July 8, 1924. 1,500,155

W. M. ROMINE ET AL

DENTAL FLASK

Filed April 13, 1923 3 Sheets-Sheet 1

FIG. 1.

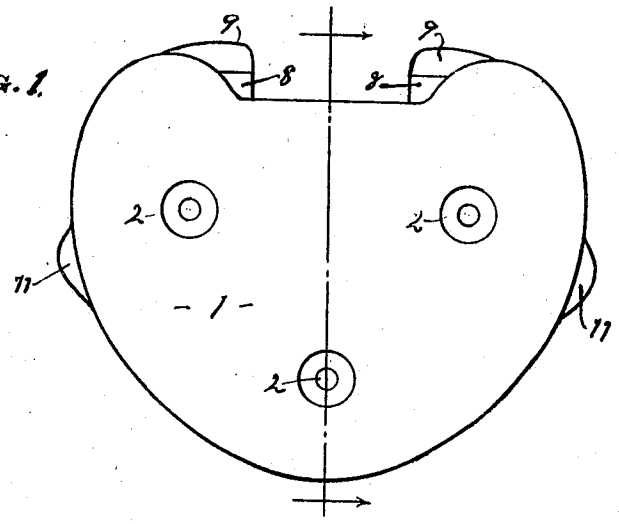


FIG. 2.

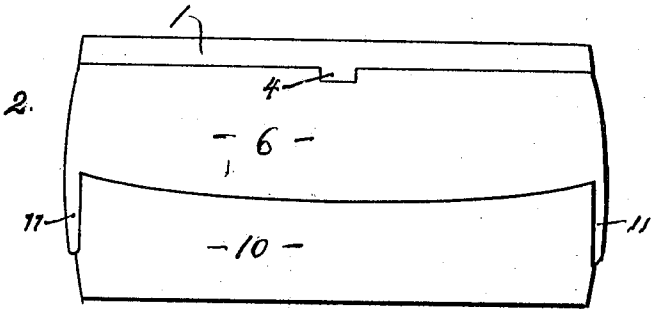
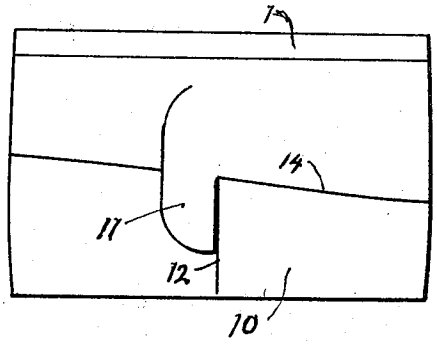


FIG. 3.



INVENTOR.
William M. Romine
Walter J. Clark
BY
U.S. Charles ATTORNEYS.

July 8, 1924.

W. M. ROMINE ET AL

1,500,155

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Filed April 13, 1923 3 Sheets-Sheet 2

FIG. 4

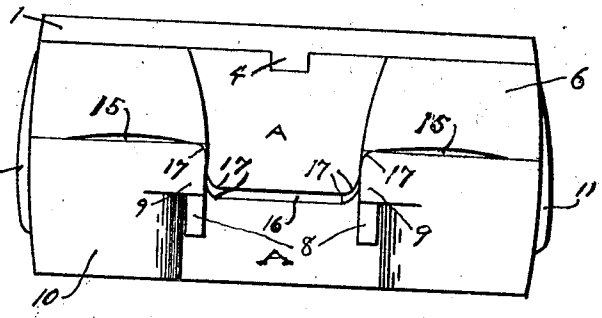


FIG. 5

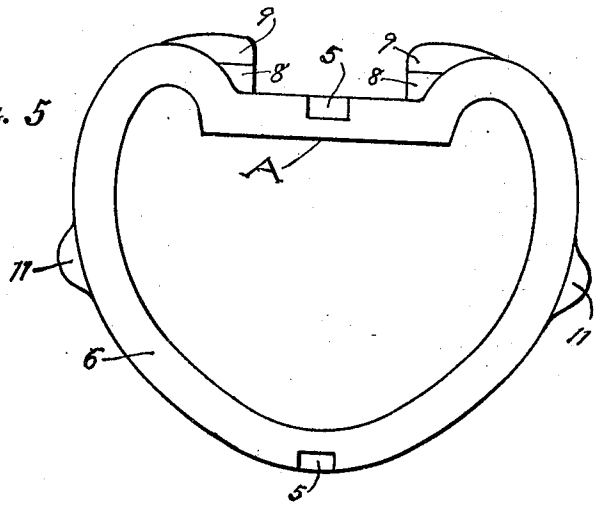
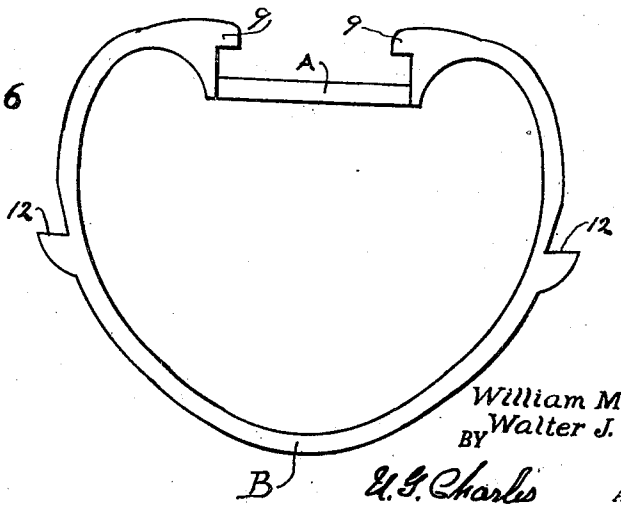


FIG. 6



INVENTOR.
William M. Romine
BY Walter J. Clark

E. G. Charles ATTORNEYS.

July 8, 1924.

1,500,155

W. M. ROMINE ET AL

DENTAL FLASK

Filed April 13, 1923 3 Sheets-Sheet 3

FIG. 7

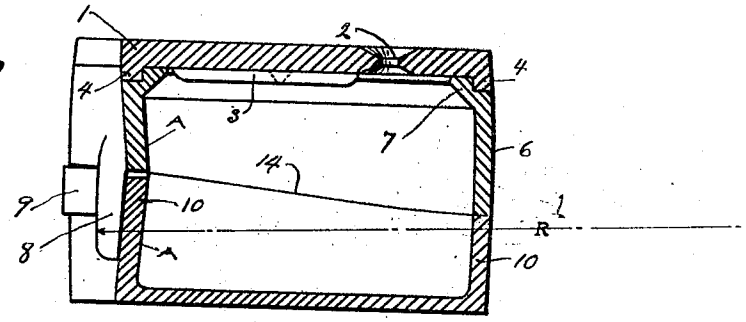


FIG. 8

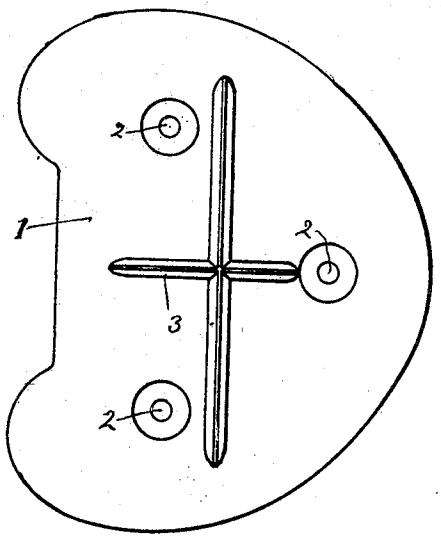
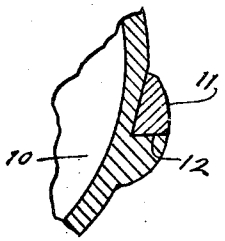


FIG. 9



INVENTOR.
William M. Romine
BY Walter J. Clark

W. G. Charles ATTORNEYS.

Patented July 8, 1924. 1,500,155

UNITED STATES PATENT OFFICE.

WILLIAM M. ROMINE AND WALTER J. CLARK, OF WICHITA, KANSAS.

DENTAL FLASK.

Application filed April 13, 1923. Serial No. 631,805.

To all whom it may concern:

Be it known that we, WILLIAM M. ROMINE and WALTER J. CLARK, citizens of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Dental Flasks, of which the following is a specification, reference being had to the accompanying drawings, and which form a part of this application.

Our invention relates to a dental flask, composed of three parts.

The objects of our invention are as follows:

First, to provide a flask that will separate on the proper line between the set of teeth.

Second, to provide a flask that will contact on the front and rock in position rearward as it closes, for the purpose hereinafter described.

Third, to provide a flask that when assembled, the members can not shift, getting the teeth out of line.

Fourth, to provide proper reinforcing means to obviate the usual displacement as heretofore experienced.

Fifth, to provide a flask having guide members that will not collect sediment, which would prevent said flask from closing properly.

On the drawings, like characters refer to like parts.

Fig. 1 is a top view of our flask, all parts being assembled.

Fig. 2 is a front view.

Fig. 3 is a side view.

Fig. 4 is a rear view.

Fig. 5 is a top view of the flask having the lid removed.

Fig. 6 is a top view of the bottom member of the flask.

Fig. 7 is a cross section through the flask, looking in the direction of arrows.

Fig. 8 is a view of the under side of the lid showing the reinforcing ribs.

Fig. 9 is a sectional view of a fragmentary part of the flask showing the guide arm engaging in position with the lug on the flask.

1 is the lid, having perforations 2, functioning as vents. 3 are the reinforcing ribs, transversely positioned on the under side of said lid, and functioning as guide means when protruding into the plaster Paris hereinafter described. 4 are the lugs extending downward, engaging in notches 5, the top edge of top member 6, said top member, having a reinforcing flange 7, and guide members 8, said guide members extending downward on a radius as shown by dotted line R, functioning as a wedge between lug 9 and wall of bottom flask 10. 11 is a guide member on said top member engaging with a shoulder on bottom member 10, functioning as a guard to prevent said members from slipping when placed under pressure and also as reinforcing means for the sides. The said members 11 and 12, also function as guides to properly cooperate and hold in proper relation to each other, the flask members 6 and 10, the contacting edges of which are at an angle with the horizontal lines of the flask when assembled, as shown by dividing line 14. The bottom member 10 of the flask comprises a bottom, and side walls, functioning as a container in which is placed a form or model for the lower jaw teeth, the back of which ordinarily stands higher than the front of said mould, and for such reason the flask is divided on a horizontal incline as heretofore described. The top member 6 has a lid 1 as heretofore described, and by removing said lid, the upper form or impression for the upper jaw is placed in proper position over the lower jaw, said impression for the upper jaw is placed in proper position over the lower jaw, said impressions being centrally located within the walls of the flask, and by pouring plaster Paris filling in the space between, the teeth are held in proper relation to each other during the course of clamping and vulcanizing, and this part of the work pertaining to the cast for the teeth is not shown in the drawings. On the rear of the flask a portion of said flask is straight as shown at A, but the said portions incline inward, as bracing means when clamped firmly together. On the rear of the flask are openings 15, and on the straight portions is a space 16 between said members, the object of which is that the superfluous amount of rubber may force out through said openings when the flask is forced firmly together, the pressure beginning at the front, as at B, and closing rearward to said openings, by which action the surplus rubber will flow rearward and pass out through said openings 15 and 16, when the cast for the lower jaw is placed in the bottom member 10 of the flask, and the plaster Paris is poured

around the cast, the surplus of the plaster Paris is wiped off, principally by the fingers and therefore the corners are rounded as shown at 17, by which arrangement a cleaner job can be obtained, not having any corners to clean out, or sharp corners to hurt the fingers.

With reference to the superfluous rubber referred to heretofore, it will be understood that when the teeth are placed in the cast, a flesh colored rubber is placed next to the teeth, or that portion that is exposed to view when in the mouth and the base or roof of the mouth is formed by a dark colored rubber which has greater strength and the flesh colored rubber under the process of vulcanizing becomes a fluid, while the dark colored rubber is more solid, and is inclined to press forward forcing its way through the flesh colored rubber and for this cause my flask is so designed that the front part is forced together first, starting the flow of the rubber rearward when a superfluous amount is in place and by gradually clamping together, the superfluous rubber being largely the dark shade, flow rearward freely and pass out through the openings heretofore described.

Such modifications may be employed as lies within the scope of the appended claims.

What is new and we desire to secure by Letters Patent is;

1. In a dental flask, a base member having shoulders, functioning as guides, and a straight portion of said member being inclined inward, and the top of said member being horizontally inclined, a top member, the bottom edge of which is horizontally inclined to cooperate with said bottom member said top member having downwardly extending lugs, adapted to engage with shoulders on said bottom member, as means for holding said members rigid, and in registry with each other, a flange extending around the top of said top member, as reinforcing means to prevent expansion, a notch on the front of said top member and a notch in the straight portion of the rear of said top member, said notches adapted to engage lugs, said lugs being positioned on the under side of said lid, said means functioning as braces and means for registering said lid in proper position, the lid functioning as a cover for said top member, said lid having bars, on the under side and extending downward, and adapted to engage in the plaster Paris filler, a plurality of vent holes in said lid, as means for escape of air or superfluous plaster Paris, all for the purpose set forth and described.

2. In a dental flask, a base containing member, a top member conforming in shape for the inside walls of said base member, a lid placed on said top member, guide means for causing said base and top member to register when placed together and to hold said members in rigid position, and said members adapted to close at the front, first, and rocking together, having a radial cam guide at the rear of said top member, causing said members to register firmly, an opening in the rear of said flask, between said bottom and top members, and an opening between the straight portions on the rear of said flask, by which means superfluous materials may pass out when under pressure, the said straight portion of said flask members being inclined inward, as bracing means for said straight portion, all for the purpose set forth and described.

WILLIAM M. ROMINE.
WALTER J. CLARK.