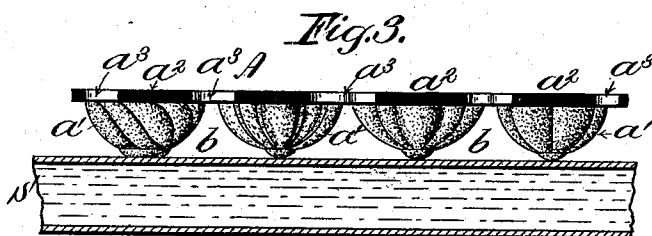
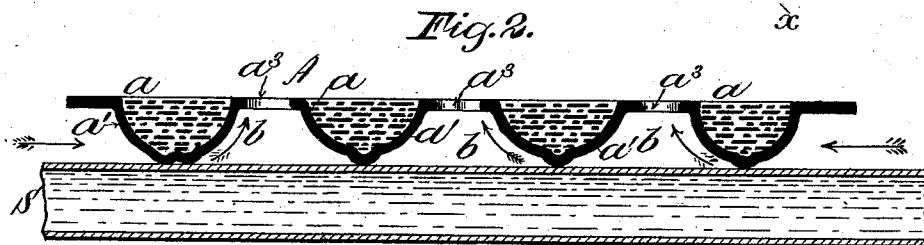
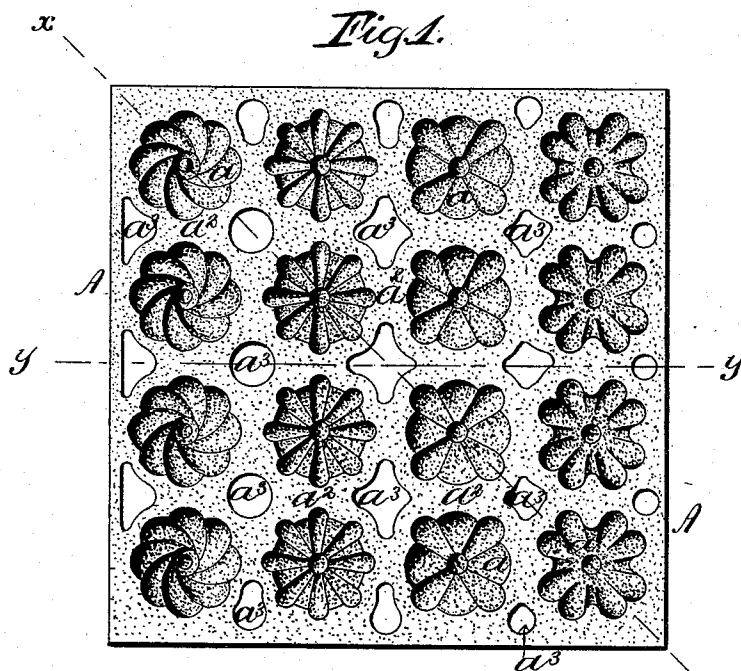


(No Model.)

W. E. COLEMAN.
FLEXIBLE CANDY MOLD.

No. 534,633.

Patented Feb. 26, 1895.



Witnesses:

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UNITED STATES PATENT OFFICE.

WALTER E. COLEMAN, OF NEW DORP, NEW YORK.

FLEXIBLE CANDY-MOLD.

SPECIFICATION forming part of Letters Patent No. 534,633, dated February 26, 1895.

Application filed May 31, 1893. Serial No. 476,082. (No model.)

To all whom it may concern:

Be it known that I, WALTER E. COLEMAN, a citizen of the United States, residing at New Dorp, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Flexible Candy-Molds, of which the following is a description sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My present invention is an improvement upon the flexible candy-mold described in my application, Serial No. 456,606, filed December 28, 1892, which discloses a permanent flexible skeleton candy-mold formed with air spaces between the exterior side walls of the matrices,—the side walls of the matrices being comparatively thin and conforming approximately in convex configuration to the inner surfaces thereof,—the object being to lighten and cheapen the mold while insuring a more rapid and uniform cooling of the candy castings, since the heat escapes more rapidly through the comparatively thin side walls of the matrices and is taken up and conveyed away by the air, which is free to circulate around and between the exterior side walls of the matrices. In practice these skeleton molds or mats, after the matrices have been filled with warm candy stock by the use of suitable apparatus, are placed upon cooling tables or slabs, the exterior bottom portions of the molds coming in contact with the upper surface of the cooling slab which thus incloses the space beneath the underside of the web which connects the upper edges of the matrices, and exterior sides of the said matrices. The consequence is that the air heated by the side walls of the matrices can only escape gradually and comparatively slowly at the edges of the mat,—to be replaced by cooler air entering around said edges and as these mats are usually several square feet in size, the circulation or change of air is both slow and imperfect.

The object of my invention is to effect and maintain a rapid circulation or change of air around the exterior side walls of the matrices; and my invention consists essentially in a skeleton mat or mold formed with a series of matrices having side walls of less thickness than the depth of the matrices and having the web which connects the side walls of the mat-

rices formed with openings for the escape of the heated air from between the exterior side walls of the matrices. By this means I insure a rapid displacement and change of air; the air naturally rising and escaping from between the exterior side walls of the matrices as it absorbs heat therefrom, while cooler air passes in at the edges of the mat.

As these molds are properly made only from the purest and more expensive grades of rubber I also effect a saving in the weight and cost of the mat as an article of manufacture.

In the accompanying drawings, Figure 1, is a plan of a mat or mold of my improved construction formed with sixteen matrices. Fig. 2, is a sectional view thereof upon the plane of line *x, x*, Fig. 1, the mat being shown as resting upon a cooling slab which is indicated in part only. Fig. 3, is a view similar to Fig. 2, taken upon the plane of line *y, y*, Fig. 1.

The mold or mat A, is formed of india-rubber or other suitable material or compound, the matrices being formed by pressing the material while in a plastic state over a series of suitable dies, and then permanently setting the material to give it the desired consistency by vulcanization; or the mat of matrices may be formed in any other suitable manner.

When the plastic material is applied to the dies, of which there is one for each matrix *a*, it is forced closely around the dies in such manner as to leave spaces *b, b*, between the exterior side walls of the matrices, the side walls being regulated in thickness according to the character of the material employed and with relation to the character of the designs, work to be performed, &c. These air spaces *b, b*, may be of greater or less extent or depth as may be required; and though the side walls of the matrices are preferably made to conform in general shape to the configuration of the designs impressed therein by the dies, this is not indispensable since the air spaces *b, b*, may be made in the form of grooves running longitudinally and transversely across the back of the mat or mold and between the several matrices; or the air spaces *b, b*, may be formed or shaped in any other desired or convenient manner,—the essential feature being the formation of open air spaces in the back of the mold or mat and between the exterior side walls of the matrices for the purpose of

lightening the mold, rendering it more flexible, and facilitating the cooling of the castings.

The side walls a' , a' , of the matrices a , a , are connected preferably by a comparatively thin web a^2 , a^2 , and preferably at their upper edges, although the shape and quantity of the material connecting the matrices are of secondary importance and may be varied. The distinguishing feature of my invention in this connection consists in forming the material a^2 , a^2 , between the matrices a , a , with perforations or openings a^3 , a^3 , through which the air can pass from the under side of the mold. These openings may be formed in any suitable or convenient manner either before or after the vulcanization of the mold; and may be of any desired size and shape.

S, represents a slab or cooling table upon which the mat, after its matrices have been charged with hot candy stock, is placed. It will be seen that when thus placed the air spaces b , b , are closed below by the upper surface of the slab S, while they are open above

to a greater or less extent, according to the size of the apertures a^3 a^3 , formed in the web of connecting material a^2 , a^2 . Under these conditions the cooler air naturally flows in under the edges of the mat and around the exterior side walls of the matrices, is heated by the latter, and rises through the apertures a^3 .

What I claim as my invention, and desire to secure by Letters Patent, is—

A permanent flexible mold for the manufacture of confectionery, formed with matrices of suitable design in its face, with air spaces between the exterior side walls of said matrices, and with openings in the connecting material between the matrices, said openings extending into and forming continuations of the said air spaces between the exterior side walls of the matrices substantially in the manner and for the purpose described.

WALTER E. COLEMAN.

Witnesses:

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