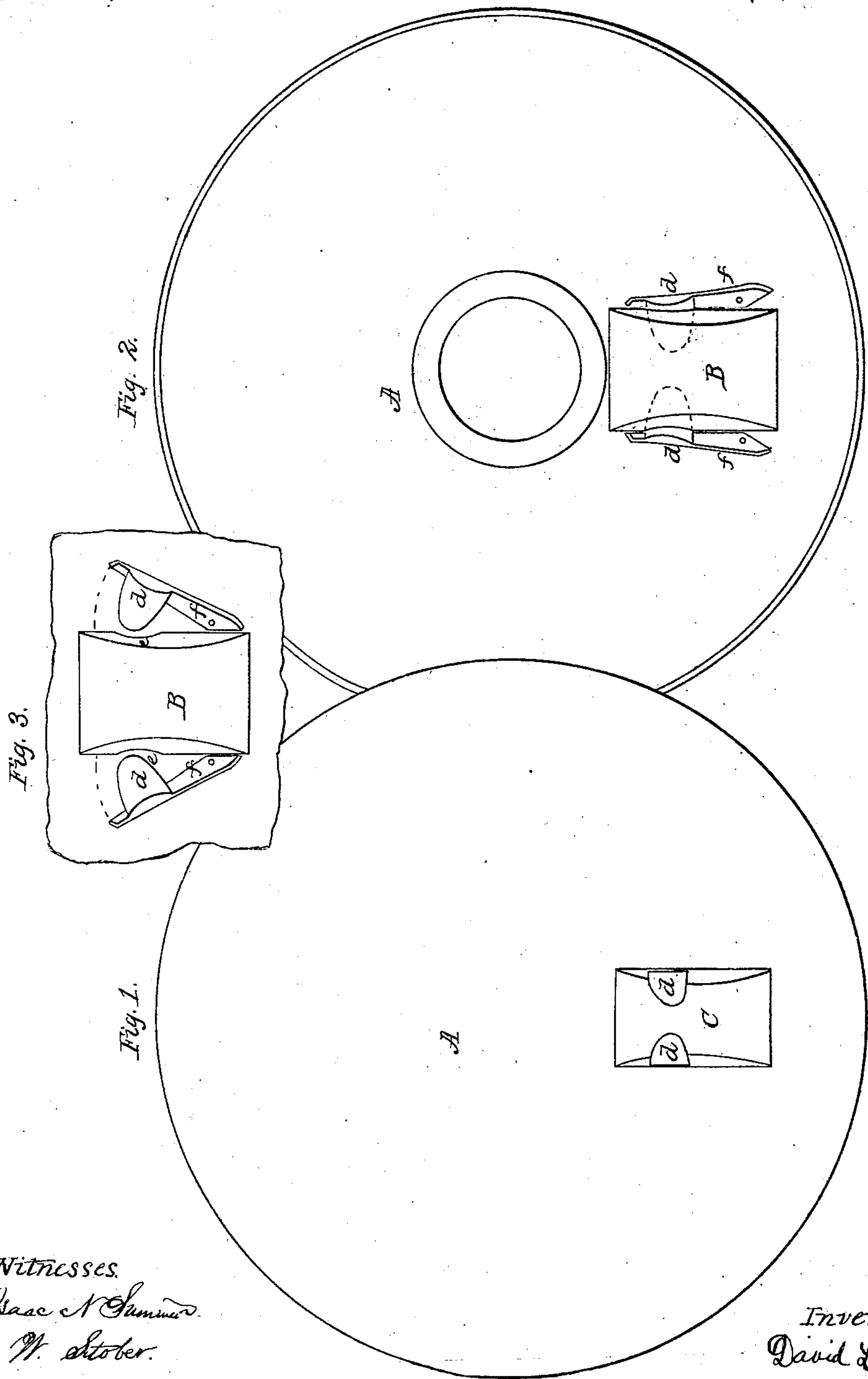


*D. L. Stiles,*

*Pattern for Molding.*

*Nº 25,707.*

*Patented Oct. 4, 1859.*



*Witnesses.*  
*Isaac N. Sumner.*  
*J. W. Stober.*

*Inventor*  
*David L. Stiles*

# UNITED STATES PATENT OFFICE.

DAVID L. STILES, OF ROCHESTER, NEW YORK, ASSIGNOR TO JOHN M. FRENCH & CO., OF SAME PLACE.

## IMPROVEMENT IN MOLDING STOVE-COVERS.

Specification forming part of Letters Patent No. 25,707, dated October 4, 1859.

*To all whom it may concern:*

Be it known that I, DAVID L. STILES, of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Method of Molding Stove-Covers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a view of the top of the cover or pattern thereof; Fig. 2, a plan view of the same inverted; Fig. 3, a plan view of a portion thereof, showing the position of the plugs *d d* when the pattern is withdrawn from the sand.

Similar letters refer to corresponding parts in all the figures.

As represented in the drawings, A is the plate which forms the cover, and B the portion which forms the recess C in the reverse side, for the reception of the cover-lifter.

My invention is designed to obviate the difficulty of molding the lips or projections *d d* for the handle and the necessity of setting wire in the mold for the purpose.

I construct my pattern with holes *e e*, Fig. 3, of a suitable size and form for the purpose, in the two side walls of the indented portion C. In these I fit two plugs, *d d*, which resemble in form the two sections of a cone if divided vertically, one side being a plane, and the other convex and diminishing toward its termination, as shown in the drawings. These pieces, when inserted, project inwardly through the walls of the recess C, their points approaching each other to form, when cast, a stop or support for the cover-lifter. They are connected on the outer side of the projection each with a small pivoted lever, *f f*. The short end of the lever is either beveled off on the side next to B, or the pivots set far enough back to admit of their being moved toward each other far enough to throw the plugs *d d* entirely out of the recess C.

The operation of molding with this improvement consists in having the plugs in the position shown in Fig. 1, in molding that side of

the cover the sand being packed around and underneath them. It is then turned over, and the other side, Fig. 2, molded, when, the flask being removed from this side, the workman applies his thumb and finger to the short end of the levers *f f*, which instantly withdraws the plugs from the sand of that part of the mold which forms the recess C, when the pattern can be readily withdrawn. This leaves the mold so that the casting is precisely as shown in Fig. 1.

I am aware that a method of accomplishing this end, consisting of two circular pieces, a part of which is removed, pivoted at their centers and revolving in the sand, has been patented; but this method is objectionable in two particulars—first, by revolving in the sand which forms the mold the friction between the surfaces of the two displaces some portion of the sand, and thereby renders the mold imperfect and injures the casting; second, the time required, the molder having to turn each pivoted piece separately and carefully in order to withdraw the pattern. By my improved method the plugs are both withdrawn instantly by the same act, merely touching the levers *f f*, and their tapering form is such that as soon as started they are no longer in contact with the mold, and therefore cannot abrade the surface of the sand.

The facility and expedition with which covers can be molded by this method is of great importance to the workman, as well as to the public in the better article produced.

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

The employment of the coniform plugs *d d* and pivoted thumb-levers *f f*, in combination with that portion of the pattern which forms the recess of the cover, substantially in the manner and for the purposes herein specified.

DAVID L. STILES.

Witnesses:

ISAAC N. SUMMERS,  
J. W. STOBER.