

(No Model.)

S. T. ACHOR.  
RE-ENFORCED PAPER BOX.

No. 450,211.

Patented Apr. 14, 1891.

Fig. 1.

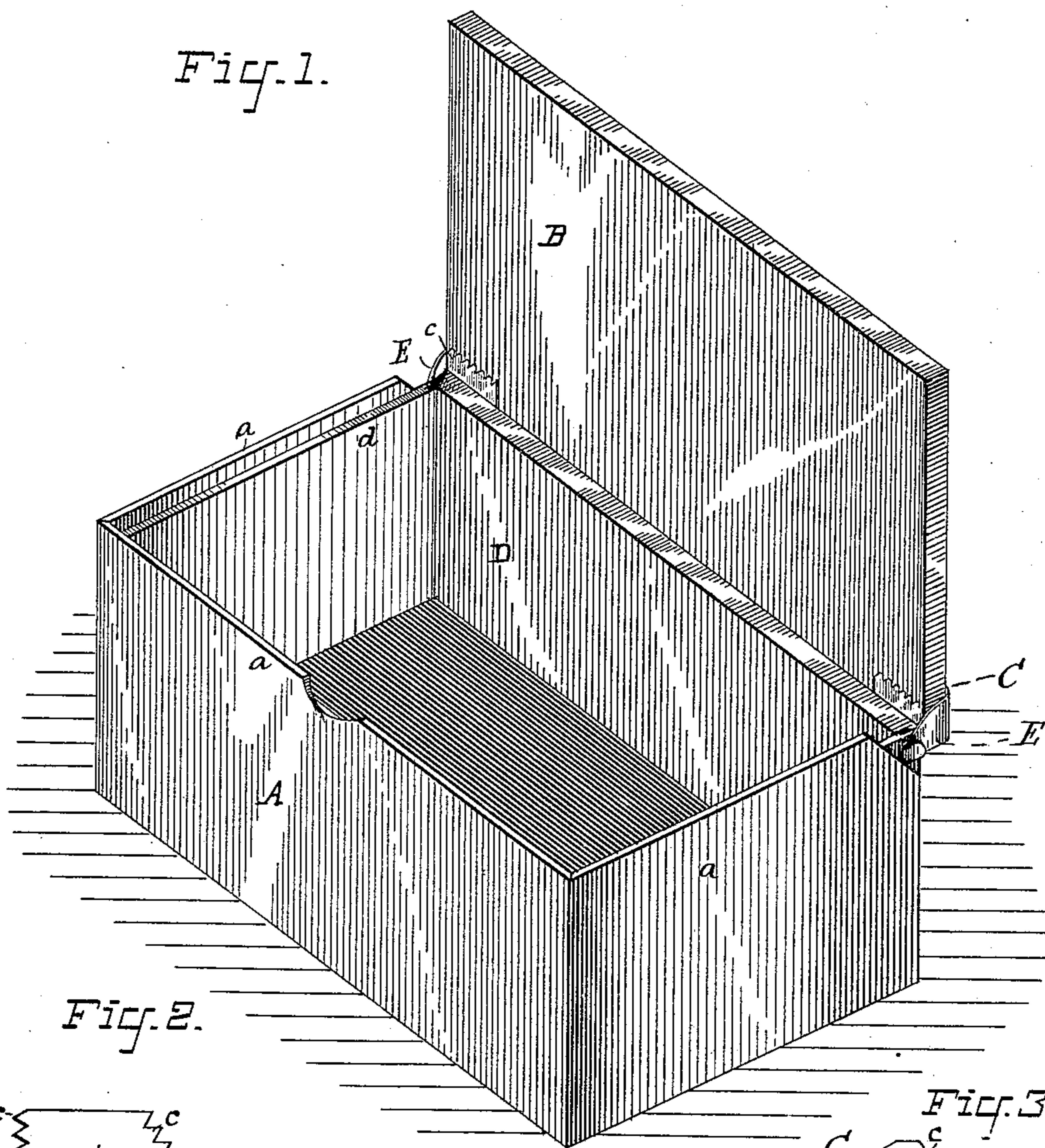


Fig. 2.

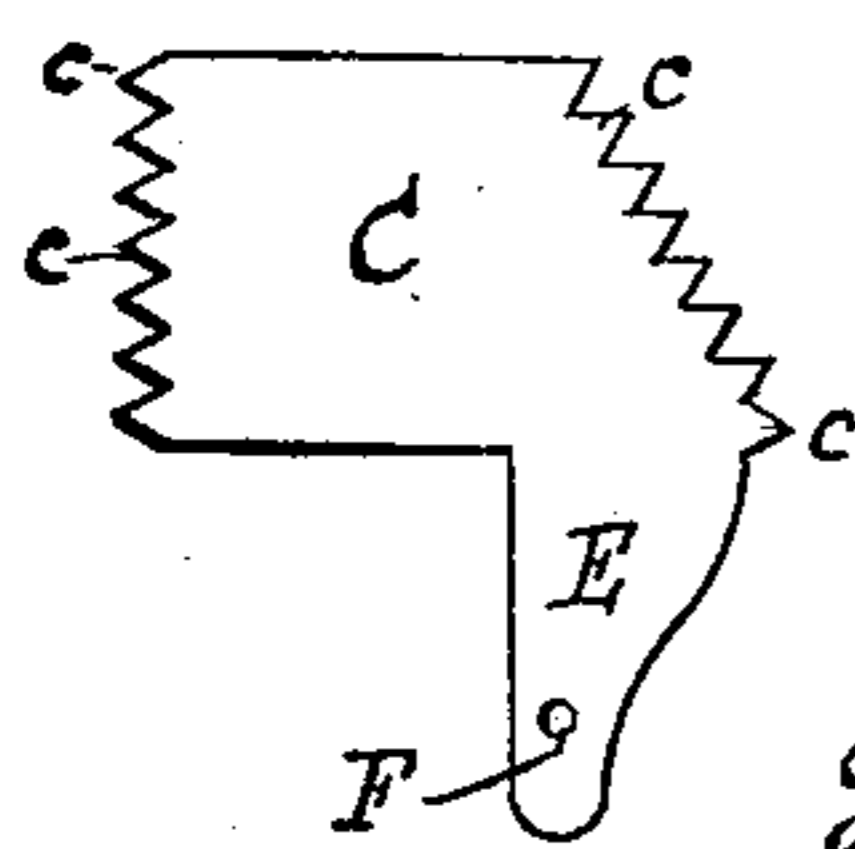


Fig. 3.

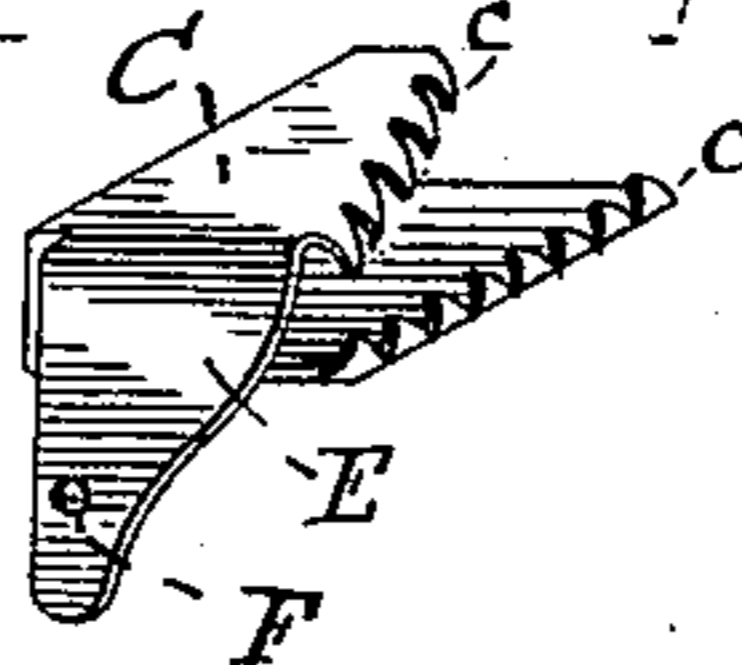


Fig. 4.

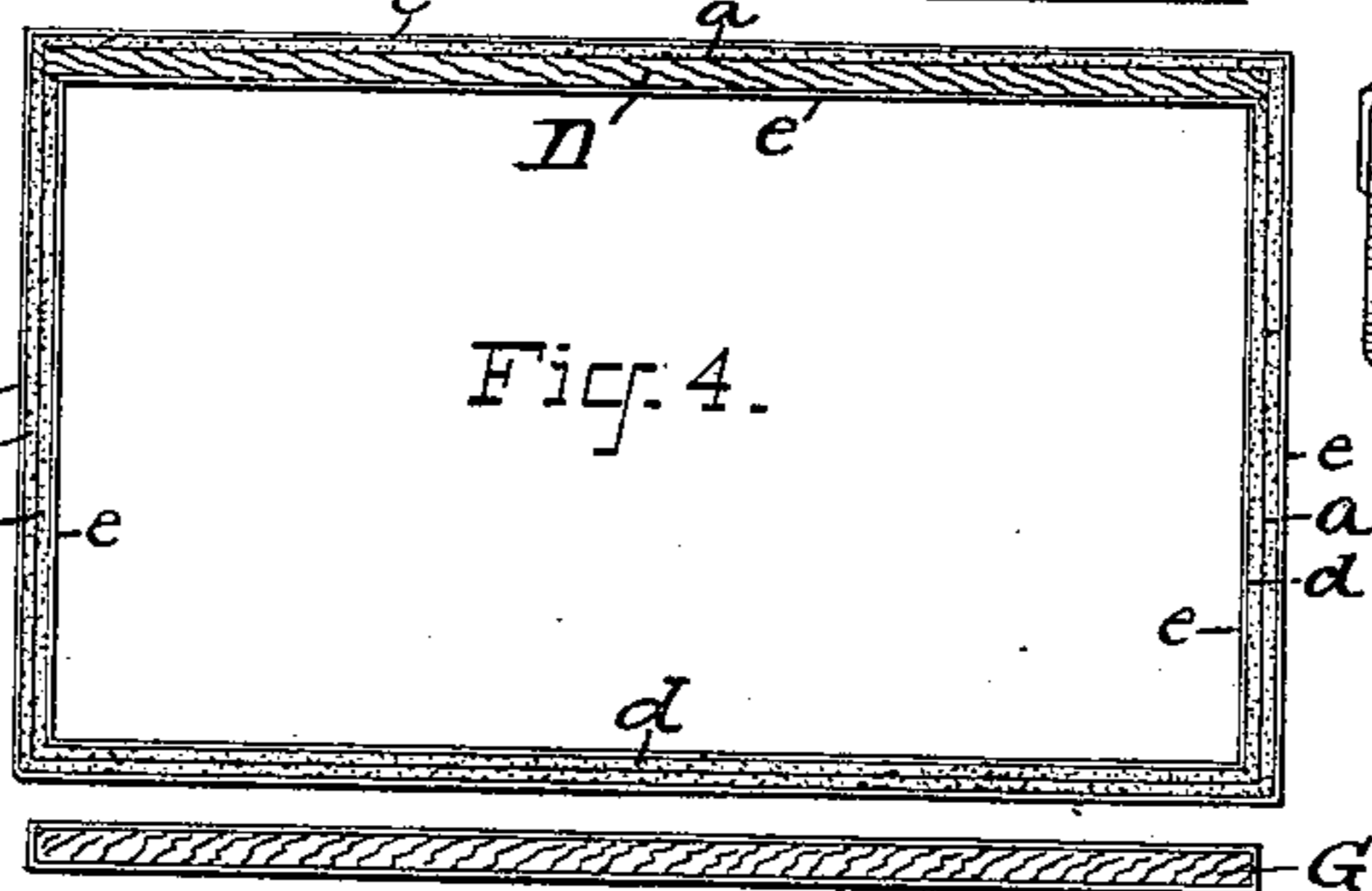


Fig. 5.



ATTEST:

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# UNITED STATES PATENT OFFICE.

SERVETUS T. ACHOR, OF BROOKLYN, NEW YORK.

## RE-ENFORCED PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 450,211, dated April 14, 1891.

Application filed July 14, 1890. Serial No. 358,665. (No model.)

*To all whom it may concern:*

Be it known that I, SERVETUS T. ACHOR, of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Re-Enforced Paper Boxes, of which the following is a specification.

My invention pertains to a box suitable for confectionery and similar articles, and relates particularly to so constructing the box as to combine the strength and rigidity of wood with the lightness of pasteboard and in applying upon such box a peculiarly-constructed hinge, as hereinafter set forth.

In the drawings, Figure 1 is a perspective view of my improved box, showing the lid raised. Fig. 2 shows the blank for forming the hinge. Fig. 3 shows the blank as bent around to fasten on the lid. Fig. 4 is a horizontal sectional view of the box, and Fig. 5 is a sectional view of the lid.

Similar letters of reference designate similar parts in all the drawings.

A is the box, which is made of pasteboard or other light material, and consists, primarily, of a bottom and four sides *a a a a*. The rear side of the box is re-enforced by a wooden strip D, glued fast to the box, so as to give that side extra strength, thickness, and rigidity and afford a firm hold for the pivot-nail of the hinge to be driven in. The other three sides of the box are also re-enforced with an extra thickness of pasteboard or other suitable material *d d d*, the upper edge of which forms a shoulder around the box for the lid to rest on when closed.

After the sides of the box have been re-enforced as above the box is covered with paper *e e e e* or other suitable material, like an ordinary pasteboard box.

The lid E is preferably composed of wood G, covered with paper *e*, or the same material as the rest of the box, and it is provided with hinges C C, formed of sheet metal and attached to the lid by being bent around it and having the teeth or prongs *c c c c*, forced into the lid, so as to hold it firmly. The arm E is then bent down against the end of the box and a nail driven through the hole F, serving for a pivot for the hinge to turn on. The lower end of the hinge is then turned up over the head of the nail, as shown in Fig. 1, thus preventing the nail from working out and

protecting the nail from being caught or pulled out by accident. When the hinges are attached, the lid will shut down into the shoulder *d d d* and be held firmly from lateral movement by the projecting edges of the sides *a a a*. The rear upper corners of the sides *a a* are cut away to correspond with the shape of the hinges C C, thus forming recesses for the hinges to occupy and further protecting the hinges from accidents. In this manner I secure a strong light box with a metal hinge, having the advantages of a pasteboard box with the strength of a wooden box in the important parts. It can be readily opened and closed, and is neat, attractive, and durable. The lid being strong will allow the boxes to be placed in piles without danger of crushing in the tops, as would be the case with a light pasteboard lid without a turned-down edge.

By re-enforcing the back with wood I obtain a substance in which the pivot-nail can be firmly driven and I also gain strength in the box to hold the lid in ordinary use and when raised as in Fig. 1.

My hinge is cheap and durable and is readily attached to the lid without nails or screws. The teeth or prongs clasping the top of the lid and running diagonally across the corner will thus hold more firmly and will be less likely to split the lid than would be the case if they followed the grain of the wood, while at the same time the appearance of the box is improved.

The teeth or prongs are particularly advantageous in fastening the hinge to a wooden lid, which is liable to shrink or work loose otherwise. If wood-pulp or pasteboard, which do not shrink or split, is used, the teeth or prongs may be dispensed with if the hinge is firmly clamped down on the lid.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A hinge, of sheet metal or similar material, provided with prongs or teeth to enter and hold the lid on its upper and under sides and having its lower end bent up over the pivot-head, in combination with a box and lid, substantially as described.

2. The combination of the lid B, hinges C C, and box A, said box A being partially cut

away at its upper rear corners to form recesses  
for the hinges C C, substantially as described.

3. The combination of a box, the lid there-  
for, and sheet-metal hinges, said hinges be-  
5 ing secured to the lid and turning upon pivot-  
nails in the ends of the box and having their  
lower ends bent up over the heads of the

pivot-nails, substantially as and for the pur-  
poses set forth.

SERVETUS T. ACHOR.

Witnesses:

WM. D. NEILLEY,  
G. W. HOPKINS.