(No Model.)

M. R. GRISWOLD.

DENTAL FLASK.

No. 544,095. Patented Aug. 6, 1895.

Fig. 1.

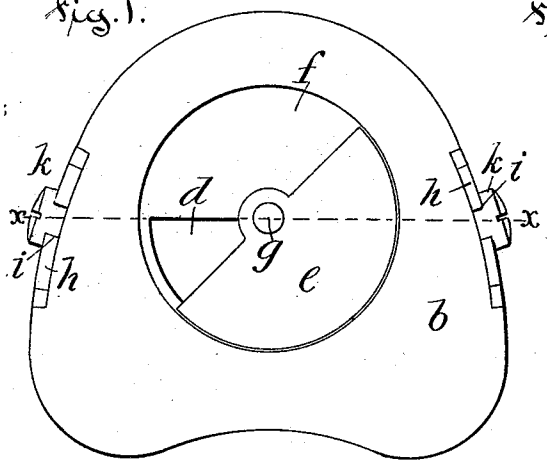


Fig. 3.

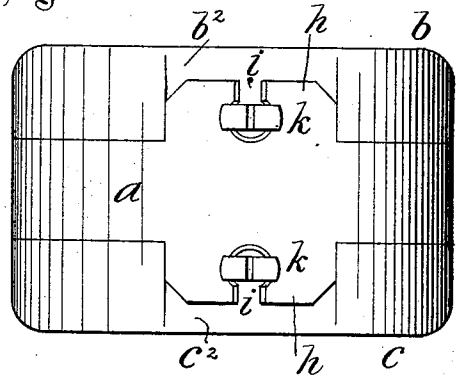


Fig. 2.

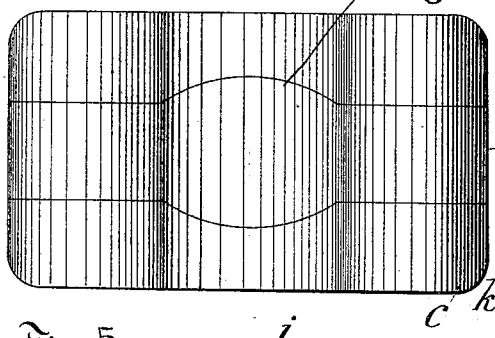


Fig. 4.

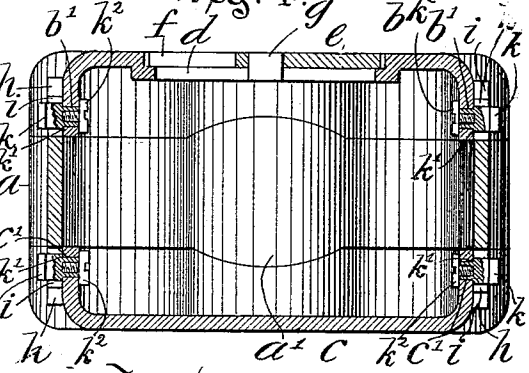


Fig. 5.

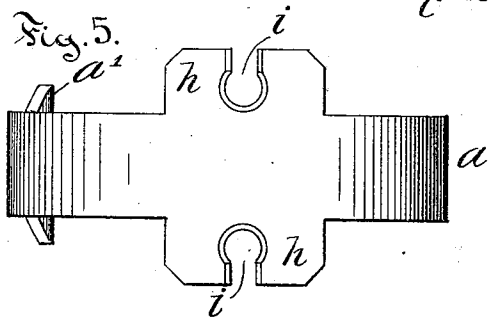
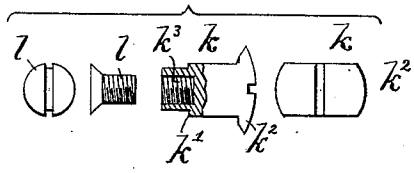


Fig. 6.



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UNITED STATES PATENT OFFICE.

MALCOLM R. GRISWOLD, OF HARTFORD, CONNECTICUT.

DENTAL FLASK.

SPECIFICATION forming part of Letters Patent No. 544,095, dated August 6, 1895.

Application filed January 2, 1894. Serial No. 495,311. (No model.)

To all whom it may concern:

Be it known that I, MALCOLM R. GRISWOLD, a citizen of the United States, and a resident of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Dental Flasks, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates to the art of making rubber plates for holding false teeth, and to the "flasks," as they are called, which are used for holding the plates and teeth while the plates are being vulcanized; and my object is to provide a dental flask of a form of metal which adds to the strength of the flask, and, further, to provide a sectional flask with certain parts interchangeable.

To this end my invention consists in the details of the several parts making up the flask as a whole and in the combination of such parts, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a top view of my improved flask. Fig. 2 is a view in front elevation of the flask. Fig. 3 is a side view of the flask. Fig. 4 is a view in section through the flask on plane denoted by line *x x* of Fig. 1, looking from the rear. Fig. 5 is a detail view of the central section of the flask. Fig. 6 shows detail views of the clamping-screw and turn-button.

In the accompanying drawings, the letter *a* denotes the center ring or section of the flask, the latter, as a whole, being made of sheet metal, preferably brass, pressed to shape, as to the end or outer sections, by means of dies. The outer sections *b* and *c* are counterparts and interchangeable, fitting equally well on either the upper or lower side of the center ring.

One of the outer sections, as *b*, is provided with an opening *d*, through which plaster may be poured into the flask, and a cover *e* is preferably arranged so as to be swung over and close said opening. This opening, as shown, is formed in a depression or recess *f* in the flat part or floor of the section, so as to allow the cover *e* to be located in the depression and not project beyond the surface, where it might otherwise interfere with the convenient use or handling of the flask. The cover is secured to the section by a pivot *g* and has a circular periphery to enable it to fit closely and turn freely within the recess *f*. This outer section *b* is supplied with turn-button holes *b'*, of which there are preferably two, located in the down-turned portion of the section. Any number of these holes may be provided, if desired, but in use two have been found to produce the best results.

The walls of the other outer section, as *c*, are of uniform thickness throughout, and the surface is unbroken, with the exception of the holes *c'*, preferably two in number, although more may be provided, if desired.

Projections *h*, forming what may be called a "T-lock," are located on each edge of the central ring or section *a* in such position as to fit within the channels or recesses b^2 c^2, located in the outer sections *b* and *c*, respectively. These projections are preferably formed in opposition to each other on the center ring or section and are counterparts of each other; but it is obvious that they may be otherwise arranged or located, so that the several parts of the flask will be interchangeable, and yet come within the scope of my invention. Locking recesses *i* are formed in each member of the T-lock *h*, the recesses broadening out at their inner ends and being of larger area than at the opening or outer end.

Turn-buttons *k* are provided, the inner ends thereof being of a size to fit the turn-button holes *b'* and *c'* in each of the outer sections *b* and *c*, and between this inner portion and the head the button is formed of a larger diameter in order to fit within the locking-recess *i*, this construction forming a shoulder *k'* on the inner end of the turn-button that abuts against the outer surface of the outer sections of the flask. The head k^2 of the button is formed of a size to overlie the edges of the locking-recesses *i*, and is preferably made flat on opposite sides to enable it to pass through the outer portion or neck of said locking-recesses, the under side of the head being beveled to fit the beveled edge of the locking-recesses. In operation, the button is passed through the neck of the recess and then given a quarter-turn, so that the beveled surface on the under side of the head fits the beveled surface on the wall of the locking recess *i*. A screw-hole k^3 is formed on the

inner end of the turn-button *k*, and within this hole is secured the clamp-screw *l*, the head of which is adapted to overlie the edges of the turn-button holes *b'* and *c'* in the outer sections *b* and *c*, respectively.

An enlarged portion *a'* is formed on the central ring and fits corresponding depressions made in the outer sections, this construction affording an additional means of securing the parts against rotation each on the other.

In the manufacture of rubber plates for holding false teeth a very essential feature is uniformness in the process of vulcanization, and this can be only attained in a flask of comparatively uniform thickness throughout, the result being a light thin denture having the same strength as a denture of a much thicker vulcanization made after the old process in a cast-flask unequal in thickness with a result that the heat used in the vulcanizing process is not evenly distributed over the whole interior surface of the flask. My invention overcomes the objections of the old forms of cast-flasks, which are of varying thickness owing to defects in casting and also in methods of securing the different sections together.

My invention contemplates the making of a flask from sheets of wrought metal rolled or otherwise reduced to a uniform thickness, and my improved locking means greatly reduces the varying thickness in the walls of the flask, which is present in prior devices of this class.

There is shown and described herein a flask composed of a reversible center section and two interchangeable outer sections adapted to fit upon either side of the center section. By the term "reversible," as used herein, I mean that the sections may be reversed, top for bottom, and vice versa.

There has been shown and described herein three sections of a flask used in connection with each other; but it obvious that any number of sections may be used and yet come within the scope of my invention.

The T-locks and opposing recesses may be so located on the center section and on the outer sections that the latter may be locked together without the interposition of the center section and at the same time be capable of being locked to the center section, thus making the outer sections interchangeable each with the other and also with the center section.

I claim as my invention—

1. In combination in a dental flask or the like, a reversible central section, the T-lock located on the central section, the reversible outer sections adapted to fit upon either side of the central section, and locking means on the outer sections adapted to engage the T-lock, all substantially as described.

2. In combination in a dental flask or the like, a reversible center section, the T-lock secured to the section, the locking recesses located within the lock, the reversible outer sections adapted to fit the central section and provided with interchangeable locking means adapted to fit the recesses in the T-lock, all substantially as described.

3. In combination in a dental flask or the like, a reversible central section, the locks located upon opposite sides of the central section and counterparts of each other, the recesses located in the locks, the interchangeable outer sections provided with depressions for receiving the T-lock, the locking screws located in the outer sections and adapted to engage the locking recesses in the central section for securing the sections together, and a clamping screw adapted to fit the locking screw, all substantially as described.

4. In combination in a dental flask or the like, a reversible center section, reversible outer sections adapted to fit upon either side of the central section and to be secured thereto, an opening located in an outer section, and a slide adapted to close said opening, all substantially as described.

5. In combination in a dental flask or the like, a reversible center section, reversible outer sections adapted to fit upon either side of the center section, an opening located in an outer section, a depression formed adjacent to the opening, and a slide pivoted in the depression and adapted to close the opening, all substantially as described.

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