No. 879,459. PATENTED FEB. 18, 1908.

E. GOOD.

CAR JOURNAL BOX.

APPLICATION FILED APR. 13, 1907.

3 SHEETS—SHEET 1.

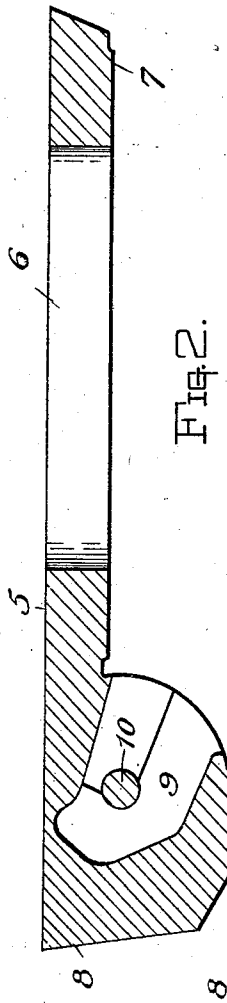

Fig. 2.

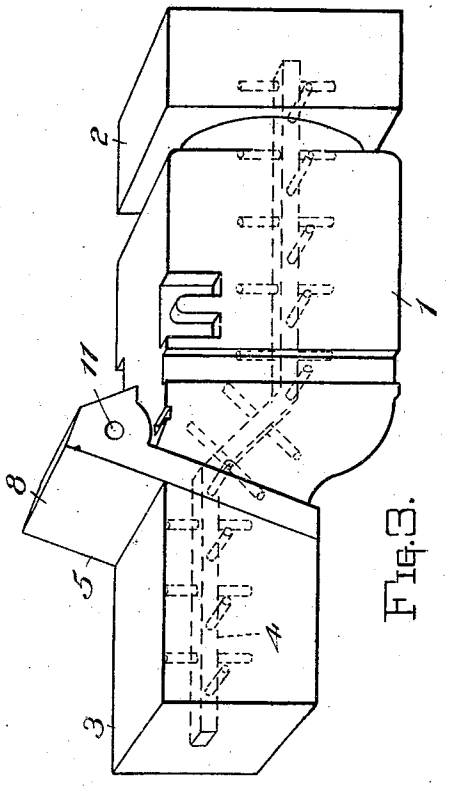

Fig. 3.

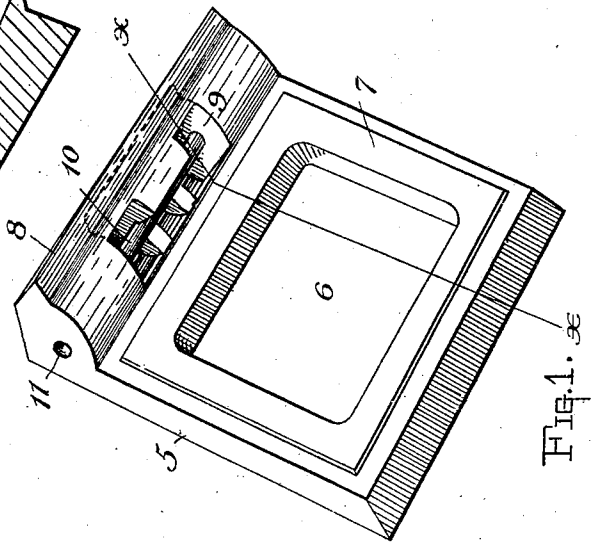

Fig. 1.

WITNESSES.

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3 SHEETS—SHEET 2.

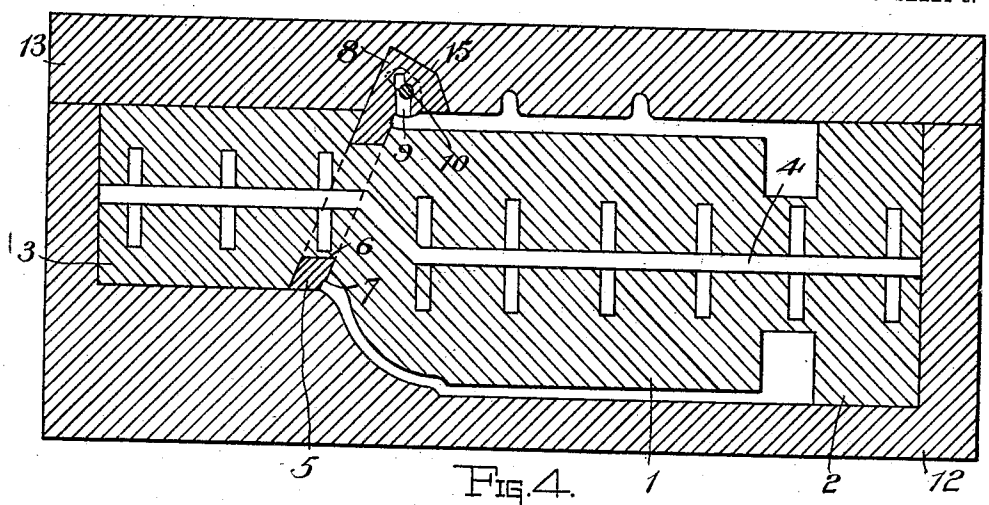

FIG. 4.

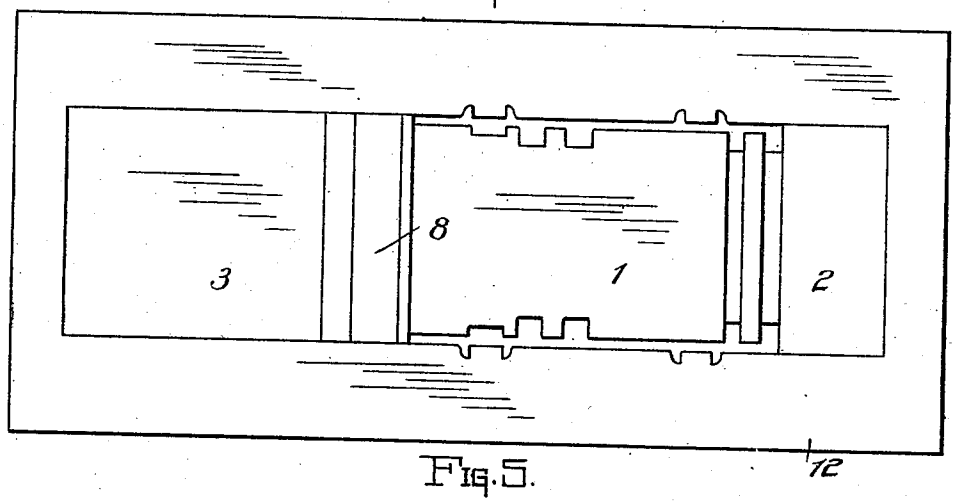

FIG. 5.

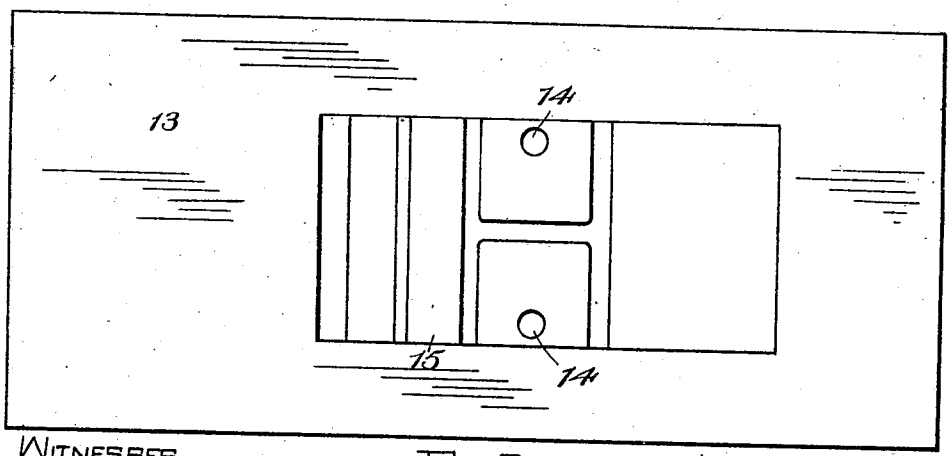

FIG. 6.

WITNESSES.

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3 SHEETS—SHEET 3.

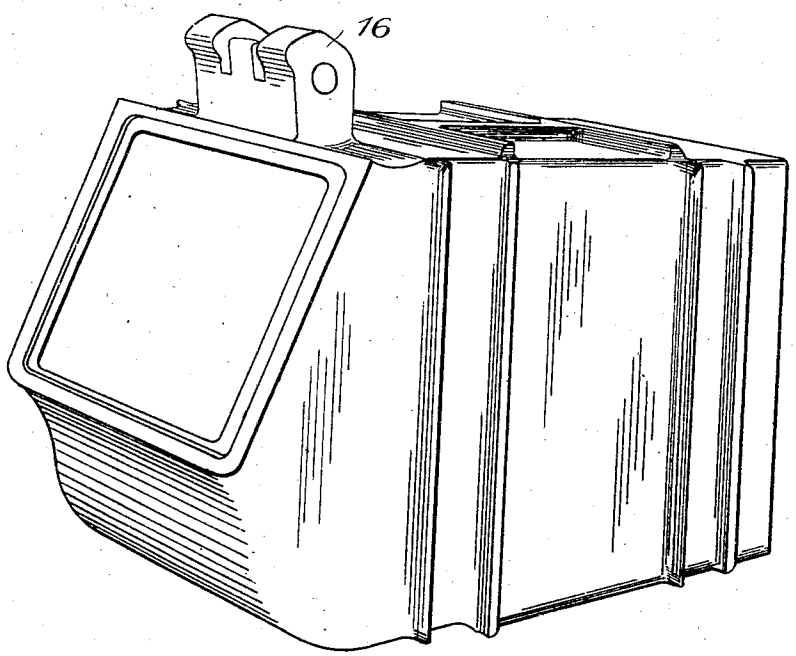

FIG. 7.

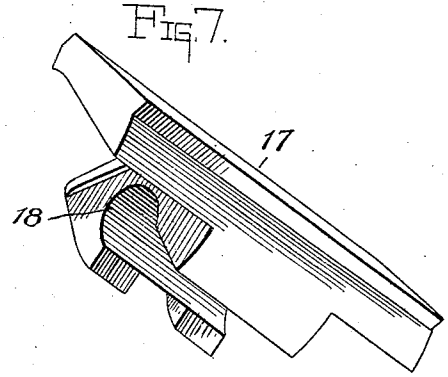

FIG. 8.

WITNESSES.

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Atty.

UNITED STATES PATENT OFFICE.

EDGAR GOOD, OF TOLEDO, OHIO, ASSIGNOR TO LACEY Y. WILLIAMS AND FRANK B. HARRISON, OF TOLEDO, OHIO.

CAR JOURNAL-BOX.

No. 879,459. Specification of Letters Patent. Patented Feb. 18, 1908.

Application filed April 13, 1907. Serial No. 367,956.

To all whom it may concern:

Be it known that I, EDGAR GOOD, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Molds for Casting Car Journal-Boxes, of which the following is a specification.

The object of my invention is the provision of an improved mold for casting car journal boxes whereby the projection or lug or lugs adjacent the top edge of the opening at the end of the box when cast will occupy a predetermined position relative to the seat for the lid, which seat bounds the said opening at the end of the box.

The invention consists in certain novelties of construction and combinations of parts hereinafter set forth and claimed.

The accompanying drawings illustrate an example of the physical embodiment of the invention constructed according to the best mode I have so far devised for the practical application of the principle.

Figure 1 is a view in perspective of a mold for the end of the box and the projection or lug or lugs at the top front edge of the same. Fig. 2 is an enlarged sectional view on line *x*—*x* of Fig. 1, showing the shape of the cavity or matrix for the projection on the end of the box when cast. Fig. 3 shows in perspective the core for the interior of the box, the supports for the core at the ends thereof, and the mold shown by Fig. 1. Fig. 4 is a vertical section through a flask with the core, supports, and mold in place for casting the box. Fig. 5 is a top plan view of the nowel with the core and mold in place, the cope being removed. Fig. 6 is a bottom plan view of the cope showing the matrix for the top surface of the box. Fig. 7 is a view of the journal box in perspective. Fig. 8 is a part of the mold for the projection or lug or lugs at the top front edge of the box.

Referring to the several figures, the numeral 1 designates a green sand core fashioned to the inner shape of the journal box; 2, a support for one end of the core when in the flask; 3, the support for the opposite end of the core; 4, a core iron or anchor located within the core and supports which latter may be of green sand; 5, the mold of dry sand or made of pipe clay, plaster of paris, or the like for the end of the box and the projection or lug or lugs at the top of the box; 6, the opening through the mold 5 to receive the end of the green sand core 1 where it joins the support 3 for the said core; 7, the raised surface about the opening for forming a recessed seat to receive the edge of the box lid; 8, the top portion of the mold 5 of any suitable shape; 9, the cavity or matrix in the top portion of the mold for the projection at the top of the box; 10, a round dry baked core to form a bolt hole in the projection; 11, 11, holes to receive the core; 12, the nowel or drag; 13, the cope; 14, the gates in the cope where the metal is poured; 15, the print in the lower surface of the cope to receive the top portion 8 of the mold 5 when the cope is in place; and 16 is the cast projection at the top edge of the journal box to which the cover is to be secured.

Fig. 3 illustrates the core, supports, and mold 5 as they are formed and combined preparatory to their introduction into the flask, and Fig. 4 shows them located within the cope and nowel. The matrices in the nowel and cope corresponding to the exterior surface of the box, the supports for the core, and the top portion 8 of the mold 5 are formed in a way well known in the art by suitable patterns. It will be observed that the mold 5 is integral and that the projection or lug or lugs, and the surface of the end of the box about the opening when cast will have fixed relations to each other so that lids of uniform shape will fit all boxes similarly cast.

The matrix 9 in the top portion 8 of the mold 5 is preferably formed in part by a supplemental dry sand or other mold 17, shown by Fig. 8 occupying the position in Fig. 1 indicated by the dotted lines. The supplemental mold may have a semi-circular bearing 18 to engage the pin core. By its use the matrix for the projection may be more easily formed when the projection is of irregular or curved shape. When the projection is not of a complicated shape the matrix may be formed without the use of a supplemental mold.

While there is illustrated only one particular shape of matrix 9 in the top portion 8 of the mold 5, it is not intended that such matrix shall define the limits of the invention, inasmuch as any other shape of matrix or a num-

ber of matrices of different shapes may be present and all fall within the scope of the invention and the claims.

What I claim is:

1. The combination with a core for casting a journal box interior, of a mold for the end of the box having an extension with a matrix for a projection at the edge of the journal box opening.

2. The combination with a core for casting a journal box interior, of a mold for the end of the box having an extension with a matrix for a projection at the edge of the journal box opening, and a pin core in connection with said matrix for the purpose set forth.

3. The combination with a core for casting a journal box interior, of a mold for the end of the box having an extension with a matrix for a projection at the edge of the journal box opening, and a supplemental mold in connection with said matrix to form part of the surface thereof.

4. The combination with a core for casting a journal box interior, of a mold for the end of the box having an extension with a matrix for a projection at the edge of the journal box opening, a supplemental mold in connection with said matrix, and a pin core.

5. A mold 5 for use in casting the end and top lug of a journal box, said mold having a top portion 8 with a matrix therein, and a supplemental mold in connection with said matrix.

6. A mold for use in casting the end and top lug of a journal box, said mold having a top portion 8 with a matrix therein, a supplemental mold in connection with said matrix, and a pin core.

In testimony whereof I affix my signature in presence of two witnesses.

EDGAR GOOD.

Witnesses:

MINNIE O'GRADY,

LACEY Y. WILLIAMS