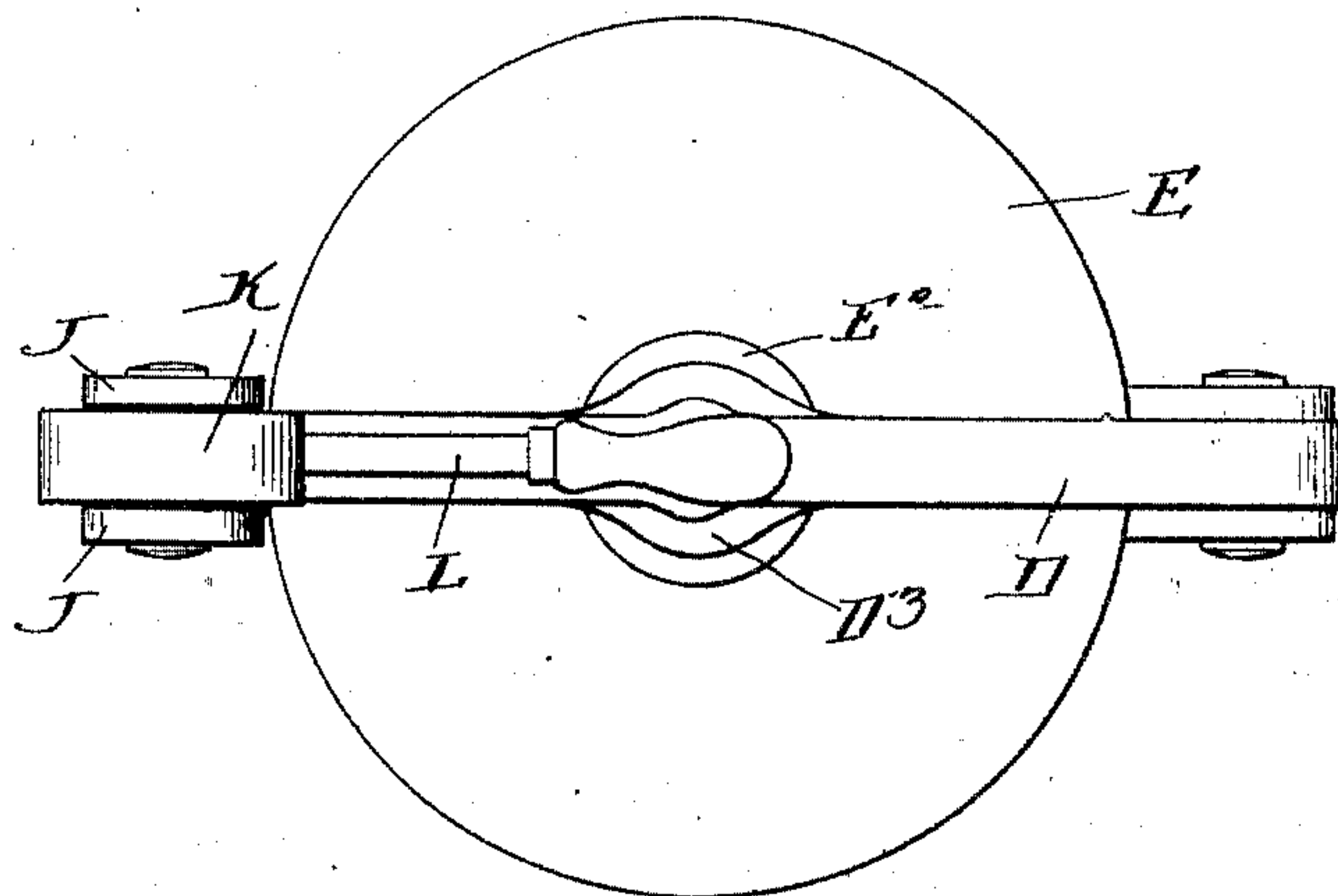


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ALBERT GOEBEL, OF CAMDEN, NEW JERSEY.

## DENTAL VULCANIZER.

SPECIFICATION forming part of Letters Patent No. 776,833, dated December 6, 1904.

Application filed May 18, 1904. Serial No. 208,551. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT GOEBEL, a citizen of the United States, residing at Camden, county of Camden, and State of New Jersey, have invented a certain new and useful Improvement in Dental Vulcanizers, of which the following is a specification.

My invention relates to a new and useful improvement in dental vulcanizers, and relates more particularly to a means for securing the lid over the boiler, and has for its object to provide means for securing the lid tightly in place without the aid of a wrench, and the construction is such that the operation of opening or closing the lid may be accomplished quickly; and a further object of my improvement is to provide means for adjusting the mechanism to take up any wear, so that the lid may be secured upon the top of the boiler as tightly as desired.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical section through the upper end of a vulcanizer having my improvement applied thereto; Fig. 2, a plan view of the vulcanizer.

A represents the body of the boiler.

B is a ring secured around the outside of the boiler near the upper end thereof, and pivoted to this ring at the point C is a lever D, which extends upward vertically and then horizontally across the top of the boiler when the parts are in their normal position.

E is a lid which is provided with a cavity E' upon its upper side, into which extends an ear D', extending downward from the horizontal portion of the lever D.

F is a pin extending transversely through the boss E' of the lid, in which the cavity E' is formed, and also through an opening D<sup>2</sup> formed through the ear D'. The opening D<sup>2</sup>

is considerably larger in diameter than the pin F, so as to allow for play. The horizontal portion of the lever D directly over the boss E' is curved downward, as represented at D<sup>3</sup>, and the lowest point of this portion contacts the boss E' upon each side of the cavity E', so that when the lever D is pressed downward the pressure upon the lid is not exerted through the pin F, but through the direct pressure of the lever D upon the boss. The lid E is provided with the usual annular groove adapted to fit upon the upper rim of the boiler, suitable packing being located within the groove. It will thus be seen that when the lever D is thrown back the lid will be carried with it, and when the lever is thrown downward into its normal position there will be sufficient play between the pin F and the wall of the hole D<sup>2</sup> to allow the lid to adjust itself to the upper rim of the boiler. G is a lug extending outward from the ring B diametrically opposite from the point where the lever D is pivoted to said ring.

H is a stud threaded at its lower end extending downward through an opening formed through the lug G.

I is a nut threaded upon the lower end of the stud H below the lug G.

J represents two links, the lower ends of which are pivoted to the upper end of the stud H upon each side thereof, so as to leave a space between the links sufficient to allow the outer end of the lever D to enter therebetween.

K is an eccentric pivoted between the upper ends of the two links.

L is a handle secured to the eccentric for rotating the same. It will thus be seen that by rotating the eccentric the pressure can be increased or diminished from the lever D, and when the pressure is removed from the outer end of the lever D the two links may be thrown outward by rocking them upon their lower pivot. Then the lever D is free to be raised with the cover E, and when it is desired to secure the cover in place it is simply necessary to bring the links back so that the eccentric lies over the outer end of the lever. Then by rotating the eccentric by means of the handle L any degree of pressure can be



applied to the lever, and the eccentric will stay in any position placed.

By moving the nut I upon the threaded portion of the stud H the amount of pressure  
5 can be adjusted to a nicety. It will thus be seen that I have provided a cross-bar locking arrangement for dental vulcanizers which consists of exceedingly few parts, may be  
10 easily and quickly operated, will insure a tight connection at all times, and is exceedingly durable and efficient.

Of course I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing  
15 from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

1. In combination with a boiler of a dental vulcanizer, a lid adapted to fit over the upper  
20 end of said boiler, a lever pivoted at one end to the body of the boiler and normally extending across above the same and adapted to bear against the upper face of the lid, means for connecting the lid to the lever so as to allow  
25 a certain amount of play between the two in all directions, a projection extending outward from the boiler diametrically opposite to the pivotal point of the lever, a stud extending downward through said projection, means for  
30 adjusting said stud vertically, links pivoted to the upper end of said stud, an eccentric pivoted to the upper end of the links and adapted to bear upon the outer end of the lever, and a handle for rotating the eccentric,  
35 as and for the purpose specified.

2. In combination with a boiler of a dental vulcanizer, a lever pivoted to the boiler and normally extending across the top thereof, a  
40 lid provided with an annular groove formed in its lower face adapted to fit the upper rim of the boiler, a boss extending upward from the lid, said boss provided with a cavity, an ear extending downward from the lever into  
45 said cavity, a pin extending transversely through the boss and through an opening in

the ear, the lever adapted to bear upon the boss upon each side of the cavity, a lug extending outward from the boiler diametrically opposite to the pivotal point of the lever, an eccentric adapted to bear downward against the  
50 outer end of the lever, bearings in which said eccentric is pivoted, said bearings pivoted to the lug, means for adjusting the eccentric vertically, and a handle secured to the eccentric for rotating the same, as and for the purpose specified. 55

3. In combination with a boiler of a dental vulcanizer, a lever pivoted to the boiler, said lever extending across the top of the boiler horizontally when the boiler is closed, a lid  
60 provided with a suitable groove, and packing adapted to fit over the upper rim of the boiler, a boss extending upward from the lid, said boss provided with a cavity formed downward into the same, an ear formed with the lever extending downward into the cavity, a pin extending transversely through the boss and  
65 through the ear, the opening through the ear being considerably larger in diameter than the pin, the lever adapted to bear upon the upper surface of the boss, a lug extending outward from the boiler diametrically opposite the pivotal point of the lever, a stud extending downward through the opening provided in the boss, a nut threaded upon the  
70 lower end of the stud below the lug, two links pivoted at their lower ends to the upper end of the stud upon each side thereof, the outer end of the lever adapted to enter between the links, an eccentric pivoted in between the upper  
75 end of the links and adapted to bear downward against the outer end of the lever, and a handle for rotating the eccentric, as specified.

In testimony whereof I have hereunto affixed my signature in the presence of two  
85 subscribing witnesses.

ALBERT GOEBEL.

Witnesses:

MARY E. HAMER,  
L. W. MORRISON.