

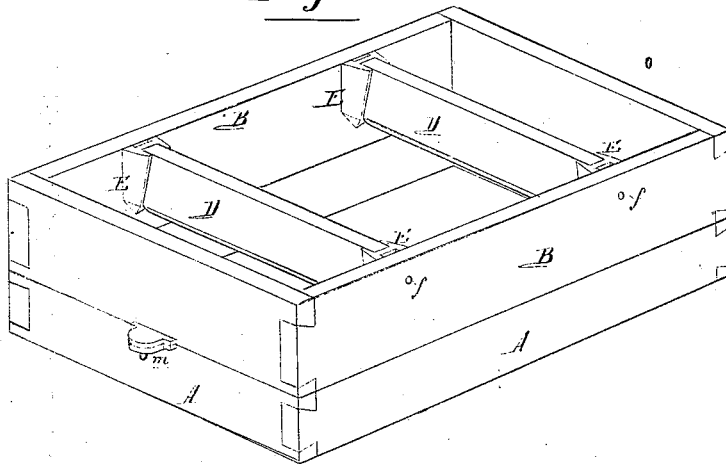
*J. M. Laughlin,*

*Molding Flask.*

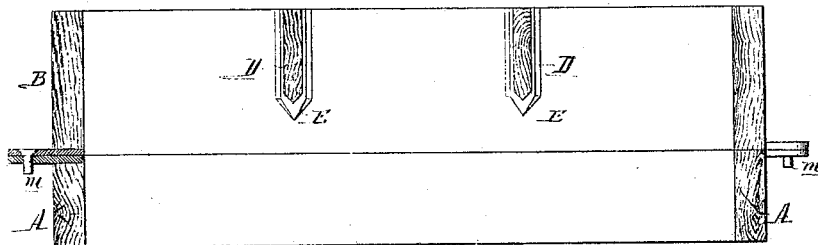
*No. 106350.*

*Patented Aug. 30. 1870.*

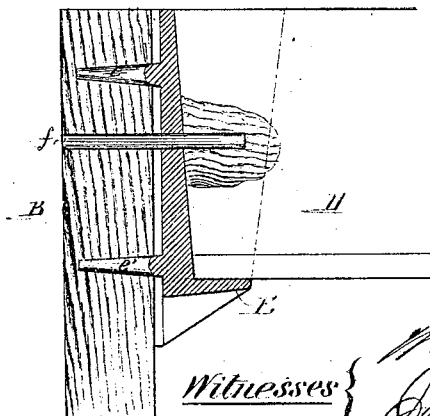
*—Fig. 1.—*



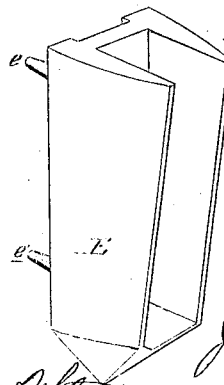
*—Fig. 2.—*



*—Fig. 3.—*



*—Fig. 4.—*



*Witnesses*

*Wm. A. Steel,  
John Parker*

*John M. Laughlin  
by his Att'y  
Stinson & Son*

# United States Patent Office.

JOHN McLAUGHLIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
HIMSELF AND JACOB APPLE, OF SAME PLACE.

Letters Patent No. 106,850, dated August 30, 1870.

## IMPROVEMENT IN MOLDING-FLASKS.

The Schedule referred to in these Letters Patent and making part of the same

I, JOHN McLAUGHLIN, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improvement in Molding-Flasks, of which the following is a specification.

### *Nature and Object of the Invention.*

My invention consists in the combination, substantially as described hereafter, of certain detachable cross-bars and metal sockets, with the cope of a molding-flask, so as to permit the ready removal of burnt cross-bars, and the ready attachment of new ones, and so as to prevent the cope from being ignited by burning cross-bars.

### *Description of the Accompanying Drawing.*

Figure 1 is a perspective view of my improved molding-flask.

Figure 2, a vertical section of the same.

Figure 3, a vertical section of part of the upper portion of the flask or cope, drawn to an enlarged scale; and

Figure 4, a perspective view of one of the sockets attached to the cope.

### *General Description.*

A represents the lower portion of a molding-box or flask, and

B the upper portion or cope, both consisting of side and end strips of wood, dovetailed or otherwise secured together, and the cope having the usual pins, *m*, for fitting into holes in lips on the lower portion of the flask.

The upper portion or cope of a flask has any suitable number of transverse bars, which are usually nailed to the side strips, and these bars frequently catch fire, owing to their contiguity with the molten metal as the latter is poured into the mold, the fire

sometimes communicating with the side strips of the flask, and injuring or destroying the same.

In place of cross-bars nailed to the cope, I use detachable bars, D, the ends of which are adapted to metal sockets, E, attached to the inside of the opposite side strips of the cope B in the following manner:

At the rear of each socket are cast upper and lower pins, *e* and *e'*, which I prefer to make of the tapering form represented, and which fit snugly in corresponding orifices in the cope. After these sockets have been arranged in their proper position, the cross-bars are fitted to them, as shown in figs. 1 and 3, and these cross-bars serve to retain the sockets in their places. The cross-bars themselves may be so retained by pins, *f*, of hard wood or metal, as to prevent their vertical displacement.

I prefer to make the sockets, at the point where the ends of the bars bear against them, slightly inclined, as shown in fig. 3, so that the bars may be driven tight into their places.

My invention not only permits the ready removal of burnt cross-bars, and the equally ready introduction of new ones, but the sockets serve as barriers to prevent ignited cross-bars from setting fire to the cope. The expense of the numerous nails heretofore required in securing the cross-bars is obviated.

### *Claim.*

The combination, substantially as described, of detachable cross-bar or bars D, and sockets E, with the cope of a molding-flask.

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

Witnesses:

JOHN McLAUGHLIN.

F. B. RICHARDS,  
WM. A. STEEL.