

R. F. HUNT.

Molding Celluloid for Dentists and Others.

No. 153,196.

Patented July 21, 1874.

Fig. 1.

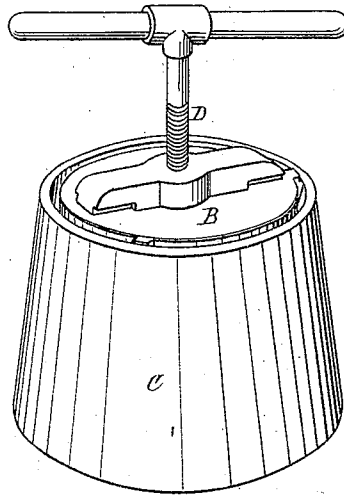
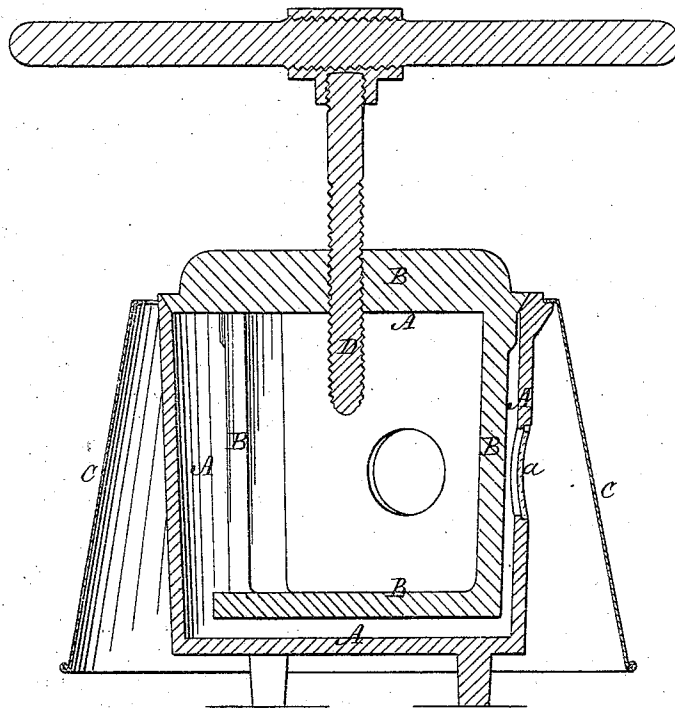


Fig. 2.



Witnesses.

John L. Wolf.
R. P. Donaldson

Inventor.

Robert Finley Hunt

UNITED STATES PATENT OFFICE.

R. FINLEY HUNT, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN MOLDING CELLULOIDS FOR DENTISTS AND OTHERS.

Specification forming part of Letters Patent No. **153,196**, dated July 21, 1874; application filed June 29, 1874.

To all whom it may concern:

Be it known that I, R. FINLEY HUNT, of Washington, District of Columbia, have invented an Apparatus for Softening Blank Pieces of Celluloid, of which the following is a specification:

The object of my invention is to soften blank pieces of celluloid intended to be used for dental and other purposes, in order to render them sufficiently plastic to be molded into the form required for the purpose for which they are to be used, and to produce other results, which will be described in this specification, by the use of dry heat, without the intervention of a bath of oil, water, steam, or other substance than hot air, as has hitherto been the practice of using.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure 1 represents an exterior view of the apparatus I employ; and Fig. 2 represents a vertical section through the same.

To accomplish the above-named object, I use the apparatus herein described. This apparatus consists of a cup or oven, A, a cover and press in one piece, B, a conical loose jacket, C, and a screw, D, as shown in the accompanying drawing. The cup or oven A is cast or otherwise made solid, with lugs on the bottom to serve as legs or to fasten legs to; also, lugs at the top edge to support the loose jacket C. The top edge is beveled inwardly to support the cover and press. There may be glazed openings *a* in the cup to enable the operator to observe the process as it goes on within. The outer edge of the cover is beveled below inwardly, so as to fit the beveled surface of the upper edge of the cup or oven. These beveled surfaces are ground together, so as to make a close joint. The press is made in one piece with the cover, and has its upper part projecting above the same, to give strength and stiffness. The sides of the press are so inclined in relation to each other, that at the top they fit accurately within the cup or oven, and at the lower end are at least an eighth of an inch distant from the interior surface of the same.

The lower ends of the sides are connected by a piece or bottom which serves as a bed for the flask containing the celluloid-blank. This bottom of the press is at least three-eighths of an inch from the bottom of the cup or oven. The press is thus suspended in the cup or oven. The screw is arranged as shown in the drawing, as clamp-screws usually are, and is operated by a handle, while the press is held firm by a suitable wrench. The loose jacket is of conical shape, with the upper edge turned over inwardly to fit on the shoulders of the upper lugs, so that it is suspended thereby, and serves to bring or conduct the heat from the flame below in close contact with the exterior surface of the cup or oven. This flame may be obtained by the use of gas, oil, alcohol, or other suitable agent.

All the apparatus, except the screw and loose jacket, should be made of brass or other metal that does not readily oxidize.

I am aware that heat has been heretofore used to render the celluloid-blanks plastic for molding, but it has been used in connection with a bath of oil, water, steam, or other fluid. My invention of using the dry heat, without the intervention of these substances, is quicker, cleaner, and more economical than the methods hitherto used, and at the same time seasons and hardens the molded celluloid better by volatilizing more rapidly and driving off the camphor, which is the solvent of the celluloid.

What I claim as my invention is—

1. The process of softening and molding celluloid or celluloid-blanks, for dental and other purposes, with dry heat, by means substantially such as herein described.

2. The herein-described apparatus for softening and molding celluloid or celluloid-blanks, consisting essentially of a combined inclosed chamber and a press, in and by means of which dry heat is applied by conduction to the flask or mold containing the celluloid, substantially as herein described and represented.

R. FINLEY HUNT.

Witnesses:

JOHN L. WOLF,
R. B. DONALDSON.