UNITED STATES PATENT OFFICE.

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CARDBOARD TIRE-STAND.

1,284,930.


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To all whom it may concern:

Be it known that we, WILLIAM M. DOERING and CHARLES J. DOERING, citizens of the United States, and residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Cardboard Tire-Stands, of which the following specification is a full disclosure.

10 Our invention relates to a two piece cardboard tire stand or cradle.

An object of the invention is to provide a cheap, simple and strong cardboard tire stand, which can be wholly assembled at the factory, shipped flat, and opened by the user into a stand formation.

Another object of the invention is to provide such a device of two members of such shape that they can be economically cut out of blank with a minimum waste of material.

The features of our invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which:

Figure 1 is a plan view of one of the duplicate two piece members.

Figure 2 is a plan view of the two pieces as assembled at the factory in flat or knocked-down position.

Figure 3 is a perspective view of the stand supporting the tire.

Each of the two members comprises a side wall 1 and two end sections 2, 3, projecting diagonally from opposite ends of section 1 and defined by the diagonally scored lines 4, preferably reinforced by the adhesive tape 5. The overlapping extremities 6 of the end sections 2, 3, are formed with the pivotal orifices 7 and the upper margin of these end sections 2, 3, have the concave contour 8. In the factory the end section 2 of one member are interlapped with the end section 3 of the opposite section and secured by pivots 9 at each end of the stand, the concave margins registering to form the tire receiving notches 10. When so attached, the united members are folded flat upon the opposite corner diagonally folding scored lines. The pivotal connections of the ends folding down flat against the side members, the side and end members overlapping, as shown in Fig. 2.

The user simply opens up the flat folded members into the stand formation 18, Fig. 8, to support the tire 14. Preferably, the stand is slightly shallow in relation to the diameter of a tire tube, so that the bottom extremity of the tire will tangentially contact the ground to help support the tire. It is not necessary to have internal side walls or bottom. The characteristics of the device are, a two-piece stand, assembled folding flat, to open up into a permanent stand formation, and open at the top and bottom.

In the preferred form of our invention, the bottom margins of end sections 2, 3, are upwardly inclined, as shown at 14, Fig. 1, so that when opened up into shell stand formation, there being no bottom, the bottom edges of the side walls 1, alone contact the ground, and the bottom edges of the end sections 2, 3, do not contact the ground, except at the corners 15, wherefore the two side walls being connected by the pivotal ends, fulcrum on these ground edges 16, constituting two tire gripping jaws, which, when the weight of the tire is applied, grip the tire in proportion to the weight, and lower the tire into ground contact.

Having described our invention, we claim:

1. A knock-down cardboard tire carton stand, assuming the general shape of a frustum of a pyramid, said structure comprising a rectangular shell open at the top and bottom, having flexible corners enabling the structure to be folded upon itself diagonally into flat form and to open up into stand formation, the end walls comprising pivotally connected sections, the upper margins being shaped to support a tire.

2. A knock-down cardboard tire carton stand, assuming the general shape of a frustum of a pyramid, said structure comprising a rectangular shell open at the top and
bottom, having flexible corners enabling the structure to be folded upon itself diagonally into flat form and to open up into stand formation, the side walls having marginal ground contact, and the end walls comprisingpivotally connected sections shaped to constitute pincer jaws to grip the tire.

In witness whereof, we hereunto subscribe our names, as attested by the two subscribing witnesses.

WILLIAM M. DOERING.
CHARLES J. DOERING.

Witnesses:
D. DRACHENBERG,
L. A. BECK.