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L. TEST & H. M. JONES. SHIPPING CRATE.

(Application filed Mar. 31, 1898.) (No Model.) Lours Test & Horace M. Jones, Inventors: Witnesses:

United States Patent Office.

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SHIPPING-CRATE.

SPECIFICATION forming part of Letters Patent No. 618,448, dated January 31, 1899.

Application filed March 31, 1898. Serial No. 675,984. (No model.)

To all whom it may concern:

Be it known that we, Louis Test and Hor-ACE MAYNARD JONES, citizens of the United States, residing at Philadelphia, in the county 5 of Philadelphia and State of Pennsylvania, have invented a new and useful Shipping-Crate, of which the following is a specification.

Our invention relates to shipping-crates, 19 and has for its object to provide a simple, strong, and efficient construction and arrangement of parts whereby the members of the crate may be folded into compact form for return shipment and whereby when set up the 15 adjustable or movable walls thereof are locked firmly in their operative positions.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be par-20 ticularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a crate constructed in accordance with our invention. Fig. 2 is a detail view in perspective of one corner of the crate to show the 25 lock for connecting the side and end walls. Fig. 3 is a sectional elevation of the same. Fig. 4 is a detail view of one of the latches detached. Fig. 5 is a transverse sectional view of the crate with its parts folded. Fig. 30 6 is a partial longitudinal section of the same.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The crate embodying our invention con-35 sists, essentially, of a bottom wall 1, inwardly-folding side walls 2 and 3, hinged at their lower edges to the bottom wall, the side wall 3 being hinged upon a strip or raised portion 4 to fold over the wall 2 and lie parallel there-40 with, outwardly-folding end walls 5, adapted to fold parallel and in contact with the under or outer surface of the bottom wall, and a top wall 6, hinged to the side wall 3 and adapted to fold outwardly in contact with the exterior 45 surface thereof. One end wall is provided face and adapted when the end walls are folded in contact with the outer surface of the bottom wall to engage a staple or eye 8 on the 50 inner surface of the other end wall. Also the

9, adapted when the crate is folded to engage corresponding eyes 10 on the exterior surfaces of the end walls contiguous to their lower edges. In practice a single hook 9, as shown 55 in the drawings, will be found sufficient for maintaining the parts of the crate in their folded positions, and the eye with which this hook is engaged is exposed beyond the contiguous extremity of the bottom wall when 60 the end walls are folded by reason of the extension of the hinges 11 of said end walls beyoud the edges of the bottom wall, as clearly

indicated in Fig. 6.

With the above-described construction it 65 will be seen that the end walls fold against the terminal edges of the side walls when the crate is set up, and in order to maintain the side and end walls in their upright or operative positions the former are fitted contig- 70 uous to their upper corners with pivotal latches 12, preferably countersunk in the edges of the walls and having elongated Theads 13 for engaging T-sockets 14, carried by the end walls, said T-sockets being extend-75 ed to form flanged seats 15 to receive the contiguous portions of the end edges of the side walls, and thereby prevent displacement of the side walls with relation to the end walls. The latches are extended beyond their 80 pivotal points 16 to form tails 17, which may be depressed to disengage the T-heads from the T-sockets of the end walls, and thus release the walls for folding. The seats in which the latches are mounted are closed at 85 their upper sides by the under surface of the top wall, said latches being flush at their backs or upper edges with the contiguous edges of the side walls, whereby displacement of the latches and the consequent release of 90 the end walls is prevented by the contact therewith of the top wall when the latter is in its closed position.

The portions of the front side wall contiguous to the latches are protected by wear- 95 plates 21, suitably slotted, sufficient protecwith a hook 7, mounted upon its inner sur- | tion being afforded to the portions of the side wall 3 contiguous to the latches thereon by the hinges of the top wall.

Any suitable locking device may be em- 100 ployed for maintaining the free edge of the top wall is provided with one or more hooks | top wall in place, such as a hasp 18 on the

top wall for engagement with a pivotal staple 19 on the contiguous side wall, and the other side wall is provided in its inner surface contiguous to its lower edge with a socket 5 20 for the reception of said staple when the parts are folded.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit 10 or sacrificing any of the advantages of this

invention.

Having described our invention, what we claim is—

1. A crate having a bottom wall, inwardly-15 folding side walls hingedly connected with the side edges of the bottom wall, with their fulcrum-points in different planes, outwardlyfolding end walls mounted upon the end edges of the bottom wall by means of hinges 20 extended beyond said edges of the bottom wall, a top wall hingedly mounted upon the upper edge of one of the side walls to fold outwardly in contact and parallel with the exterior surface thereof, means for connect-25 ing the contiguous edges of the side and end walls to maintain the latter in their upright or normal positions, a hook mounted upon the inner surface of one end wall for engagement with a staple on the inner surface of the other 30 end wall when the crate is folded, and a hook mounted upon one end edge of the top wall for

engagement with a staple projecting from the

exterior surface of the contiguous end wall near its lower edge, and exposed beyond the contiguous end edge of the bottom wall when 35 the crate is folded, substantially as specified.

2. In a crate, the combination with bottom, side, and end walls, of pivotal latches mounted upon the side walls and having T-heads, and socket-plates carried by the end walls 40 and provided with T-sockets to receive the T-heads of the latches, said socket-plates being extended and upstruck at their side edges to form flanged seats for the reception of the contiguous edges of the end walls, substan- 45

tially as specified.

3. In a crate, the combination with bottom, side, end, and top walls, of pivotal latches mounted upon the side walls for swinging movement in the planes thereof, and having 50 inner terminal extensions or tails and outer terminal T-heads, and sockets on the end walls for engagement by the heads of the latches said extensions or tails being depressible to disengage the heads from said sockets, 55 substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures

in the presence of two witnesses.

LOUIS TEST. HORACE MAYNARD JONES.

Witnesses: JOHN PACEY, CHAS. E. BONNET.