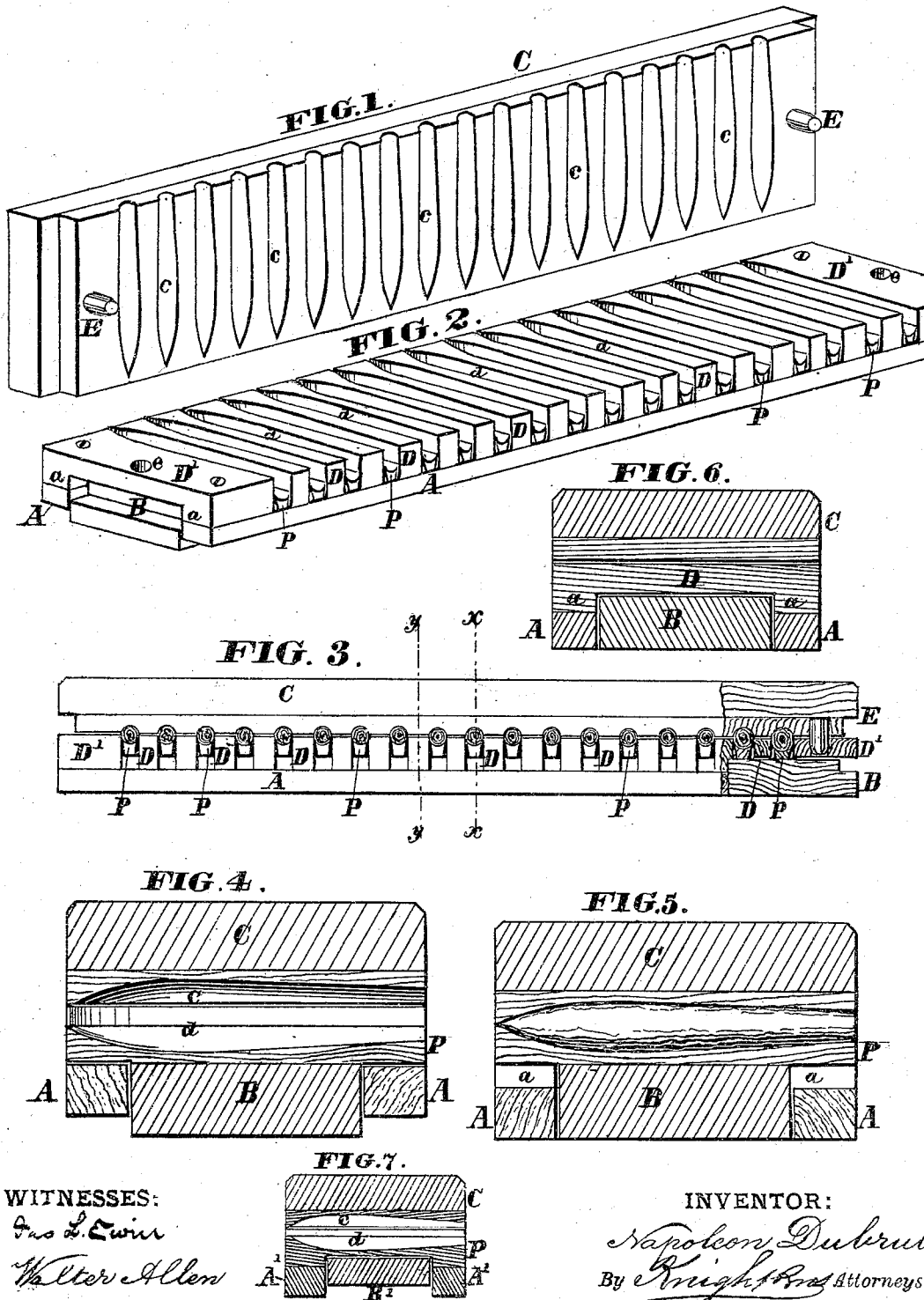


N. DUBRUL.
Cigar-Molds.

No. 147,617.

Patented Feb. 17, 1874.



WITNESSES:

Jas L. Swin

Walter Allen

INVENTOR:

Napoleon Dubrul
By *Knights* Attorneys.

UNITED STATES PATENT OFFICE.

NAPOLEON DUBRUL, OF CINCINNATI, OHIO.

IMPROVEMENT IN CIGAR-MOLDS.

Specification forming part of Letters Patent No. **147,617**, dated February 17, 1874; application filed October 18, 1873.

To all whom it may concern:

Be it known that I, NAPOLEON DUBRUL, of Cincinnati, in the county of Hamilton and State of Ohio, have invented an Improvement in Cigar-Molds, of which the following is a specification:

My invention relates to a cigar-mold constructed in two parts, with cavities in their opposing faces, those in the base of the mold containing plungers connected to one or more back strips, which, in my improvements, project below the base, so that when placed in a press the plungers will be forced up simultaneously, compressing the cigar-fillers upward into the cavities of the cap or cover of the mold, as hereinafter described. The object of the invention is to produce a machine which may be used with rapidity and success by unskilled hands. The plungers in their retracted position are seated on the longitudinal bars of the base, which limit their downward movement and prevent their separation from the base. The connecting bar or bars of the plungers projecting below the base adapt any desirable number of the molds to be pressed at once by placing them one on another within the press. This facility for simultaneous pressure constitutes a leading feature of utility in my improvement. The plungers have a limited and simultaneous movement within the base, but are inseparable therefrom, and the parts are so arranged that in the retracted condition of the plungers the strip or strips by which they are connected project below the bottom, so as to afford means of applying pressure to all the followers in any number of molds simultaneously, by the simple superposition of a number of molds one over another in the press.

In the accompanying drawings, Figure 1 is a perspective view of the cap or cover of the mold. Fig. 2 is a perspective view of the base portion thereof. Fig. 3 is a front elevation of the entire mold, partly in section. Fig. 4 is a transverse section on the line *xx*, Fig. 3, showing the plungers retracted. Fig. 5 is a section in the same plane, showing the parts of the mold pressed together, and a cigar-filler within the matrix. Fig. 6 is a transverse section on the line *yy*, Fig. 3. Fig. 7 is a transverse section, illustrating a modification hereinafter described.

The cap or cover C of the mold is formed with any desirable number of cavities, *c*, corresponding in form to the half of a cigar. Twenty constitutes a good number, a machine making twenty cigars at once being found convenient to manipulate. The base of the mold is made up of a corresponding number of divisions, D, and end pieces, D', connected by strips A A, the said divisions and end pieces having vertical sides so formed that the spaces *d* between them will correspond in horizontal area to the shape of a cigar. Within these spaces *d* work plungers P, attached to a backing, B, which connects them all together, and is fitted to slide up and down between the strips A, and between offsets *a a* of the division-pieces D, corresponding to said strips A. The plungers have concave faces of the necessary shape to impart the required form to the cigars, and they extend to the entire width of the mold, their ends projecting over the strips A. This limits their downward movement and their upward movement is restricted by the backing B, to which they are attached, and by which they are connected. In their transverse section the plungers P have a tapering form, as shown in Figs. 2 and 3, so as to relieve their sides of friction, except at the extreme edges, where they necessarily fit tightly within the cavities *d*. This tapering form of the plungers is of especial importance in my machine, owing to the depth of the mold-cavities, and the necessity for pressing back all the plungers simultaneously with the fingers. The said form is also useful in effectually preventing the sticking of the plungers in the event of their becoming swelled by moisture. Dowels E are provided on the under side of the cap, fitting corresponding holes *e* in the base, to insure the proper relative adjustment of the parts.

From an inspection of Figs. 2 and 4 of the drawings, it will be seen that when the plungers are down the backing B, to which they are attached, projects below the bottom of the strips A A. The cavities *d* in the base or body of the mold are now ready for the reception of the tobacco of which the fillers are to be formed. The material being placed in said cavities in proper quantities, the cap is placed on the mold, its surface fitting closely

on that of the base, so as to form tight joints around the mold-cavities. The molds are then placed, a number together, in a press, and the backing B, carrying the plungers, is forced up into the position shown in Figs. 3, 5, and 6, bringing the strips A A flush with the backing B on the bed of the press or upon the mold below it, so that the parts of the mold are held firmly while the fillers are pressed to the required shape.

The molds are left in the press from two to six or eight hours, or sufficiently long for the fillers to become set to the proper form. They are then taken out, and on taking off the cap the fillers are found projecting out of the cavities for one-half their thickness, so that they are removed with perfect facility.

The operator, then, placing his fingers around the edges of the end pieces D', and pressing on the two end plungers with his thumbs, readily presses down the whole body of plungers at once, in readiness for refilling.

As a manifest modification of my invention, I reserve the right, if preferred, to attach the division-pieces D and end pieces D' to a stationary central backing, B', and the plungers P to edge strips A', adapted to work up and down in recesses in the ends of the division and end pieces, instead of in the center, as in

the present illustration. This modification is illustrated in Fig. 7.

I do not claim, broadly, a mold made in three parts—to wit, a connected series of concaves at top, a connected series of plungers at bottom, and a connected series of surrounding boxes, within which the said plungers work—excepting when the same are constructed and combined in the manner herein specified.

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

1. The series of plungers connected by one or more back strips, so that they may be pressed down simultaneously, and projecting over the longitudinal bars of the base, so as to limit their downward movement, and prevent their separation from the base, all said parts being constructed and combined as herein set forth.

2. The connected series of plungers, having a limited up-and-down movement, as described, in combination with a mold-base, below which the backing of the plungers projects in the retracted condition of the plungers, as and for the purposes designated.

NAPOLEON DUBRUL.

Witnesses:

OCTAVIUS KNIGHT,
WALTER ALLEN.