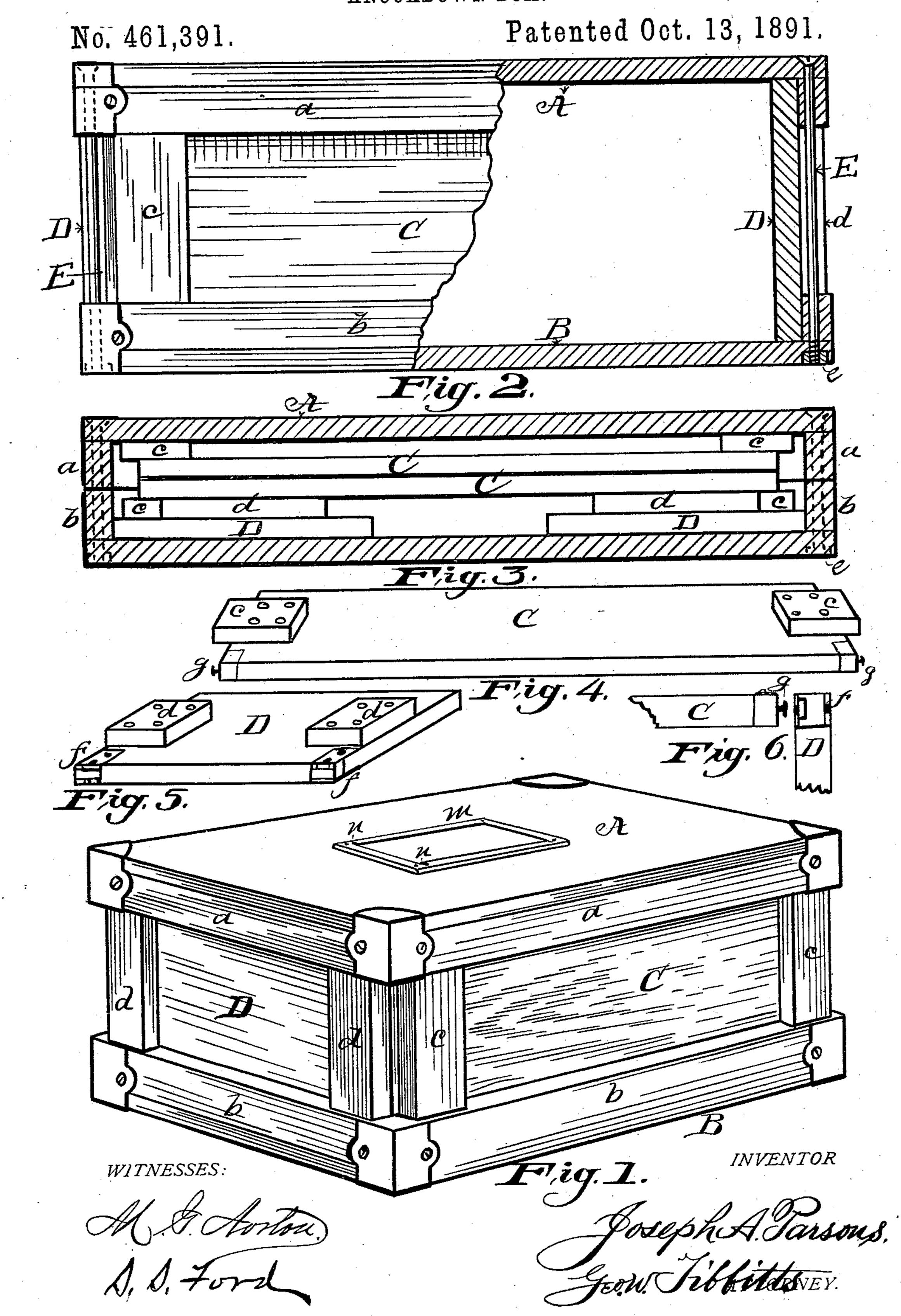
J. A. PARSONS. KNOCKDOWN BOX.



United States Patent Office.

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KNOCKDOWN BOX.

SPECIFICATION forming part of Letters Patent No. 461,391, dated October 13, 1891.

Application filed March 6, 1891. Serial No. 383,975. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Parsons, a citizen of the United States, and a resident of Rockport, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Knockdown Packing-Boxes, of which the following is a specification.

This invention relates to knockdown packing-boxes; and the invention consists in the construction and combination of the several parts, whereby the box may be taken apart and readily packed together in a compact form for return shipment. The box is constructed and arranged for use substantially as hereinafter described and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of my new knockdown box. Fig. 2 is a side elevation of the same having a portion of the side broken away to show method of setting up. Fig. 3 is a longitudinal section showing method of compact packing. Figs. 4 and 5 are detached views of end and side pieces. Fig. 6 represents a temporary corner-fastening.

A represents the top, and B the bottom, of the box. These are made alike, having narrow side and ends a b permanently attached, forming suitable flanges, and the corners may so be re-enforced and protected by suitable corner or band irons.

C C represent removable sides, and D D removable ends for building up the box when set up for use. To the ends of the sides C are provided cleats c c, which lap over the ends, but are shorter than the width of said sides, designed to stiffen and strengthen the sides, to prevent warping or splitting, and to form stops for the tank batter.

to form stops for the top, bottom, and ends to rest against when the box is set up. The end pieces are likewise provided with cleats d d and for like purposes, but they do not lap or extend over the ends as the cleats on the side pieces do.

For securing the box together when set up long bolts E E are used, passing through the end pieces of the cover and bottom, there being provided nuts e in the bottom for the bolts and in the top countersunk sockets for the heads of the bolts.

In the top corners of the end pieces are provided metal strips or corner-pieces f, having slots or notches, and to the top corners

of the side pieces are provided nails or screws g, whose heads project sufficiently to allow 55 the necks to pass into the slots, and thereby hold the ends and sides from slipping by one another while setting up and filling the box.

When the box is closely packed together, 60 as seen in Fig. 3, the end pieces D D are turned down and lie on the bottom with their cleats d d uppermost. Then the side pieces C C are laid in, the first one with its cleats downward and outside of the cleats 65 of the end pieces, the second one lying on top of the first with its cleats uppermost. Then the top or cover of the box A is laid over these pieces, which just fill the space between the top and bottom, the flanges of 70 the top and bottom meeting, thus making a solid and compact bundle, which may be secured together by short bolts or with a cleat tacked onto each end.

In setting up the box the top is removed, 75 then the side pieces taken out, then the end pieces are stood in upright position in the ends of the bottom, with the cleats outside, then the side pieces are stood upright in the sides of the bottom, the nail or screw heads 80 g slipped into the slots of the corner-pieces f. The cleats c c on the said sides C being also on the outside, the inside of the box is smooth and perfectly free from any obstructions and ready to receive its filling.

To the top A is provided a metal frame m for holding a direction-label, said frame having slots n n in two of its inside corners by which a card-label may be inserted in or removed from the frame.

Having described my invention, what I claim is—

The improved knockdown packing-box consisting of top or cover A, bottom B, each having side and end flanges a b, side pieces C C, 95 having overlapping short cleats c c, the end pieces D D, having short non-lapping cleats d d, and the bolts E E, inserted through the ends of the cover and bottom flanges, constructed and arranged for setting up or compact packing, substantially as described.

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Witnesses:
GEO. W. TIBBITTS,
M. G. NORTON.