

J. G. Staunton,
Air-Tight Box.

N^o 45,766.

Patented Jan. 3, 1865.

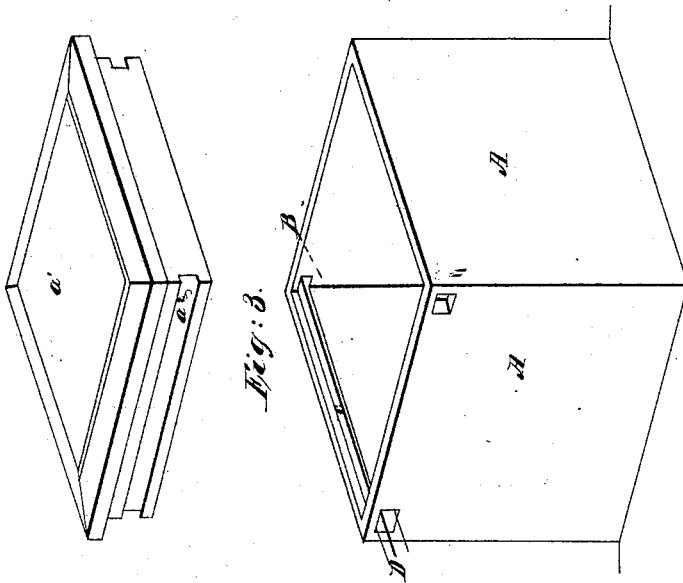


Fig. 3.

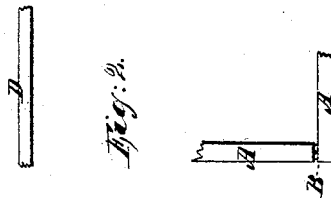
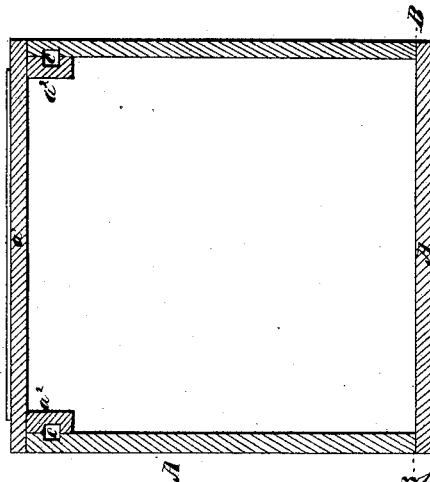


Fig. 2.

Fig. 1.



Witnesses:
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J. GALUSHA STAUNTON, OF BUFFALO, NEW YORK.

IMPROVEMENT IN AIR-TIGHT BOXES, CASES, &c.

Specification forming part of Letters Patent No. **45,766**, dated January 3, 1865; antedated May 18, 1863.

To all whom it may concern:

Be it known that I, J. GALUSHA STAUNTON, of the city of Buffalo, county of Erie, and State of New York, have invented a new and improved air-tight box or package for butter, lard, oysters, beef, pork, fruit, and other organic substances, for dead bodies, and for acids, alkalies, and other corrosive substances which require tight packages for holding or transportation, the particular shape, style, or size of which is determined by the article for which it is intended; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being made to the accompanying drawings, making a part of this specification, in which—

Figure I is a vertical section of my improvement in the form of a square or nearly square box for holding butter, lard, &c. Fig. II is a section to show a rubber welt or thread which is laid into the joint, the joint being separated a little, in order to show more clearly the welt or thread before it is compressed in the joint by driving the nails or screws. Fig. III is a perspective showing the cover removed from the box, and a mode of fastening the cover to the box.

The nature of my invention relates, first, to making a box, package, or case of boards, with a rubber welt or thread throughout the joints; second, in lining the box or package with paraffine, wax, gum, or equivalent substance applied in a liquid state, so as to penetrate the pores of the wood and form a thin lining or coating on the surface of the wood; third, in the manner of fastening the cover to the box.

Letters of like name and kind refer to like parts in each of the figures.

A represents a box, case, or package made of hard or soft wood boards, of any required form and size, jointed and held firmly together by screws or galvanized nails. A rubber welt or thread, which is shown at B, is laid into the joints as the several parts of the box are put together, so that when the screws or nails are driven in tightly the rubber welt or thread will be compressed within the joint and form a water and air tight joint. In case the timber shrinks or warps so as to open the joint slightly the rubber expands to prevent a leak.

The cover to the box, which is shown at *a'*, has a grooved flange, *a²*, which flange fits within the box. There is a corresponding groove

made in the upper edge of the box inside, forming with the groove in the flange, when the cover is put on, a square mortise, running completely through from side to side, as shown at *c*. A wooden key is driven into this, (shown at D,) which holds the cover firmly on. The mortise through the body of the box is so located with reference to the groove in the cover that when the key is driven in it will "draw" the cover down firmly. The key should be a little short, so as to admit a cork stopper at each end of the key. Two such keys on opposite sides complete the fastening. The keys are driven out in removing the cover. This mode of fastening on the cover is convenient and secure; but I do not limit myself to this mode, for other modes of fastening may be advantageously used in connection with the other parts of my invention. After the box is thus put together, the inside is coated with paraffine, wax, gum, or equivalent material melted or in solution. It is applied by pouring the lining material into the box, bringing it into contact with the entire inner surface, and quickly pouring off again. Enough remains to fill the pores of the wood, and also form a thin coating or lining which hardens and becomes impervious to air and moisture, and when composed of paraffine is indestructible by acids or alkalies.

A box or package made as above described possesses many advantages over the packages now in use for the purposes for which these are designed. They cost much less than cooper-work. In many parts of the country staves and wooden hoops are scarce and obtained with difficulty. The work upon these packages may be nearly all done by machinery. The work may be done by less skillful workmen, as in cutting the several pieces of the proper size no jointing after the saw is necessary, the rubber thread accommodating itself to all the inequalities of surface left by the saw. In use for butter and the like articles with which brine is used there is no saturation and staining of the outside through the pores, as is the case with packages now used for that purpose. In packing for transportation there is a great saving of space, eight butter packages of one hundred pounds each requiring only a three-foot box, while not more than five of the ordinary firkins could be stowed in the same box. There is no burst-

ing or falling off of hoops. There is much greater certainty of making them tight. In removing butter from them, having made them a half inch the largest at the top, on turning them over the butter drops out like a brick from the mold, without requiring the destruction of the package to get it out. The packages may be easily cleaned and used repeatedly if desired. Although the lining protects the wood entirely from moisture, yet the pieces are so arranged with reference to the grain that a uniform expansion of all the pieces of even a half-inch would not open a single joint, while the elastic thread would stretch to meet the expansion. These packages for the transportation of acids and alkalies lined with paraffine are much cheaper than glass carboys, free from the danger of breaking, and less bulky. For dead bodies, made as coffins, they are air-tight, waterproof, and coated with par-

affine on the outside. Shellac and varnish finishes very nicely over the paraffine, and they must resist decomposing agencies much longer, and cost but a trifle more than ordinary coffins.

What I claim as of my invention is—

1. The application and use of a thread or welt of rubber throughout the joints of wooden or board packages, for the purpose and substantially as described.

2. Coating or lining the inside of such wooden packages with paraffine, wax, gum, or other impervious substance, in combination with the welted joint, for the purpose and substantially as described.

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Witnesses:

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