

J. A. McFERRAN.
MOLDS FOR PILLS.

No. 177,866.

Patented May 23, 1876.

Fig. 1.

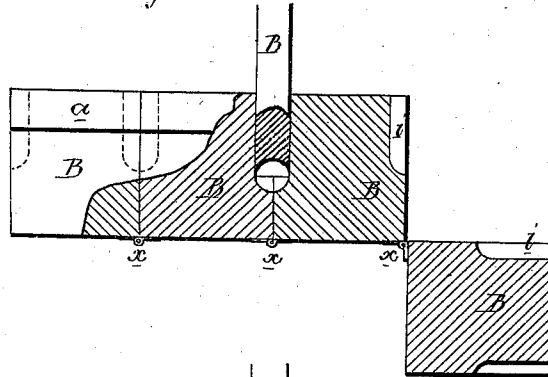


Fig. 2.

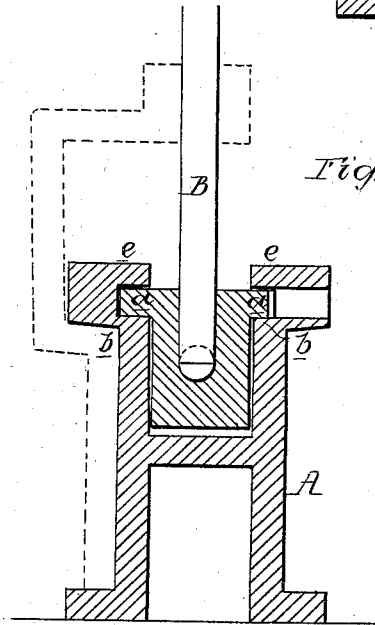
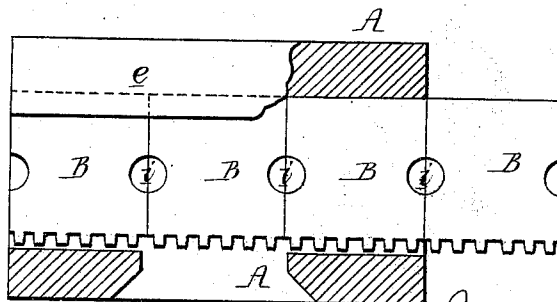


Fig. 3.



Witnesses
Harry Howson
Harry Smith

Joseph A. McFerran
by his Attorneys
Howson and Son

UNITED STATES PATENT OFFICE.

JOSEPH A. MCFERRAN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MOLDS FOR PILLS.

Specification forming part of Letters Patent No. **177,866**, dated May 23, 1876; application filed April 28, 1876.

To all whom it may concern:

Be it known that I, JOSEPH A. MCFERRAN, of Philadelphia, Pennsylvania, have invented certain Improvements in Molds, of which the following is a specification:

The object of my invention is to construct a chain of molds in which powder for making pills, or other materials for other objects, can be compressed, and from which the molded article can be readily discharged. This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a vertical section of my improved molding device; Fig. 2, a transverse section; and Fig. 3, a plan view, partly in section.

A is a box-like frame, between which a number of blocks, B, are arranged to slide, the said blocks being hinged together at their lower ends *a*, as shown. Each block B has on each side a flange, *a*, the two flanges bearing and sliding on ledges *b b*, formed on the frame, which has ribs *c* overlapping the blocks, and keeping them in place. Chambers *i* for receiving the material to be molded are formed at the junctions of the blocks, one half of each chamber being formed in one block, and the other half in the adjoining block, and the chambers in all cases extending below the supporting-ledges *b* of the blocks, for a purpose explained hereafter. B is a plunger or die adapted to the chambers of the molds, and operated by any suitable mechanism.

One of the chambers which has received its proper charge of material to be molded being beneath the plunger, the latter is brought down with sufficient force to condense and solidify the charge, after which the chain of molds is moved forward between the frame A until another chamber is beneath the mold, when the plunger is again depressed, and so the operation is continued.

As the blocks pass from the frame, and are freed from the control of its guides, they will turn downward on their hinges, thereby exposing the compressed charges, which will

either of themselves fall from the molds, or can be readily dislodged therefrom.

As before remarked, the chambers of the molds must extend below the bearing-ledges *b*. In fact, the chambers must be of such a depth that the lower end of the plunger, when it begins to act on the material, shall be below the said ledges. This important feature of my invention should be adhered to, for the reason that pressure applied by the plunger to the material at a point below the said ledges tends to force together the two blocks in which the chamber is formed—or, in other words, the pressure of the plunger on the material tends to maintain a tight joint between the adjoining blocks.

The blocks may constitute an endless chain of molds, and they may be moved forward through the frame A by hand, or by any suitable mechanism.

I do not claim, broadly, a series of blocks hinged together, with chambers at the junction; but

I claim as my invention—

1. The combination of the plunger B with the stationary frame A and chambered blocks B, hinged to each other, substantially as described.

2. The combination of the chambered blocks, hinged together at their lower edges, and having at or near the top flanges *a*, with supporting-ledges on a guiding-frame, A, all substantially as specified.

3. The combination of the blocks, hinged together as specified, and chambered at their junctions, with a plunger, the movement of which is such that, when depressed, its lower end shall be below the support of the blocks.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH A. MCFERRAN.

Witnesses:

HARRY HOWSON, Jr.,
HARRY SMITH.