No. 646,298. Patented Mar. 27, 1900.

L. L. MERRIMAN.

CRATE FOR FRAGILE BOXES.

(Application filed July 8, 1899.)

(No Model.)

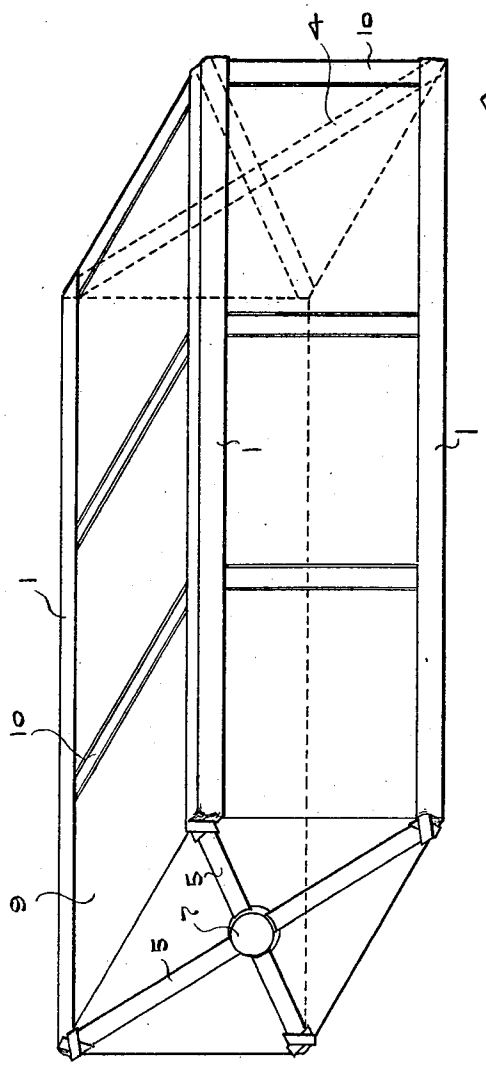


FIG. 1.

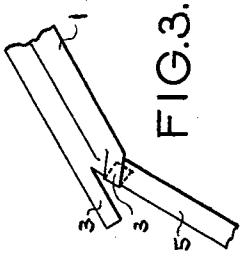


FIG. 3.

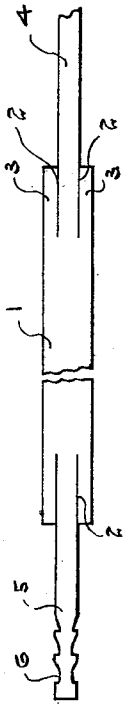


FIG. 2.

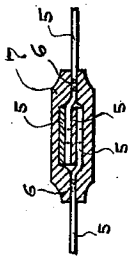


FIG. 5.

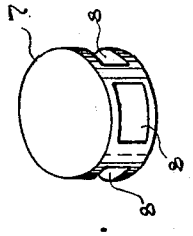


FIG. 4.

WITNESSES:

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CRATE FOR FRAGILE BOXES.

SPECIFICATION forming part of Letters Patent No. 646,298, dated March 27, 1900.

Application filed July 8, 1899. Serial No. 723,236. (No model.)

To all whom it may concern:

Be it known that I, LORENZO L. MERRIMAN, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Crates for Fragile Boxes, of which the following is a specification.

My invention relates to crates for fragile boxes, and particularly to a form designed for holding together a number of pasteboard boxes.

The main objects of my invention are, first, to provide a light, simple, and inexpensive device for holding together and protecting the corners of said boxes, and, second, to provide suitable means for securing said device in position without the use of fasteners entering the material of the boxes. I accomplish these objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a number of pasteboard boxes having a crate constructed and attached according to my invention. Fig. 2 is a plan of the blank from which the crate-strips are formed, being partly broken away. Fig. 3 is a view showing the manner of bending the strips to form the corners. Fig. 4 is a perspective view of a seal for locking the strips together. Fig. 5 is a section through the seal, showing the same compressed upon the strips after insertion of the latter.

The boxes shown in Fig. 1 are such as are ordinarily used in packing stogies. The crate shown consists of two continuous metal strips passing diagonally across the ends of the boxes from corner to corner and thence along the edge or corner of the boxes intermediate of said ends. Said strips cross each other at the rear end, as shown in dotted lines in Fig. 1. At the front end said strips are connected by means of the seal 7. Each strip consists of a wide part 1, having a narrower extension 5 at one end. In the form shown the extension 4 connects two of the parts 1. The cuts 2 in the part 1 form tongues 3. When the corners are formed, the tongues 3 are bent across each other and under the extensions 4 and 5. The extension 5 at its free end is preferably notched to form the shoulders 6. The seal 7 has recesses 8 extending entirely through the same and crossing each other for receiving the strips 5. When said strips are inserted in said recesses, the seal 7, being of soft metal, such as lead, is compressed upon the strips, as shown in Fig. 5, and into the notches 6, as indicated by the dotted lines. The seal may be compressed by any suitable instrument for that purpose. It will be understood that a similar seal may be used at the rear end, the strips 5 in such case being substituted for the continuous strips 4.

The parts 1 are creased or bent over the edges of the boxes, so as to lap over on each wall forming said edges, said parts 1 thus being angular in cross-section. The extensions 5 are then bent down and the tongues 3 bent under the same, as before described.

It will be understood that the strips may be bent into position upon the boxes or that said strips may be previously formed, as shown in Fig. 1, before attachment to the boxes, the same being sprung slightly to admit the boxes and afterward sealed together, as before described.

It will be understood that my device may be used for strengthening a single box, that any suitable fastener may be substituted for the seal, and that other details of my invention may be altered in numerous ways without departing from the spirit of my invention. I therefore do not confine myself to such details.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a box-crate, the sheet-metal strip formed of a single piece, comprising the part 1 angular in cross-section, the part 5 bent at an angle to the part 1, the tongues 3 formed by cuts at the base of the part 5 and bent across each other and under the part 5, substantially as described.

2. The combination of a series of boxes placed end to end, with the detachable crate formed of the sheet-metal strips 1 angular in cross-section, having the extension 5 and tongues 3 bent across each other and under said extensions and means for connecting the free ends of the extensions 5; the parts of said crate being disposed upon said boxes, substantially as shown and described.

Signed by me at Chicago, Illinois, this 5th day of July, 1899.

LORENZO L. MERRIMAN.

Witnesses:
GLEN C. STEPHENS,
WM. R. RUMMLER.