C. G. French.

Vulcanizing App's.

No. 93,429. Patented Aug. 10, 1869.

Fig. 7

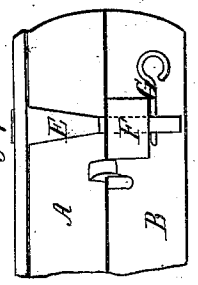


Fig. 8

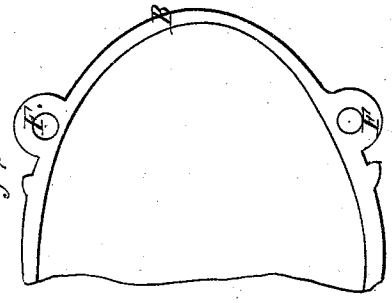


Fig. 4

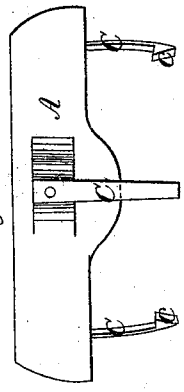


Fig. 5

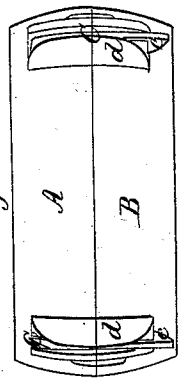


Fig. 6

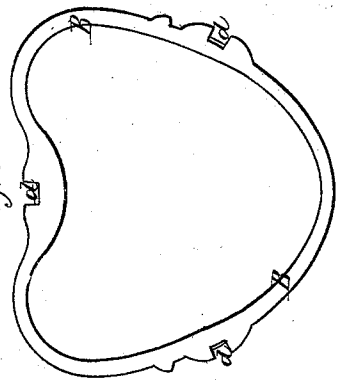


Fig. 1

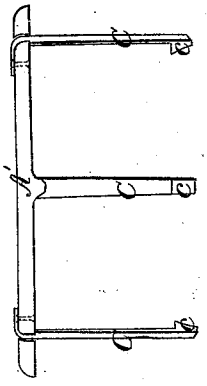


Fig. 2

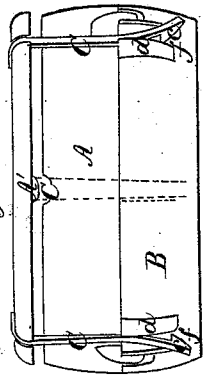
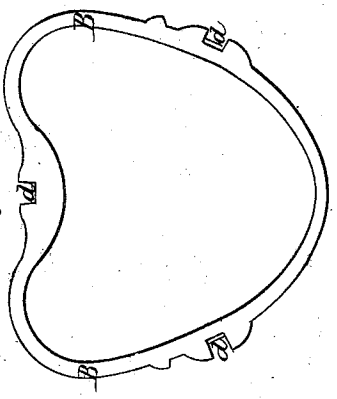


Fig. 3



Witnesses
Wm. S. Sharpe
Geo. W. Dyer.

Inventor
Cyrus G. French
by Pindle and Dyer
Attys.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

CYRUS G. FRENCH, OF SPRINGFIELD, ILLINOIS.

Letters Patent No. 93,429, *dated August* 10, 1869.

IMPROVEMENT IN FLASKS FOR VULCANIZING RUBBER PLATES FOR SETTING TEETH.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CYRUS G. FRENCH, of Springfield, in the county of Sangamon, and in the State of Illinois, have invented an Improvement in Flasks for Vulcanizing Rubber Plates for Setting Teeth; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in a new method for constructing the flasks for vulcanizing rubber plates for the setting of teeth, and also a new method of connecting the two rings together which form the flask.

The flask now used by dentists for this purpose is made of hard metal, shaped like the human, and divided, like that, into two jaws. The lower jaw of this ordinary flask is one piece of metal, bottom and sides, the bottom not being detachable. The upper jaw has a detachable lid, which projects, at convenient points, over the upper jaw. Through these projections, screws extend into corresponding projecting eyes in the metallic jaw below.

After the plates, which are to be vulcanized, are pressed into this flask, so constructed, the upper lid is put on, and that, with the upper metallic jaw, is screwed down upon the lower metallic jaw, by means of the screws and projecting eyes above mentioned, the jaws fitting upon each other like the jaws in the human mouth when closed.

These screws do not always make the pressure on all parts of these metallic jaws even and uniform. There may be the imperceptible difference of one thread of the screw, between one side or the other, which difference affects the uniformity of the plate, and of course the evenness of the teeth set upon it.

To avoid this difficulty, and secure a uniform pressure upon the rubber plate to be vulcanized, I construct a flask, as shown in Figure 1, with only two pieces of metal, one for the upper and one for the lower jaw, and connect these two together by means of metallic spring-strips, with catches on the end, the spring-strips being of uniform length, or I can connect them by means of bolts and keys.

I also use a detached upper lid whenever desired, and attach to it the spring-strips, as is shown in figs. 1 and 2.

A represents the upper jaw or ring, and B the lower jaw or ring of a flask for vulcanizing rubber plates upon which to set teeth.

C represents the metal spring-strips, of uniform length, fastened securely and firmly by the upper part in any desired way, to the outside of the upper metallic jaw A, and extending downward below said jaw to just such a distance as to allow the catch *c*, on the lower inner end of said jaw, to hook under the lower edge *f* of a projecting slot, *d*, extending down the side of the lower jaw B, nearly to the bottom thereof.

Figures 1 and 2 represent the vulcanizing-flask with the spring-strip C attached to the detachable lid of the upper jaw or ring A. These figures also show the construction of the springs C and the catch *c* at the lower end.

Figures 4 and 5 show the upper jaw or ring A with an undetachable top, and the attachment of the spring-strips C to the sides of the same, and also the rings or jaws A and B, when firmly closed upon each other and fastened by the spring-strips C.

Figures 3 and 6 show the grooves or slots for the spring-strips C to work or slide in.

Figure 7 shows a section of the vulcanizing-flask, with a detachable projecting upper lid, through which projections the bolts E are thrust, and made to keep in place the upper ring A by means of the eye F and key G.

Figure 8 shows the construction of the projecting detachable upper lid with the aperture for the reception of the bolt E.

Now, what I claim as my invention, and desire to secure by Letters Patent, is—

The within-described flask, consisting of the rings or sections A and B, secured together by means of the spring-strips C, substantially as described, and for the purpose specified.

Also, the spring-strips C, provided with the catches or detents *c*, when applied to the rings or sections A and B, or to said sections and the detachable cover A', substantially as shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 9th day of June, 1869.

CYRUS G. FRENCH.

Witnesses:

GEO. O. MARCY,

THOS. NALE.