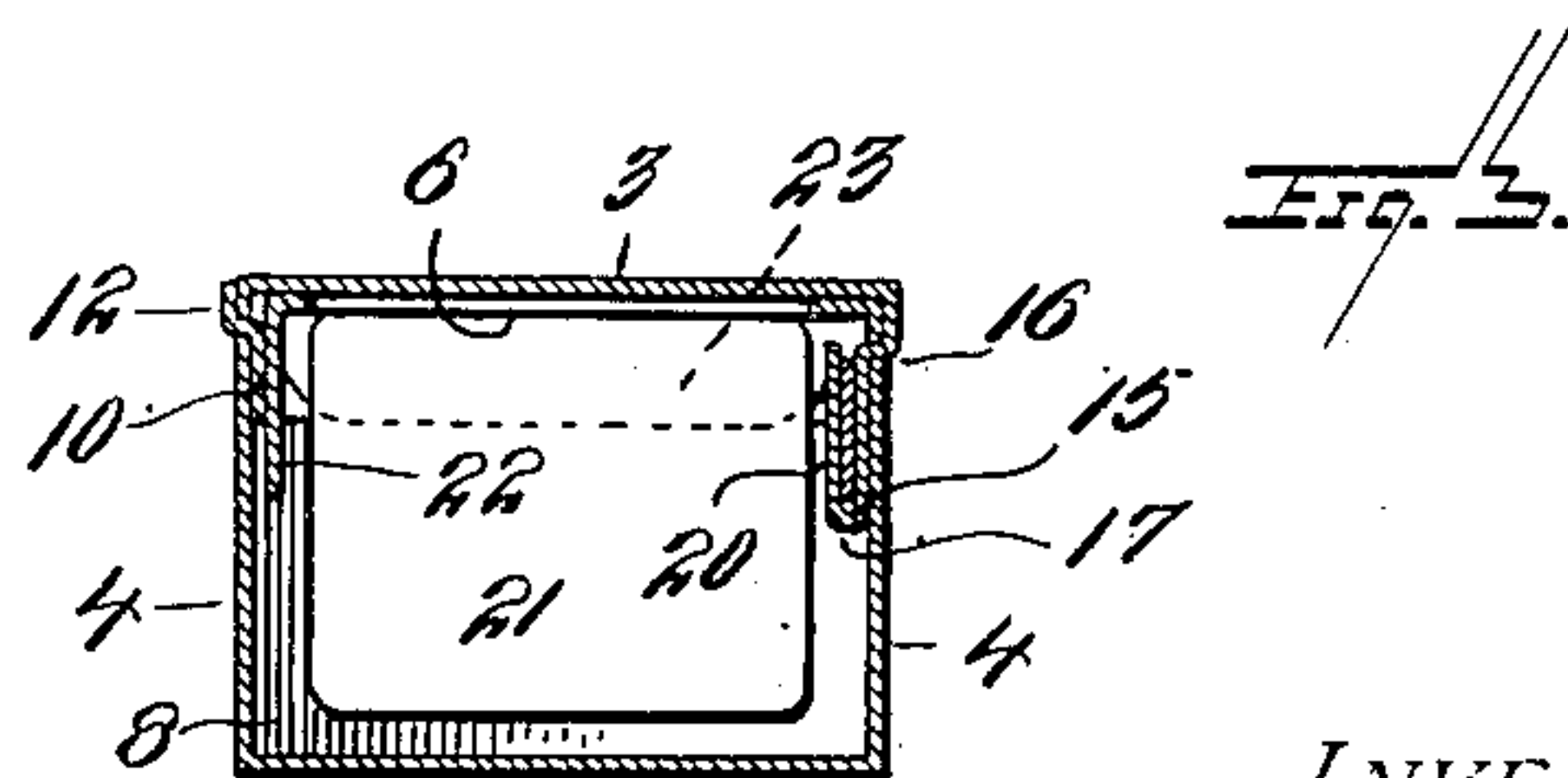
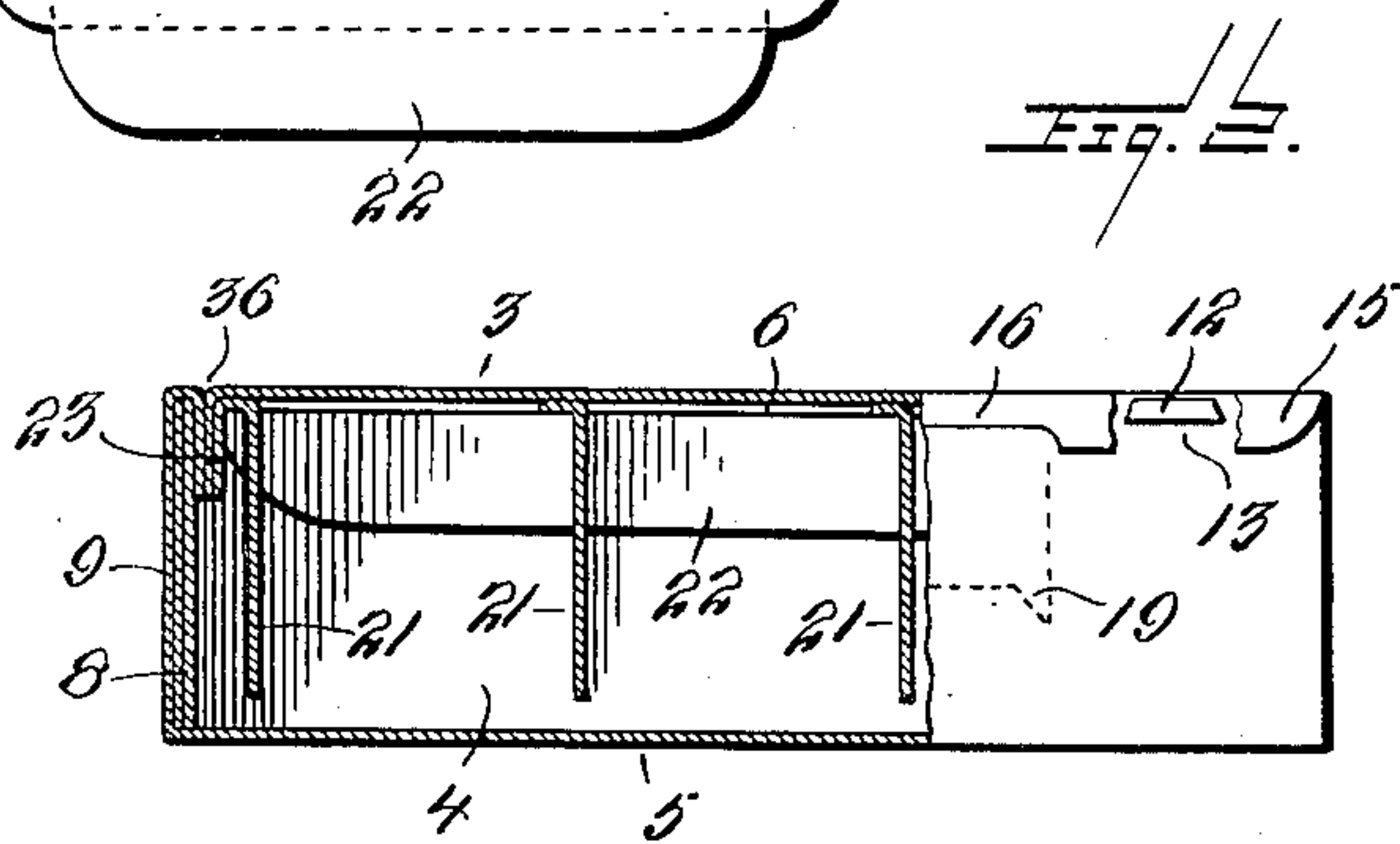
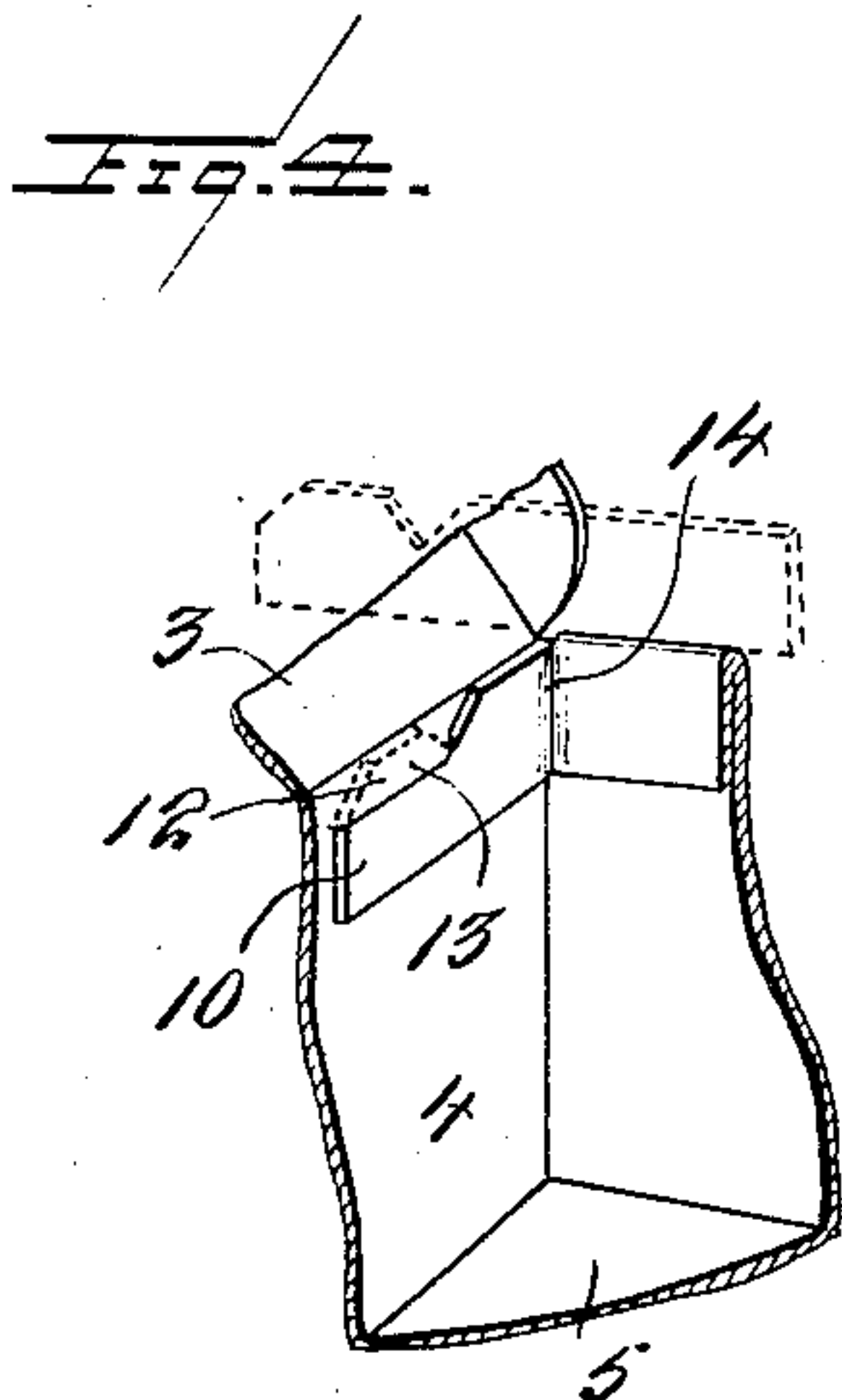
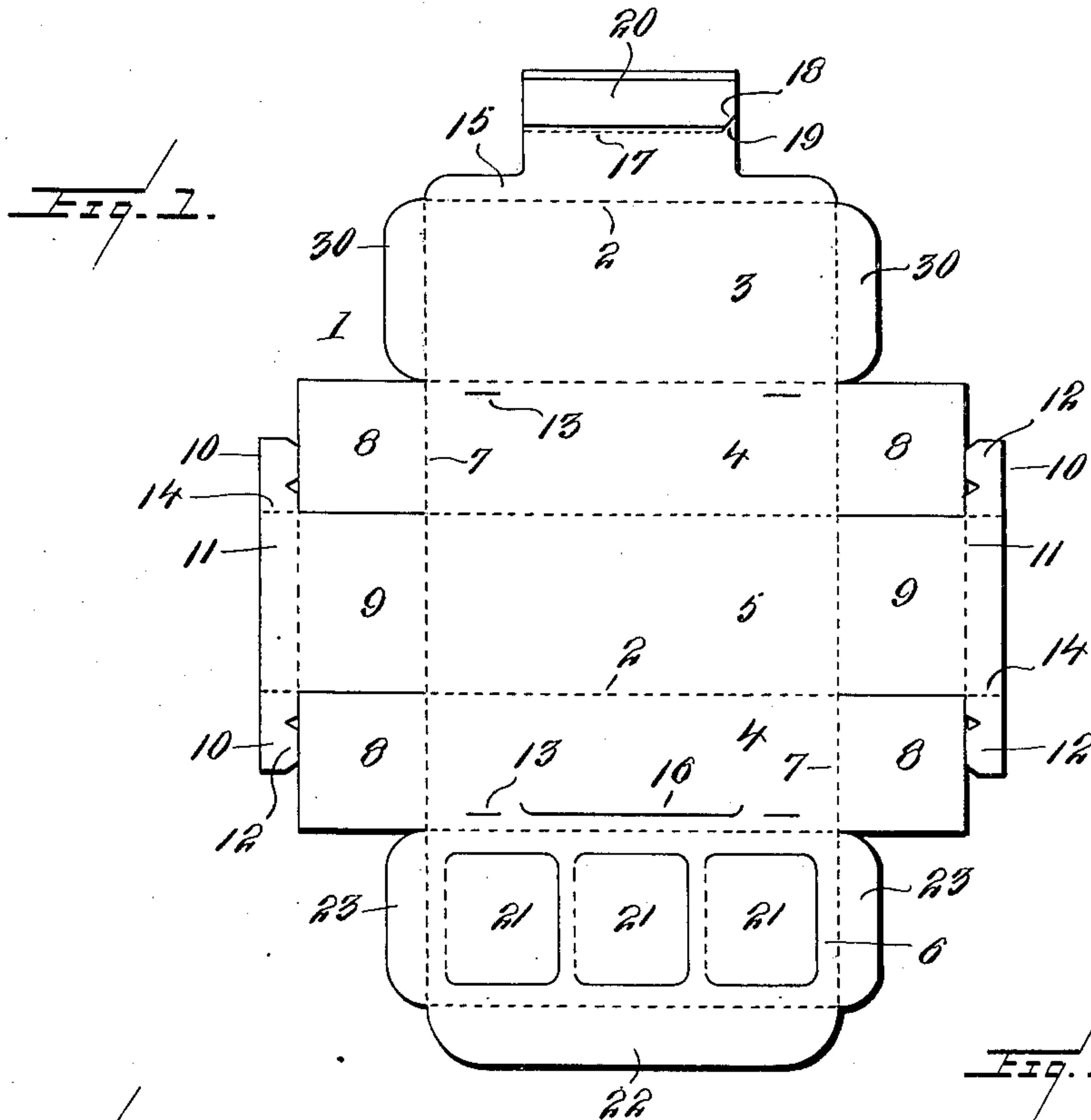


E. K. DAVIS.
 SELF LOCKING BOX.
 APPLICATION FILED MAY 22, 1908.

914,809.

Patented Mar. 9, 1909.



WITNESSES:

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EDWIN K. DAVIS, OF PHILADELPHIA, PENNSYLVANIA.

SELF-LOCKING BOX.

No. 914,809.

Specification of Letters Patent.

Patented March 9, 1909.

Continuation of application filed January 29, 1907, Serial No. 354,740. This application filed May 22, 1908. Serial No. 434,402.

To all whom it may concern:

Be it known that I, EDWIN K. DAVIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Self-Locking Boxes, of which the following is a specification.

This application is a continuation of my forfeited application filed Jan. 29, 1907, Serial Number 354740.

This invention relates to collapsible or folding boxes, cartons, etc., and has for its object to provide a device of this character which can be quickly and securely closed and locked in its closed position so that it cannot be opened without destroying the structure and thereby indicating such opening. This renders the box or package non-refillable as well as non-openable, thereby rendering it useful to prevent the substitution of contents, as well as the abstraction of the same.

The accompanying drawings illustrate the invention, in which—

Figure 1 is a plan view of one form of the blanks from which the box or receptacle is to be formed; Fig. 2 is a broken side elevation partly in longitudinal section of the box as it appears when filled and locked; Fig. 3 is a transverse sectional view of the same, and Fig. 4 is a broken detail sectional view of one corner of the box.

Referring to the drawings, the numeral 1 indicates the blank from which the completed package, as a box or carton, can be constructed, and which is preferably formed from suitable flexible material, preferably card board or paper of sufficient thickness to answer the purpose for which the package is intended.

The blank is divided into suitable sections by folds or creases 2 for forming the top 3, sides 4, bottom 5, and a supplemental cover 6. The blank is further folded or creased, as shown at 7, to form the end pieces 8 and 9. The end pieces 9 are each provided upon their outer ends, with oppositely extending tongues 10, which are adapted to be folded inward upon the lines 11 over the end pieces 8, when the sides 4 are turned up to form the box, and which tongue is provided with a lip 12 which is adapted to be passed through a slit or perforation 13 in each side 4 near its upper edge, the tongues being

adapted to be folded upon the lines 14, so as to cause the tongue 10 to lie flat against the sides 4 with the lips projecting upward toward the top of the box, when the box is completed.

The top or cover 3 is provided upon its free edge with a flap or extension 15 which is adapted to be projected through a slot 16 formed near the top of one of the sides 4. The flap is creased as at 17 so that its outer edge may be folded back upon the inner portion so that after the flap has been inserted through the slot 16, the free edge will open or spring away from the main portion of the flap so as to engage with the interior of the box in which position it is held against dislodgment by the pressure of the contents of the box, thus preventing the withdrawal of the flap without destroying the package and thereby indicating that it has been tampered with. As shown in the drawings, the distance between the slot 16 and the top of the side 4 is less than the height of the upturned end-portion of the flap 15, which construction prevents the possibility of successful manipulation of said flap to release its engagement.

One edge of the flap 15 is preferably provided with a slit 18, which extends diagonally inward to the crease 17 and forms a tip or point 19, which projects below the fold 17, as shown in dotted lines in Fig. 2, and assists in entering the folded flap into the slit 16.

If desired, a reinforce, as a metallic plate or paper strip 20, may be secured to the downwardly extending portion of the flap 15 so as to permit the use of very thin paper or material, and engage the edge of the slit thereby preventing its removal after the box has been closed. Said reinforce also serves to press the upturned portion of the free end of the flap 15 outwardly, and thus prevent its flattening against the inner face of the box for the purpose of withdrawal through the slot 16.

When the package is to be used for fragile or breakable objects, as eggs, the supplemental cover 6 is provided with flaps 21, which are adapted to be folded down transversely of the box, so as to form partitions, and thereby dividing the box into compartments, within each of which may be placed the article that is to form the contents of the package. In such case, the free edge

of the supplemental cover 6 is provided with an extension 22 which adds the desired strength or stiffness to the cover and is adapted to be folded down against one of the sides pieces 4. The ends of said cover are also preferably provided with extensions 23, which are folded down against the ends 8 in the form of narrow flaps.

From the foregoing description, it will be seen that my package can be cheaply formed, as it can be stamped, creased and slotted from the material at one operation, after which it can be readily folded into shape, the inverted folded ends of the tongues 9 greatly reinforcing each corner, and the insertion of the lips 12 into the slits 13, locking the sides and ends together so as to hold them in proper shape for receiving the contents. When it is desired to close the box, the cover 3 is folded over the top of the box with its flaps inserted between the tongues 9 and the supplemental cover 6 and the free edge of the flap 15 folded inward and the flap inserted through the slit 16. When closed in this manner it is evident that the box cannot be opened for any purpose without destroying it or damaging it to such an extent as to indicate that it has been tampered with.

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

1. A collapsible package, one side of which is provided with a longitudinal slit, the top of same being provided with a folded flap having an upturned portion adapted to be passed through the slit, and a reinforce on the inside of said flap adapted to engage the edge of the slit, substantially as described.

2. A collapsible package, one side of which is provided with a longitudinal slit, the top of same being provided with a folded flap having an upturned end portion of greater length than the distance between the top of the side and the longitudinal slit therein adapted to be passed through said slit, said upturned end portion being adapted to spring outward and engage the interior of the box to form an automatic lock, substantially as described.

3. A collapsible package, one side of which is provided with a longitudinal slit, the top of same being provided with a folded flap having an upturned end portion adapted to be passed through said slit, a reinforce on the inside of said folded flap adapted to force the upturned portion thereof outward to engage the side of the box to form an automatic lock, and to prevent the compression of the folded flap and disengagement therewith, substantially as described.

4. A collapsible package, one side of which is provided with a longitudinal slit, the top of same being provided with a folded flap having an upturned portion, one edge of the flap being slitted diagonally inward to form a forwardly extending point to assist in entering the flap into the side of the box, a reinforce on the inside of said folded flap adapted to force the upturned portion thereof outward to engage the interior of the box to form an automatic lock, and to prevent its compression and disengagement therewith.

5. A folding box, each side of which is provided with a flap and slotted longitudinally near each end, and one side is slotted centrally between the slots, the flap on the one side forming a cover and being creased and slitted diagonally inward from one edge to the crease to form a point for assisting in entering the central slot of the other side when the flap is folded to form an automatic lock, the other flap forming a supplemental cover, and being provided with flaps to form partitions and with reinforcing extensions, the ends of the box being formed from overlapping portions, the outer portion of each end being extended and provided with notched tongues, the extension being folded over the inner portions and the notched portions of the tongues being passed through the end slots in the sides of the box.

In testimony whereof, I have hereunto signed my name in the presence of two subscribing witnesses.

EDWIN K. DAVIS.

Witnesses:

H. M. DITTIE,
THOMAS H. CONLON.