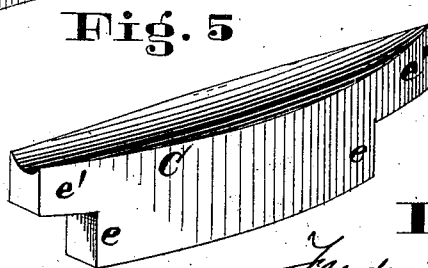
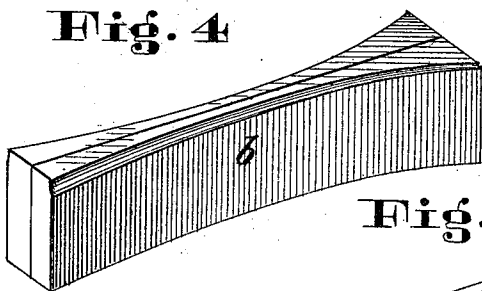
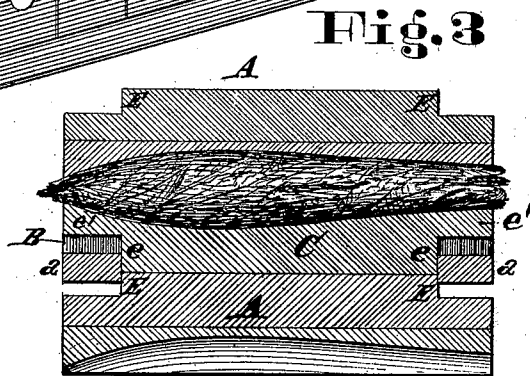
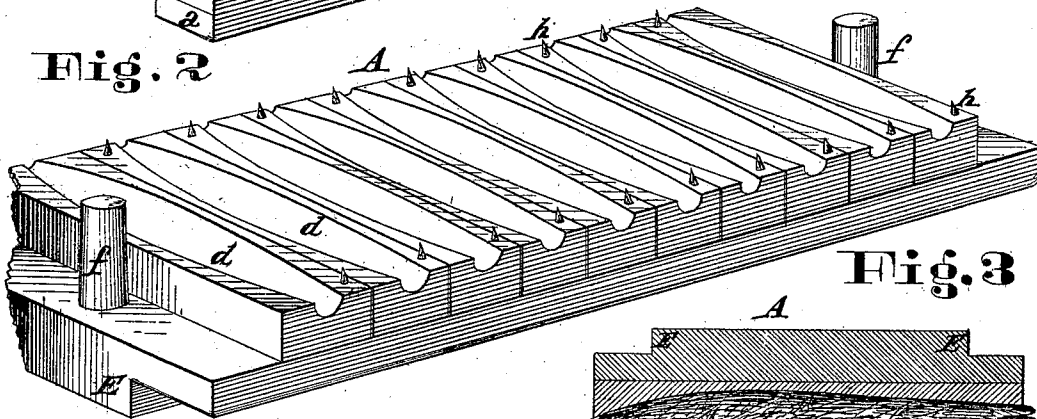
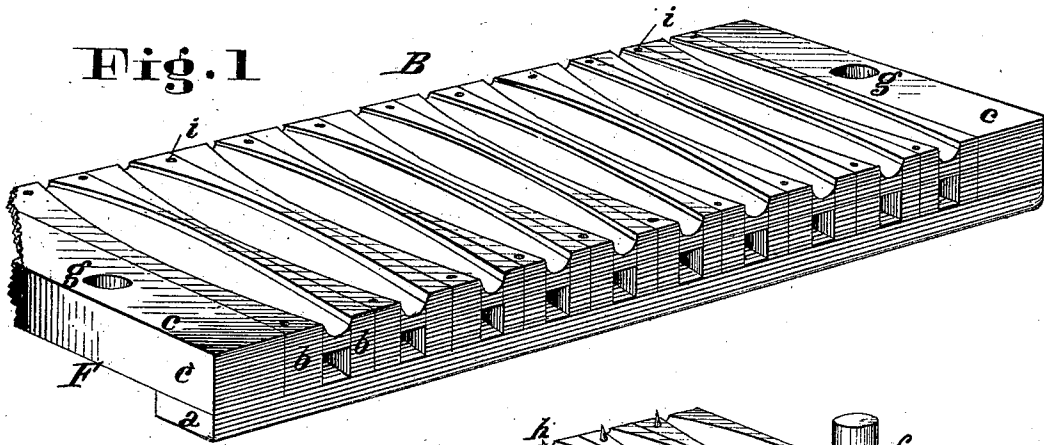


F. C. MILLER.
CIGAR-MOLDS.

No. 179,125.

Patented June 27, 1876.



Attest
John R. Linn

Inventor
Fredrick C. Miller
By *J. Millward*
Attorney.

UNITED STATES PATENT OFFICE.

FREDRICK C. MILLER, OF CINCINNATI, OHIO.

IMPROVEMENT IN CIGAR-MOLDS.

Specification forming part of Letters Patent No. **179,125**, dated June 27, 1876; application filed July 3, 1873.

To all whom it may concern:

Be it known that I, FREDRICK C. MILLER, of Cincinnati, Hamilton county, State of Ohio, have invented a certain new and useful Improvement in Cigar-Molds, of which the following is a specification:

My invention relates to the construction of molds, which may be made to press into shape a great number of cigar-bunches at one operation; and consists of an upper part, containing properly-shaped concaves, to form the upper part of the cigar, combined with a lower part, of peculiar construction, containing deep cavities for the reception of the tobacco, and fitted with sliding cigar-shaped pressing-plungers, the latter being of such construction that, when fitted to the lower half of the mold, they are securely retained in place, and admit of being operated either independently or simultaneously.

Figure 1 is a perspective view of the lower half of the mold, fitted with its shapers. Fig. 2 is a similar perspective view of the upper half of the mold. Fig. 3 is a cross-section of the mold complete, with the top of another below. Fig. 4 is a part of the lower half of the mold. Fig. 5 is a perspective view of one of the sliding pressers.

The lower part B of the mold is composed of strips *a a*, concave division-pieces *b*, which are firmly attached to the strips *a*, and connecting end pieces *c*, connecting the side strips *a* together. The sliding pressers C are concave on top, to conform to the shape of the cigar, and are of a length corresponding to the length of the division-pieces *b*.

The top part A of the mold has cigar-shaped concavities *d*, either attached to or formed upon it, and guide-pins *f*, which are arranged to enter the apertures *g* in the part B in such a way as to bring the concavities in the part A, in proper relation to the concavities in the sliding presses C within the part B. The top part A may also have small guide-pins *h* to enter corresponding apertures *i* in the part B. It will be seen that by the presence of the strips *a a* a recess or groove, F, is formed at the bottom of the part B throughout its entire length. The bottom parts of the pressers C, when at their normal downward position,

project below the division parts *b*, and are flush with the strips *a* by means of their tongues *e*, which enter into this groove or recess F, the sides of the strips *a* forming a guide for the vertical movement of the pressers C, and prevent their endwise movement. These connecting-strips *a a* also limit the downward movement of the pressers C. The upper part A, upon its upper side has a longitudinal rib, E, to fit into the recess F between the strips *a*. The provision of this rib E and recess F serves to enable a number of molds to be placed over each other in a vertical stack, so that one press may be used to press a great number of cigars in a number of molds at one and the same time, in the manner shown in Fig. 3. The rib E enters the bottom of one mold, as at F, and so on through a series of molds, and its upward movement is limited by the bottom of division-pieces *b* and end pieces *c*, and, acting on the tongues *e* of the pressers C, contracts the cigar concavities, and thus presses the tobacco in the necessary compact form, in the manner clearly shown in Fig. 3. The bunches are then removed, and in placing in fresh ones the sliding pressers are forced down into their normal positions. The part B, not including the pressers C, may be all made (with proper tools and appliances) out of one piece. The ends *e' e'* of the pressers project over the strips *a a*.

I claim—

1. The lower mold B, consisting essentially of the series of division parts *b* and connecting-strips *a a*, which limit the downward movement of the sliding pressers C, all constructed as set forth.

2. The lower mold B, consisting of the series of division-pieces *b* and the connecting-strips *a a*, in combination with a series of independent sliding pressers C, having projecting ends and a suitable upper half-mold A, as set forth.

3. The upper half-mold A, provided with the rib E, as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

FREDRICK C. MILLER.

Witnesses:

FRANK MILLWARD,
J. L. WARTMANN.