B. HARRIS.

Mold for Castings.

No. 166,773. Patented Aug. 17, 1875.

Fig. 1

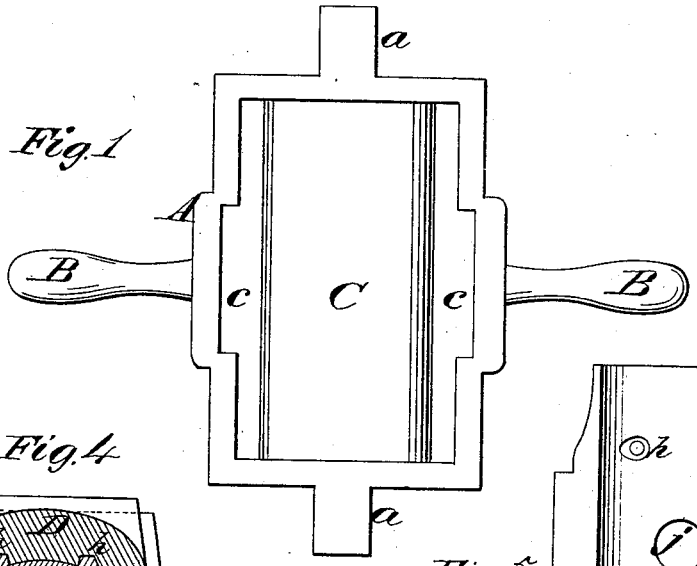


Fig. 4

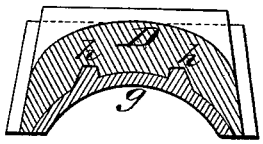


Fig. 5

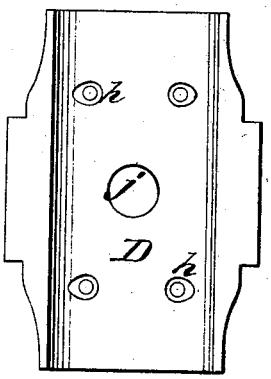


Fig. 2

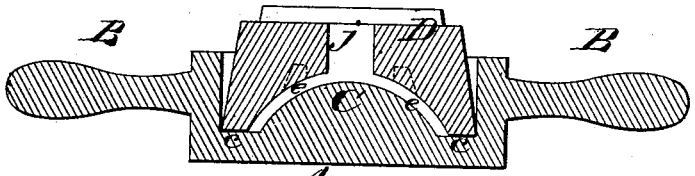
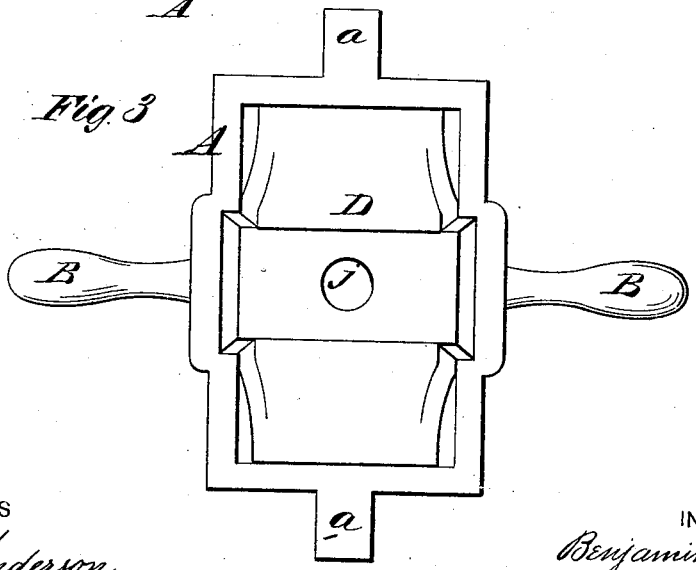


Fig. 3



WITNESSES

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BENJAMIN HARRIS, OF MARSHALLTOWN, IOWA.

IMPROVEMENT IN MOLDS FOR CASTING.

Specification forming part of Letters Patent No. **166,773**, dated August 17, 1875; application filed November 21, 1874.

To all whom it may concern:

Be it known that I, BENJAMIN HARRIS, of Marshalltown, in the county of Marshall and State of Iowa, have invented a new and valuable Improvement in a Mold and Former; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the figures of reference marked thereon.

Figure 1 is a plan view of my device. Fig. 2 is a transverse sectional view of the same, and Fig. 3 is a bottom view. Fig. 4 is a sectional detail view. Fig. 5 is a detail view.

This invention has relation to means for applying a lining of Babbitt metal or other suitable metal to the bearing-blocks of the axle-boxes of railroad-car axles; and it consists in a rectangular mold-box, which is surrounded by flanges, and which has a bottom adapted to receive the lower edges of the bearing-block and form a close joint therewith, and also which has a raised convex portion, which corresponds in radius to the radius of the journal for which the bearing-box is designed, said block being constructed with a pouring-sprue, and with indentations to receive the bearing metal, as will be hereinafter explained.

In the annexed drawings, A designates a shallow rectangular box, from two sides of which project handles B B, and from the ends of which project dovetailed lugs *a a*. The central portion C of the mold-box A is convex, and in cross-section is the arc of a circle, corresponding in diameter to the diameter of the axle for which the bearing-block D is designed. On opposite sides of the convex portion C are narrow flat surfaces *c c*, on which the lower edges of the bearing-block lie snugly when it is in place in the mold-box, as shown in Fig. 2. The bearing-block is constructed with a concavity, which leaves a space, *e*, between it and the upper surface of the convex portion C, to receive the lining metal *g*. (Shown in Fig. 4.) The bottom or concave surface of the block D has a number of indentations, *h*, in it, which, together with a pouring-sprue, *j*, will receive the lining metal, and securely attach the lining to the block.

When the block is put into the mold-box A the ends of this box tightly close the ends of the space *e*, so that when the lining metal *g* is poured into this space it will not escape therefrom.

It will be seen from the above description that journal-blocks can be conveniently and rapidly lined with any suitable metal, and that such lining will in every instance truly fit the axle for which it is designed.

What I claim as new, and desire to secure by Letters Patent, is—

1. A facing mold-box having a cylindrical convexity, C, on its bottom, adapted to form an unbroken concave bearing-face on the under side of the lining metal poured in through the journal-box, substantially as described.

2. The rectangular journal-facing mold-box A, provided with opposite handles B B and opposite lugs *a a*, at right angles to the handles, and the inside bottom of the box having a seat-molding convexity, C, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BENJAMIN HARRIS.

Witnesses:

RICHD. CROCKER,

D. C. WILBUR.