

(No Model.)

E. FANNING.
BOX.

No. 576,664.

Patented Feb. 9, 1897.

Fig. 1.

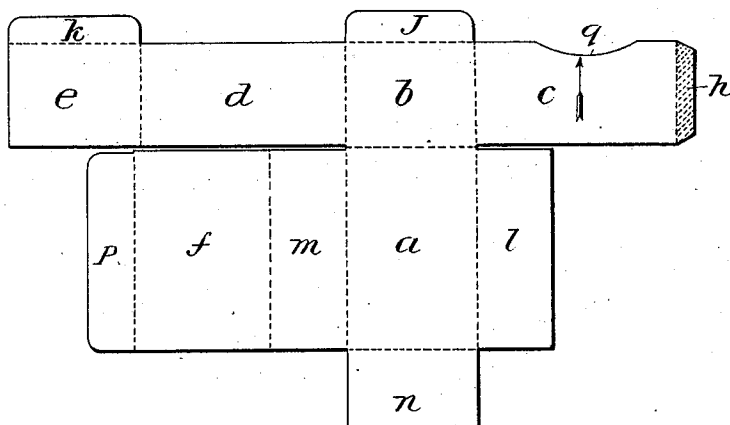


Fig. 2.

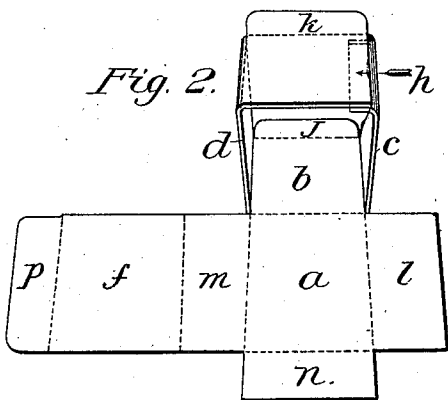


Fig. 3.

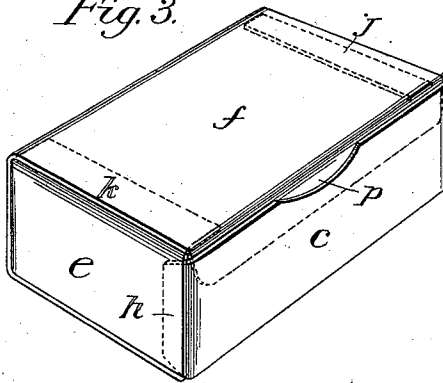
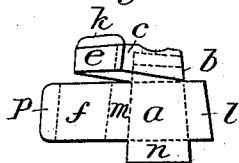


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

EUGENE FANNING, OF NEWTON, MASSACHUSETTS.

BOX.

SPECIFICATION forming part of Letters Patent No. 576,664, dated February 9, 1897.

Application filed September 3, 1896. Serial No. 604,797. (No model.)

To all whom it may concern:

Be it known that I, EUGENE FANNING, a citizen of the United States, residing in the city of Newton, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Paper Boxes and in the Construction of Paper Boxes and Boxes of Similar Flexible Material, of which the following is a specification.

My invention relates to the cutting or stamping out in one single piece of material the entire box and having the parts designed for the various sides, ends, top, bottom, &c., bear certain convenient and advantageous relations to each other and to the completed box, substantially as hereinafter more fully described, and shown in the drawings.

The objects of my invention are economy in the cutting up of the material, compactness for packing and transportation while in the condition of a blank or shoo not yet set up in the form of a box, the self-supporting quality for convenience in filling up before the cover is closed down, and the strong and substantial character which the particular arrangement of the sides, ends, and other members or parts in relation to each other secure for the completed box, all substantially as hereinafter more fully set forth and described, with reference to the accompanying drawings, which, with the reference-letters thereon, compose a part of this specification.

In the drawings, Figure 1 is a plan of the blank form of material after being stamped or cut into form and creased where the folding of corners is to be effected, the lines of folding being indicated by broken lines. Fig. 2 is a perspective view, the side *c* and end *e* having been adhesively united by means of mucilage, glue, paste, or other adhesive substance applied between fold *h* and end *e*. Fig. 3 illustrates in a perspective view the box-blank in the same condition, except that the box form of sides and ends so united is shown in process of being folded into the flat condition, in which it is ready to receive any printing that may be required upon its surface or to be packed for transportation. Fig. 4 is a perspective view of the completed box. Like letters refer to the same or corresponding parts in all the figures.

It will be observed at this stage, as in Fig.

4, that when the box is completed and ready to set up, and filled, if desired, it can be printed with convenience and facility upon any of its sides, ends, top, or bottom, there being no laps of any irregular nature to prevent the normal operation of the press and type.

The several parts or members of the box, all embraced in one single piece of material, are each designated by name and a reference-letter, and their local relations are clearly shown in the drawings, while the drawings and description make clear and obvious their functional relations. Thus *a* is the bottom. Connected at the folding-line is end *b*, to which are connected on opposite sides at folding-lines the sides *d* and *c*. End *e* is joined at the folding-line with side *d*. Adhesive fold *h* is joined in like manner to side *c* and corner-flap *k* to end *e*. On either side of the bottom is joined at a folding-line guides *m* and *l*, which are reinforcements to the sides *d* and *c*. The top is connected to guide *m* at the folding-line and has connected to itself in like manner the tuck *p*, while the reinforcing end guide *n* is joined in like manner to the end of bottom *a*. I will therefore proceed to describe the setting-up and filling processes.

First, referring to Fig. 1 in the drawings, the members which according to their name are in their nature both of guides and reinforcements—viz., *l* and *n*—are first turned up, then down toward the bottom *a*. Then the box form, consisting of *d c* and *b e*, is brought forward and downward, thus folding a corner between end *b* and bottom, after which the reinforcements and guides *n* and *l* are turned up inside, and so come to perform their function in guiding to its proper position the box form *b c d e* and also reinforce upon the inside the side *c* and end *e* of the box form. When this is done, the box is self-supporting, sufficiently so to be conveniently filled. Then to complete and close the box, either before or after filling it, the outside guide and reinforcement *m* for side *d* is turned up against side *d*, thus folding a corner between the guide and reinforcement *m* and the bottom *a*. At this stage the box is ready for the cover *f* to be shut down, so closing and completing the closed box, the tuck *p* entering and being gripped between guide and reinforcement *l*

and side *c* of the box, and thus the completed box appears as shown in Fig. 3. A thumb scoop or scallop is formed, as seen at point of arrow in Fig. 1 and in Figs. 3 and 4, also, in the side *c* of the box, at which with the thumb the tuck *p* may be lifted out to open the box by releasing and lifting the cover or top *f*.

The words "sides" and "ends" are used interchangeably, being each practically a side or an end in each case, but so used for convenience in the description when one side is shorter or longer than another.

What I claim as my invention is—

1. The described stamped blank form or shook for a box, cut in a single piece and creased for folding corners, and having the arrangement and combination shown of the several parts viz. the bottom having the guides and reinforcements *l m n* on three sides and end *b* on the fourth to which are attached parts *c d e* and *h* in a continuous longitudinal strip the top and tuck *p* being attached to the guide and reinforcement *m*, and folds *k* and *j* respectively to ends *e* and *b* the fold *h* being adapted to be adhesively joined to the opposite end of the longitudinal strip of which it forms one end viz. strip *c b d e* substantially as shown and described.

2. The complete box-shook in a single piece of material having the two sides and two ends *d c e b* (four sides) having flaps *k j* and fold *h* in one longitudinal strip contiguous to another longitudinal strip containing bottom *a* top *f* two guides and reinforcements *l m* and tuck *p* said bottom being joined to end *b* and a guide and reinforcement *n* the fold *h* being adapted to be adhesively joined to opposite end *e* of the longitudinal strip and thus made ready for packing, or for setting up and filling all substantially as shown and described.

3. The completed box as shown, when stamped out in a single piece with all parts connected and having the opposite ends of the strip which forms the four ends and sides united by the adhesive fold *h* the guides and reinforcements *n* and *l* being turned up within the end *e* and side *c* and the guide and reinforcement *m* turned up outside of side *d*, and the top or cover *f*, folding down over all with tuck *p* gripped between guide and reinforcement *l* and side *c* substantially as described.

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Witnesses:

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