

(No Model.)

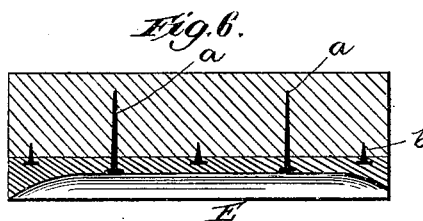
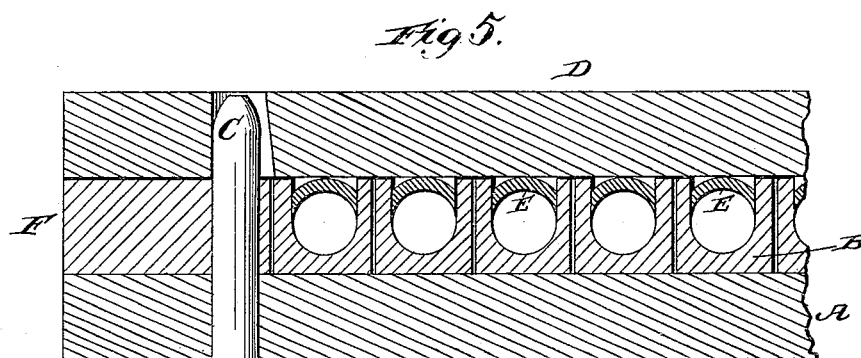
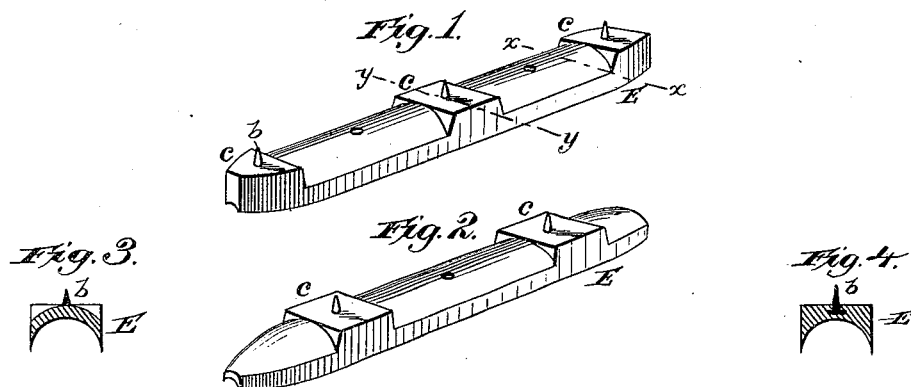
2 Sheets—Sheet 1.

F. C. MILLER.

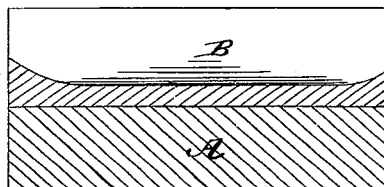
CIGAR MOLD.

No. 262,084.

Patented Aug. 1, 1882.



Witnesses.  
*Robert Everett*  
*J. A. Rutherford*



Inventor.  
*Fredrick C. Miller.*  
By *James L. Norris*  
*Atty.*

F. C. MILLER.

CIGAR MOLD.

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Fig. 7.

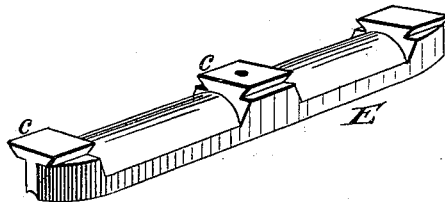


Fig. 8.

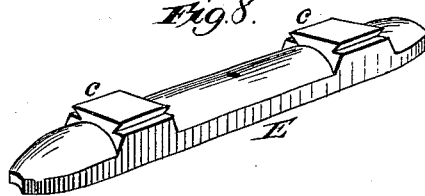


Fig. 9.



Fig. 10.



Fig. 11.

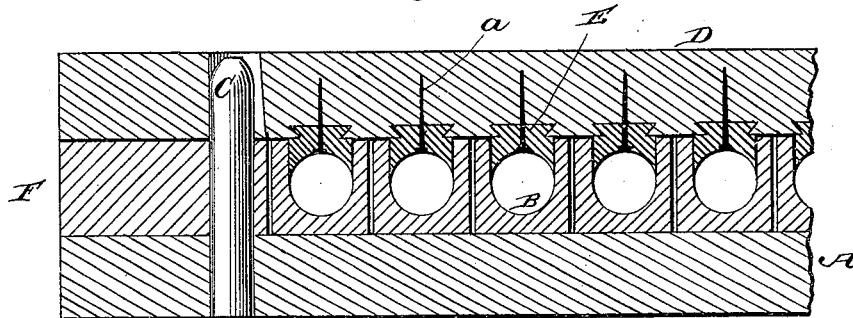
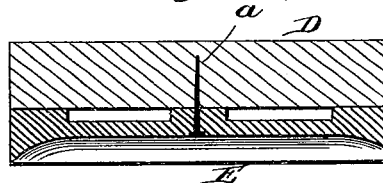
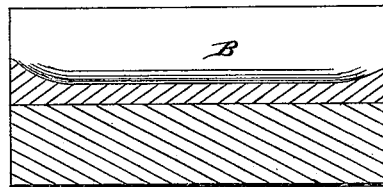


Fig. 12.



Witnesses.

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# UNITED STATES PATENT OFFICE.

FREDRICK C. MILLER, OF NEW YORK, N. Y.

## CIGAR-MOLD.

SPECIFICATION forming part of Letters Patent No. 262,084, dated August 1, 1882.

Application filed February 2, 1882. (No model.)

### *To all whom it may concern:*

Be it known that I, FREDRICK C. MILLER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Cigar-Molds, of which the following is a specification.

This invention relates to that class of cigar-molds in which metal plungers, cups, or upper half-molds are employed.

The object of my invention is to provide a metal half-cup or plunger which can be cast sufficiently strong, and at the same time have fine thin edges, so that when the cigar-bunch is pressed or molded into proper shape no unsightly crease will be left; also, to form the said cup so that it can be more accurately and effectively secured to a wooden backing than heretofore, and also to so form the cup and provide it with devices for primarily connecting it to the backing that it can be brought to accurately register with the lower half-molds before the final fastening devices are applied.

To such end my invention consists in an upper cup composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it with a suitable backing, and further provided with lugs or bearings, whereby it is adapted to be employed in connection with a wooden matrix.

It further consists in an upper cup composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it to a suitable backing, and provided with lugs or bearings having straight sides, whereby it is adapted to be employed in connection with a wooden matrix without liability of injury from strain.

It further consists in an upper cup composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it to a suitable backing, and provided with lugs or bearings having pins projecting therefrom. These pins constitute primary or partial fastenings, and are inserted into the wooden backing before the permanent fastening devices are passed through the openings, whereby the cup can be readily brought to register with the

lower half-mold and held in place preparatory to applying the final or permanent fastening devices.

In the accompanying drawings, Figure 1 is a perspective view of my improved metallic cup for cigar-molds, showing the same provided with three bearing-lugs and their registering-pins. Fig. 2 is a similar view, showing the cup provided with two of such bearing-lugs and pins. Figs. 3 and 4 are transverse sections of mold-cups, respectively taken on lines *xx* and *yy*, Fig. 1. Fig. 5 is a section of a cigar-mold. Fig. 6 is a section through the cup shown in Fig. 1, illustrating the manner of attaching the cup to its backing by means of screws. Figs. 7 and 8 illustrate a metallic cup having dovetailed bearing-lugs. Figs. 9 and 10 are transverse sections of the same, and Figs. 11 and 12 illustrate the manner of attaching the metallic cups provided with dovetailed bearings to their backing.

Like letters indicate like parts throughout the several views.

The letter *A* denotes the base-plate of a cigar-mold, to which plate are rigidly secured the lower half-molds or matrices, *B B*; or said matrices may be formed integral with the base-plate. This base plate is preferably composed of some suitable hard wood, and is provided near one or both ends with a stout dowel-pin, *C*, which is rounded or tapered at its upper end, and is adapted to enter a suitable opening or perforation in the lid of the mold. The lid or back board, *D*, may also be composed of hard wood, and to it are attached the metallic cups or upper half-molds, *E E*. These metallic cups or half-molds *E E* may be attached to the back boards or lid, *D*, by means of screws or nails *a*; or they may be dovetailed into it, as shown in Fig. 11.

In order to enable the cups to be attached to the back board in such position that they will register accurately with the matrices *B*, I provide said cups with registering-pins *b b*, which may consist of tacks, nails, or sharp pegs cast into the metal of which the cups are formed. In using these pins for the purpose of causing the cups *E* to register at all times with the matrices *B* a wooden or other hard cigar-shaped body is placed in each matrix, the cups *E* are placed thereon, and the back-

board, D, is then placed in position upon the cups and coincident with the base-plate. Pressure is now applied to the board, so as to cause the points of the pins *b b* to enter said board, the hard wooden cigar-shaped bodies placed in the matrices B preventing the cups E from sinking down under the pressure. The lid or back board, D, is now withdrawn, with the cups E attached thereto by the penetration of its pins *b b* into the said board. This attachment, however, is not secure, but by means of screws or nails *a*, passed through the openings *a'*, the cups may be permanently secured upon the lid or board D, and, owing to the previous use of the pins *b b*, as described, they will be found in practice to be so arranged on said board as to always register with the lower half-molds or matrices.

The metallic cups E are cast with lugs or bearings *c*, the remaining portions of the exterior of the cups being rounded, as shown clearly in Figs. 1, 2, 7, and 8. By this means the cups E may be firmly seated upon the lid or board D, and yet are of less weight than would be the case if they were cast solid. The straight or vertical sides of the cups E correspond with the upper part of the matrices, within which they thus fit, so as to be capable of being inserted into the same or withdrawn therefrom in a vertical line without binding or causing injurious strain. The exterior of the cups and corresponding inner walls of the matrices may, however, be formed with a slight vertical taper, if desired. It will be seen that the pins *b* project from these lugs or bearings *c*, which latter form a bed for the pins.

The bearing-lugs *c* on the cups E may be cast so as to dovetail into the lid or board D, as shown in Figs. 7, 8, and 11, in which event the registering-pins *b b* are dispensed with.

In casting the cups E or upper half-molds I prefer to employ zinc or type-metal; but any other suitable metal or alloy may be used.

It will be seen that the dowel pin C, attached to the base-plate A, is made to pass through a block, F, which is placed between the plate and the lid or board D, said block adjoining the outer matrix at each end of the series and forming an end support for the lid-board or backing of the cups or upper half-molds. It will also be observed that the openings *d* in the lid or board for the reception of the dowel-pins are elongated or enlarged at their lower portion, so that when the lid is raised the cups, plungers, or upper half-molds will be drawn from their respective matrices without subjecting the edges of the cups or matrices to strain

or pressure sufficient to break or injure the same. The mold may thus be safely opened at either or both ends, as the pivoted points upon which the lid is raised is removed to a sufficient distance beyond or to the outer sides of the matrices and cups to enable the cups to be withdrawn from the matrices in substantially vertical lines, thereby obviating all liability of breakage or strain of the parts. The same result may also be obtained by making the openings *d* of an oblong form or by beveling the inner side of the dowel-pin near its end. If desired, the dowel-pins may be attached to the lid, and the openings for their reception may be formed in the base-plate. When the lid is raised at one end it will be seen that its pivot or point of contact with the intermediate block, F, is at the outer extremity of said block, and consequently the curved paths described by the withdrawing plungers or cups will be arcs of circles so large that the plungers will rise in nearly vertical lines or paths. In this way it will be observed that the plungers or cups may be raised and lowered without liability of binding at their edges, and thereby causing injurious strain within the matrices.

What I claim is—

1. In a cigar-mold, an upper cup, composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it to a suitable backing, and provided with lugs or bearings, whereby it is adapted to be employed in connection with a wooden matrix, substantially as specified.

2. In a cigar-mold, an upper cup, composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it with a suitable backing, and provided with lugs or bearings having straight sides, whereby it is adapted to be employed in connection with a wooden matrix without liability of injury from strain, substantially as described.

3. In a cigar-mold, an upper cup, composed of cast metal, having one or more than one opening for the passage of one or more than one fastening device for connecting it to a suitable backing, and provided with lugs or bearings having pins projecting therefrom, substantially as described.

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

FREDRICK C. MILLER.

Witnesses:

JAMES L. NORRIS,

JAMES A. RUTHERFORD.