J. L. Mott, Casting Hardware. Patented Dec.1, 1840.

Fig. 2

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JY º 1872.

UNITED STATES PATENT OFFICE.

JORDAN L. MOTT, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANNER OF FORMING OBLIQUE CATCHES, PROTUBERANCES, AND DOVETAILED FASTENINGS ON PLATES AND OTHER PIECES OF CAST-IRON, &c.

Specification forming part of Letters Patent No. 1,872, dated December 1, 1840.

To all whom it may concern:

Be it known that I, JORDAN L. MOTT, of the city of New York, in the State of New York, have invented an improvement in the manner of forming dovetailed or oblique catches or projections on plates or other pieces cast from iron or other metal, said catches or projections being such as are required and used for holding latches, the retaining of stove-feet, dovetailed wedges on railroad-chairs, and for a variety of purposes similar in character and well known to founders; and I do hereby declare that the following is a full and exact description thereof

The ordinary modes of forming projections for the catches to latch or to retain in place the doors or other parts of stoves, and of forming the dovetailed grooves for receiving and retaining the legs of stoves and of producing projections on cast articles for numerous other purposes, have been by the use of sand cores or of movable pieces on the pattern, which pieces are taken from the mold after the removal of the main plate or piece of casting. Instead of employing these or similar devices, I make holes through the pattern in the part where such projections are to be formed, or through a plate or piece of metal or of wood, which may be laid upon the proper part of the mold after the main pattern has been removed, and through these holes I force a punch or piece adapted thereto which is to be so formed as to make an impression in the sand of the exact form required, by which means said impression will be produced with much greater facility and truth than by any of the methods heretofore used or known.

In the accompanying drawings, Figure 1 represents a piece of wood or metal by which the impression is to be made in the sand, and Fig. 2 the plate or portion of a pattern having holes through it adapted to the impression to be made.

A, Fig. 1, is the handle part of the punch or piece which is to make the impression, and

f the portion which is to enter the holes prepared therefor in the pattern or plate.

In Fig. 2, e e represent such holes, and e c the catches or projections, which may be formed on a plate by the part f, Fig. 1. By reversing the two inner projections, e'e', they would, in conjunction with the two outer ones, constitute a dovetailed opening, which would retain a suitably-formed piece slipped between them, and it will be readily seen that by making the openings through the plate or pattern of the required dimensions and form and adapting the punch or piece to such holes, dovetailed projections, catches, and numerous devices of a similar character may be produced with the utmost precision and ease. The punch must, of course, be so formed as that it shall be brought up to a shoulder on the plate or pattern when the impression to be made is completed.

I am aware that it is a common practice among founders to form depressions in the sand by pricking through holes made in the patterns for that purpose, so as to produce pins or shanks on the casting to be obtained, and I do not, therefore, claim the so doing as of my invention; but it has never been attempted, as I verily believe, to form catches, dovetailed openings, and other devices of a like character by means of an apparatus such as I have described.

What I claim, therefore, as constituting my invention, and desire to secure by Letters Patent, is—

The manner herein described of forming such catches and projections by means of a punch or piece properly formed for the purpose, there being corresponding openings through the pattern or through a plate adapted thereto, as herein fully set forth.

JORDAN L. MOTT.

Witnesses:

THOS. P. JONES, ROBT. T. BUNKER.