

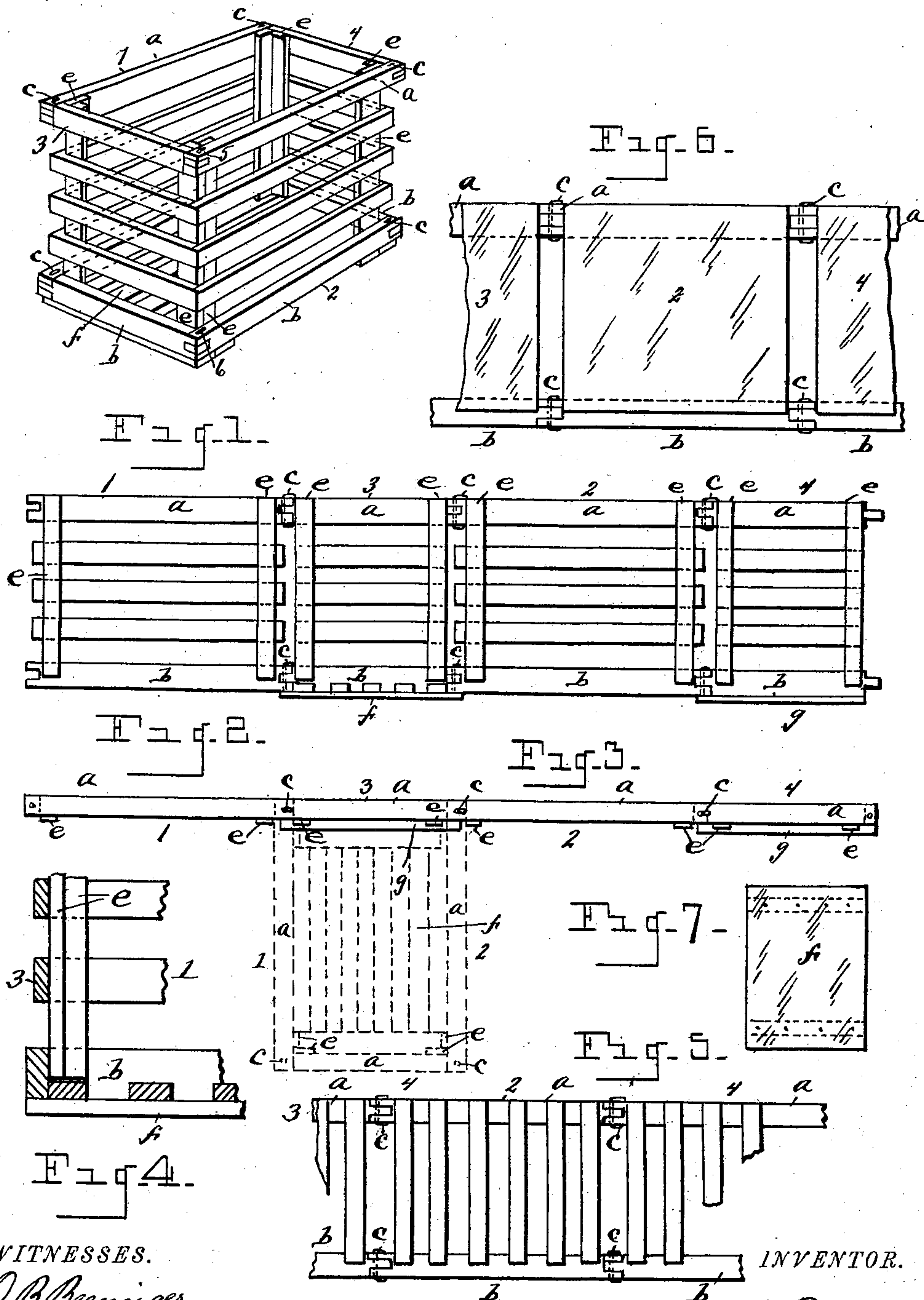
No. 701,834.

Patented June 10, 1902.

B. K. BOYD.
KNOCKDOWN CRATE.

(Application filed Mar. 12, 1902.)

(No Model.)



WITNESSES.

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UNITED STATES PATENT OFFICE.

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KNOCKDOWN CRATE.

SPECIFICATION forming part of Letters Patent No. 701,834, dated June 10, 1902.

Application filed March 12, 1902. Serial No. 97,830. (No model.)

To all whom it may concern:

Be it known that I, BERTRON K. BOYD, a citizen of the United States, residing at Bancroft, county of Shiawassee, State of Michigan, have invented a certain new and useful Improvement in Knockdown Crates; and I 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 appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object certain new and useful improvements in a folding or knockdown crate illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective, showing the crate assembled. Fig. 2 shows the side and end walls in flat or knockdown condition. Fig. 3 is an edge view of the same with the bottom indicated in dotted lines. Fig. 4 is a detail view showing one of the corners, portions being shown in section. Fig. 5 illustrates a modification of construction, and Fig. 6 illustrates another modification. Fig. 7 is a detail view of a solid bottom.

More particularly, my invention is designed to provide a crate of this description for a variety of uses, as for potatoes, fruit, grain, and the like, of simple and economical construction and of superior utility.

The side walls of the crate are indicated by the numerals 1 and 2, the end walls being indicated by the numerals 3 and 4. The side and end walls or sections may be variously constructed and are jointedly connected at their adjacent ends at top and bottom, as indicated at 5 and 6, these sections, provided with upper and lower bars, (indicated at *a* and *b*, respectively,) having a socket-and-tenon engagement, preferably, as shown. The socket and tenon of the adjacent sections are jointedly united by pins or analogous devices, (indicated at *c*.) These pins simply pass through the socket and tenons of the corresponding top and bottom bars *a* and *b*. As so constructed the side and end walls may be folded out flat, as indicated in Figs. 2 and 3.

When assembled, the said sections are folded in their extremities, being united by pins 5 and 6 at the top and bottom. As so constructed one of the extremities of the knock-

down walls will be formed with tenons, the other extremity being provided with corresponding sockets. This construction permits the ready assembling of the sections. Instead of knocking down the sides and ends of the crate in one piece, as indicated in Figs. 2 and 3, said sections might be otherwise separated, as into two sections, if preferred. The pins may consist of wires to be bent over and below the joints. The ends of the slats of each section are united by upright bars *e* in the form of construction shown in Figs. 1, 2, 3, and 4, which when the sides and ends are assembled are located adjacent to each other, as indicated in Figs. 1 and 4. The bottom of the crate is indicated at *f*, which may be formed in any suitable manner. To support the bottom, the two ends of the crate are provided with supporting ledges or brackets *g*, upon which the corresponding extremities of the bottom may rest. The uprights *e* are shortened at their lower ends, so as to permit the extremities of the bottom extending thereunder to prevent the bottom from rising.

To assemble the parts, the bottom is put into place on the ledges *g*, the four sides being brought into position thereabout, their adjacent free ends being connected by the pins *c*. In the form shown in Figs. 1 and 4 the walls are constructed of horizontal slats and uprights *e*.

In the form shown in Fig. 5 only the upper and lower bars are horizontal, said bars being connected by vertical slats.

In the form shown in Fig. 6 the side and end walls are constructed with solid sides and end pieces with upper and lower horizontal bars, in which case the bottom would also be made with a solid flooring, so that the device might be used for grain.

In folding out or knocking down the crate a couple of pins are removed from corresponding corners. The side and end walls may then be stretched or folded out flat, the bottom being simply slipped out of place.

What I claim as my invention is—

1. A knockdown crate having side and end walls formed with horizontal top and bottom bars, the adjacent ends of said bars having a socket-and-tenon engagement one with the other, pins jointedly connecting adjacent sockets and tenons, abutting interior upright

corner-strips, and a separable bottom, said crate provided with ledges to support the bottom.

2. A knockdown crate having side and end
5 walls formed with horizontal top and bottom bars, the adjacent ends of said bars having a socket-and-tenon engagement one with the other, pins jointedly connecting adjacent sockets and tenons, interior abutting upright corner-strips, and a separable bottom, said crate
10 provided with ledges to support the bottom, said corner-strips cut away at their lower ends to permit the bottom resting thereunder.

3. A knockdown crate having side and end
15 walls formed with horizontal top and bottom bars, the adjacent ends of said bars having a

socket-and-tenon engagement one with the other, pins jointedly connecting adjacent the sockets and tenons, interior abutting upright corner-strips, and a separable bottom, said
20 crate provided with ledges to support the bottom, said corner-strips cut away at their lower ends to permit the bottom resting thereunder to hold the bottom from rising off from the support. 25

In testimony whereof I sign this specification in the presence of two witnesses.

BERTRON K. BOYD.

Witnesses:

H. W. PARKER,
MAUDE HUNTER.