

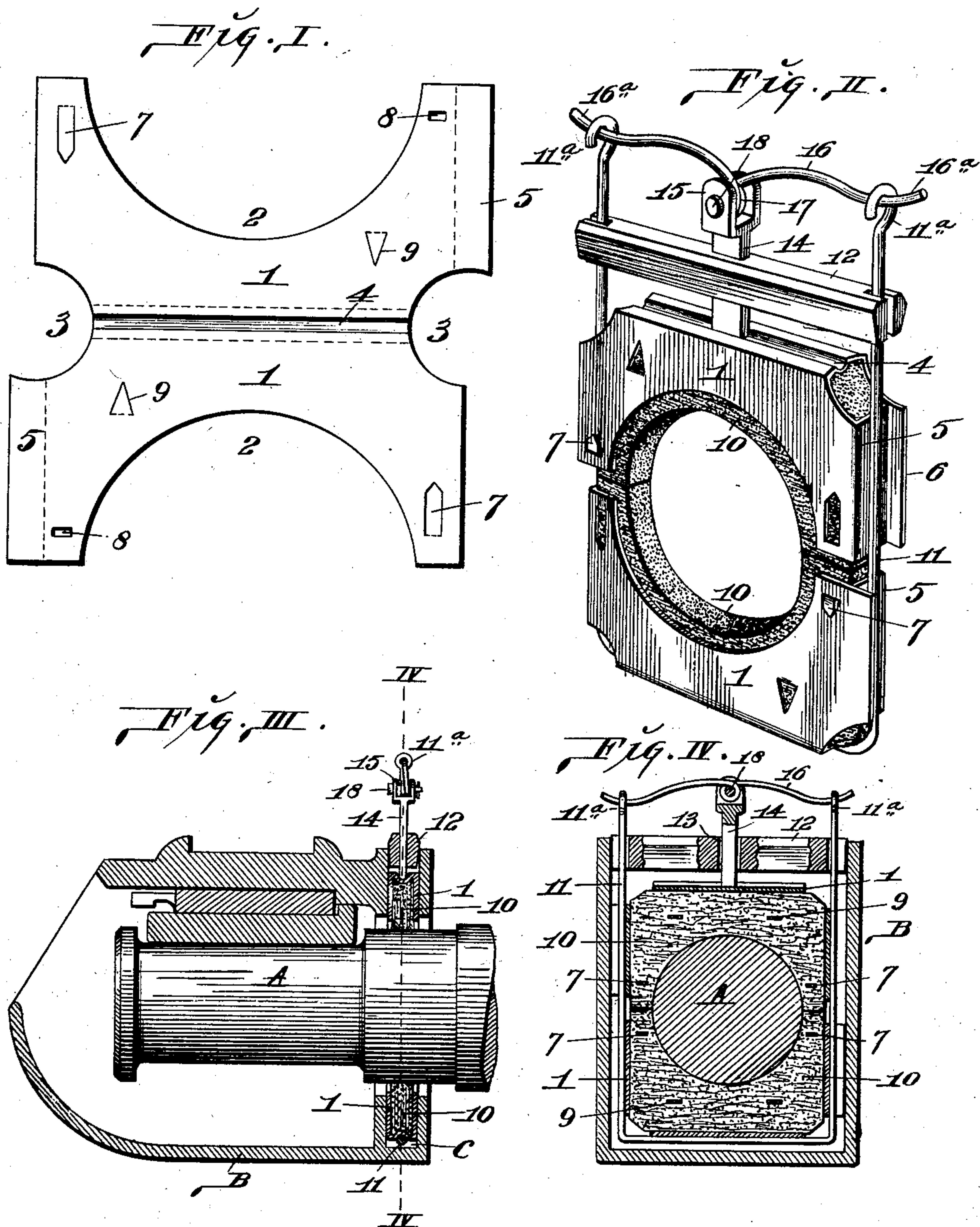
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C. S. SHALLENBERGER.
DUST GUARD FOR JOURNAL BOXES.

(Application filed Dec. 23, 1901.)

(No Model.)



attest:—
M. P. Smith
E. Krigh

Inventor:—
Chas. S. Shallenberger.
By Knight, Bro
attys.

UNITED STATES PATENT OFFICE.

CHARLES S. SHALLENBERGER, OF JACKSONVILLE, ILLINOIS, ASSIGNOR, BY
MESNE ASSIGNMENTS, OF ONE-HALF TO MICHAEL J. HURLEY, OF ST. LOUIS,
MISSOURI.

DUST-GUARD FOR JOURNAL-BOXES.

SPECIFICATION forming part of Letters Patent No. 701,629, dated June 3, 1902.

Application filed December 23, 1901. Serial No. 87,016. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. SHALLENBERGER, a citizen of the United States, residing in Jacksonville, in the county of Morgan and State of Illinois, have invented certain new and useful Improvements in Dust-Guards for Journal-Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to that class of dust-guards used in railway-car journal-boxes to inclose the car-axle journals and exclude dust from the journal-boxes and also prevent the egress of the lubricant and journal-packing contained by the box.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a view of one of the sheet-metal blanks from which the dust-guard packing-holders are constructed. Fig. II is a perspective view of my dust-guard. Fig. III is a vertical longitudinal sectional view taken through a journal-box and my dust-guard therein. Fig. IV is a vertical cross-sectional view taken on line IV IV, Fig. III.

A designates the journal of a car-axle, and B a journal-box containing a dust-guard-receiving pocket C. In my dust-guard a pair of counterpart packing-holders are utilized to encircle the axle-journal and occupy the pocket in the journal-box B. The packing-holders are constructed of sheet metal formed from blanks illustrated in Fig. I, each holder having a pair of side walls 1, provided with a semicircular recess 2, and also provided centrally at their ends with semicircular recesses 3. At the center of each holder and extending longitudinally thereof between the recesses 3 is a groove 4. At each end of each packing-holder and projecting from the side walls thereof are extensions that are adapted to form flanges 5, that are bent toward the opposing side wall of the holder to inclose the packing within the holder and permit the protrusion of guide-lips 6 beyond said flanges, as seen in Fig. II. The flanges 5 also serve to preserve the thickness of the packing-holders by holding their side walls apart by bearing

against the lips 6. The holders when formed up from the blank are held in shape by tongues 7, struck from the side walls of the holders and adapted to pass through the packing 10 in the holders and through apertures 8 in the opposite side of the holder and clenched, as seen in Fig. II. 9 shows tongues struck from the side walls of the holders and adapted to enter the packing 10 to serve as retainers for the packing. The packing 10 is preferably of felt, though any other desirable material may be utilized, and each piece of packing is semicircularly recessed, as seen in Fig. II, to fit against the journal of the axle to which the guard is applied, as seen in Figs. III and IV.

11 designates a stirrup or yoke in which the packing-holders are movably positioned and by which they are embraced. The guide-lips 6, projecting at each end of the holders at opposite sides, serve to direct the movement of the packing-holders within the pocket C, so that they will ride vertically therein within the stirrup 11.

12 designates a wedge-shaped cross-bar having forked ends that are fitted to the stirrup 11 and adapted to fit snugly in the open upper end of the dust-guard pocket C to exclude the ingress of dust or dirt through the entrance to said pocket. The cross-bar 12 is provided with a central opening 13, and passing through this opening is a fulcrum 14, that is adapted to seat in the groove 4 contained by the upper packing-holder. The fulcrum 14 is provided at its outer end with a forked head 15.

16 is a two-armed spring mounted in the forked head of the fulcrum 14 and provided with a central coil 17, through which a pin or bolt 18 passes to hold the spring to the fulcrum. The spring-arms 16^a of the spring 16 extend in opposite directions from the forked head of the fulcrum 14 and are seated in hooks 11^a at the ends of the stirrup 11.

In the practical use of the guard the packing-holders are placed one below and one above the axle-journal in the dust-guard pocket of the journal-box and mounted in the stirrup 11, the lower guard-holder being seated in said stirrup, with its groove 4 occupied by the lower end of the stirrup and the

upper holder having its groove 4 occupied by the fulcrum 14, resting therein, as stated. The spring 16 acts centrally to depress the fulcrum 14, and its arms act to lift the yoke 11, thereby carrying the packing-holders toward each other and holding them firmly, yet yieldingly to the axle-journal, thereby producing a closure between the exterior and interior of the journal-box.

10 I claim as my invention—

- 15 1. The combination of a pair of packing-holders, a stirrup holding said holders together, a two-armed spring provided with a central coil and having a detachable connection with the ends of the stirrup, a fulcrum supporting the coil of the spring and bearing loosely against the upper packing-holder, and means holding the fulcrum against movement.
- 20 2. The combination of a pair of packing-holders, a stirrup holding said holders together, a cross-arm provided with a central opening, a fulcrum passing through the central opening of the cross-arm, and bearing
- 25 against one of the packing-holders, a two-armed spring, mounted in the fulcrum and

the ends of said arms engaging with the ends of the stirrups.

3. The combination of a pair of packing-holders, a stirrup holding said holders together, a wedge-shaped cross-arm, provided with a central opening, and forked ends which receive the stirrup, a fulcrum provided with a forked head, passing through the central opening of the cross-arm, and bearing against one of the packing-holders, a two-armed spring having a central coil, mounted in the forked head of the fulcrum and the ends of said arms engaging with the ends of the stirrups.

4. In a dust-guard, the combination of a pair of packing-holders, packing in said holders, guide-lips carried by said holders, inturned flanges carried by said holders and adapted to bear against said lips, and means for embracing said packing-holders, substantially as described.

CHAS. S. SHALLENBERGER.

In presence of—

M. P. SMITH,

E. S. KNIGHT.