(No Model.)

W. M. GORRY.

TOOL FOR MOLDING THE MOLD BOARDS OF PLOWS.

No. 318,979. Patented June 2, 1885.

Fig. 2.

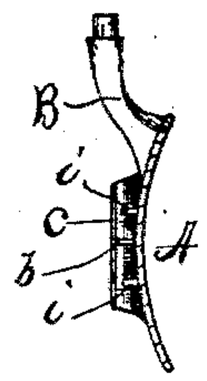


Fig. 1.

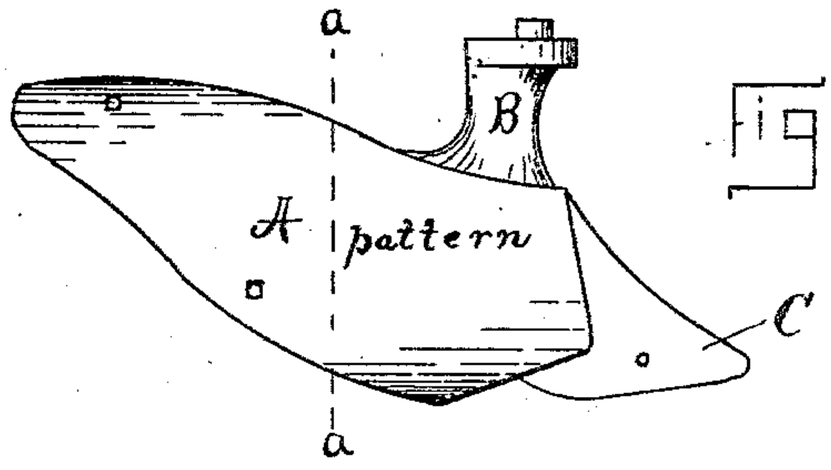


Fig. 6.

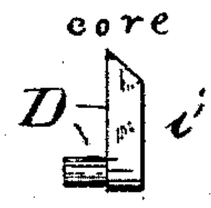


Fig. 3.

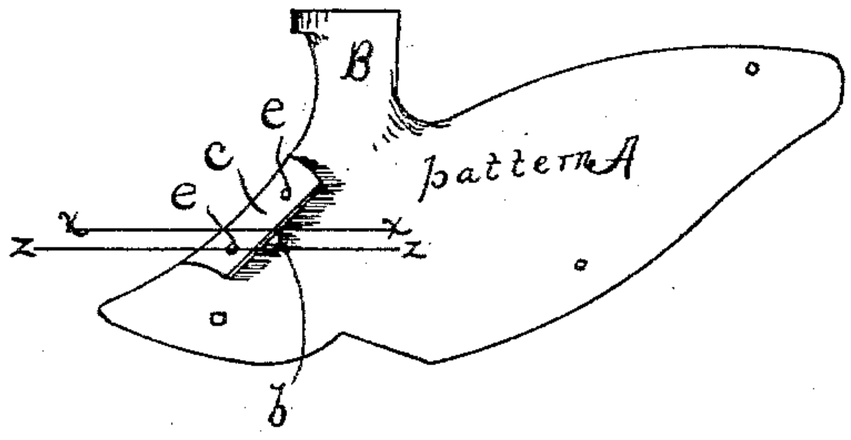


Fig. 4.

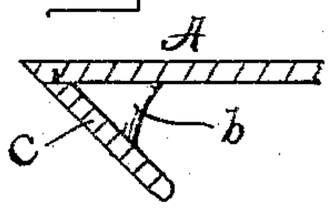
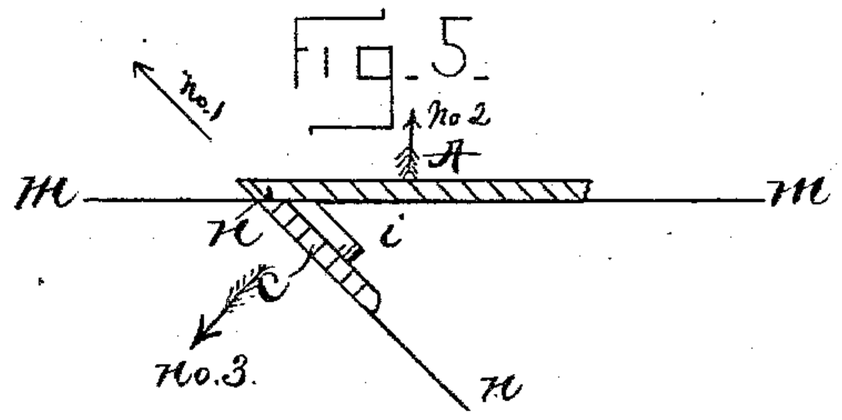


Fig. 5.



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UNITED STATES PATENT OFFICE.

WILLIAM M. GORRY, OF WILLIMANTIC, CONNECTICUT.

TOOL FOR MOLDING THE MOLD-BOARDS OF PLOWS.

SPECIFICATION forming part of Letters Patent No. 318,979, dated June 2, 1885.

Application filed September 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. GORRY, of Willimantic, in the county of Windham and State of Connecticut, have invented a certain new and useful Improvement in Molding the Mold-Boards of Plows, which improvement is fully set forth and described in the following specification, reference being had to the accompanying drawings.

My improvement relates particularly to a new method of molding the so-called "mold-board" in plows, my immediate object being to simplify somewhat the operation, and also to overcome certain difficulties which have heretofore been frequently met, as hereinafter more fully described.

So far as I am acquainted with the state of the art, it has been the practice heretofore to mold said mold-board either in a three-part flask or in a flask having a "draw-back" to release the removable section of the pattern which represents the ledge to which is to be bolted the so-called "landside" of the plow. In using a draw-back so that said ledge-pattern may be drawn from the sand, there is a constant tendency to jar and displace the mold, thereby spoiling a large percentage of the castings made, and, in consequence, adding materially to the cost of those that come from the pouring perfect. Great inconvenience also arises from the fact that when a certain number of mold-board castings are wanted at a stated time a much larger number must be molded to insure the number of perfect castings wanted.

In the annexed drawings, Figure 1 is a view of the mold-board pattern from the outer or right-hand side. Fig. 2 is a cross-section on line *a a*, looking from the rear. Fig. 3 is a view of the inner side of the mold-board pattern, showing the ledge *c*, to which is to be secured the landside. Fig. 4 is an enlarged cross-section on line *x x*, Fig. 3, showing a strengthening-rib, *b*, which connects the ledge and mold-board proper. Fig. 5 is an enlarged cross-section on line *z z*, Fig. 3, showing the elongated core-prints *i*, which form one of the principal features of my invention. Fig. 6 is a side view of the core used, the print of the core being denoted by *i'*.

It is my intention to cast in one piece the mold-board A, the beam-standard B, the extension C, (which is to support the point-section,) and the ledge *c*. So far as I am conversant with the state of the art, it has been the usual practice in molding similar forms of mold-boards to draw the mold-board proper from the sand, leaving the ledge-pattern, which is released by withdrawing a draw-back, said draw-back moving in the direction indicated by the arrow No. 3 in Fig. 5. The ledge-pattern then follows the draw-back, and said draw-back is slid forward into place. The parting-lines in such a form of flask are shown in said Fig. 5, and are lettered *m m* and *n n*. Such a form of flask has been necessary heretofore on account of the bolt-holes *e e;* but I have constructed my ledge-pattern with core-prints *i i*, on the inner side, which extend upward to the point of junction with the mold-board proper. It will now be seen that when the mold-board pattern is drawn from the sand upward from its position in Fig. 5, as indicated by the arrow No. 2, and the ledge-pattern left, said ledge-pattern may then be drawn out in the direction indicated by the arrow No. 1, Fig. 5, leaving a clean mold, with no tendency to tumble or collapse. The cores may now be set with their print portions *i'* resting in the prints *i*, and their core portions resting in the main cavity formed by the pattern-ledge *c*, the cope returned to its place, and everything is in readiness for the pouring operation.

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

A pattern (for that class of plow mold-boards in which a ledge is cast as an integral part of said mold-board) having the ledge-pattern *c*, doweled removably to the mold-board pattern, and having on its under side core-prints *i i*, extending to the point of junction with said mold-board, all as and for the purpose specified.

WILLIAM M. GORRY.

Witnesses:
FRANK H. ALLEN,
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