(No Model.)

J. LOOS.

TRUNK CASTER.

No. 356,483. Patented Jan. 25, 1887.

Fig. 1.

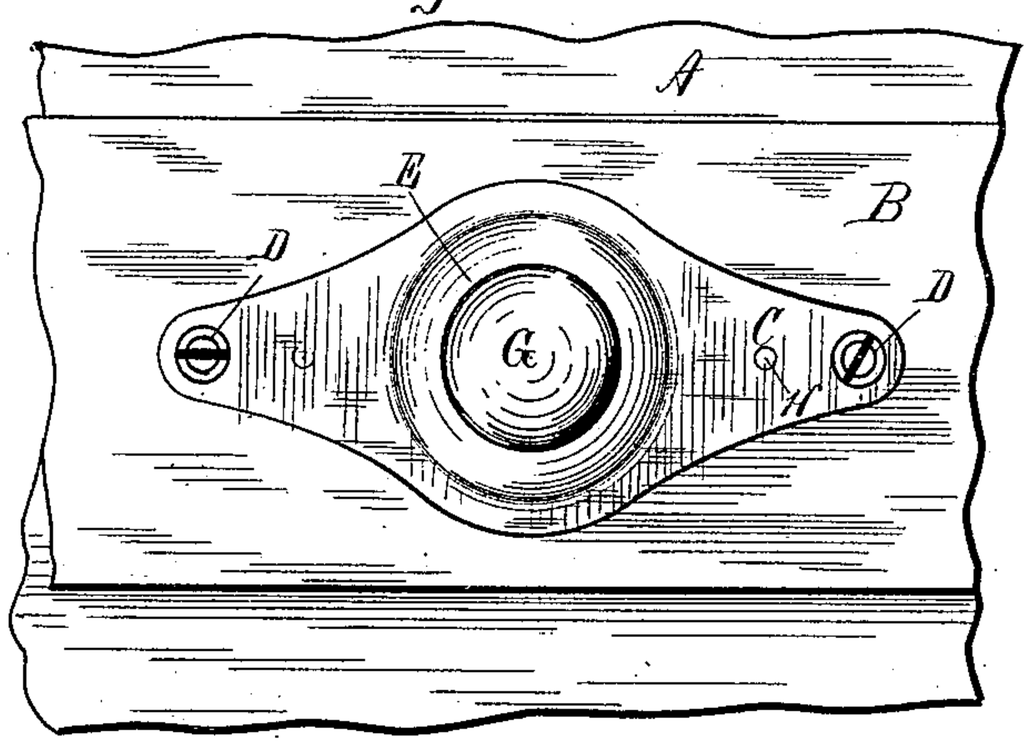


Fig. 2.

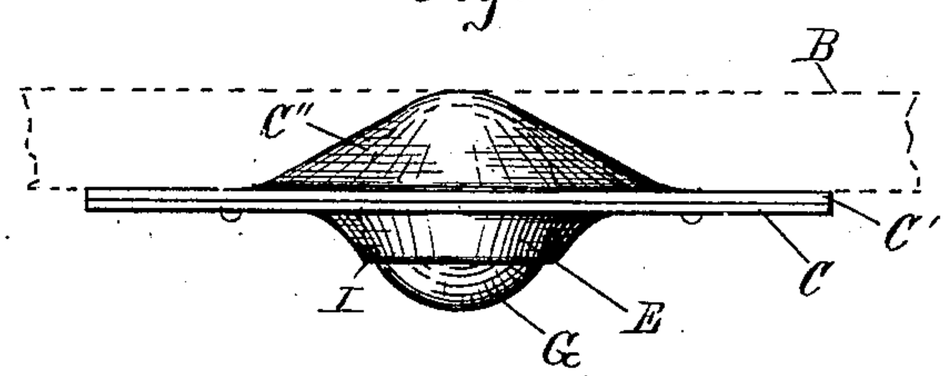


Fig. 3.

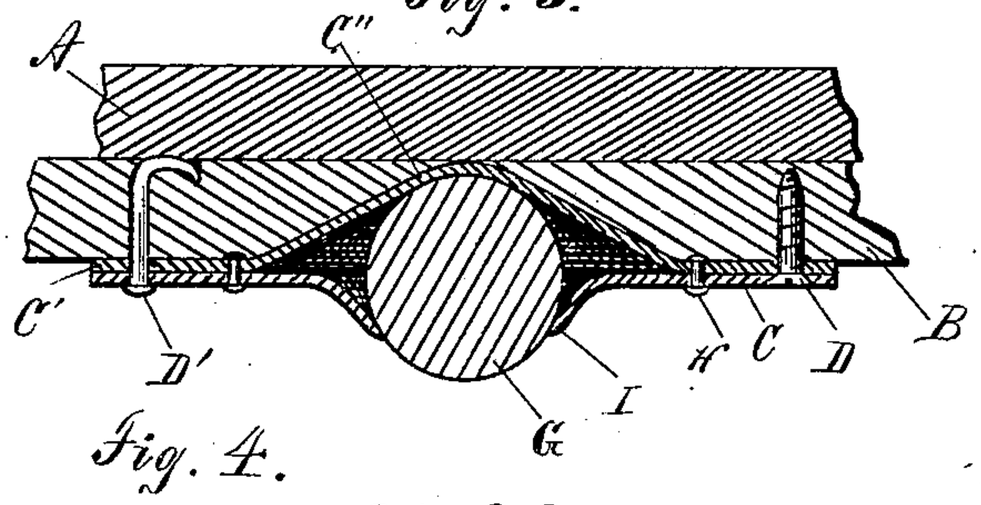
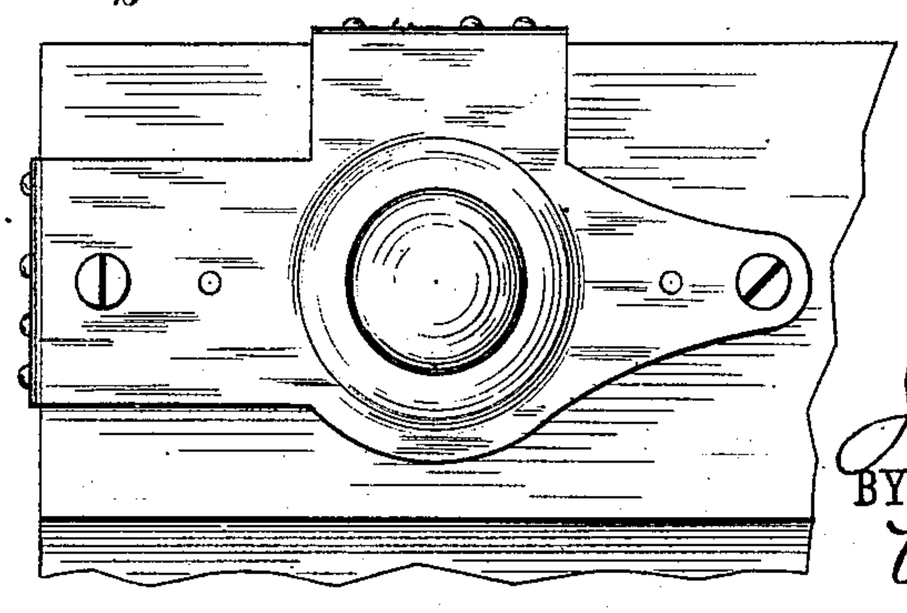


Fig. 4.



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TRUNK-CASTER.

SPECIFICATION forming part of Letters Patent No. 356,483, dated January 25, 1887.

Application filed August 22, 1885. Serial No. 175,060. (No model.)

To all whom it may concern:

Be it known that I, JOHN LOOS, a resident of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Trunk-Casters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in trunk-casters, and is fully described and explained in the following specification and shown in the accompanying drawings, in which—

Figure 1 is a bottom plan of my improved caster in working position; Fig. 2, a side elevation of a caster, the bottom or cleat of the trunk being shown in dotted lines; Fig. 3, a longitudinal central section of a caster in position on a trunk, and Fig. 4 a bottom plan of a slightly-modified form of the caster attached to the corner of a trunk-bottom.

In these views, A is the ordinary trunk-bottom, and B a strengthening-cleat fastened to the bottom in any desired manner. C C″ are the lower and upper halves, respectively, of a two-part caster-case, the two parts being preferably fastened together by means of rivets H. Each of the parts C C″ is a thin outwardly-convex shell, preferably of sheet metal, and is provided with a plane flange extending outward from the edge of the convex portion. When the two parts of the shell or case are fastened together, their flanges are in contact, and through both flanges are perforations for screws or nails D D′. These shells, with their flanges, are formed from a plane sheet of metal at a single operation by means of an ordinary stamping-machine, and their form is such as to adapt them especially to this method of manufacture. The angle at the junction of each shell with its flange is obtuse and rounded, and the curve of each shell is such that it can be stamped from ordinary sheet metal without danger of rupturing the material. In fact, the pressure exerted on the metal in stamping gives its surface a perfect finish, and renders it more satisfactory in practice than a similar shell of cast metal. The stamped shell is at the same time cheaper and lighter than a cast one, as well as stronger, and on the whole I am able to make a better caster of this form for a given cost than is possible with any other form with which I am acquainted.

Within the case C C″ lies a ball, G, preferably of chilled iron, whose upper surface rests against the inner surface of the plate or shell C″, while a small part of its lower surface projects through a circular opening in the shell C. The form of the shell C″ is such that only a single point on the upper surface of the ball G is in contact therewith, and the friction-surfaces of the caster are thus reduced to a minimum.

The cleat B, to which the caster is fastened, is countersunk to receive the shell C″, the flange of said shell resting on the lower surface of the cleat and being fastened thereto. The cleat may of course be dispensed with, if desired, and the trunk-bottom countersunk; but the use of the cleat is preferable.

Fig. 4 shows a slightly different arrangement of the shell, the flanges being extended to overlap the edges of the bottom of the trunk at or near one of its corners. With this exception the caster is the same as that illustrated in Figs. 1, 2, 3.

The rivets H (shown in the drawings) may be dispensed with and the two shells C C″ be held together by the screws or nails D D′. This construction has the advantage of rendering the parts C C″ readily separable, whereby the ball G may be detached and exchanged in case of wear or breakage of any of the parts.

I am aware that ball-casters are already in common use, and I do not therefore claim, broadly, a caster involving the use of a ball instead of a roller. I believe it to be new, however, to combine with the ball a two-part shell whose upper part rests on the ball and has an inner concave surface whose curve has a greater radius than that of the ball, so that the ball is only in contact therewith at a single point.

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

The combination of the concavo-convex

sheet-metal shells C C″, each provided with an integrally-formed plane flange, and the ball G, inclosed by said shells and projecting through a circular central opening in the shell C, the angle at the junction of each of said shells with its flange being obtuse and slightly rounded, substantially as and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN LOOS.

Witnesses:
LEONARD STOSKOPF,
MICHAEL STOSKOPF.