

(No Model.)

J. S. CAMPBELL.

GUIDE FOR DENTAL FLASKS.

No. 248,022.

Fig. 1. Patented Oct. 11, 1881.

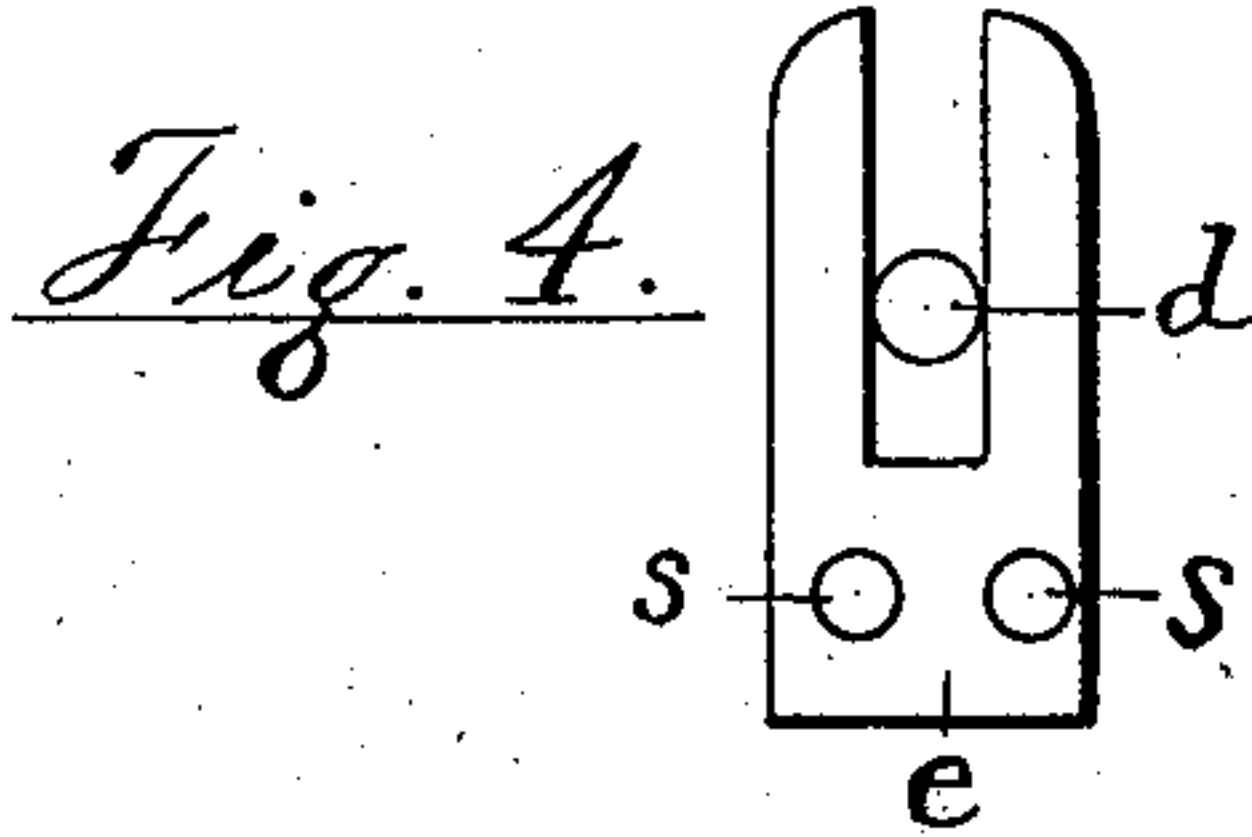
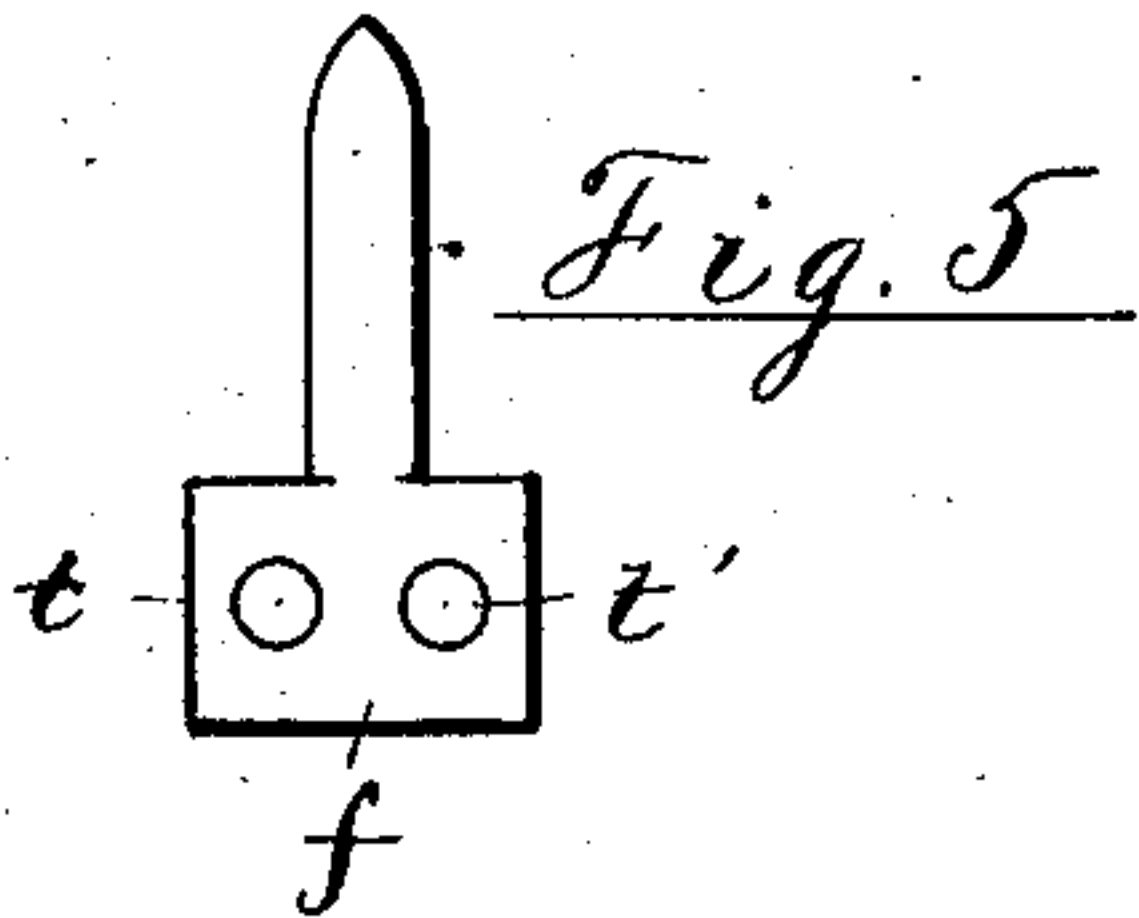
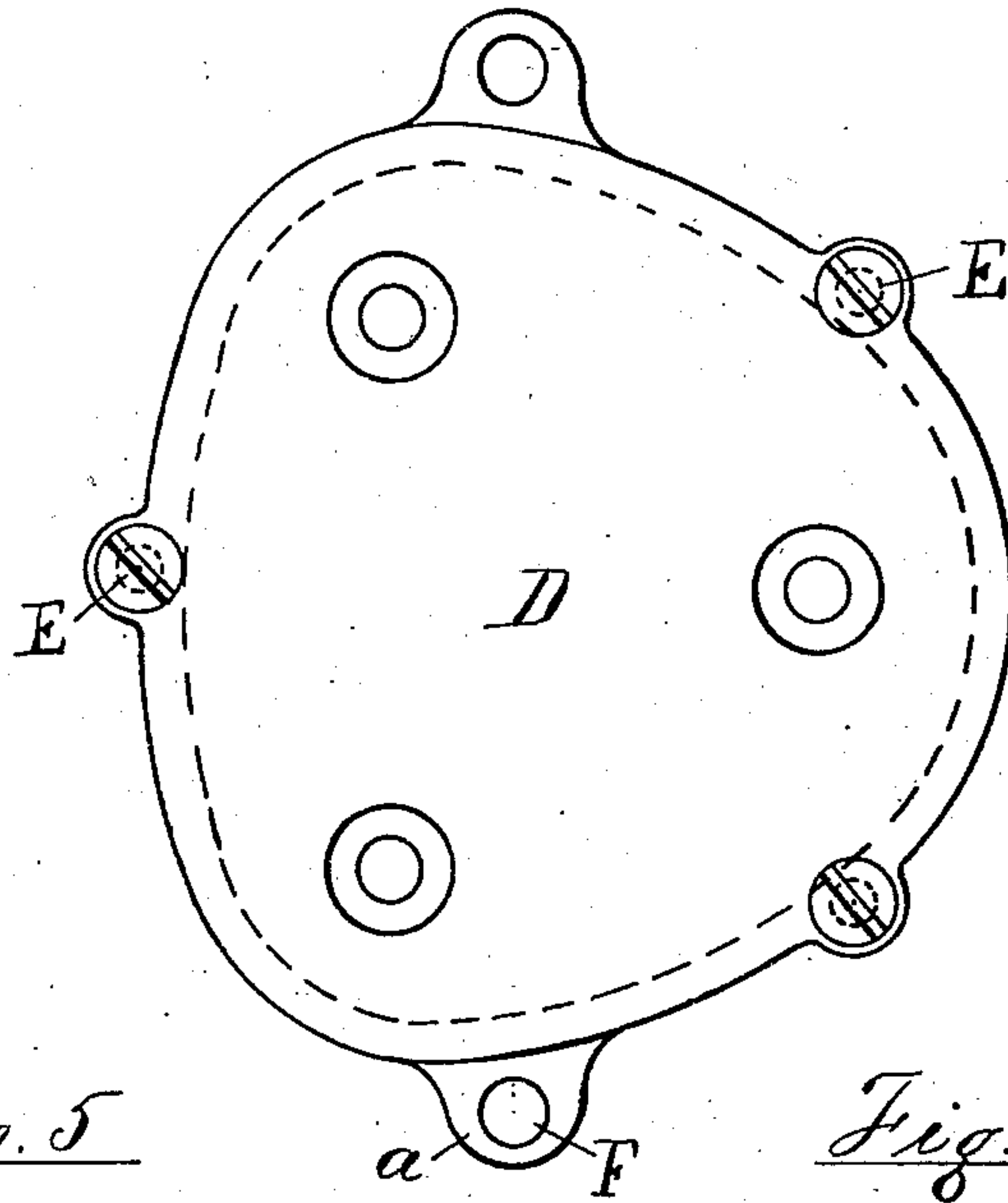


Fig. 2.

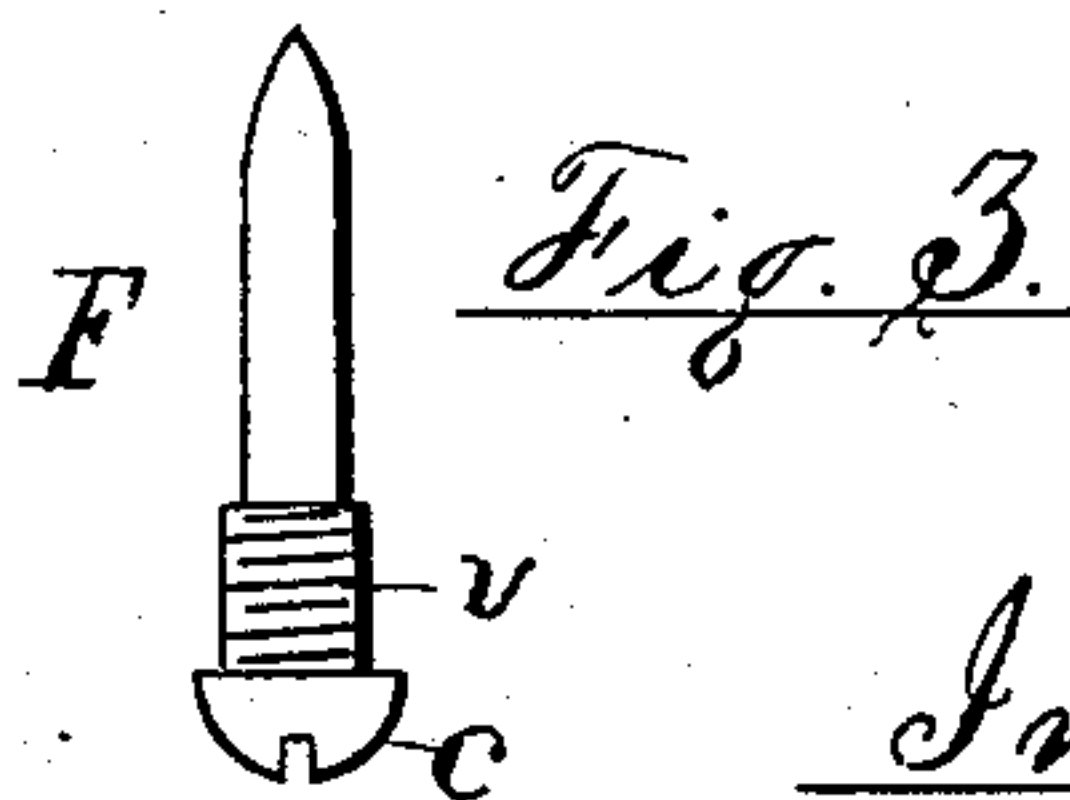
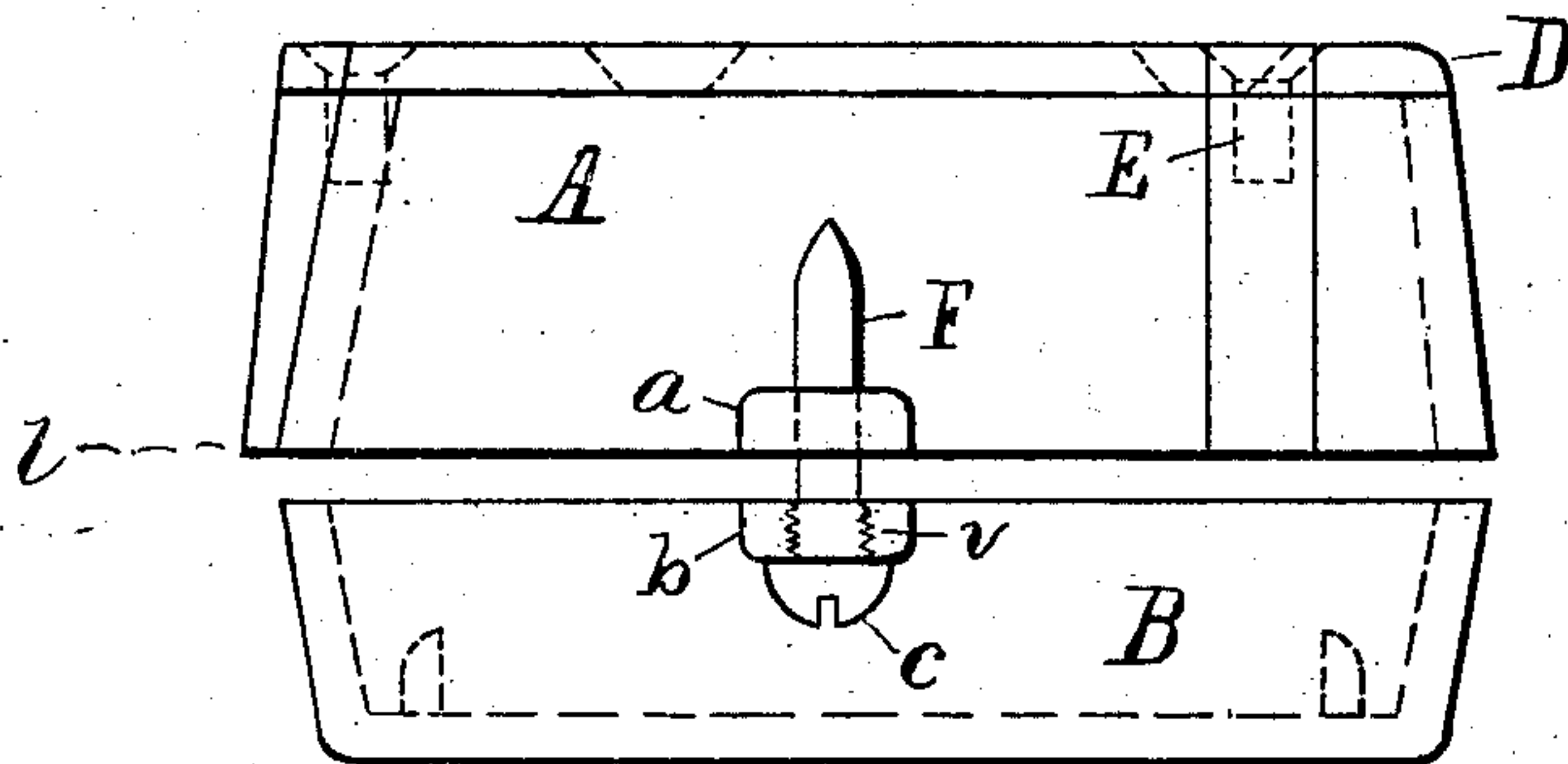


Fig. 3.

Attest:

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Thos. S. Crane, Atty,

UNITED STATES PATENT OFFICE.

JOHN S. CAMPBELL, OF NEW YORK, N. Y.

GUIDE FOR DENTAL FLASKS.

SPECIFICATION forming part of Letters Patent No. 248,022, dated October 11, 1881.

Application filed June 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. CAMPBELL, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Guides for Dental Flasks, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

My invention relates to an improvement in the guides employed upon dental flasks; and it consists in making the same either loose, so as to swing upon a pivot, or detachable from the flask, the purpose of the invention being to remove the flask from the control of the guides after the wax model or plate has been finished, that in either case the parts of the flask may separate automatically in the most favorable direction for the preservation of its contents.

In the drawings annexed, Figure 1 is a plan of the upper half of the flask, or "cope," as it is usually termed. Fig. 2 is a side elevation of the flask, showing the guide as a removable screw-pin. Fig. 3 is an isolated view of the guide-pin shown in Fig. 2, and Figs. 4 and 5 are similar views of guides of other alternative modes of construction.

A is the cope of the flask; B, the bed, in which the model is indicated by dotted lines at C.

D is the cover of the cope, removably secured thereto by three screws, E.

F is the guide-pin, one of which is usually employed in conjunction with ears or lugs *a* *b*, secured respectively to the parts A and B at opposite sides of the flask. Such pins are usually rigidly secured into one of the lugs, and guides the opposite half of the flask into a perpendicular movement parallel with the guide. Such movement is quite suitable in many instances; but in cases where the plaster model is undercut, as shown by the dotted lines at C, the mold is often injured and broken when parted perpendicularly to the line *l*, dividing the sections A and B.

By my invention the guide is made loose or removable at pleasure, so that its control over the flask is removed when the wax model or

plate is completed, and the flask may be opened at any inclination or in any direction that is desired. This is most readily accomplished by the method shown in Figs. 1 to 3, wherein the guide is shown as a round pin provided with a screw-thread, *v*, at one end, to secure it into the lug *b*, and with a notched head, *c*, for turning it around as required. By this construction the pin can be removed from its place when the wax model is to be inspected and the mold opened without danger to the interlocking parts of the plaster casts.

It is evident that the guide may be constructed in other manners, as at *d e* in Fig. 4, where *d* is a simple pin projected from the side of the cope, and *e* is a forked plate secured to the bed B by two screws inserted in holes *s s*. Such a device will guide the cope perpendicularly when desired, and may be removed by taking out the screws from the holes *s s* by a screw-driver.

In Fig. 5 is shown a round pin provided with a foot, *f*, having two holes, *t t*, for the insertion of screws to secure it to the bed. By employing such a pin in conjunction with the lug *a* and making the guide-hole in the latter of conical shape, the guide may be loosened to operate in the required manner by merely removing one of the screws from the foot of each guide. The pin would then be at liberty to take any required inclination automatically as the parts of the flask were separated, provided no side movement of the cope was required.

The cover of the cope is shown in the drawings as secured thereto by three screws, E, so that it may be removed at pleasure and fastened thereto when desired; but it may be made in any other way that is preferred.

From the above description it will be seen that the essential feature of my invention consists in providing the flask with a guide of such character that the flask can be opened in a different direction or at a different angle from the parting-line *l* than that at which it was closed.

I do not therefore limit myself to the particular modes of construction herein described, but claim the invention as follows:

1. A dental flask having a guide constructed to direct the movement of the cope when closing, and adapted to be removed or loosened for opening the flask when required, substantially as and for the purpose set forth.

5 2. In combination with the flask A B, provided with the lugs *a b*, the removable guide-pin F, provided with screw-thread *v* at one end, and operating with the lugs to guide the

cope, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOHN S. CAMPBELL.

Witnesses:

PHILIP UMBSCHIEDEN,
THOS. S. CRANE.