

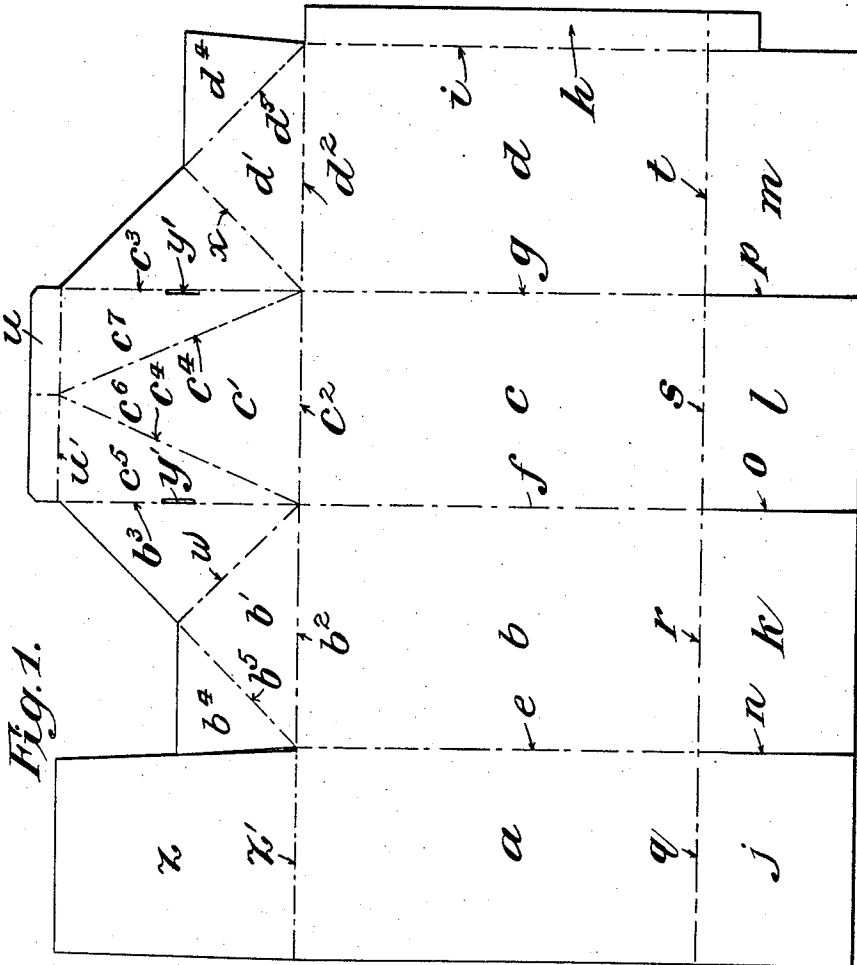
LOCK SCOOP BOX.

APPLICATION FILED NOV. 8, 1909.

1,037,347.

Patented Sept. 3, 1912.

3 SHEETS—SHEET 1.



Attest:
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3 SHEETS—SHEET 2.

Fig. 2.

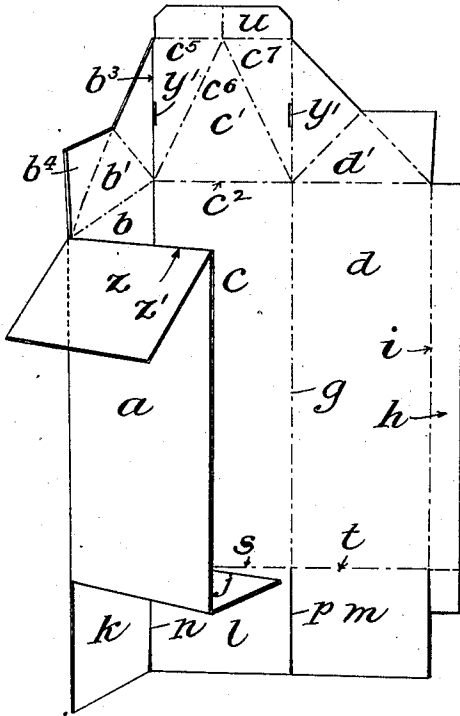


Fig. 3.

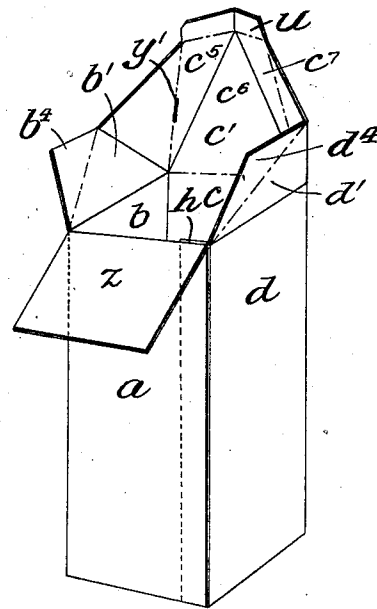


Fig. 5.

Fig. 4.

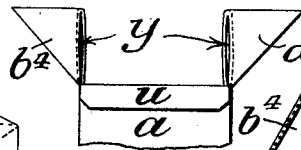
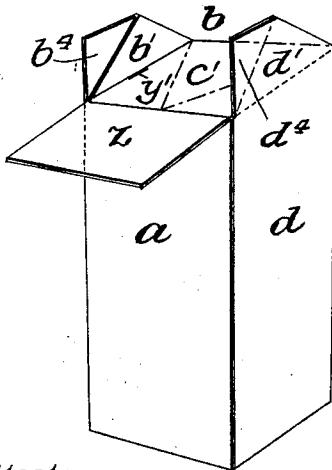
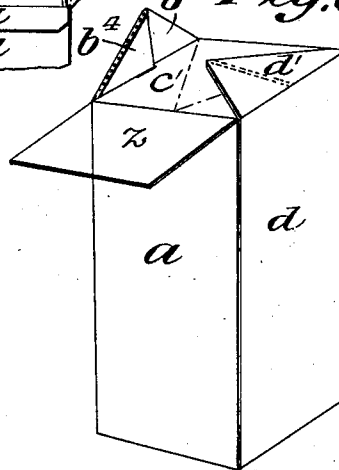


Fig. 6.



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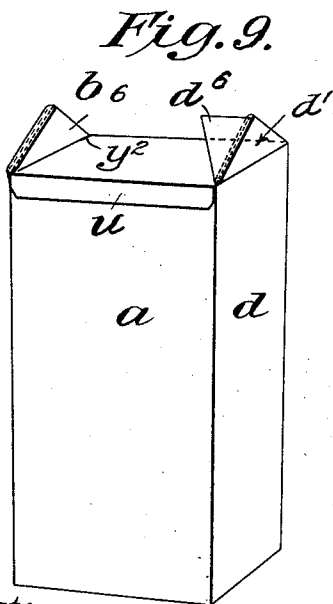
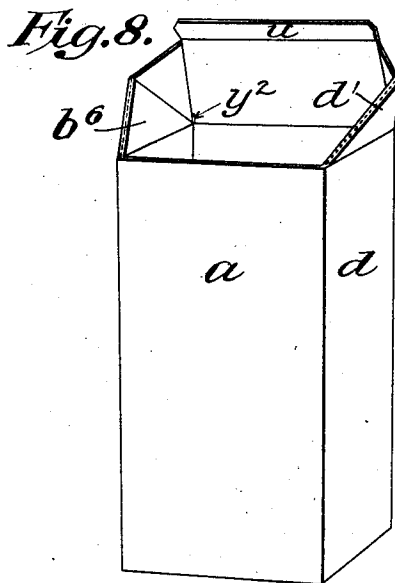
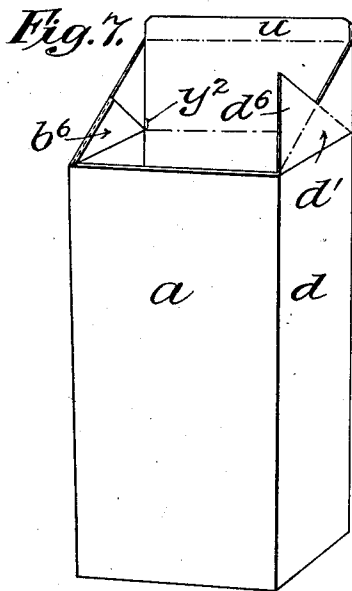
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

ABRAHAM L. SMITH, OF NEW YORK, N. Y., ASSIGNOR TO SCOOP FOLDING BOX COMPANY,
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LOCK SCOOP-BOX.

1,037,347.

Specification of Letters Patent.

Patented Sept. 3, 1912.

Application filed November 8, 1909. Serial No. 526,758.

To all whom it may concern:

Be it known that I, ABRAHAM L. SMITH, a citizen of the United States, and resident of the borough of Manhattan, in the city, county, and State of New York, have invented certain new and useful Improvements in Lock Scoop-Boxes, of which the following is a specification.

This invention relates to cartons, or knock-down boxes for containing merchandise such as groceries or like goods capable of being contained in and dispensed from cardboard or similar receptacles.

The improvement, in brief, consists in the formation of a receptacle of the above indicated character in such manner that its delivery end, while capable of opening and closing to serve as both scoop and closure, and having flexible webs between the lid and body portion of the box, is further provided with means enabling the lid, when opened as a scoop, to adopt a tapering trough shape, for the better direction and regulation of the goods being delivered; and is also provided with auxiliary locking flaps, which, when the seal of the box has been broken, serve to hold the lid tightly shut and locked and to prevent the ingress of dust, insects or foreign matter.

In the drawing accompanying this application: Figure 1 is a plan view of a blank bearing the divisional markings or creasings which define the several parts, Fig. 2 is a perspective view showing the blank partly folded. Fig. 3 is a perspective view of the box formed. Fig. 4 is a perspective view of the box with lid closed but not locked. Fig. 5 is a front view of the same. Fig. 6 is a perspective view of the box, showing the lock in operation. Figs. 7 and 8 are perspective views showing a modified form of lock flap, folded between the wings, and Fig. 9 is a similar view showing said modified flaps folded outside the wings.

The blank from which my improved carton or box is formed has a main or body portion composed of the rectangular divisions a , b , c , d which are defined by the parallel markings or creasings e , f , g , weakening the union between said divisions and permitting them to be folded to form the four main walls of a box. Similarly the division d has a ledge or flange h separated therefrom by a marking or creasing i , and

designed to fold over upon the wall a to be secured thereto, as by gluing, to connect the walls in unified, box formation.

Extending respectively from corresponding ends of the divisions a , b , c , d are rectangular members j , k , l , m , which, while separated from each other by parallel incisions n , o , p , have weakened, or hinge like connections with their respective divisions a , b , c , d defined by the markings or creasings q , r , s , t . The members j , k , l , m are thus adapted to fold in super-imposed fashion to form a multiply base or end closure for the box, and they are glued or otherwise permanently secured to serve the purpose for which intended.

The delivery end of this box is so devised that it forms a tight closure, which may be sealed for purposes of transit, but which, when in use, may be conveniently opened or closed and locked. When open, the delivery scoop is adapted to dispense the goods through a contracted channel; preventing spilling thereof and conveniently controlling the quantity discharged. Said delivery end consists of extensions b' , c' and d' , respectively emanating from the divisions b , c and d , and respectively divided from the latter by the markings or creasings b^2 , c^2 , d^2 , and divided from each other by the markings or creasings b^3 , c^3 . The extension c' is in form of a rectangle, and at its outer end is provided with a lip or flange u , from which it is divided by a marking or creasing u' . In its rectangular form the extension c' serves as the lid of the box. It is however also intended for use as the delivery scoop, in conjunction with the extensions b' , d' , and in furtherance of this function said rectangular extension is divided, by creasings or markings c^4 , c^4 , into the triangular subdivisions c^5 , c^6 , c^7 . Due to this subdivisional arrangement the extension c' , when opened out widely, forms into a contracting delivery channel or scoop, facilitating directional control of the goods in their discharge. The extensions b' , d' , forming webs or side flaps connecting the lid with the box, are bi-sectioned by the respective radial markings or creasings v , w , and adapted to yield at said markings or creasing in the direction of the yield afforded at the other markings or creasings. Extending from the extensions b' , d' are triangular

flaps b^4 , d^4 having weakened connection therewith at b^5 , d^5 , which flaps are intended to serve as locks for the lid when the box is in use, also to prevent ingress of dust, insects, etc.

At the delivery end of the box the division a is provided with an extension z separated therefrom by a marking or creasing z' , to form a fastening flap or seal when the box is filled and closed for shipment. This fastening flap or panel is entirely free from the adjacent extension or side-flap b' , and from the entire scoop structure formed by the extensions b' , c' and d' .

In assembling the several divisional parts of the blank into structural form the parts a , b , c , d are first folded in the order and manner indicated in Figs. 2, 3, 4 and 5, the part a being glued to the flange h . In filling the box it is usual to close the scoop end and put the goods in at the base end, which is then closed by folding down the extensions j , k , l , m , securing them by glue or otherwise as a permanent base. The manner of closing the scoop end is as follows: The webs b' , d' are flexed outwardly, and the extension c' closed upon the edges of walls b , d , in this act the flexible webs b' , d' folding together and assuming the upright position indicated in Figs. 4 and 5, where they represent wings. As seen in Fig. 5 the folding members of each of the webs b' , d' fail in practice to close tightly together, and between them is left a narrow passage, as y , through which dust, insects, etc., might enter the box. To prevent such occurrence, and to effectually close such passages I have provided the flaps b^4 , d^4 , hinged to one of the subdivisions of extensions b' , d' , which are now folded down upon the other of said subdivisions, thus attaining the desired result. Said flaps, as folded over, are slightly deeper at their vertical edges than the vertical extent of the folded wings, and thus press against the surface of the lid or panel c' . In order that said flaps b^4 , d^4 may be securely retained in such position and form locks for the closure, I provide slots as y' in the markings or creasings b^3 , c^3 to receive the frictional bearing points of the flaps b^4 , d^4 , thus completing the lock closure.

With the box in use the flange u closes outside the forward wall when shutting the lid, but when the box is to be sealed for shipment said flange u fits inside the box, the wings are pressed down flat upon the lid, and the flap z is folded down upon said wings and lid and secured thereto by glue or otherwise.

In the modifications shown in Figs. 7 and 8 the auxiliary, or lock flaps, as b^6 , d^6 , are indicated as having the same area and triangular contour as the subdivisions of extensions b' , d' to which they are respectively connected, and to form an additional ply

thereto when folded. Also, the lock for said flaps is produced by slots y^2 provided at the top rear corners of the box to receive the free pointed ends of said flaps. As a modified method of using the flaps b^6 , d^6 they may be folded against the surface of the subdivisions of extensions b' , d' from which they emanate, thus each lying between the two subdivisions of said extensions, where they will fill the spaces that would otherwise be left therebetween, to prevent ingress of foreign matter; or, as shown in Fig. 9, said enlarged flaps may be employed in the manner previously described.

I claim:

1. In a paper box, an end closure, consisting of two end panels forming respectively continuations of two opposite sides of the box, and flaps connecting the edges of the two intermediate sides of the box with the side edges of one of said end panels and foldable inwardly on top of the end panel to which they are connected to form therewith a folding spout, said flaps being free to swing outwardly beyond the plane of the sides to which they are connected and being disconnected from the edges of the other end panel which serves as a sealing flap for the folded spout; substantially as described.

2. A rectangular box formed from a single blank and having a delivery end closure adapted to open out in scoop like form, said closure comprising a rectangular lid with flexible webs or walls connecting said lid and box, said webs flexing outwardly, and, in the closing of the lid assuming an upright position, as wings; and auxiliary flaps extending forwardly from the outer portion of said flexed webs, to fold over against the inner portion thereof, covering the entrance to the space therebetween, said flaps, as folded, pressing at their lower edges against the lid, to hold the latter closed, and means locking said flaps.

3. In a paper box, a delivery end closure comprising a lid extending from one wall of the box, webs connecting said lid with the box walls on either side thereof and foldable upon themselves and on top of the lid when the latter is closed, auxiliary flaps connected with said webs and folded to overlie the inner surface of the folded webs and close the space between the portions or sections thereof, and a closing flap to fold down over said webs and the lid.

4. In a paper box, a delivery end closure comprising a lid extending from one wall of the box, webs connecting said lid with the box walls on either side thereof and foldable on themselves to form upright wings alongside the closed lid, auxiliary flaps extending from said webs and foldable over the folded webs, when the latter are upright, into a position wherein said auxiliary flaps abut against and hold down the lid, and a closing

flap extending from the box wall opposite
that from which said lid is extended, and
adapted to fold down on the webs when the
latter are in turn folded down on the lid,
5 said closing flap having both side edges free
from the webs.

Signed at New York in the county of New

York and State of New York this 4th day
of November A. D. 1909.

ABRAHAM L. SMITH.

Witnesses:

PETER P. BECK,
F. W. BARKER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."