E. C. Little,

Molders' Flask.

No. 58,173. Patented Sep. 18, 1866.

Fig: 1.

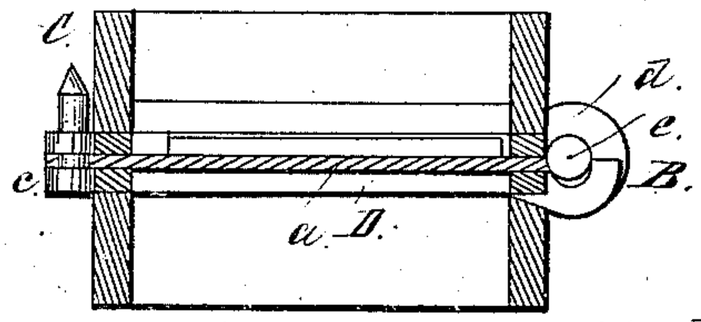


Fig: 2.

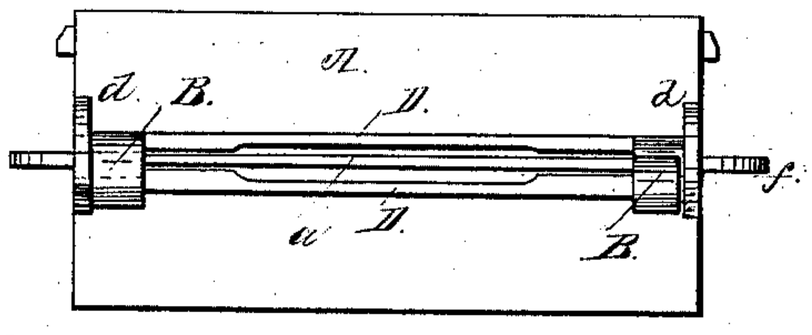


Fig: 3.

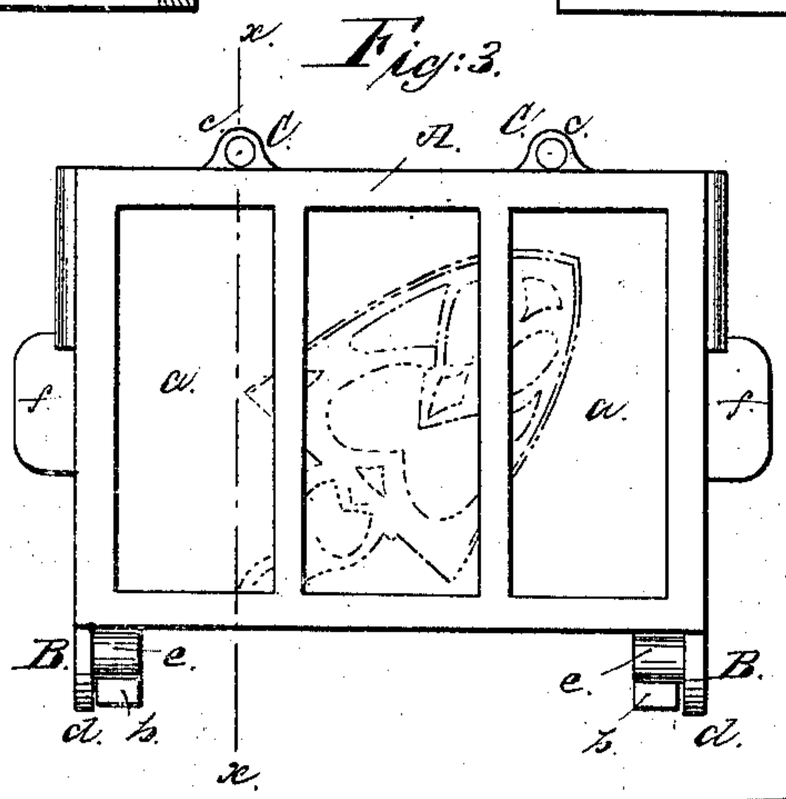


Fig: 4.

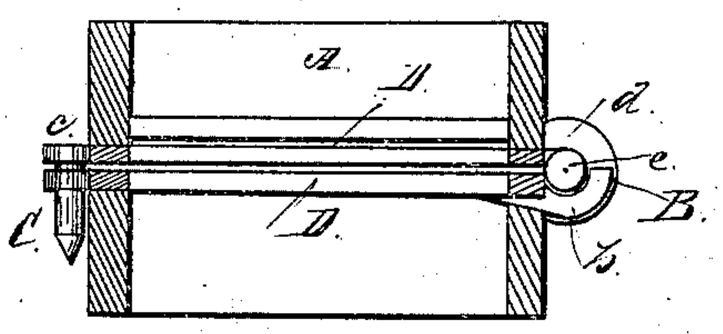


Fig: 5.

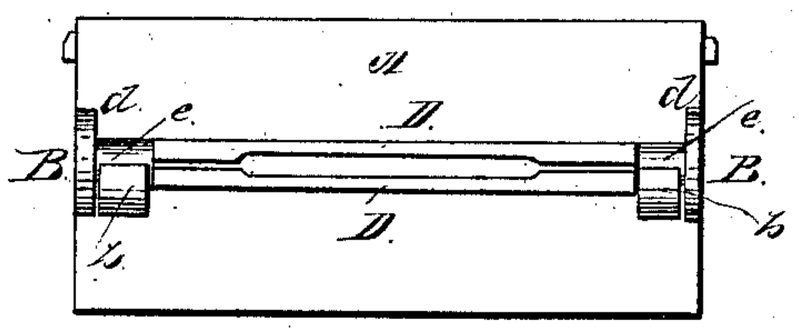
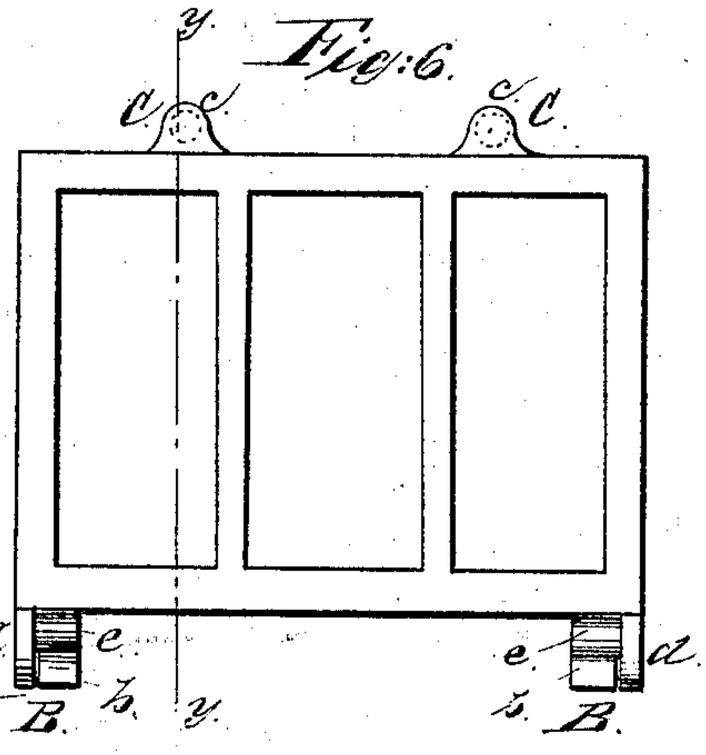


Fig: 6.



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UNITED STATES PATENT OFFICE.

E. C. LITTLE, OF ST. LOUIS, MISSOURI, ASSIGNOR TO EVELINE LITTLE, OF THE SAME PLACE.

IMPROVEMENT IN MOLDERS' FLASKS.

Specification forming part of Letters Patent No. **58,173**, dated September 18, 1866.

To all whom it may concern:

Be it known that I, E. C. LITTLE, of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and useful Improvement in Molders' Flasks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical section of a flask, taken in the line *x x*, Fig. 3, showing the cope and drag connected with frames on their edges and a match-plate pattern between them. Fig. 2 is a side view with the same exhibit. Fig. 3 is a plan with the same exhibit. Fig. 4 is a vertical section of a flask, taken in the line *y y*, Fig. 6, showing the cope and drag connected without the match-plate pattern between them. Fig. 5 is a side view with the same exhibit. Fig. 6 is a plan with the same exhibit.

Similar letters of reference indicate like parts.

The nature of this improvement consists in combining my improved flask hinges and pins with my improved cast-iron frame for protecting the cope and drag of iron-molders' flasks, and casting the hinges and pins connected with the protecting-frames and the pins and female part of the hinge upon the frame attached to the drag part of the flask.

The special feature and advantage of this arrangement is that it permits the molder to introduce a match-plate pattern between the cope and drag, allowing the raising of the cope above the drag the thickness of the match-plate without producing side movement, as will be hereinafter more particularly described.

A represents a wooden flask; B B, the hinges; C C, the pins; D D, the cast-iron protecting-frames on the inside edges of the cope and drag, and *a a* match-plate patterns between them. The ordinary side lifting-handles are marked *f f*.

The hinges and pins and protecting-frames, as separately applied, constitute the subject-matter of distinct applications for Letters Patent, and the present application proposes a combination of the several parts cast together, in connection with a match-plate pattern placed between the frames.

In detail, the frames D D are cast-iron plates fitted upon the inside edges of the cope and drag and fastened by countersunk screws. On the drag-frame is cast the female part of a hinge, at the corner, with a half eye or bearing, *b*, projecting beyond the outside of the flask, and on the same frame the pins C C are also cast. They sit upon projecting ears or lugs *c c*.

The male part of the hinge is cast on the cope-frame, with projecting flanges or wings *d d* made flush with the flask on the outside, being let into the side of the eye *b* of the female part of the hinge, and set against a shoulder in the back part, as shown in the drawings.

From the middle of the square inside face of the wings *d d*, but united with the side on the frame D, rises the pintle *e*, which fits into the eye or bearing *b*, on which it rests and works when in place.

When the cope is placed upon the drag without a pattern-plate between them, then the frames D D come together and make a close joint, the pintle *e* sitting down snug on its seat of the eye *b*, as shown by Figs. 4, 5, and 6; but when the match-plate pattern is placed between them, as shown in Figs. 1, 2, and 3, then the pintle *e* rises in its seat in the eye *b* as much as is required by the thickness of the pattern, and is held in place by the wing *d*, which bears against it and prevents all side movement of the drag and cope and derangement of the mold.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the hinges B B and the pins C C with the protecting-frames D D, when cast together in one piece, and so arranged and applied in connection with the cope and drag of molders' flasks as to permit a match-plate pattern, *a*, to be placed between them without derangement by side movement, substantially as herein described.

E. C. LITTLE.

Witnesses:

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