

W. B. ROBINSON.
Molds for Casting.

No. 133,801.

Patented Dec. 10, 1872.

Fig. 1.

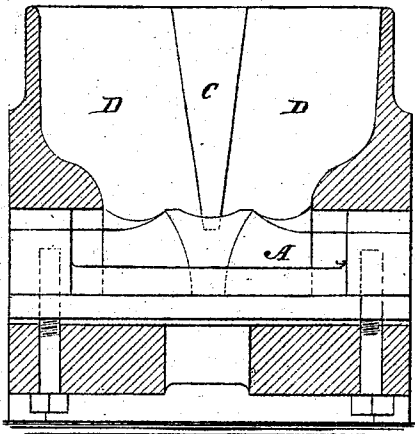


Fig. 2.

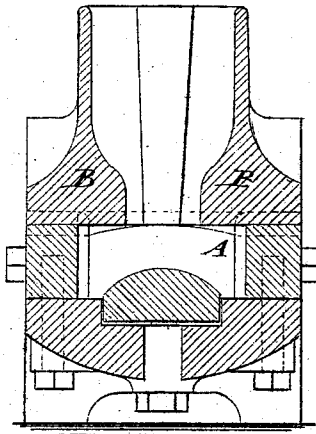


Fig. 3.

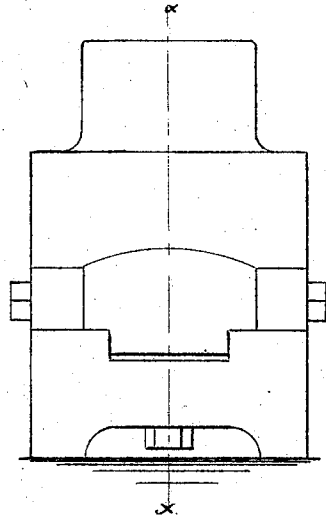


Fig. 5.

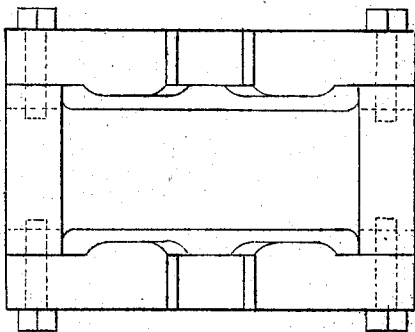


Fig. 4.

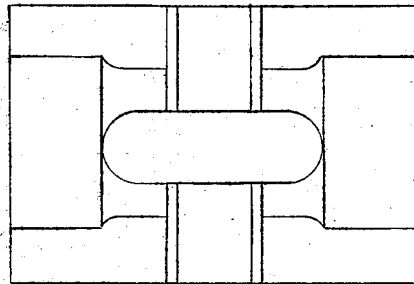
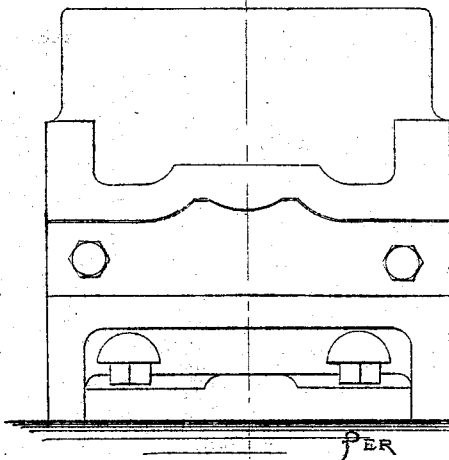


Fig. 6.



Witnesses:

Chas. Nida
C. Schuyler

Inventor:

W. B. Robinson

Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM B. ROBINSON, OF DETROIT, MICHIGAN, ASSIGNOR TO HIMSELF
AND JEFFERSON WILEY, OF SAME PLACE.

IMPROVEMENT IN MOLDS FOR CASTING.

Specification forming part of Letters Patent No. 133,801, dated December 10, 1872.

To all whom it may concern:

Be it known that I, WILLIAM B. ROBINSON, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Molds for Casting, of which the following is a specification:

My invention consists of a combination, with metallic molds for making composition castings and the like, of a gate-mold of sand adapted to retain a surplus quantity of molten metal above the metallic mold, to flow into the latter as the metal therein cools and shrinks to compensate for the shrinkage and produce castings of the exact size of the metallic molds.

Figure 1 is a longitudinal sectional elevation of my improved molds taken on the line *x x* of Fig. 3. Fig. 2 is a cross-section taken on the line *x x* of Fig. 6. Fig. 3 is an end elevation. Fig. 4 is a plan view of the bottom of the sand-mold. Fig. 5 is a plan of the metallic mold, and Fig. 6 is a side elevation.

Similar letters of reference indicate corresponding parts.

A represents a metallic mold, which may be of any kind. B is a cope fitted on the top of

the metallic mold. C is the core for the gate, which extends up from the top of the metallic mold as high as the top of the cope, and is made large enough to provide space for surplus metal sufficient to supply whatever may be needed to make up the shrinkage of the casting in the metallic mold by cooling. D is a space within the cope surrounding the gate-core, which is rammed full of sand to make a gate-mold that will retain the heat of the metal contained within it while the metal in the metallic mold cools so as to flow in and keep the metal mold full. Thus I compensate the shrinkage of the casting and produce perfect castings of the exact size of the molds.

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

The combination of a sand-mold with a metallic mold, substantially as specified.

WILLIAM B. ROBINSON.

Witnesses:

F. A. HUSSEY,
JEFFERSON WILEY.