

E. B. BEECHER & W. H. SWIFT.
Improvement in Paper Boxes.

No. 124,319.

Patented March 5, 1872.

Fig. 2.

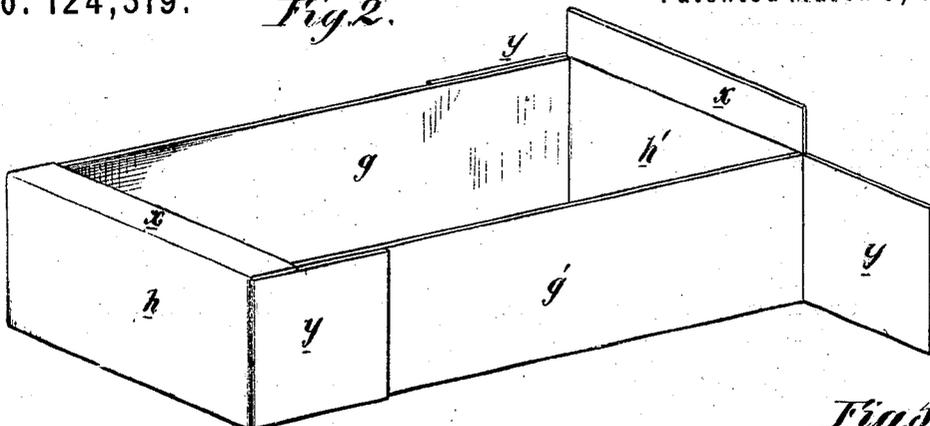


Fig. 5.

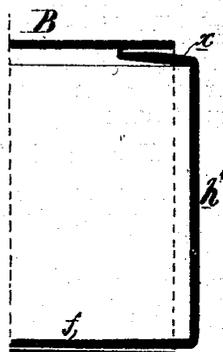


Fig. 4.

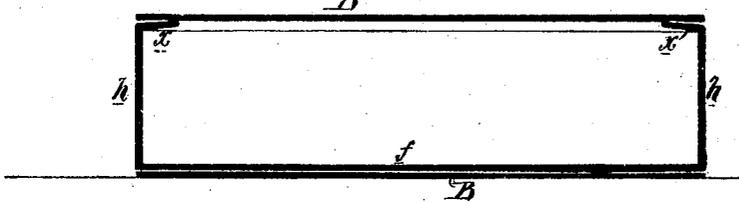


Fig. 1.

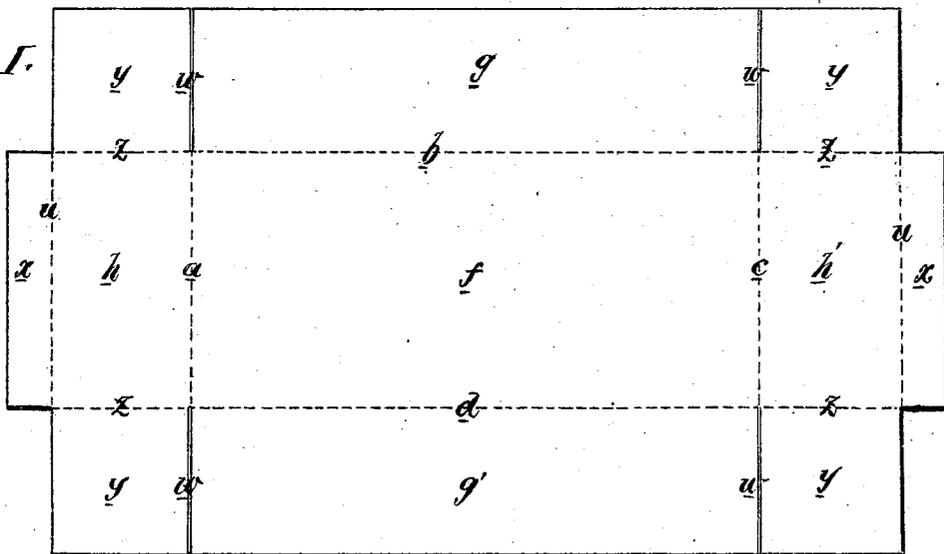
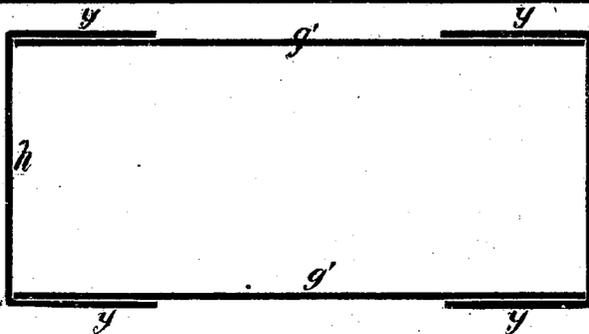


Fig. 3.



Witnesses
Wm. Steel
Thos. McKeown

E. B. Beecher & W. H. Swift
by their Attys
Hewson & Co.

UNITED STATES PATENT OFFICE.

EBENEZER B. BEECHER, OF WESTVILLE, CONNECTICUT, AND WILLIAM H. SWIFT, OF WILMINGTON, DELAWARE, ASSIGNORS TO SWIFT AND COURTNEY AND BEECHER COMPANY, OF NEW HAVEN, CONNECTICUT.

IMPROVEMENT IN PAPER-BOXES.

Specification forming part of Letters Patent No. 124,319, dated March 5, 1872.

SPECIFICATION.

We, EBENEZER B. BEECHER, of Westville, New Haven county, Connecticut, and WILLIAM H. SWIFT, of Wilmington, county of New Castle, State of Delaware, have invented an Improved Paper-Box, of which the following is a specification:

Nature and Object of the Invention.

Our invention consists of certain improvements in that class of paper-boxes which are provided with tubular sliding covers and commonly used for containing matches, &c.; the said improvements, which are fully described hereafter, having been designed with the view of adding to the strength and durability of the box and of preventing the escape of the matches or other contents from the same.

Description of the Accompanying Drawing.

Figure 1 is a view of a strip or sheet of paper or straw-board of the shape required for our improved box; Fig. 2, a perspective view illustrating the manner of folding the sheet in making the box; Fig. 3, a sectional plan view of the completed box; Fig. 4, a longitudinal section of the box with its sliding cover; and Fig. 5, an enlarged view of one end of Fig. 4, showing the cover partially withdrawn from the box.

General Description.

Paper-boxes with sliding covers or lids, of the kind in general use for containing matches, &c., are commonly made as follows: A rectangular strip of paper or straw-board of about the form shown in Fig. 1, except that it has not the projecting ends $x x$, is cut and creased by suitable mechanism, so as to crease it on the lines a , b , c , and d . The sheet is divided by these creasing lines into a central portion, f , which forms the bottom of the box and into four flaps, $g g'$ and h and h' , which are turned upward at right angles to the portion f , and joined together at the corners to form the sides and ends of the box. The corners $y y$ are sometimes removed; and the box thus formed consists simply of a bottom, sides, and ends, and

is furnished with a tubular sliding cover, b , Fig. 4, open at each end and arranged to be fitted entirely over the box, the said cover being of equal length with the latter.

There are two principal objections to boxes thus constructed: First, when the corner pieces y are removed the boxes have not sufficient strength to resist the ordinary pressure to which they are subjected and last but a short time, and they are exceedingly liable to warp and twist so as to become drawn inward at the sides and ends, but especially at the latter; the consequence being that the ends sink inward and downward from the cover and thus form a gap through which the matches or other contents of the box can escape. The second objection is, that if one end of the box projects slightly from the cover a portion of the contents is exposed and will escape if the box is tilted or inverted.

In our improved box the rectangular strip, from which the box is to be made, has projecting ends $x x$ creased on the lines u , so that they can be folded over, as hereafter described, and the corner pieces $y y y y$, instead of being entirely cut out, are retained, they being severed from the flaps $g g'$ on the lines w , but merely creased on the lines z , where they join the end flaps $h h'$. The flaps $g g'$ and $h h'$ are turned up, as before described, to form the sides and ends of the box, after which the corner pieces y , attached to the end flaps, are folded around the side flaps in the manner plainly shown in Figs. 2 and 3, the projecting end pieces $x x$, which are also attached to the end flaps, being next turned down into the top of the box, as seen in Figs. 2, 4, and 5. After thus folding the several parts together they are united by pasting the overlapping corner pieces to the side flaps $g g'$, the whole forming a strong and durable box entirely free from the above-mentioned objections. The corner pieces y strengthen and prevent the warping and twisting of the box in one direction, while the pieces x strengthen it in the other direction, and also partially cover the top of the box at the ends and thus prevent the escape of the matches or other contents when the sliding cover is partially withdrawn. (See Fig. 5.)

It will be evident that a box possessing advantages over those ordinarily used could be made by employing the corner pieces *y* independently of the end pieces *x*, or by using the latter independently of the corner pieces. We do not, therefore, limit ourselves to a box in which these two improvements are combined;

But claim—

1. The combination, with a paper-box adapted to a tubular cover, of end pieces *x*, arranged substantially as and for the purpose specified.
2. A paper-box, constructed substantially in the manner described, with overlapping corner pieces *y*, and with end pieces *x* partially

covering the ends of the said box, all substantially as and for the purpose specified.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

E. B. BEECHER.
WM. H. SWIFT.

Witnesses to signature of E. B. BEECHER:

JOHNSON T. PLATT,
SIMEON E. BALDWIN.

Witnesses to signature of WM. H. SWIFT:

WM. A. STEEL,
JNO. B. HARDING.