(No Model.) 2 Sheets—Sheet 1.

S. H. SMITH.

PAPER BOX.

No. 362,675. Patented May 10, 1887.

Fig. 1.

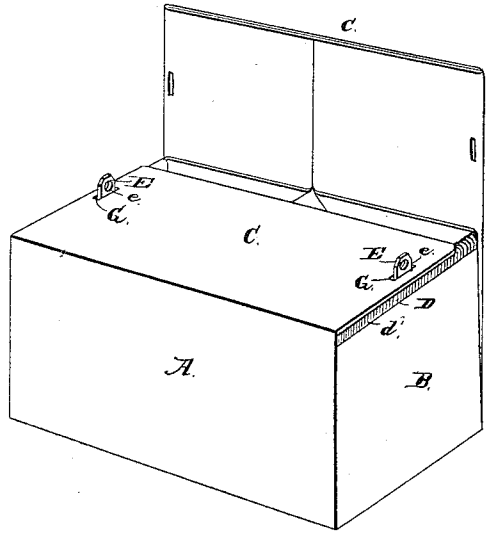


Fig. 2.

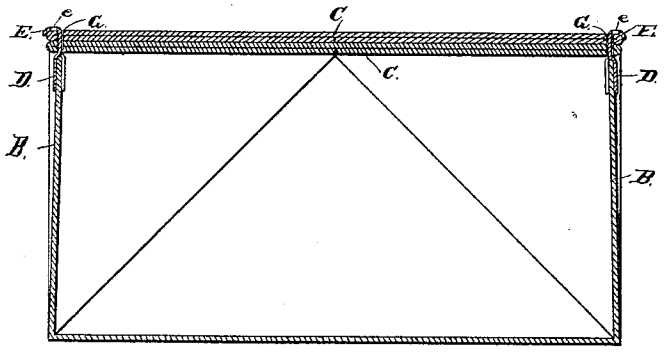
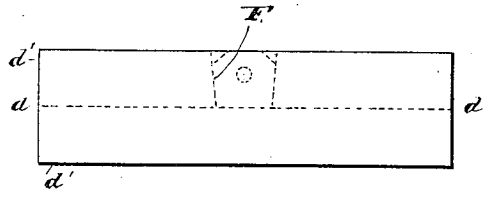


Fig. 5.



Witnesses
M. E. Fowler
J. W. Garner

Inventor
Seth H. Smith
By his Attorneys
C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

S. H. SMITH.

PAPER BOX.

No. 362,675. Patented May 10, 1887.

Fig. 3.

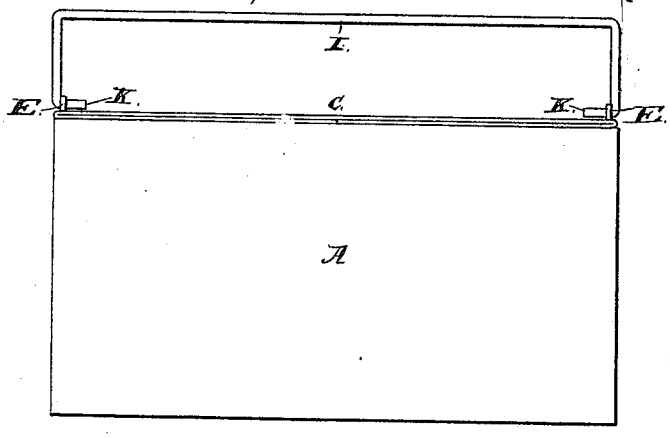
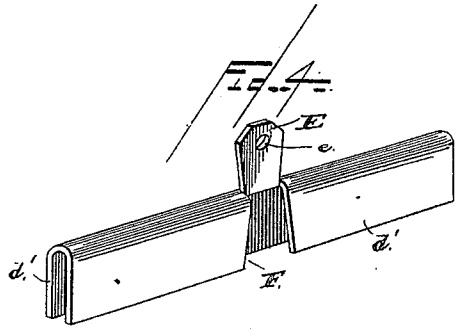


Fig. 4.



Witnesses
M. E. Fowler
J. W. Garner

Inventor
Seth H. Smith
By his Attorneys
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

SETH H. SMITH, OF DELTA, OHIO.

PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 362,675, dated May 10, 1887.

Application filed January 5, 1887. Serial No. 223,475. (No model.)

To all whom it may concern:

Be it known that I, SETH H. SMITH, a citizen of the United States, residing at Delta, in the county of Fulton and State of Ohio, have invented new and useful Improvements in Paper Boxes, of which the following is a specification.

My invention relates to paper boxes; and it consists in the peculiar construction, combination, and arrangement of parts, as will be hereinafter fully set forth and claimed.

In the drawings, Figure 1 is a perspective view of a paper box embodying my improvements, with one of the top flaps closed over the box and the other top flap open. Fig. 2 is a vertical longitudinal central sectional view of the same, showing the manner of securing the top flaps. Fig. 3 is an elevation of my improved box provided with a detachable bail, whereby the box may be easily carried. Fig. 4 is a detailed perspective view of one of the re-enforce strips. Fig. 5 is a similar view of a blank from which the re-enforce strip is formed.

A represents a rectangular paper box, which is made from a single plain rectangular sheet of paper, and has the ends B and the top flaps, C, adapted to fold over the upper side of the box and close the same, substantially as described in an application filed of even date herewith.

The box and the blank from which it is formed are fully described in my application, No. 223,474, for Letters Patent of the United States for an improvement in paper boxes and packages, filed this day, and therefore does not require to be more fully described here.

The top edges of the ends B are provided with re-enforce strips D, to enable them to withstand strain and to stiffen the ends and prevent them from bulging out when the box is filled with heavy material. These strips are made from rectangular blanks—such as shown at Fig. 5—the said blanks being preferably formed of thin sheet metal; but other suitable material may be employed in lieu of sheet metal, if preferred.

The length of the blank is equal to the width of the box, and the said blank is doubled in the center on a longitudinal line, *d d*, thereby forming flaps *d'*, which are adapted to bear against the inner and outer sides of the end of the box when the binding-strip is placed on the upper edge thereof.

If the binding or re-enforce strip is made of sheet metal, it may be firmly secured to the edge of the end of the box by simply pressing the flaps *d'* together on the end of the box, so as to clamp the latter firmly between them. If the binding-strip is made of stout paper or other material than metal, the flaps will be pasted or glued to the ends of the box.

In order to provide a means for securing the top flaps when folded over the upper side of the box, a tongue or ear, E, is formed in each re-enforce or binding strip by making V-shaped incisions in one of the flaps thereof, as shown at F in Fig. 5, before the flaps of the strip are doubled. When the strips are secured to the upper edges of the ends of the box, the tongues or ears E project upwardly therefrom and are adapted to enter openings G, made in the top flaps of the box. The latter may be secured, when folded over the top of the box, by bending the ears or tongues outwardly after they are passed through the openings G, as shown in Fig. 2.

If it is designed to fasten the top flaps very securely, this may be accomplished by bending the tongues or ears E downwardly against the outer sides of the box after they are passed through the openings G, as shown in dotted lines in Fig. 2.

In Fig. 3 I illustrate a bail or handle, I, made of a single piece of bent wire, and having inwardly-projecting arms K, which are adapted to be passed through openings *e*, made in the ears or tongues, and to extend over the top flaps of the box. It is evident that the top flaps cannot become disengaged from the ears or tongues so long as the arms of the bail are in the openings *e* thereof, and therefore the said bail is not only very convenient to grasp when the box is full, so as to readily carry the latter, but it also forms a means for securely locking the top flaps when folded over the top of the box.

I have herein shown each binding or re-enforce strip provided with a single tongue or ear; but I purpose to provide each of the said strips with two or more tongues or ears, if it be found necessary or desirable to do so.

Having thus described my invention, I claim—

1. A paper box having the ends provided with projecting perforated ears or tongues, and the top flaps having the openings to receive the said ears or tongues, for the purpose set forth, substantially as described.

2. The paper box having the ears or tongues at its ends, and the top flaps having the openings to receive the said ears or tongues when the said flaps are folded over the top of the box, in combination with the bail having the arms extending through openings made in the ears or tongues, and thereby attach the bail to the box, and also lock the top flaps thereon, substantially as described.

3. The paper box having the ears or tongues at its ends, and the flaps having openings to receive the said ears or tongues when the said flaps are folded over the ends of the box, in combination with the bail to engage or lock with the said ears or tongues, and thereby attach the bail to the box, and also lock the flaps thereto, as set forth.

4. A paper box or package made from a single sheet of material to form the sides, ends, bottom, and top flaps, the latter folding over the exposed edges of the ends B, and the continuous re-enforce strips D, applied along such exposed edges of the ends, said re-enforce strips being made from a single piece of metal doubled longitudinally to form clamping sides to clasp the top flaps of the exposed edge of the paper sheet, and tongues (one or more) formed integral with the re-enforce strips, which tongues engage the top flaps of the paper package or box, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

SETH H. SMITH.

Witnesses:
W. C. DUVALL,
WM. N. MOORE.