

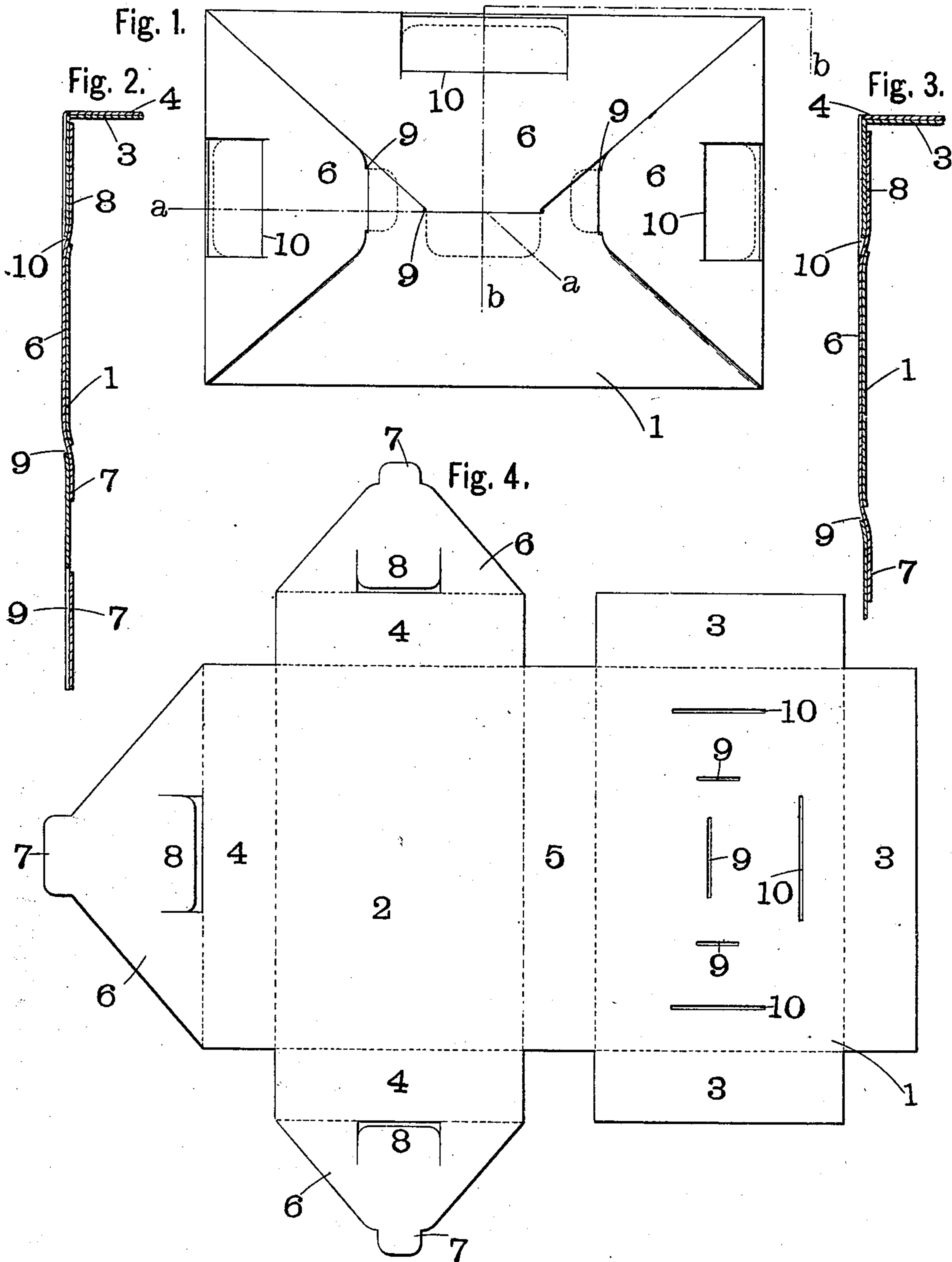
No. 673,064.

Patented Apr. 30, 1901.

L. A. SCHMIDT.
FOLDING BOX.

(Application filed Oct. 15, 1900.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

LOUIS A. SCHMIDT, OF BUFFALO, NEW YORK.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 673,064, dated April 30, 1901.

Application filed October 15, 1900. Serial No. 33,041. (No model.)

To all whom it may concern:

Be it known that I, LOUIS A. SCHMIDT, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to an improved folding box or other receptacle; and one of the objects of the invention is to provide the blank with end and side tongue-and-slot interlocking devices of identical construction, which lock in the direct line of strain.

For a full understanding of the merits and advantages of the invention reference is to be had to the accompanying drawings and the following description.

The invention is susceptible to various changes in the form, proportion, and minor details of construction without departing from the principle or sacrificing any of the advantages thereof, and to a full disclosure of the invention an adaptation thereof is employed in connection with a preferred form of box-blank, as shown in the accompanying drawings, in which—

Figure 1 represents a top plan view of my improved box or receptacle. Fig. 2 is a fragmentary longitudinal section on line *aa*, Fig. 1. Fig. 3 is a fragmentary transverse section on line *bb*, Fig. 1. Fig. 4 is a top plan view of the preferred form of blank.

The preferred form of box, as shown in the blank in Fig. 4, consists of the top and bottom portions 1 and 2, the rectangular-shaped side extensions or flaps 3, which extend from three of the edges of the top 1, the side extensions or flaps 4, which extend from three of the edges of the bottom 2, the side portion 5, which extends from the remaining side edge of the top and bottom and unites the top to the bottom portion, and the locking extensions or flaps 6, which extend from three of the outer edges of the extensions or flaps 4. These locking extensions 6 are identical in construction and are each provided with an outer tongue 7 and an inner tongue 8, which is formed by slitting or cutting the body of the extension in a suitable manner and extends oppositely to the outer tongue 7. The top 1 is provided with slots 9 and 10, corre-

sponding in number to the tongues and arranged in pairs.

In assembling the preferred form of box the flaps 3 are folded down at substantially right angles with top 1, the bottom 2 is folded upon the flaps 3 and substantially parallel to the top, and the flaps 4 are folded up at substantially right angles to the bottom. The locking extensions 6 are now folded or bent exteriorly around the sides 3 and 5, and upon the top and the oppositely-extending outer and inner tongues 7 and 8 are inserted or sprung into their proper slots 9 and 10 in the top, the outer tongue 7 being inserted in the slot 9 and the inner tongue 8 sprung into the slot 10.

As the strain upon locking extensions in boxes or receptacles of this character is usually in the direction of their length, my locking-tongues are arranged to extend longitudinally with respect to the extensions and oppositely to each other, so that each tongue locks the other in place and also locks the extensions against longitudinal movement in either direction or in the direct line of strain.

While the lateral or other strain upon the extensions is light, the arrangement of the tongues and their receiving-slots is such that it is impossible to release the tongues from the slots other than by an upward movement of the extensions, which bends and pulls the tongues out.

One of the great advantages of the invention resides in the identical construction of the interlocking devices which materially improve and strengthen the box. Another great advantage is that the blank can be made considerably cheaper owing to the fact that each locking-flap is an exact duplicate of the others. Another advantage of the invention is the absolute certainty of the lock, which cannot be released by the shifting movement of heavy material or objects within the box or by distortion of the box by other material or objects placed upon or against it or falling on it without tearing the tongues from the flaps, as the oppositely-extending locking-tongues bind against release in either direction in the direct line of strain.

I claim as my invention—

1. A box or receptacle formed from an integral blank and comprising top and bottom

portions; said top portion having a plurality of slots arranged in pairs, side flaps forming the sides of the box and extensions adapted to fold upon the top and each having inner
5 and outer longitudinal tongues extending oppositely to each other and adapted to be inserted in one of the pairs of slots, as set forth.

2. A closed folded box having a slotted top, a bottom, sides and locking devices of identical construction extending from the bottom,
10 bending around the sides and interlocking in the slots in the top.

3. A closed box formed from a single blank having sides and top and bottom parts; one
15 of said parts being slotted, and locking devices of identical construction extending from the unslotted part bending exteriorly around the sides and interlocking in the slots in the slotted part.

20 4. A folded and closed box formed from a single blank having a slotted top part, a bottom part, a connection between the top and bottom parts forming one of the sides of the box, side flaps extending from the top part

and forming the remaining sides, and locking
25 devices extending from the bottom part, bending around the sides and interlocking with the slotted top part.

5. A box formed from a single blank and consisting of a slotted top portion, a bottom
30 portion, a connection between the top and bottom portions, side flaps projecting from three of the edges of the top and locking-flaps projecting from three of the edges of the bottom and interlocking with slots in the top in the
35 direct line of strain.

6. A box formed from a single blank having a slotted top part, a bottom part, a connection between the top and bottom parts forming one of the sides of the box, side flaps
40 extending from the top part and forming the remaining sides, and locking-flaps of identical construction extending from the bottom part and interlocking with the slotted top part.

LOUIS A. SCHMIDT.

Witnesses:

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