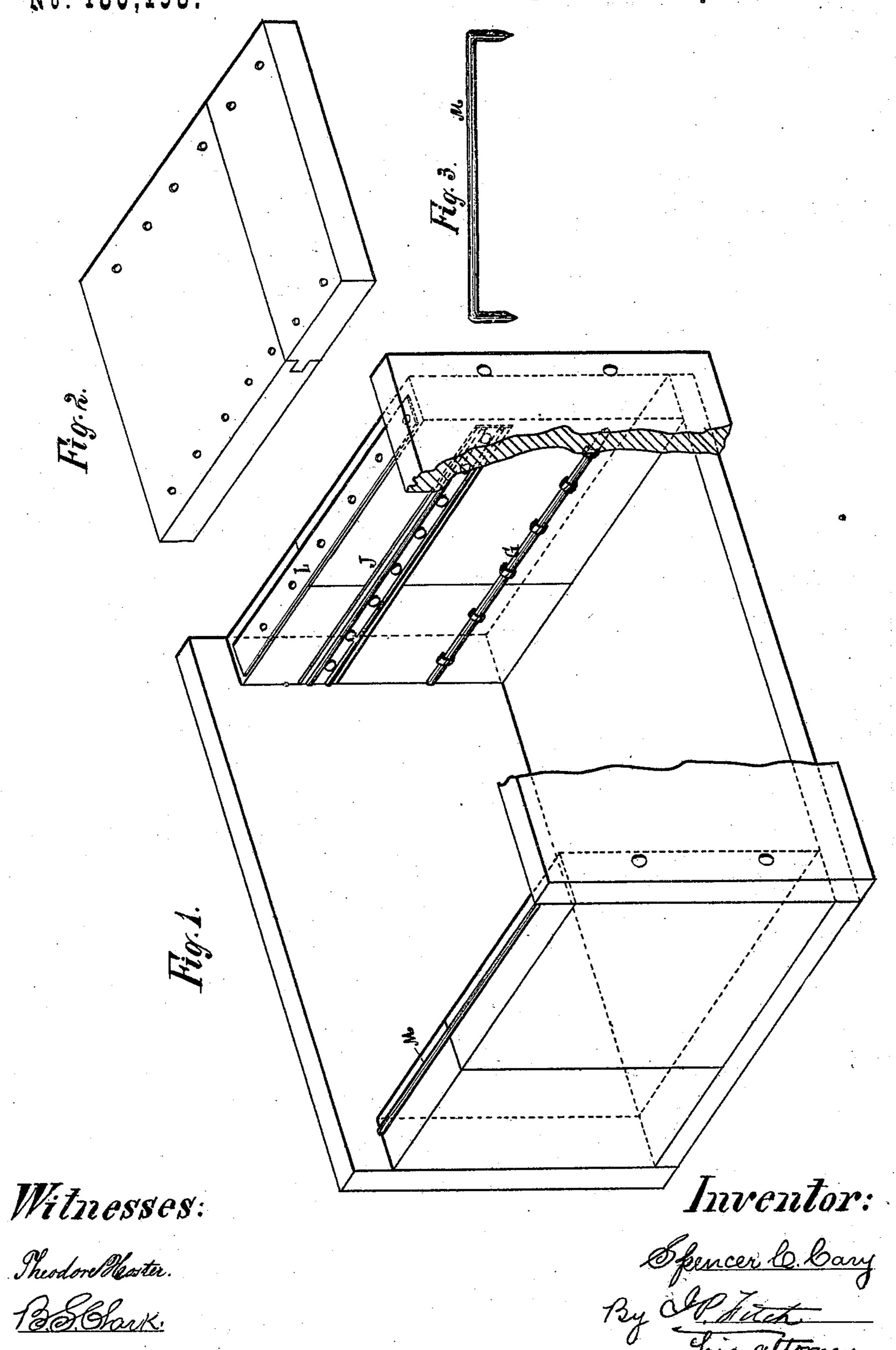
S. C. CARY.

No. 180,198.

Patented July 25, 1876.



## UNITED STATES PATENT OFFICE

SPENCER C. CARY, OF ROSELLE, NEW JERSEY.

## IMPROVEMENT IN PACKING-BOXES.

Specification forming part of Letters Patent No. 180,198, dated July 25, 1876; application filed April 11, 1876.

To all whom it may concern:

Be it known that I, Spencer C. Cary, of Roselle, Union county, State of New Jersey, have invented a new and useful Improvement on Packing-Boxes, of which the following is a specification, reference being had to the accompanying drawings, forming part of the same, in which—

Figure 1 is a perspective view of a packingbox, the side of which is removed, and the top cut away, showing my improvement as applied. Fig. 2 is a perspective view of the side of the packing-box; Fig. 3, a side view of a wire or rod bent at right angles, such as I use as a stay.

My invention relates to wooden packing-boxes; and consists in the combination, with the sides, ends, top, or bottom, as may be needed, of metal stays applied, as hereinafter described, across the grain of the wood within the interior of the box, or across the ends of the boards forming the several parts, so that when the box is completed and closed no part of said stays shall be exposed.

In Fig. 1 I have represented several modes of applying my iron stays. The one shown at M consists of a band or rod bent at right angles at the ends, as shown detached in Fig. 3. This extends across the end of the box, the bent ends being driven into the wood, or, if preferred, turned down on the side edge of the end piece, and the body of the wire may be forced down into the wood. In place of this wire a flat strip of metal may be used, as seen at L. In place of being applied at the grain ends of the walls of the box, these stays may be nailed across their faces, as seen at G and J, Fig. 1.

If strips of metal be used they should be beaded on the sides, so as to prevent nail-heads or the edges of the metal from chafing goods, so as to present no objectionable projections upon the surface to which they are

applied. Each part of the box may be thus stayed, if desired.

By this device the side, ends, top, and bottom of a box may be formed each of several peices or width of board, that will be held firmly together independent of their connections with the others; so, also, if made of a single piece of board, such piece will be prevented from splitting, and thus causing the box to go to pieces.

It well known that packing-boxes, as usually constructed, have to be hooped or stayed by cleats placed on the outside. These are objectionable in many kinds of boxes, and they are liable to be started off by the violence to which the box may be subjected in transportation or handling, endangering the integrity of the package, and presenting, perhaps, projecting ends, which will cause inconvenience and injury in various ways. Outside cleats or hoops also occupy space, which in transportation and storage is often a matter of considerable importance.

By my improvement a wooden packing-box is securely stayed cheaply and conveniently, while the stays are in no way exposed when the box is closed, and the stays present no obstruction to the packing in the box of any desired contents.

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

A wooden packing-box, the ends, sides, or top and bottom of which are combined with iron stay rods or bars, applied as described, so that when the box is complete said stay rods or bars are in its interior, or not externally exposed, substantially as specified.

Witness my hand this 8th day of April, 1876.

SPENCER C. CARY,

Witnesses:
B. S. CLARK,
FRED. E. BOND.