G. ROBINSON, Jr.

FOLDING-CRATE.

No. 191,371. Patented May 29, 1877.

Fig. 1

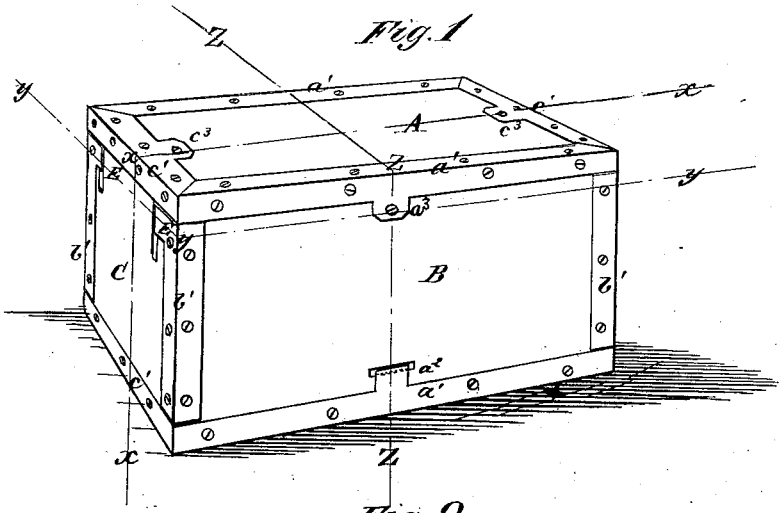


Fig. 2

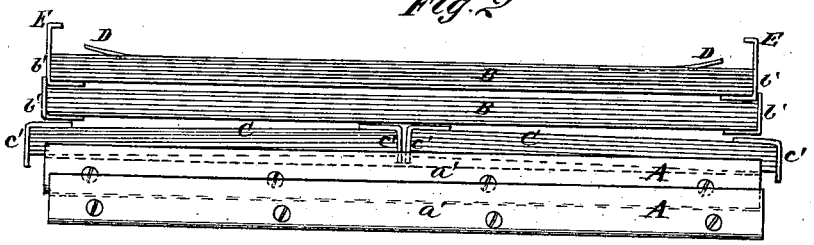


Fig. 3

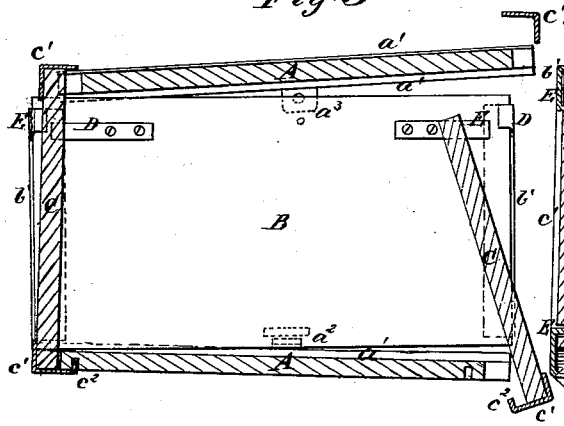


Fig. 4

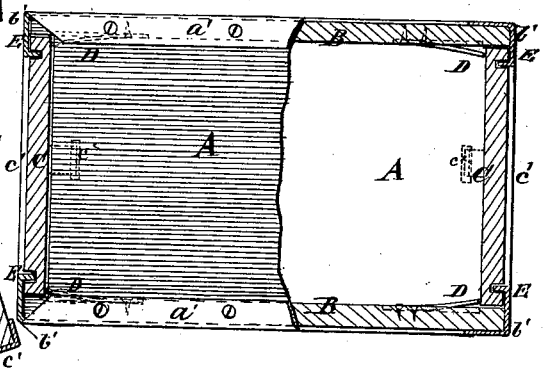
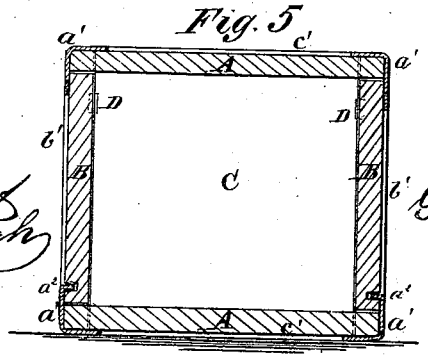


Fig. 5



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UNITED STATES PATENT OFFICE.

GILBERT ROBINSON, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN FOLDING CRATES.

Specification forming part of Letters Patent No. **191,371**, dated May 29, 1877; application filed December 11, 1876.

To all whom it may concern:

Be it known that I, GILBERT ROBINSON, Jr., of the city, county, and State of New York, have invented a new and useful Improvement in Packing-Boxes, of which the following is a specification:

Figure 1 is a perspective view of one of my improved packing-boxes. Fig. 2 is a side view of the same packed for reshipment. Fig. 3 is a vertical longitudinal section of the same, taken through the line *x x x*, Fig. 1. Fig. 4 is a horizontal section of the same, taken through the line *y y y*, Fig. 1, and showing part of the cover in place. Fig. 5 is a cross-section of the same taken through the line *z z z*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish packing-boxes which shall be so constructed that they may be conveniently taken apart and packed together in small compass for reshipment, so as to save to the shipper the cost of making new boxes every time he has to ship goods, and which shall be simple in construction, strong, and durable.

The invention consists in an improved packing-box formed by the combination of the top and bottom boards, the side boards, the end boards, the angular strips, the spring-catches, the strap-hooks, and the lugs with each other, as hereinafter fully described.

A are the top and bottom boards of the box, which are exactly alike. B are the side boards, which are exactly alike; and C are end boards, which are also exactly alike. To the side edges of the top and bottom boards A are attached angular strips a^1 of sheet metal, the parts of which, that lie along the edges of said boards A, project so as to overlap the outer sides of the edges of the side boards B, against which edges the said top and bottom boards rest.

To the end edges of the side boards B are attached angular strips of sheet metal b', the parts of which that lie along the edges of said side boards project so as to overlap the outer sides of the side edges of the end boards C, against which edges the said side boards rest, as shown in Figs. 3 and 4.

To the upper and lower edges of the end boards C are attached angular strips c' of sheet metal, the parts of which that lie along the edges of the said boards C project so as to overlap the outer sides of the ends of the top and bottom boards A, against which edges the said end boards C rest. All the edges of the box are thus bound with metal strips, which keep the parts of the box from being pressed outward.

The side parts of the ends of the top and bottom boards A project at the side edges of the end boards C, so as to be flush with the ends of the box, and fill up the spaces that would otherwise be left at those points.

The top and bottom boards A are kept from being pressed inward by resting against the side edges of the side boards B. The side boards B are kept from being pressed inward by resting against the side edges of the end boards C. The end boards C are kept from being pressed inward by resting against the end edges of the top and bottom boards A. The upper ends of the end boards C are kept from being pressed inward when the top board is removed to allow the box to be filled by spring-catches D, attached to the upper part of the side boards B, and which rest against the inner surface of the said end boards C. The side boards B are kept from being pressed outward when the top board A is removed by hook-straps E, attached to the upper part of the end edges of the said side boards B, or attached to or formed upon the angular strips b', and which hook into grooves in the outer sides of the end boards C, as shown in Figs. 1 and 4.

The box is taken apart by detaching the upper strip c^1 at one end of the box, raising that end of the top board A, and drawing it out, compressing the spring-catches D, moving the upper ends of the end boards C inward, and drawing them out downward, as indicated in Fig. 3. The side boards B may then be removed, and the parts of the box *s* taken apart, and ready to be packed for storage or transportation, as shown in Fig. 3.

When a number of the boxes are shipped to the same address a suitable number of the boxes are made enough larger than the others to receive the parts of a number of boxes when taken apart and piled together, as shown

in Fig. 2, so that the smaller boxes may be packed in the larger boxes for reshipment.

Upon the middle part of the upper edges of the lower side strips a^1 are formed strap-hooks a^2, which hook into grooves in the side boards B. Upon the middle part of the lower edges of the end strips c^1 are formed strap-hooks c^2, which hook into grooves in the bottom board A. Upon the middle part of the lower edges of the upper side strips a^1 are formed lugs a^3, which are secured to the side boards B by screws. Upon the middle part of the upper edges of the upper end strips c^1 are formed lugs c^3, which are secured to the top board A by screws. The strap-hooks a^2 c^2 and the lugs a^3 c^3 support the middle parts of the side and end edges of the top and bottom boards A to prevent them from springing out when in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved packing-box, formed by the combination of the top and bottom boards A, the side boards B, the end boards C, the angular strips a^1 b' c^1, the spring-catches D, the strap-hooks E a^2 c^2, and the lugs a^3 c^3 with each other, substantially as herein shown and described.

GILBERT ROBINSON, JR.

Witnesses:
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