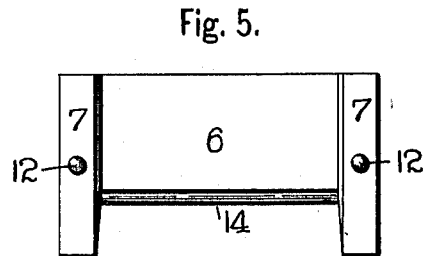
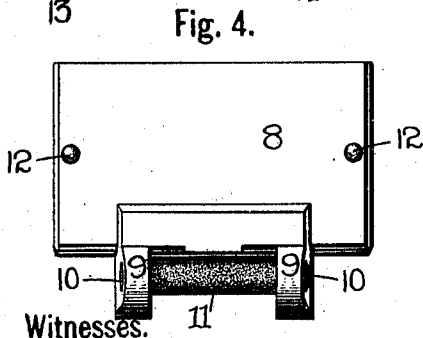
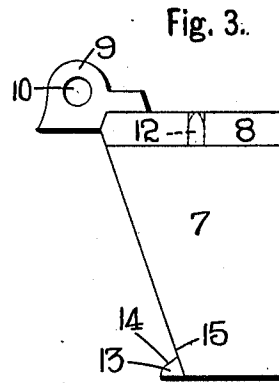
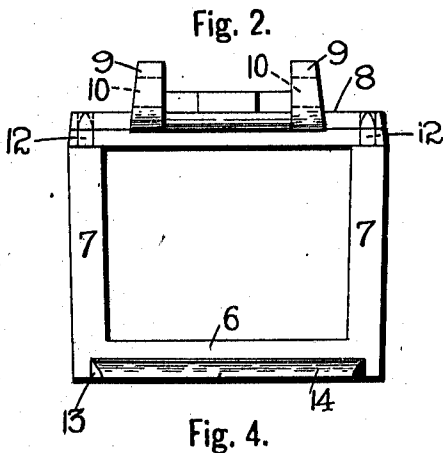
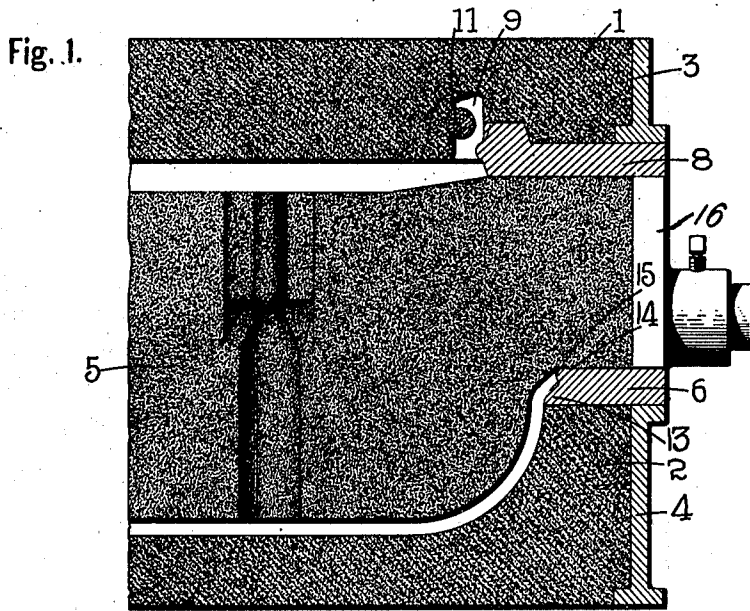


J. W. GIBNEY.
CORE FOR MOLDING CAR JOURNAL BOXES.
APPLICATION FILED SEPT. 18, 1908.

982,588.

Patented Jan. 24, 1911.



Witnesses.
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UNITED STATES PATENT OFFICE.

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CORE FOR MOLDING CAR JOURNAL-BOXES.

982,588.

Specification of Letters Patent.

Patented Jan. 24, 1911.

Application filed September 18, 1908. Serial No. 453,652.

To all whom it may concern:

Be it known that I, JAMES W. GIBNEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Improvement in Cores for Molding Car Journal-Boxes, of which the following is a specification.

This invention relates to improvement in molding cores which is chiefly designed for molding car journal boxes and the main object of the invention is to so form the mold that the hinge lug of the journal cast therein will be accurately centered with respect to the face or surface against which the lid of the journal box fits when closed. To accomplish this a metal frame is fitted around that portion of the core designed to form the open outer end of the journal box which serves to form both the hinge lug and the lid meeting face or edge surface of the box.

The invention also relates to certain details of construction which will be fully and clearly hereinafter described and claimed reference being had to the accompanying drawings, in which,—

Figure 1 is a fragmentary section through a mold showing the improved core in position therein. Fig. 2 is a front elevation of the improved core. Fig. 3 is a side elevation of the improved core. Fig. 4 is a plan view of the improved core, showing the core rod for forming the opening in the hinge lug of the journal box in position in the lugs in the upper member of the core. Fig. 5 is a plan view of the lower and side members of the improved core.

In referring to the drawings in detail like numerals designate like parts.

This improved molding core is principally adapted for use in casting car journal boxes and it is located as shown in Fig. 1 between a cope 1 and drag 2. The cope 1 and drag 2 are preferably of green sand supported in flasks 3 and 4. The larger portion or body 5 of the core is also preferably formed of green sand and a metal frame is fitted around the outer reduced part of the body 5 which is shaped to form the face of the box and the hinge lug.

Referring to Figs. 2 to 5 inclusive in which the preferred structure of the frame is shown it will be noted that it is of a rectangular shape and composed of a bot-

tom member 6, two side members 7 which are identical in form and project up from the opposite ends of the bottom member 6, being cast integral with said bottom member and a top member 8 from one edge of which two lugs 9 extend and are provided with eyes 10 as shown in Fig. 3 in which a core rod 11, circular in cross section and formed of dry sand is fitted and serves to form the opening or eye in the hinge lug of the casting. The top member 8 is made separate from the other members of the frame and is provided with openings in which projections 12 extending from the upper ends of the side members fit to accurately aline the members with respect to each other. As the top member is removable and the side members slightly and gradually diverge from each other from the bottom member upward, the frame is easily fitted in place around the body of the core. A horizontal longitudinal rib 13 projects from the lower portion of the inner edge of the bottom member and has a slanting top surface 14, which forms the bottom surface of that portion of the journal box casting in close proximity to the face. The upper portion of the said edge is slanted so as to extend at approximately right angles to the top surface 14 as shown at 15 in Fig. 1 and serves to form the bottom portion of the face of the journal box.

The sides are of irregular form, the side edges which serve to form the side portion of the face of the journal box extending or slanting at about the same angle as the slanting upper portion 15 of the inner edge of the bottom member. The lower portion of the inner edge of the top member is also inclined at about the same angle as the portion 15 so that the resulting face of the cast journal box will be flat and accurate.

Owing to the supporting of the core for the eye of the hinge lug from the metal frame the opening in the lug is cast accurately in central alinement with the face of the journal box which enables the lid or cover to be fitted perfectly to the box.

End plates 16 of suitable size and form may be fitted on the ends of the core to protect the same between the parts or members 6 and 8, as shown in Fig. 1.

Another advantage of this improved apparatus is that the face is chilled in casting and is smoother than when cast with sand

so that the lid or cover can fit closer and form a more perfect dust proof box.

I claim—

- 5 1. A molding core including a sand body and a rectangular multi-membered separable metal frame attached to said body and adapted to form and chill a portion of a casting.
- 10 2. A metal frame for forming the hinge lug and face of a car journal box casting consisting of bottom, side and top members having their inner edges shaped to accurately form a flat face on a casting, two lugs projecting from the top member and a hinge
- 15 lug eye forming core extending between the lugs and adapted to form and center the hinge lug with respect to the face.
- 20 3. A molding core including a sand body and a metal frame attached to said sand body and adapted for forming the hinge lug and face of a car journal box casting and said metal form consisting of bottom, side and top members having their inner edges
- 25 shaped to accurately form a flat face on a casting; and the top member of said metal

form being separable from the other members.

4. A molding core including a sand body and a metal frame attached to said sand body for forming the hinge lug and face 30 of a car journal box casting consisting of bottom, side and top members having their inner edges shaped to accurately form a flat face on a casting; said top member being separable from the other members and a 35 hinge lug forming element projecting from the top member.

5. A metal frame for forming the hinge lug and face of a car journal box casting consisting of bottom, side and top members 40 having their inner edges shaped to accurately form a flat face on a casting; said top member being separable from the other members, two lugs projecting from the top member and a hinge lug eye forming core 45 extending between the lugs.

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