

No. 75,000.

PATENTED MAR. 3, 1868.

G. E. DONHAM.
DENTIST'S FLASK.

Fig. 1.

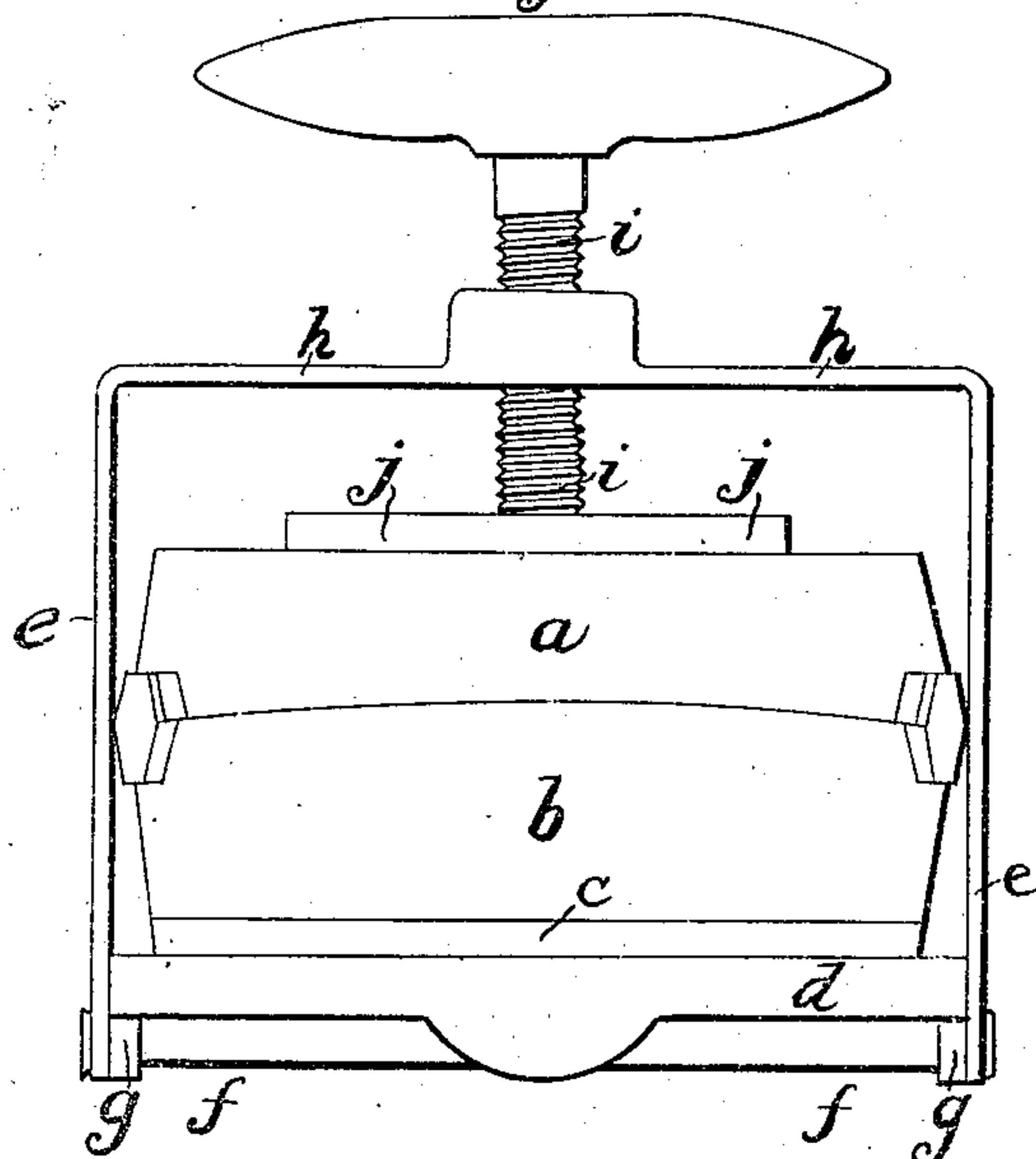
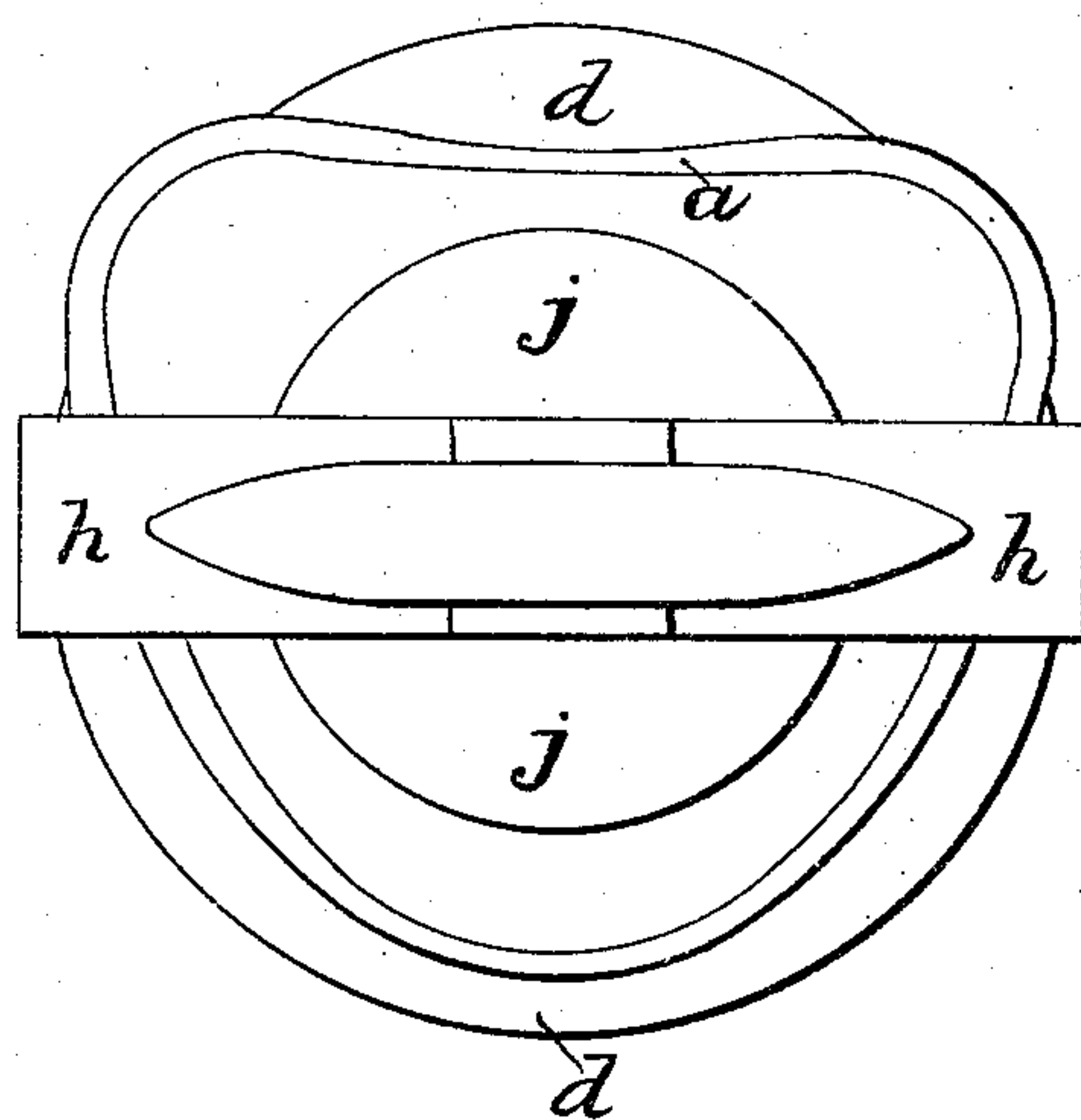


Fig. 2.



Witnesses
J. B. Kidder
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United States Patent Office.

GEORGE E. DONHAM, OF EAST ABINGTON, MASSACHUSETTS.

Letters Patent No. 75,000, dated March 3, 1868.

IMPROVEMENT IN DENTISTS' FLASKS.

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, GEORGE E. DONHAM, of East Abington, in the county of Plymouth, and State of Massachusetts, have invented a new and useful Improvement in Dentists' Flasks; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention, sufficient to enable those skilled in the art to practise it.

Since the employment of vulcanite or hard rubber as a base by which artificial teeth are united, and are fitted to the mouth, dentists have made use of what they call flasks, in which they take plaster moulds from models made from impressions taken from the mouths of patients, and in which moulds within the flasks they vulcanize a compound of rubber, in connection with artificial teeth, employing for this purpose a kind of retort, heated by steam under pressure, which retort or vessel is called by the dentists a vulcanizer. These flasks have heretofore been secured together, for the purpose of being submitted to the heat within the vulcanizer, by small screw-bolts passing through ears, forming portions of each section of each flask, three bolts being the number usually employed with each flask. These bolts give a great amount of trouble in the manipulations connected with the manufacture, by vulcanizing, of sets or partial sets of artificial teeth, and in repairing the same, as every practical dentist well knows. Besides this, there is no yield whatever in the bolts when employed as means for securing the flask.

Now, it is a desideratum to have some elasticity in the means for uniting the parts of a dentist's flask, for when the mould is packed with soft-rubber compound, and the parts are then secured together, it is often the case that under the heat in the vulcanizer the rubber will move or flow, in which case it is desirable that the parts of the mould should be capable of slight movement, so that the rubber shall be always vulcanized under pressure.

With the bolts ordinarily employed for holding dentists' flasks together in the vulcanizer there is no provision for a yielding movement of the parts of the flask, which it is the object of my invention to secure, my invention consisting in the combination, with a dentist's flask, and the means for securing it together, of means for allowing its parts to yield, so that pressure upon the contents of the mould in the flask can always be secured; also, in a spring-clamp, when so arranged as to surround the flask, and when arranged to be used with provision for holding the parts of the flask together. The drawings show an illustration of the best embodiment of my invention known to me—

Figure 1 being an elevation of a flask provided with a spring-clamp, in which the means for holding the parts of the flask together are a screw and nut, the latter being integral with the clamp.

Figure 2 is a plan of the organization seen in fig. 1.

a b c are parts of the flask. *d* is a base-plate, which may be considered as the lower part of the clamp, the side-pieces *e c* being pivoted to the plate by the rod *f*, which passes through ears *g*, on the plate, these side-pieces being integral with the cross-piece *h*, which is a spring, and is, of course, preferably of steel. In a nut formed in a boss, forged integral with the spring cross-piece *h*, a screw, *i*, is fitted, which may be made with a handle, as shown, or may have a head suitable for application of a wrench. To prevent the end of the screw from concaving the flat surface of the flask on which it acts, I pivot the washer *j* to the screw, and, by preference, make the lower face of the washer concave. Instead of the screw a wedge might be inserted between the flask and the bar *h* of the clamp, though the screw is preferable.

An inferior way of embodying my invention would be to make the washer *j* as a spring, making the clamp rigid, and the yielding connection of the parts of the flask might be had so as to embody my invention, by dispensing with the clamp, and using springs in combination with the separate bolts, by which dentists' flasks are usually fastened together.

I claim, in combination with the parts of a dentist's flask, and means for securing said parts together, means for allowing the parts to yield while retaining pressure on the contents of the flask, substantially as described.

Also, the clamp when made so as to yield, and arranged to be used with means for securing together the parts of a dentist's flask.

GEORGE E. DONHAM.

Witnesses:

A. W. STUART,
B. E. DONHAM.