G. E. CHAMBERLIN.

FLASKS FOR MOLDING.

No. 182,411. Patented Sept. 19, 1876.

Fig 2

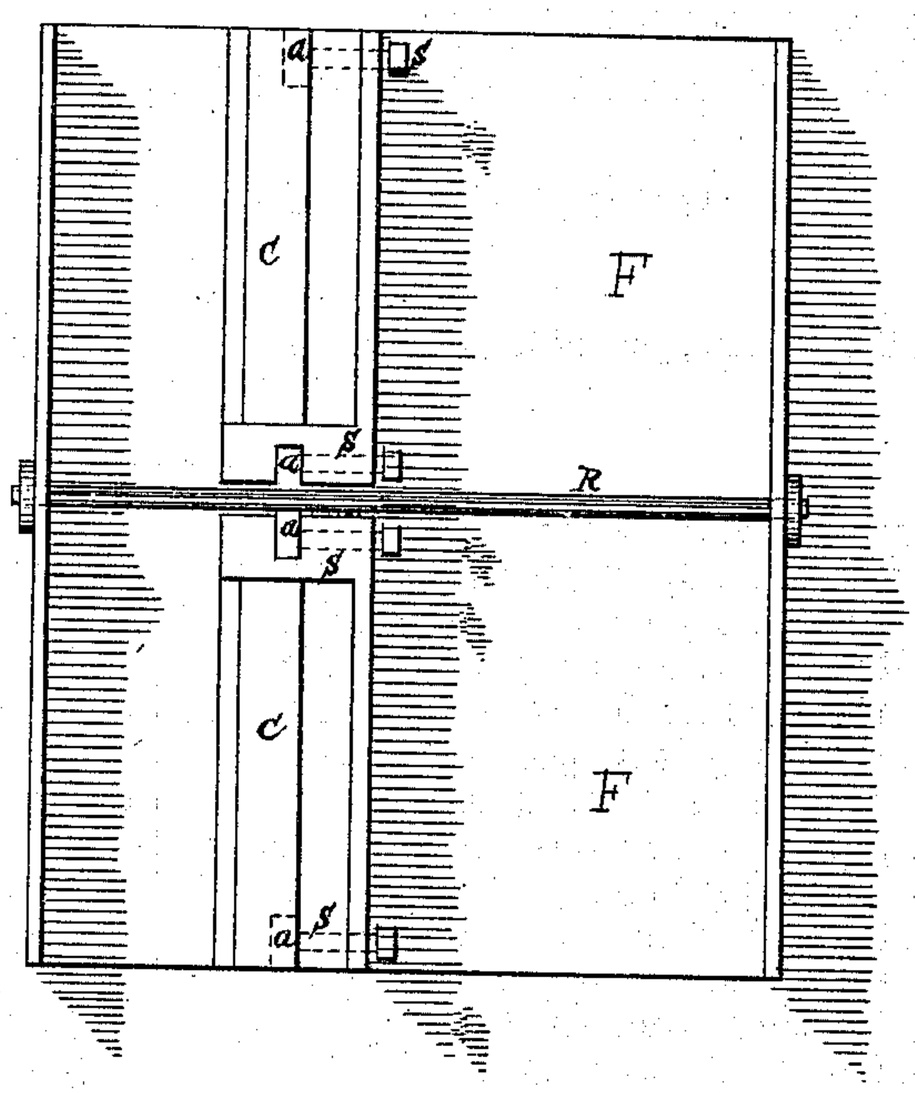


Fig 3

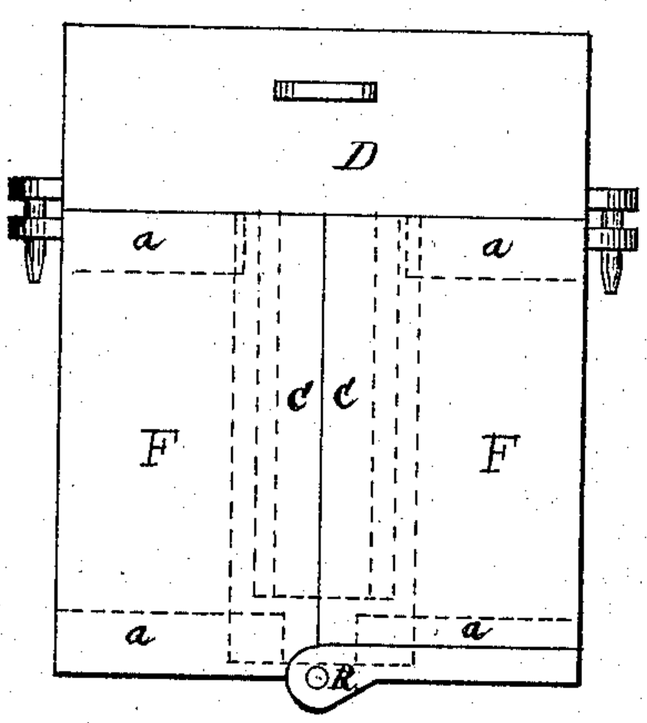
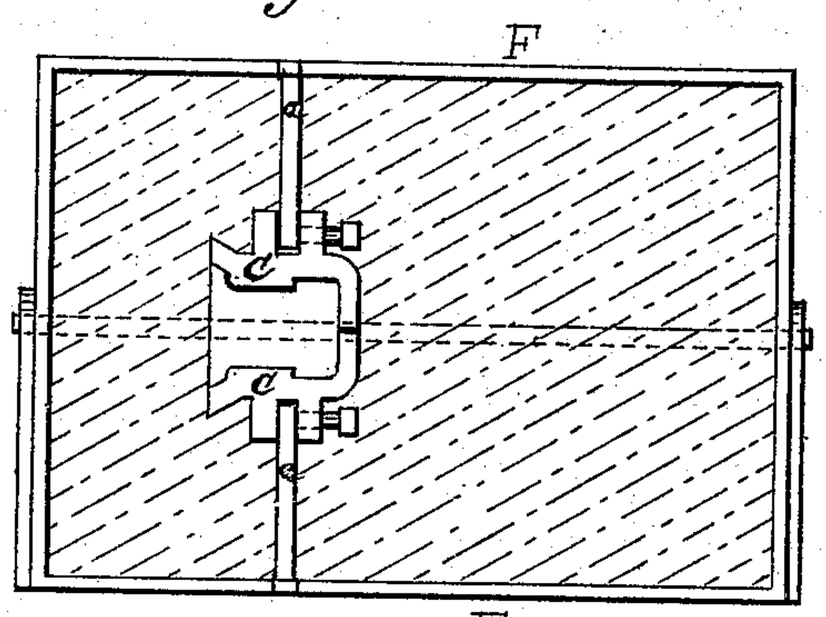


Fig 1



WITNESSES:

Benj. F. Labbelle

J. T. Downing

INVENTOR:

George E. Chamberlin

UNITED STATES PATENT OFFICE.

GEORGE E. CHAMBERLIN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF HIS RIGHT TO BENJAMIN F. PABODIE, OF SAME PLACE.

IMPROVEMENT IN FLASKS FOR MOLDINGS.

Specification forming part of Letters Patent No. **182,411**, dated September 19, 1876; application filed May 10, 1875.

To all whom it may concern:

Be it known that I, GEORGE E. CHAMBERLIN, of Providence, county of Providence, State of Rhode Island, have invented a certain Improvement in Flasks for Molding, of which the following is a specification:

My invention consists in making the main part or drag-box of the flask in two or more parts, and pivoting these parts together with a hinge at the bottom or end, so that this part of the flask can readily swing open and relieve the casting from the sand or chills in which it has been formed by having the chill attached to the inner sides of the flask.

This device is especially important where chills of intricate form are used to produce castings of uniform dimensions. The chills can be rigidly attached to the sides of the flask, or may constitute a part of the same; and, although there may be projections on the chills to form recesses in the castings, they can readily be delivered by opening the drag after the cope has been removed, which could not be done with the ordinary solid drag-flask.

Figure 1 is a plan of my improved drag closed with the chills in position for use. Fig. 2 is a plan of the same opened to deliver the casting. Fig. 3 is an end elevation of a flask embodying my invention with cope D in position, studs *a a* and chills *c c* being shown by dotted lines.

Similar letter refer to the same parts in the different figures.

F F are the parts of my improved flask, pivoted together at the bottom with rod R, so as to swing open, carrying the chills *c c* to the position shown in Fig. 2. *a a*, &c., are studs projecting from the sides of the drag F, to which any desired form of chills may be attached by means of set-screws *s s*, as shown, or by any other suitable device, permitting the chills to be nicely adjusted and rigidly held in position, thereby securing uniformity in the castings, and facilitating their removal from the flask and chills.

I claim as my invention—

The combination of a pivoted drag with chills, a chill being secured to each side of the drag, substantially as shown, and for the purposes set forth.

GEORGE E. CHAMBERLIN.

Witnesses:

B. F. PABODIE,

J. T. DOWNING.