

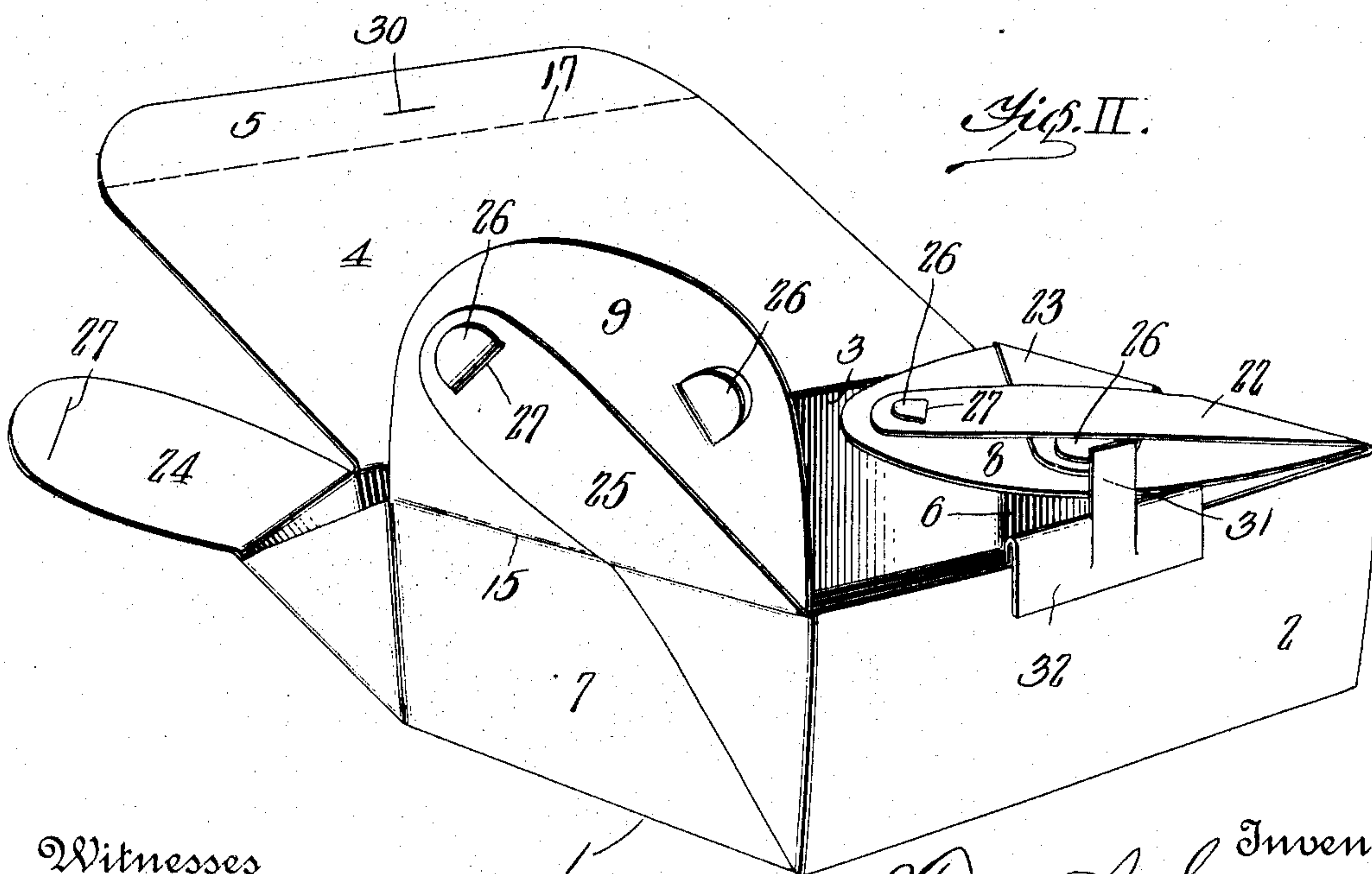
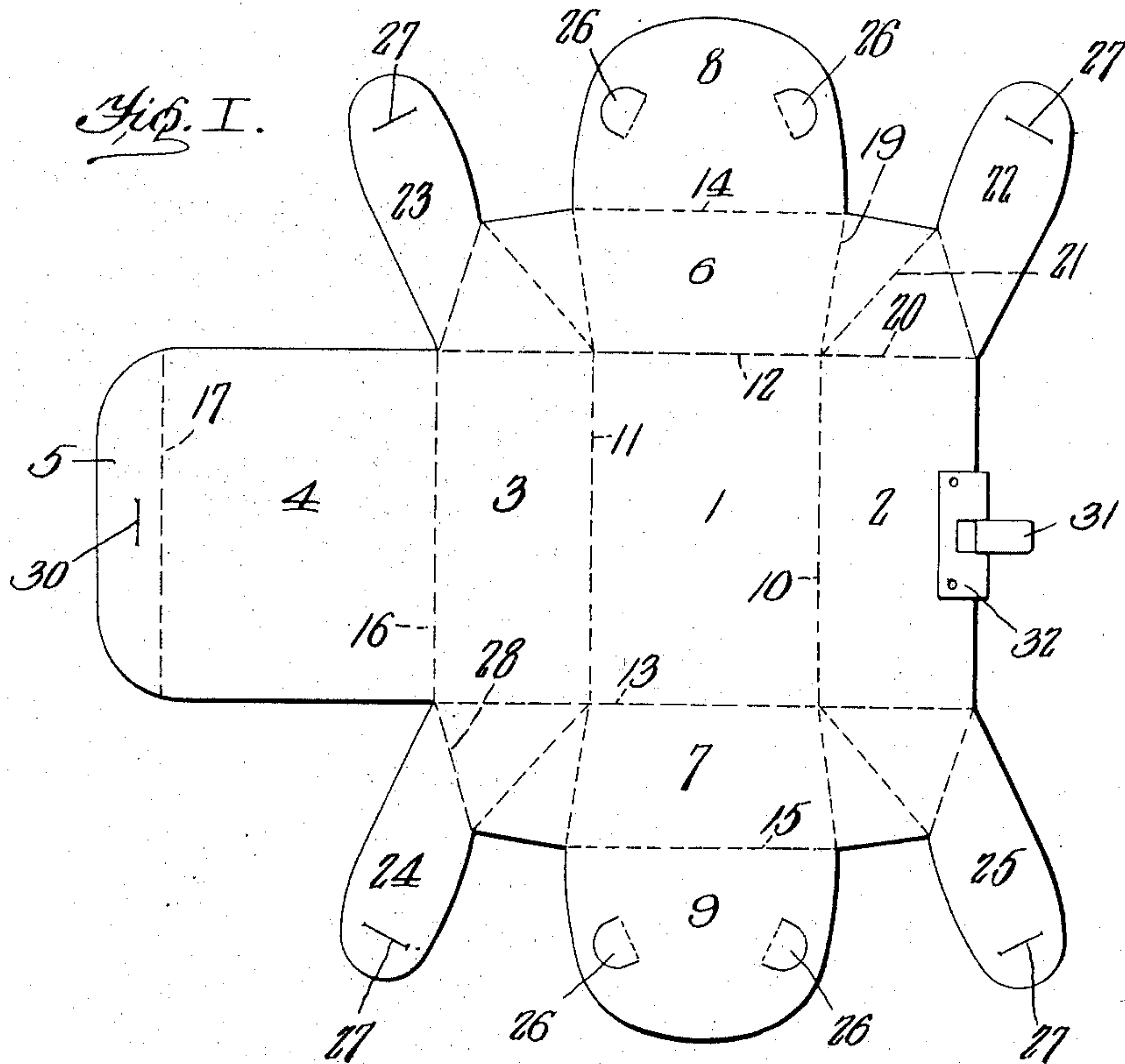
T. S. GOFF.

BOX.

APPLICATION FILED JULY 3, 1906.

905,691.

Patented Dec. 1, 1908.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS SYLVESTER GOFF, OF OWENSBORO, KENTUCKY.

BOX.

No. 905,691.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THOMAS SYLVESTER GOFF, of Owensboro, in the county of Daviess, State of Kentucky, have invented certain new and useful Improvements in Boxes, of which the following is a specification.

The object of my invention is to produce an improved collapsible, folding or knock-down box, which may be made of any suitable flexible material, such as card board or wood pulp, and which, when set up, may be relied upon to retain certain liquid or viscous materials without leakage and without liability to accidental collapse, wholly or partially, into its knock-down state.

My boxes are especially, but not exclusively, adaptable to the purpose of containing lard or the like commodities in small parcels.

In the accompanying drawing, which forms a part of this application, Figure I is a plan view of one of my boxes in its knock-down or perfectly flat state. The lines of the creasings of the box, along which it is bent to set it up in shape, are indicated by dotted lines. Fig. II is a perspective view of the box shown in Fig. I set up, but on a slightly enlarged scale, one of the corners of the box being open to show, by comparison with the next adjacent corner, the manner in which the corner structure is contrived and effected.

Referring to the numerals on the drawing, 1 indicates the bottom portion of the box blank shown in Fig. I. It may be of any preferred shape, such as the oblong rectangular shape illustrated, and of any preferred dimensions. With this bottom all the members of the box form are made integral, as of a piece of card board or wood pulp, as specified. Upon one side, it is provided with a front-piece 2 and upon the opposite side with a side-piece 3, from which extends a top 4 terminating, preferably, in a flap 5.

6 indicates one end-piece and 7 the other, the former being provided with a corner assembling-flap 8, and the latter with a corresponding member 9.

10 indicates the creasing-line which separates the bottom 1 from the side-piece 2, and 11 a creasing-line separating the bottom 1 from the side-piece 3.

12 and 13 indicate creasing-lines between the bottom and the end-pieces 6 and 7, respectively.

14 and 15 indicate the creasing-lines between the end-pieces 6 and 7 and their assembling-flaps 8 and 9, respectively.

16 indicates a creasing-line between the side-piece 3 and the top 4, and 17 a creasing-line between the top 4 and its flaps.

Between each end-piece 6 and 7, and the side-pieces 2 and 3, respectively, at each corner of the box is provided a corner-fold, of which there are four. Each corner-fold being substantially identical in principle of construction, it is sufficient to identify each of them as defined by corner-creasing lines 19 and 20 and an intermediate creasing-line 21.

Each corner of the box form is shown as provided with a wing, severally designated by the numerals 22, 23, 24, and 25. These several wings constitute, in effect, oblique extensions of the side-pieces 2 and 3, respectively, and it is characteristic of them that in the set up box, as illustrated in Fig. II, they cross over obliquely from one corner of the box substantially to the opposite corner of the assembling-flap, to which they are connected in the set up box. The means for securing the wings to their respective assembling-flaps preferably consists of tongues 26 cut in the material of one member, for instance the flap, and inserted into a slit 27 in the other member, which, in the correlation specified, is formed in a wing.

By reason of the relative dimensions and construction of the wings and for their crossing over from one side of the box to the other, a specially strong and stable construction in the set up box is effected. Not only do the wings act as stay pieces for the corners, but when bent over along their respective creasing-lines 28 to conform to the creasing-lines 14 and 15, respectively (compare Figs. I and II) the one next to the assembling-flap 8 or 9, as the case may be, being secured by its tongue 26, is also secured by the wing which over-laps it; and that, being secured by its tongue 26, is, in turn, secured by the superimposed top 4, which is provided in its flap 5 with a slit 30 into which the tongue 31 of a retaining-member 32, secured to the front-piece, is introduced and bent down to hold the parts together. The retaining-member 32 is preferably made of soft flexible metal, the tongue of which may be readily bent back and forth as often as required without breakage.

It will be observed from the foregoing specification that the wings 22 to 25, inclusive, constitute in connection with the assembling-flaps 8 and 9 the assembling-members of the set up box, and that each assembling-member in my construction is provided with not less than two distinct means for confining it in place for the performance of its office. For instance, referring to Fig. II, the wing 23 is directly confined by its tongue 26 and by the wing 22. In like manner, the wing 25 is, in the fully set up box, confined by the wing 24. Now the wings 22 and 24, respectively, are not only confined by their respective tongues 26, but are severally confined, when the box is closed, by the top 4.

By reason of the construction described, the assembling-flaps 8 and 9 being preferably formed to collectively cover substantially the entire contents contained within the assembled box, the box, when made up, filled and closed, affords a strong, durable, cleanly, and non-leakable receptacle for a variety of commodities, such, for example, as lard or the like.

The material of the box is preferably saturated or coated on the inside with paraffin to render it hygienic and impervious to such liquids as may be introduced into it.

For convenience of definition, it may be specified that each corner of the box-form shown in Fig. I is, in respect to the creasing-lines which define the boundaries, trapeziform in outline. The creasing-line 21 constitutes a diagonal of each trapezium along which the form may be folded in shaping the corner and to bring all of the parts of the corner structure into proper relative position.

What I claim is:

1. In a knock-down box made of a sheet of flexible material, the combination with integrally united bottom, sides, ends, top and corner-folds, of corner-assembling-flaps ex-

tending half way across the top of the box respectively, and means to secure to the respective flaps corner-folds adjacent thereto.

2. In a knock-down box made of a sheet of flexible material, the combination with integrally united bottom, sides, ends, top and corner-folds, of corner-assembling-flaps, wings upon the respective corner-folds each crossing obliquely from the corner of the box upon which it is located to the opposite corner of the assembling-flap to which it is secured, and means for securing the wings and corner-assembling-flaps respectively, together.

3. In a knock-down box made of a sheet of flexible material, the combination with integrally united bottom, sides, ends, top, and corner-folds, of corner-assembling-flaps, wings upon the respective corner-folds each crossing obliquely from the corner of the box upon which it is located to the opposite corner of the assembling-flap to which it is secured, and two distinct means for confining each wing in place when the box is closed.

4. In a knock-down box made of a sheet of flexible material, the combination with integrally united bottom, sides, ends, top, and corner-folds, of corner-assembling-flaps, wings upon the respective corner-folds each crossing obliquely from the corner of the box upon which it is located to the opposite corner of the assembling-flap to which it is secured, and means for securing the wings and corner-assembling-flaps, respectively, said means consisting of integrally engaging slits and tongues formed in the material of which the box is made.

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

THOMAS SYLVESTER GOFF.

Witnesses:

JAS. S. RODMAN,
SAML. SANBURY.