To all whom it may concern:

Be it known that we, THOMAS A. HORTON and ALBERT E. MASPONS, citizens of the United States, both residing at Kingston, in the county of Ulster and State of New York, United States of America, have invented certain new and useful Improvements in a Cigar-Mold Press, of which the following is a specification.

This invention relates to cigar mold presses and the primary object of the invention is the provision of a press in which the forms or molds used in presses of this character can be readily, quickly and accurately stacked.

Another object is the provision of a press in which the pressure may be uniformly and quickly applied and with very little exertion on the part of the operator.

Still another object is the provision of a press adapted to position the forms used in connection with the press without the customary extensive hand patting and positioning necessary in presses heretofore used.

The foregoing, together with such other objects as may hereinafter appear, we obtain by means of a construction, the preferred embodiment of which is shown in the accompanying drawings, wherein,

Fig. 1 is a side elevation of the press showing the lower form or mold in full lines and the balance in dot and dash lines.

Fig. 2 is an end elevation of Fig. 1.

Fig. 3 is a plan section taken on the line 3–3 of Fig. 1.

Fig. 4 is a vertical section of the press, partly broken away and showing the parts in position for applying pressure to the forms; and

Fig. 5 is a fragmentary view of a modified form wherein the guides are shown adjustable.

Referring now to the drawings the press includes a frame consisting of a base 1, vertical guide members 2, and vertical standards 3. At their upper portions the standards 3 are provided with shoulders 4 for positioning a head 5 which is held against the shoulders by means of the adjustable springs 6.

A bell crank lever 7 is pivoted in the head 5 and is connected to the stem 8 which pivotally carries the platen or pressure head 9 by means of the connecting link 10. The head 5 is provided with an abutment 11 to limit the downward motion of the bell crank and with a spring snap 12 for holding it in its upper position.

Rotary movement of the platen is prevented by the guides 2, which at the top are provided with lugs 13 which serve to tilt the platen when it is moved to upper position, thus providing additional clearance for insertion of the forms or dies 14, while still keeping the machine compact. These forms as illustrated each consist of an upper and lower half having a plurality of grooves, 14, of cigar shape as shown in the lower form in Fig. 2.

The base plate 1 is provided with the ribs 15 spaced apart sufficiently to receive and position the lower form. At the rear of these ribs are the vertical guides 2 which act as stops for the forms when inserted. The sides 16 of the guides 2 flare outwardly and forwardly from the edge 17 to insure positioning of the forms one directly in line with the other. The guides 2 may be stiffened by means of straps 18 and 19.

The operation of the press is preferably as follows: A stack of forms or molds is inserted into the frame, so that the lower form thereof is positioned between the ribs 15, after which the stack of forms is pushed back until it engages the flared sides 16 of the guides 2 which serve to automatically position the inner ends of the forms, whereby all of the forms comprising the stack are brought into complete alignment. We have found that by this arrangement considerable time is saved and a greater degree of accuracy obtained.

After the stack of forms has been inserted the bell crank lever 7 is swung or rocked until the platen engages the upper form. The swinging of the lever 7 tends to straighten out the link 10 and after the platen has engaged the upper form further movement results in raising the head 5 away from the shoulders 4 thereby compressing the springs 6 (see Fig. 4). If the link is on dead center or past center, the hand lever may be let go and the forms will still be under pressure of the springs, the amount of which can be adjusted.

The advantages of being able to quickly stack the forms and then with a single operation to apply pressure to the stack of forms greatly increases the efficiency of a press of this nature over the screw presses now in general use.
Referring now to the modification illustrated in Fig. 5 it will be seen that the vertical members 2 may be adjusted to accommodate forms of various lengths and widths by means of the bolts 20 and the slots 21. For the same purpose, the guides 15 may be provided, which are adjustable by means of the bolts 22 fitting the key slots 23.

We claim:

1. In a cigar mold press adapted to handle a plurality of forms, the combination of a frame having upright guide means flaring outwardly adapted to receive and position an end of the forms.

2. A press for shaping cigars in forms arranged in stacks, comprising a base for supporting the forms, means for aligning the lower form of the stack with the base and means for aligning the balance of the forms with said lower form.

3. In a cigar mold press adapted to handle a plurality of forms, the combination of a frame having a base for supporting the forms, a pressure plate for applying pressure to the stack of forms, means for aligning the lower form of the stack with the pressure plate and means for aligning the balance of the forms with said lower form.

4. In a cigar mold press adapted to handle a plurality of forms, the combination of a frame having a base for supporting the forms, a pressure plate for applying pressure to the stack of forms, means for aligning the lower form of the stack with the pressure plate and adjustable means for aligning the balance of the forms with said lower form.

5. In a cigar mold press adapted to handle a plurality of forms, the combination of a frame having a base for supporting the forms, a pressure plate for applying pressure to the stack of forms, adjustable means for aligning the lower form of the stack with the pressure plate and means for aligning the balance of the forms with said lower form.

6. In a cigar mold press adapted to handle a plurality of forms, the combination of a frame having a base for supporting the forms, a pressure plate for applying pressure to the stack of forms, means for aligning the lower form of the stack with the pressure plate, means for aligning the balance of the forms with said lower form and means for normally holding the pressure plate in a position to provide clearance for inserting the forms.

In testimony whereof, we have hereunto signed our names.

THOMAS A. HORTON.

ALBERT E. MASPONS.