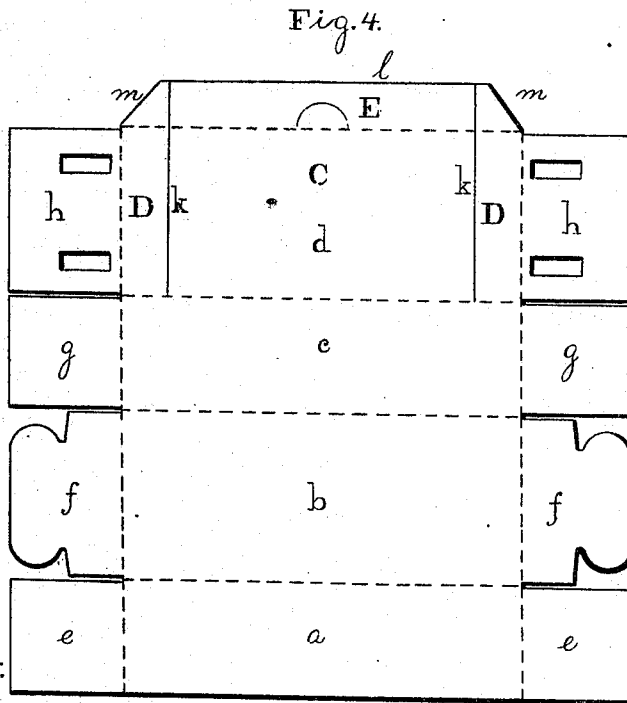
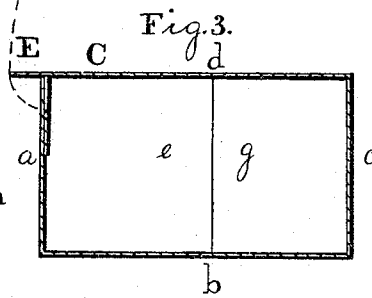
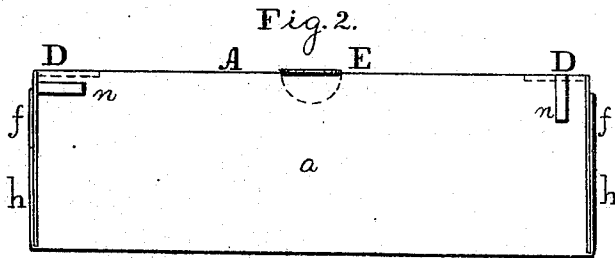
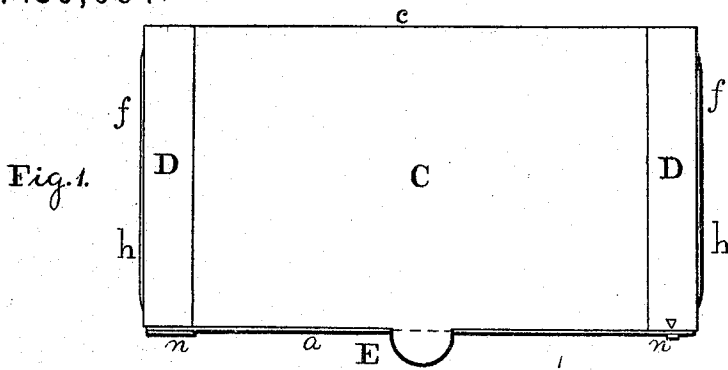


L. A. KETTLE.
Paper-Box.

No. 159,684.

Patented Feb. 9, 1875.



Witnesses:

L. F. Brown.
A. P. Grant.

Inventor:

Louis A. Kettle.
by John A. Dierschman
Att'y.

UNITED STATES PATENT OFFICE.

LOUIS A. KETTLE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO RUPERT KETTLE, OF MERRIDALE, ENGLAND.

IMPROVEMENT IN PAPER BOXES.

Specification forming part of Letters Patent No. **159,684**, dated February 9, 1875; application filed November 16, 1874.

To all whom it may concern:

Be it known that I, LOUIS A. KETTLE, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Paper Boxes; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains, to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a top or plan view of the device embodying my invention. Fig. 2 is a front view thereof. Fig. 3 is a transverse vertical section thereof. Fig. 4 is a plan of the prepared blank.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in the construction of a paper box of main folds, end folds or flaps, a lid-fold, and strips aside of the lid.

Referring to the drawings, A represents the cut-out blank, from which the box B is formed, and constructed of the folds *a b c d* and flaps *e f g h*, the dotted lines indicating the divisional and folding places which will be properly scored. The fold *a* will constitute the front side of the box, the fold *b* the bottom thereof, the fold *c* the rear side thereof, and the fold *d* the top thereof. In the top fold *d* there are formed near the sides thereof transversely-extending cuts *k*, which separate the said fold into what will be a lid, C, and side strips D D. In order to convert the blank into a box, the folds *a b c d* are bent so as to form the shape of the body of the box. The flaps *e g* are now folded on each other, and the flaps *f h* folded on each other, and over the flaps *e g*. The flaps *f h* will then be locked or fastened, either by means of adhesive material, clasps, staples, or other fastenings, or by slots on the flaps *h*, and engaging tongues on the corresponding flaps *f*. At the end of the lid *d* is a flap, *l*, and at the ends of the side strips D are tongues *m m*. The tongues *m* are turned down against the inner face of the front fold *a*, and secured by fastenings, adhesive material, or otherwise, as at *n*. At the score or folding line of the fold *d* or lid C and

flap *l* there is cut out a tongue, E, which may stand out at right angles to the flap *l*, and when the lid is closed project over and rest on the top edge of the front fold, or side *a* of the box.

It will be seen that the interior of the box is accessible from the top thereof, and thus the box is available for purposes wherein entrance at the sides or ends is not serviceable.

When the lid is closed, the flap *l* rests against the inner face of the front side or front fold *a*, and the contents of the box keep the flap in contact with said face, thus holding the lid firmly in place. The lid is prevented from being forced into the body of the box by means of the tongue E, which, resting on the top edge of the front fold, limits the closing motion of the lid. The tongue also affords a hold or means for withdrawing or opening the lid. The side strips D serve to strengthen the top of the box—especially useful where several boxes are packed together, and prevent undue strain on the lid. Said strips also connect the tops of the front and back folds or sides of the box, and, besides preventing the box from opening out transversely, also prevent bulging of the box, this bulging being the preliminary step to breaking or opening of the box.

It will also be seen that every portion of the box, including the body, sides, lid, and side strips at the top, may be integral or made of one piece of paper.

For purposes of transportation, the cut-out blank may be laid flat, and, owing to the characteristics of said prepared blank, the conversion of the latter into a box is readily performed, the operation being similar to that hereinbefore stated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The paper box constructed of the folds *a b c*, end flaps *e g f h*, the lid-fold *d* C, and side strips D, substantially as and for the purpose set forth.

LOUIS A. KETTLE.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.