

(No Model.)

C. F. MCGILVRAY.
MOLDING TABLE.

No. 516,610.

Patented Mar. 13, 1894.

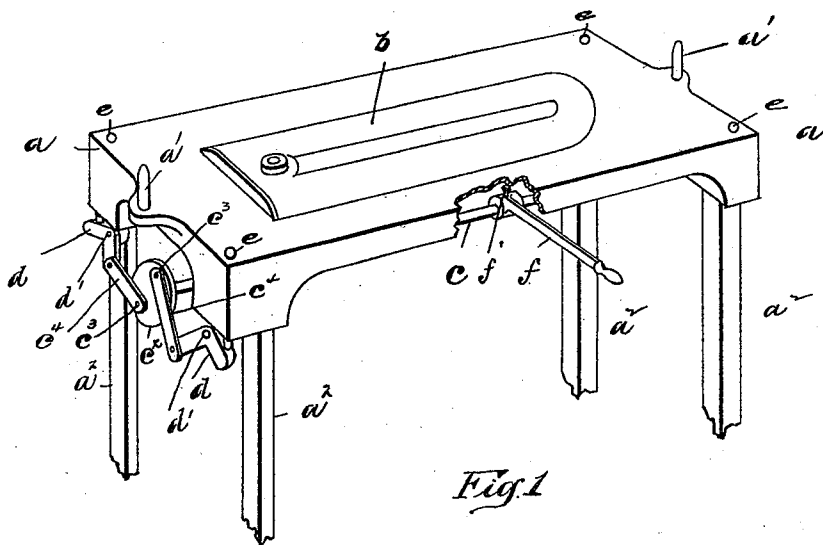


Fig. 1

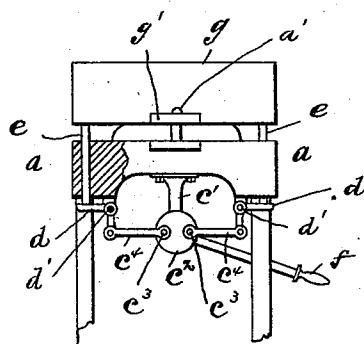


Fig. 2

WITNESSES:

H. B. Bradshaw
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BY

BY *Stacy K. Shepherd*

ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES F. MCGILVRAY, OF SPRINGFIELD, OHIO, ASSIGNOR OF ONE-HALF
TO THE ROBBINS & MYERS CO., OF SAME PLACE.

MOLDING-TABLE.

SPECIFICATION forming part of Letters Patent No. 516,610, dated March 13, 1894.

Application filed April 3, 1893. Serial No. 468,762. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. MCGILVRAY, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Molding-Tables, of which the following is a specification.

My invention relates to improvements in molding devices; and the object of my invention is to provide a simple device by which a mold can be readily formed in an ordinary flask; the invention being especially adapted to facilitate the removal of the pattern from the mold mechanically and uniformly, so as to insure accuracy in the result. I attain these objects by the constructions shown in the accompanying drawings, in which—

Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is an end elevation partly in section of the same, showing a flask in an elevated position on the table.

Like parts are represented by similar letters of reference in both views.

In the accompanying drawings *a a* represent a frame or table preferably formed of metal and provided at opposite ends with guide pins *a'*, *a'*. To the top of this table is secured the pattern *b*, the table in this respect answering the purpose of an ordinary match plate. The table is preferably supported at a suitable height on legs *a*², though it may be supported on a bench or in any other suitable manner. Extending longitudinally under the table is a shaft *c*, supported in suitable bearings *c'*, and provided at each end with a crank head *c*², having arranged on opposite sides thereof suitable crank pins *c*³. Pivoted in suitable bearings under the table, on each side of each of the crank heads *c*², are bell crank levers *d*, pivoted at *d'*, and connected at one end by a link *c*⁴, to the crank pins *c*³.

At each of the four corners of the table *a*, *a*, a perforation is formed adapted to form a bearing for a pin *e*; said pins being inserted loosely in said perforations so as to rest on the outer extremities of the horizontal portions of the bell crank levers *d*. Arranged at the center of the shaft *c*, is a handle *f*, preferably of metal and bored out at one end

to receive said shaft and secured thereto by a set-screw *f'*.

The pins *e*, at the corners of the table are arranged so as to contact with the corners of the flask *g*, when placed on said table, with the sockets *g'*, of said flask, extending over the pins *a'*, of the table. In the normal position the handle *f*, and the bell crank levers occupy the position shown in Fig. 1, with the sliding pins *e*, flush with the top of the table. That portion of the flask which is to receive the mold formed by the pattern *f*, is placed on the table, being guided to the proper position by the guide pins *a'*. The sand is thrown into the flask and rammed up in the usual manner. The handle *f*, is then operated so as to partially revolve the shaft *c*, and turn the crank heads to the position shown in Fig. 2, with the links *c*⁴, extending in opposite directions from said crank heads, thus operating the bell crank levers so as to elevate the pins *e*, and elevate the flask *g*. When moved to this position the links *c*⁴, stand diametrically opposite each other, and thus serve to lock the respective devices in this position and hold the flask elevated; the shaft *c*, being adapted to operate the crank heads on opposite ends thereof simultaneously; the pins *e*, are elevated uniformly and the flask uniformly raised from the pattern; thus insuring accuracy in drawing the same. After the flask has been elevated in the manner described, it is removed from the table; the pins returned to their normal position by moving the handle, when it is again ready for operation.

It is obvious that the constructions herein described admit of various modifications. I do not, therefore, limit myself to the exact constructions shown and described, but claim as my invention—

1. The combination of the table having the loosely mounted pins therein, the longitudinal shaft having a handle thereon under said table, bell crank levers at each end of said table, crank heads arranged on each end of said shaft, and connecting links from said crank heads to the bell crank levers, said bell crank levers being adapted to contact with said pins, substantially as specified.

2. A frame or plate having a pattern there-

on, said frame or plate being perforated at the corners to receive loosely mounted pins, adapted to normally stand flush therewith, bell crank levers pivoted under said table
5 and adapted to contact with said pins, a longitudinal shaft extending under said plate and provided on opposite ends with crank heads, a handle for operating said shaft, each of said crank heads having pivotally arranged
10 crank pins, and connecting links from said crank pins to said bell crank levers, whereby

a movement of said handle uniformly operates said pins and holds them in an operated position when said links are moved to the proper position, substantially as specified. 15
In testimony whereof I have hereunto set my hand this 28th day of March, A. D. 1893.

CHARLES F. MCGILVRAY.

Witnesses:

ROBERT C. RODGERS,
PAUL A. STALEY.