P. DURNO.

Journal-Box.

No. 169,243. Patented Oct. 26, 1875.

Fig. 1.

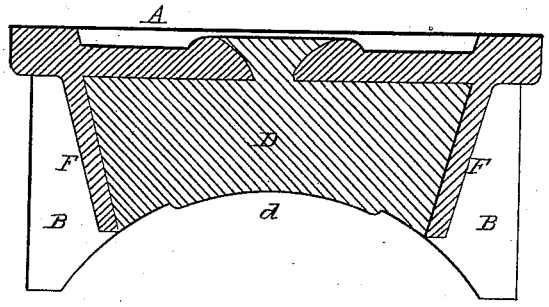


Fig. 2.

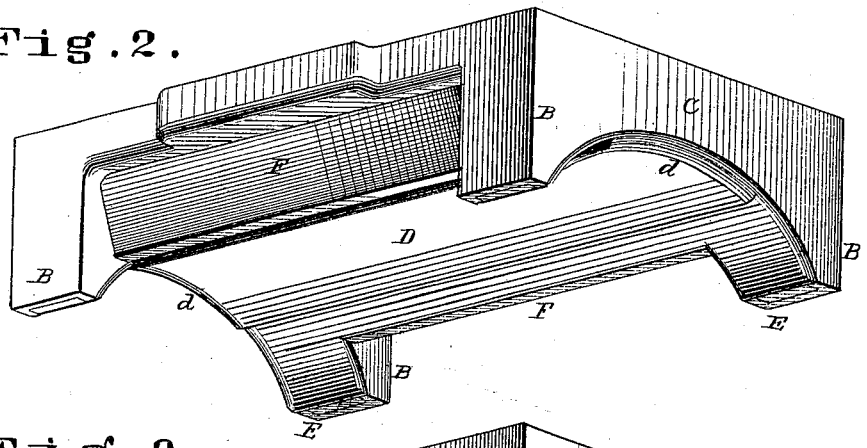
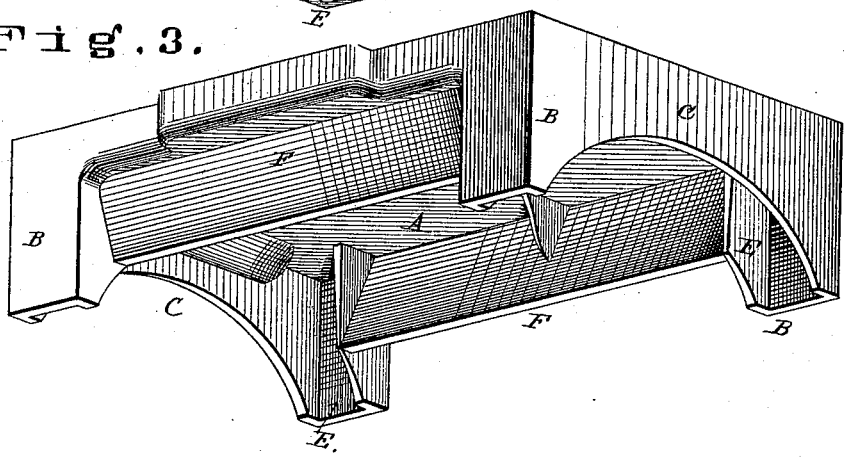


Fig. 3.



ATTEST.

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D. L.

INVENTOR.

Peter Durno

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UNITED STATES PATENT OFFICE.

PETER DURNO, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN JOURNAL-BOXES.

Specification forming part of Letters Patent No. **169,243**, dated October 19, 1875; application filed August 18, 1875.

To all whom it may concern:

Be it known that I, PETER DURNO, of St. Louis, county of St. Louis and State of Missouri, have invented a new and useful Improvement in Journal-Boxes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

My invention relates to casting the brass shell in a peculiar form, so as to require a minimum amount of metal, and so that the Babbitt metal filling will be held firmly, however much the box may be worn away. The construction is such as to admit of casting without a core.

My improvement consists, first, in a journal-box provided with a recess and inclined sides.

My improvement consists, secondly, in downwardly-projecting corners, in combination with inclined sides.

In the drawings, Figure 1 is a transverse section through the box, taken near the middle. Fig. 2 is an under perspective view of the box. Fig. 3 is an under perspective view of the shell.

A is the top of the shell, with the usual side cleats. B B are corners of the shell, and C the ends. These parts are all made perpendicular to the top, and their inner sides tend only to hold the filling-metal D in the recess E by the simple frictional contact of the filling with the shell, assisted by any accidental roughness of the inner faces of the shell. This is not the case with the sides F, for these are inclined inward, as shown, so as to hold the body of Babbitt metal firmly in place, however much the box may be worn away, for it will be seen by Fig. 1 that the metal is dovetail in transverse section, so that there is no possibility of its coming loose until completely worn through at the middle, so that the two sides may drop out separately, and even this cannot take place while the axle is in position. The Babbitt metal is cast in the box with a projecting part, *d*, which wears down in a new box, and assumes the same rotundity as the axle, whatever the diameter of the axle may be.

It will be seen that the box is narrowed at the face from side to side, except at the ends, so that it is considerably lighter than an ordinary box, which is flush along the sides, and yet abundant width of bearing-surface is furnished, and the downwardly-projecting corners *c* prevent the box and axle being disconnected by any violent jerk.

In casting the shell no core is used, as the sides F are made removable in the pattern, and the main part of the shell being first drawn from the mold, each side F is singly drawn out.

I claim as my invention—

1. The journal-box having recess E, with inclined sides F, substantially as and for the purpose set forth.

2. The downwardly-projecting corner B, in combination with inclined sides E, substantially as set forth.

PETER DURNO.

Witnesses:
SAML. KNIGHT,
ROBT. BURNS.