(No Model.)

F. M. WONDERS.

MOLDER'S FLASK.

No. 456,185. Patented July 21, 1891.

Fig. 1.

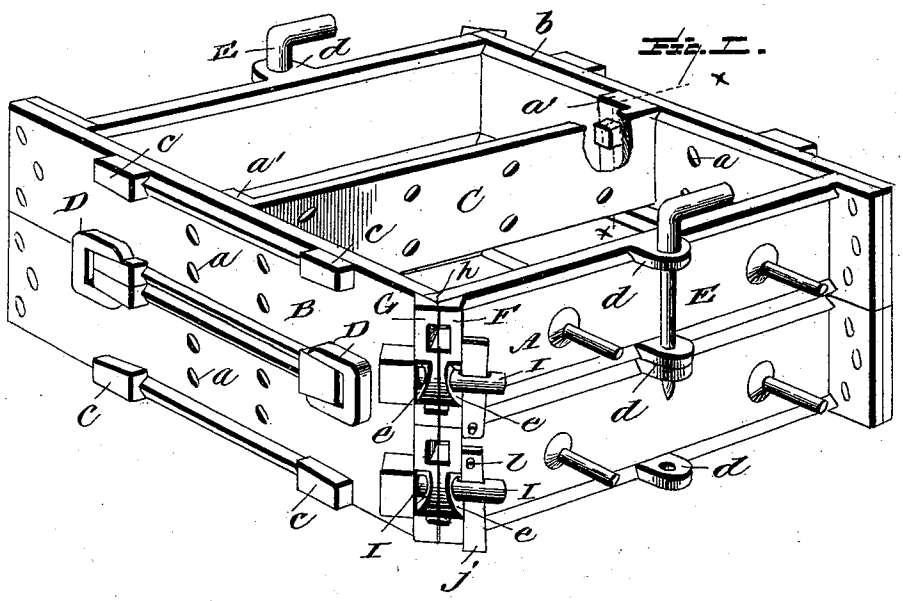


Fig. 2.

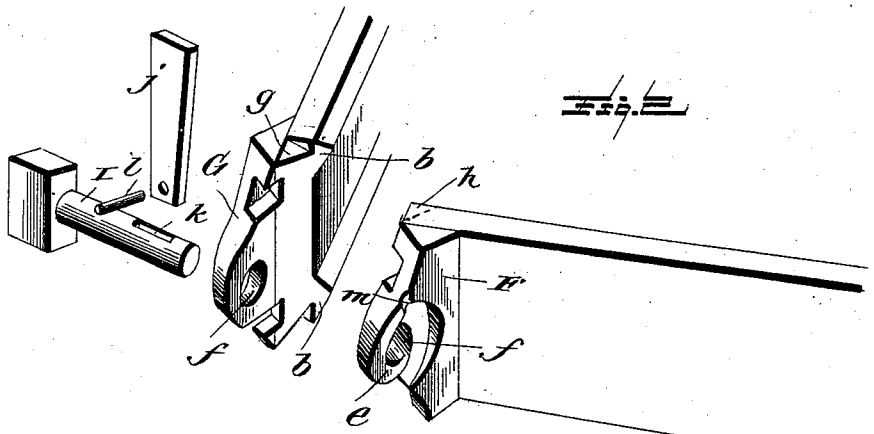
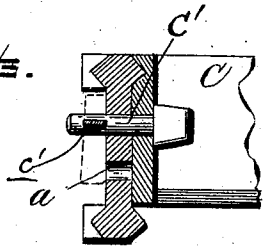


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANCIS M. WONDERS, OF ALLIANCE, OHIO.

MOLDER'S FLASK.

SPECIFICATION forming part of Letters Patent No. 456,185, dated July 21, 1891.

Application filed April 21, 1891. Serial No. 389,830. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS M. WONDERS, a citizen of the United States, residing at Alliance, in the county of Stark, State of Ohio, have invented certain new and useful Improvements in Molders' Flasks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in molders' flasks; and it has for its objects, among others, to improve, generally, upon this class of devices, and more especially upon the means employed to hold the sides and ends together at the corners and the means for holding the sections detachably together.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a molder's flask constructed in accordance with my invention, having a single cope. Fig. 2 is a perspective view of the parts constituting the corner-lock, said parts being on an enlarged scale and detached and shown bottom side up, but in their relative positions. Fig. 3 is a section on the line x x of Fig. 1.

Like letters of reference indicate like parts in all views where they occur.

Referring now to the details of the drawings by letter, A designates the sides, and B the ends, of the flask, which, except as hereinafter specified, may be of known construction, one end and side being united at their junction in any suitable manner, the means and manner of uniting at this point not forming a part of the present invention. The ends are provided with a plurality of holes a for the passage of the means which secure the cross-bar C adjustably in place, the said cross-bar having right-angled ends a', as shown in Fig. 1, which are formed with V-shaped grooves to receive the V-shaped ridges b on the inner faces of the end pieces, the said ridges or ribs being seen best in Fig. 2. The right-angled portions of the cross-bar are provided with holes for the passage of the securing means, as the removable pin C′ and wedge-shaped key c', as shown in Fig. 3. Upon their outer faces the ends are provided with wedge-shaped projections or blocks c, one at each edge; and D is a clip or clamp, the arms of which are designed to embrace the projections of the two adjacent parts, as seen in Fig. 1, and thus firmly hold them together, but permit of their ready separation when desired by simply loosening the clamps. The sides of the flask are provided with apertured lugs d at their outer edges, as seen in Fig. 1, and E is a bent pin designed to engage the said lugs, as seen in said Fig. 1, to hold the parts together.

As above described, one end and one side are united at the corner in any suitable manner. The unattached end of the side is formed or provided as shown in Fig. 2, wherein it is shown as having extending at an angle of forty-five degrees a projection F, which may be a casting affixed thereto or it may be integral with the side. The unattached end of the end piece is similarly constructed, having an angular projection G, as shown best in Fig. 2. When the flask is put together, these two angular portions come together, as seen in Fig. 1, and form a tight joint at the corner. The outer face of each of these angular extensions is formed with a cam-surface e and an opening f, through which the securing pin or key passes. The one portion is formed with a triangular-shaped notch g, into which a correspondingly-shaped projection h on the other parts fits, as seen in the views. This serves to prevent working of the parts at the joint. The parts are placed together, as seen in Fig. 1, and then a pin or key I is passed through the coincident holes in the two angular portions, and after the pin or key has thus been placed in position a wedge-shaped key j is passed through the hole k in the end of the pin, and a pin or keeper l is then passed through a hole in the end of the wedge, after which the pin I is given a partial revolution in its bearings, so that the wedge-shaped key and the head of the pin engage the cam-surfaces of the outer faces of the angular projections at the corner, and the parts are thus tightened or drawn together. The pin I seats

itself in a slight seat or depression *m* provided therefor, as shown in Fig. 2, to prevent accidental unlocking of the parts.

The construction is simple, the operation will be understood and can be performed by any one, whether skilled in the art or not, and the advantages are apparent.

Various modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. In a molder's flask, a connection for the corner, the same comprising abutting angular portions carried by the sides and having outer cam-surfaces, and a removable and rotatable connecting-pin carrying bearing devices to engage the cam-surfaces, as set forth.

2. In a molder's flask, the combination, with an end and side, each provided with an angular portion having cam-surface and hole, of the pin having hole and passed through the holes in the angular portions, and the wedge-shaped key passed through said hole and bearing against the cam-surface, as set forth.

3. In a molder's flask, the combination, with an end and side, each provided with an angular portion having cam-surfaces and hole and the one with a projection to engage a corresponding notch in the other, of a removable pin having opening therethrough, a wedge-shaped key, and a retaining-pin, all as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FRANCIS M. WONDERS.

Witnesses:

THOMAS K. CARR, Jr.,

J. W. CRAINE.