

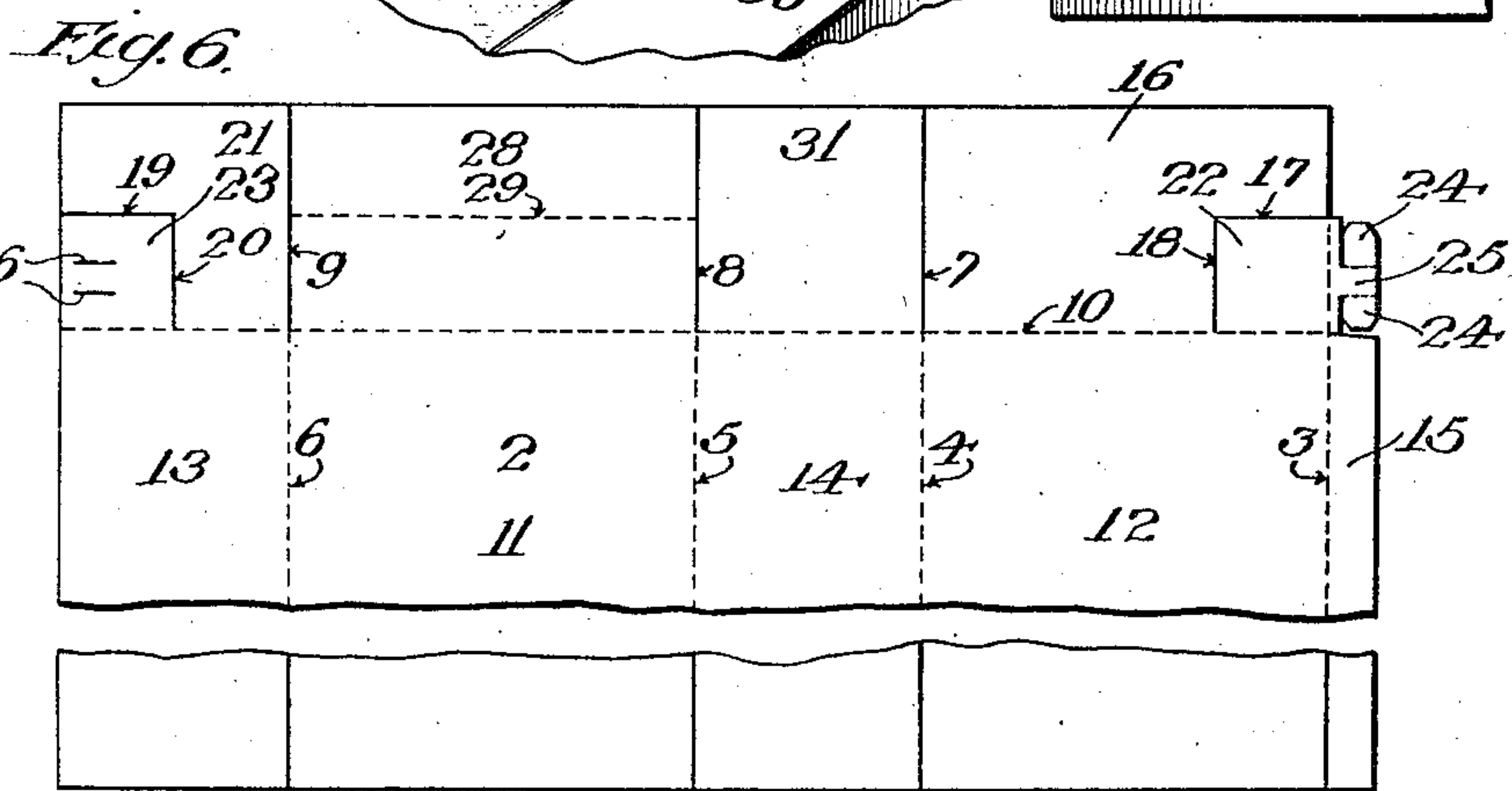
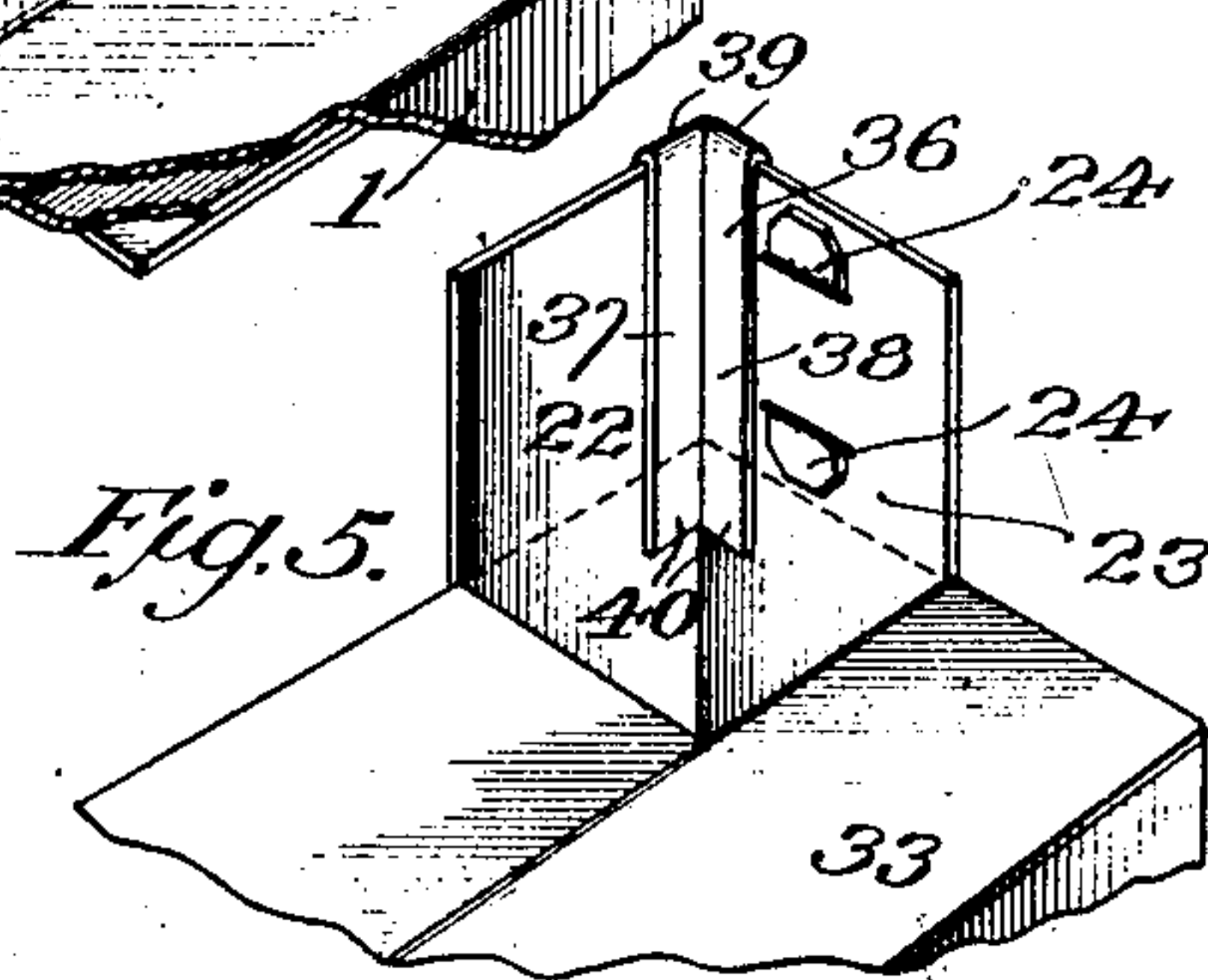
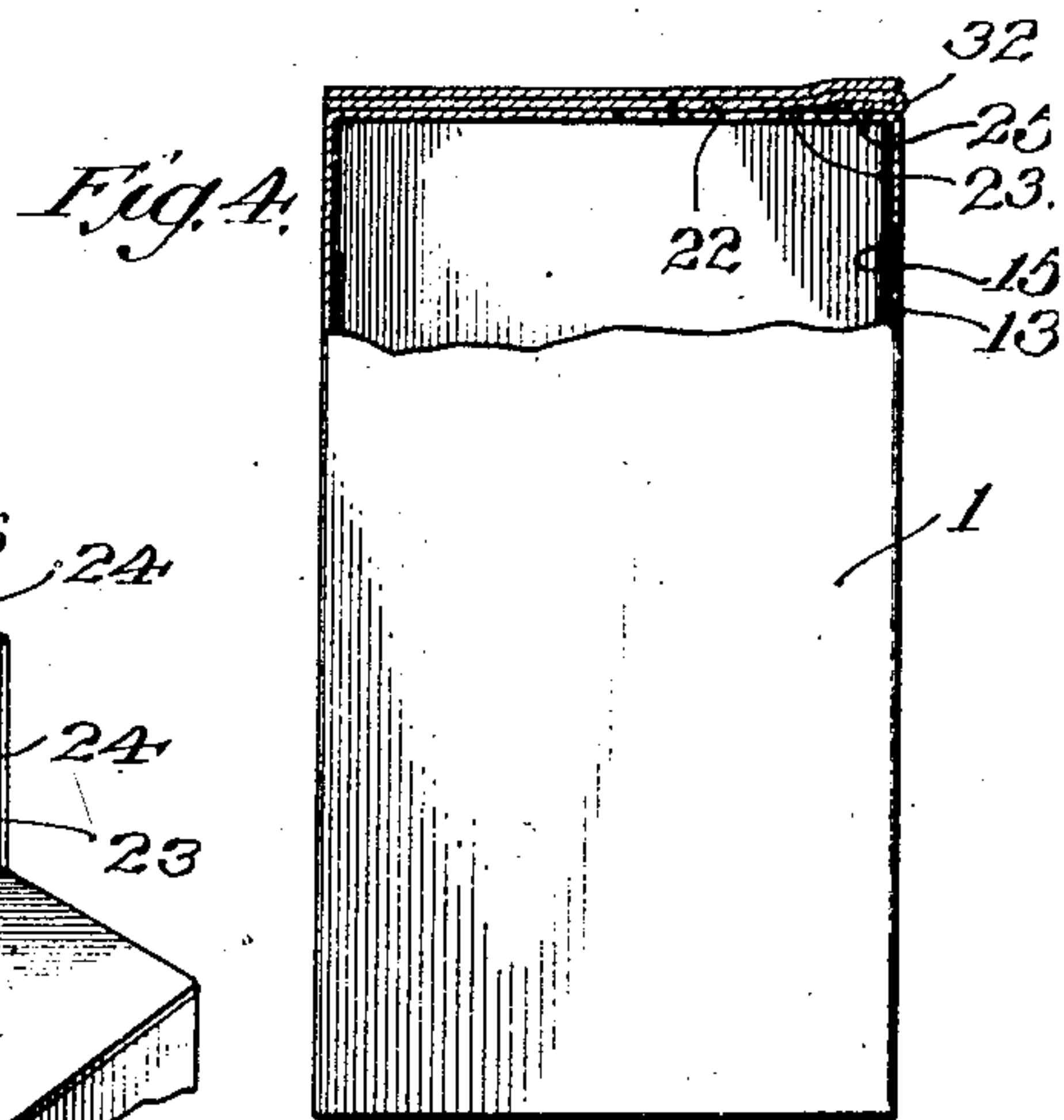
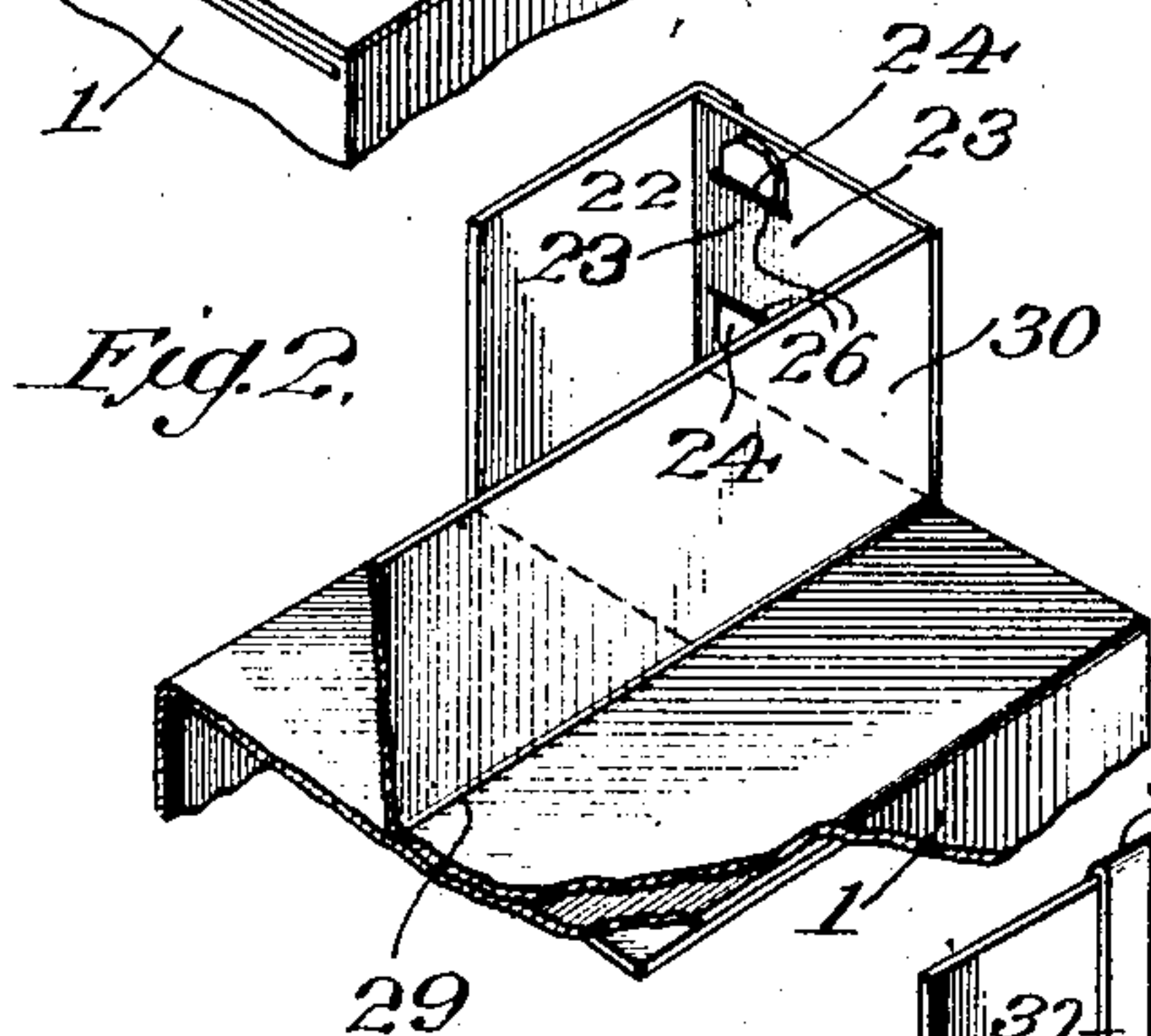
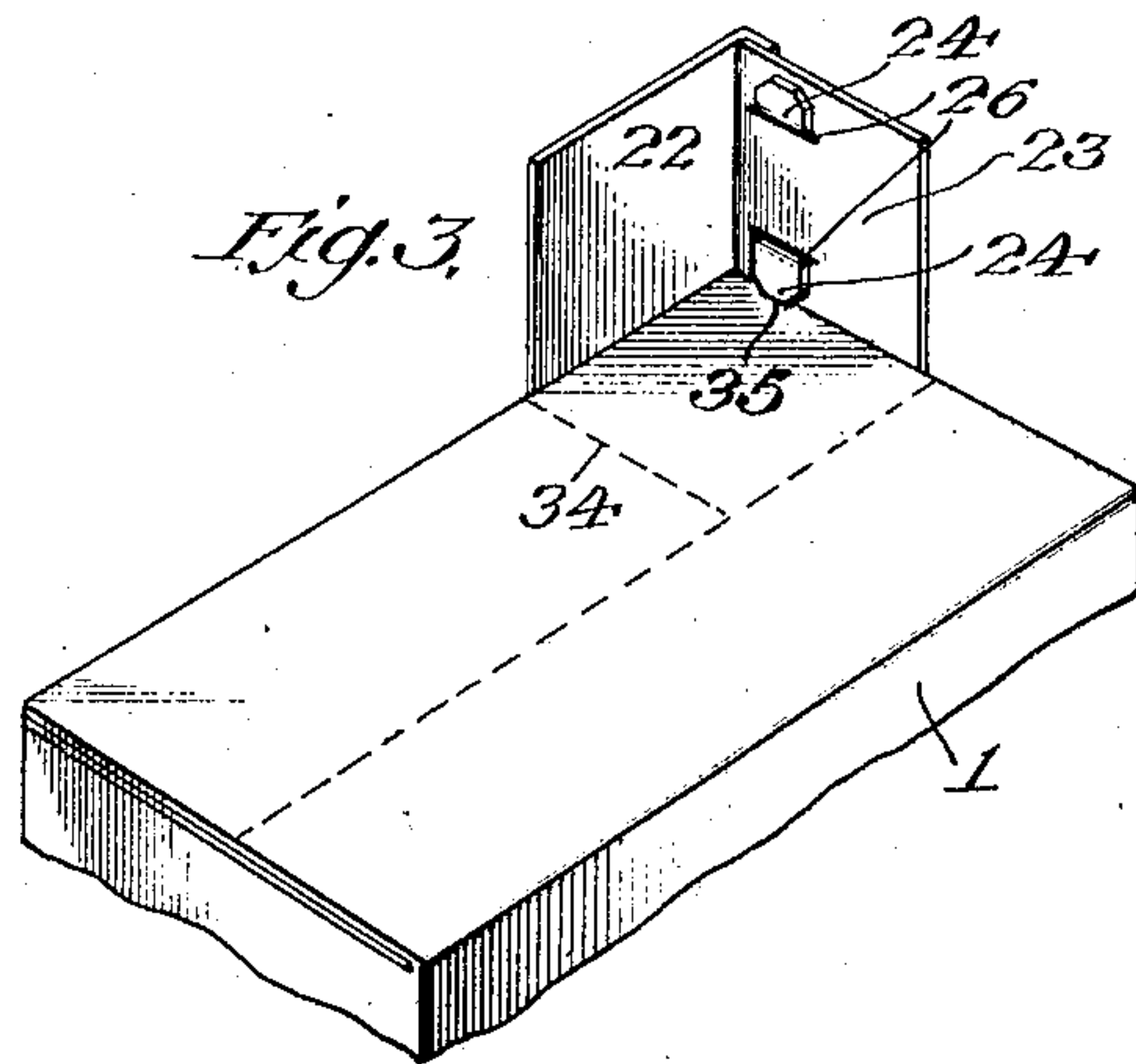
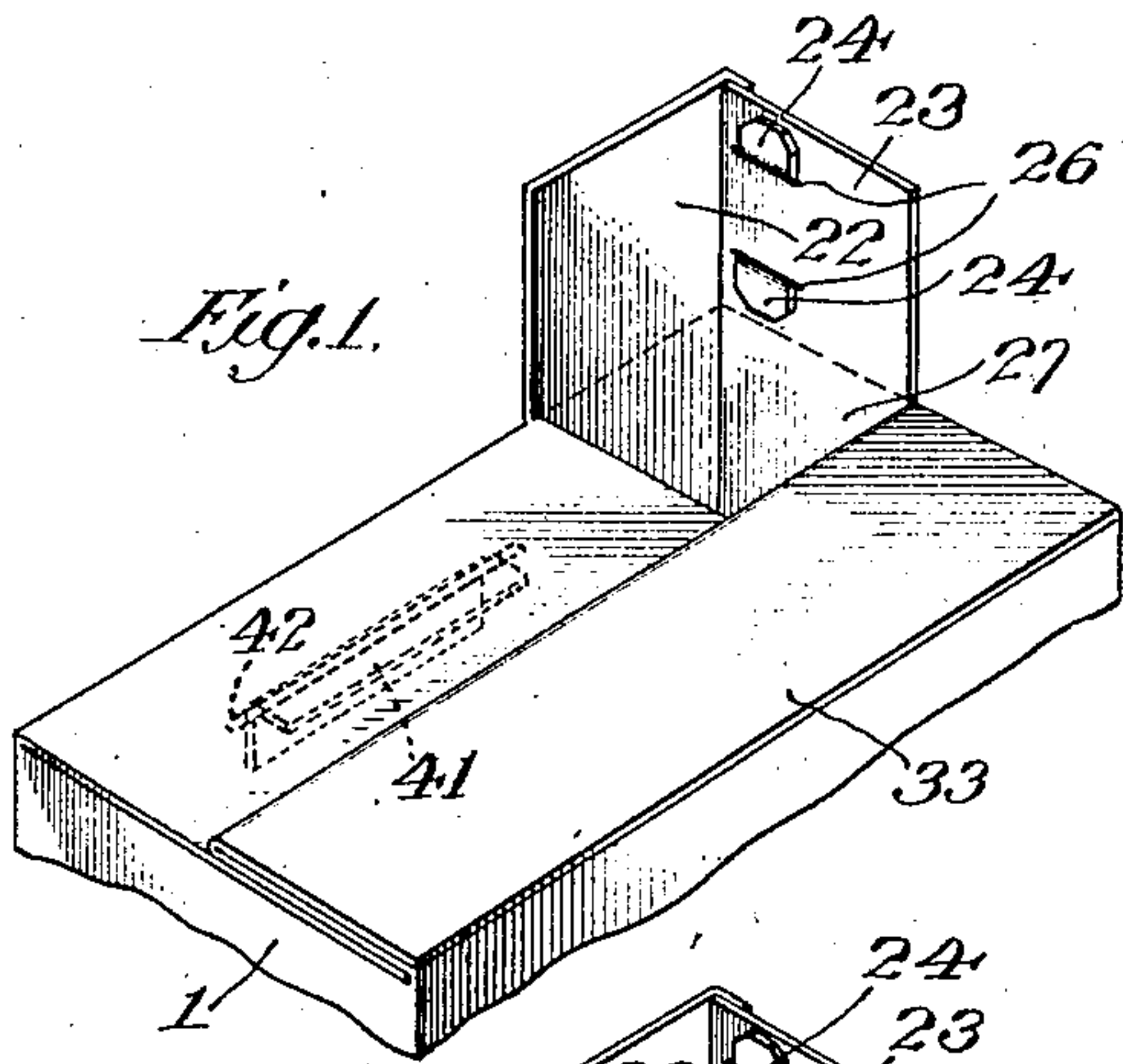
O. R. TYSON.

PACKAGE.

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925,535.

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# UNITED STATES PATENT OFFICE.

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## PACKAGE.

No. 925,535.

Specification of Letters Patent.

Patented June 22, 1909.

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*To all whom it may concern:*

Be it known that I, OTIS R. TYSON, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Packages, of which the following is a specification.

This invention relates to packages and more particularly to that class of such devices which are formed from pliable or flexible material and known as cartons.

The principal object of the invention is to provide a package or carton with a collapsible or foldable spout which is adapted to be closed and folded so that the package can be sealed in the ordinary manner and which can be unfolded or extended after the package has been opened.

Another object is to provide means for automatically locking or holding the usual flap or cover of the package in its closed position by the spout when in its extended or open position.

Another object of the invention is to provide means for reinforcing or strengthening the spout after it has been extended or opened.

I accomplish these and other objects, except the reinforcement of the spout, by cutting or forming the blank from which the package is to be made in such shape and outline that the parts can be manipulated or folded in the usual manner for forming such packages without additional cost of material and which will permit of a portion of said parts being unfolded or extended and locked together to form the spout after the package has been opened in the usual manner.

The accompanying drawings illustrate an embodiment of the invention and form a part of this specification.

Figure 1 is a perspective view of the top of a package embodying my invention with the spout open or extended. Fig. 2 is a similar view with a portion of the top of the package forming one wall of the spout. Fig. 3 is a similar view with the portion of the top closed and the spout extended. Fig. 4 is a vertical, sectional view through a package. Fig. 5 is a broken perspective view of the top of a package showing the application of a reinforcement to the spout. Fig. 6 is a broken plan view of a blank from which the package is formed.

Referring more particularly to the draw-

ings which are for illustrative purposes only and, therefore, are not drawn to any particular scale, 1 indicates a package or carton which can be formed of any desired shape and size, preferably substantially rectangular in outline and from paper that is stiff enough to hold its shape after having been folded or closed together.

The blank 2 from which the package or carton is to be formed is substantially rectangular in outline and is creased longitudinally as shown at 3, 4, 5 and 6 which creases terminate in the ends as cuts 7, 8 and 9, except the crease 3 which terminates at the crease or fold 10 which is made transversely across the blank adjacent to and parallel with the edge or end of the blank. Only one end of the blank is shown, as the other end may be of any desired form and its particular formation forms no part of the present invention.

By cutting and creasing the blank in this manner two side pieces 11 and 12 are formed and also two edge strips 13 and 14 which are adapted to form the sides of the package and also a sealing or fastening strip or portion 15 which is adapted to be folded in and glued or otherwise secured to the edge piece 13 for holding the pieces in their tubular form.

One of the end folds 16, as of the side 12, is provided with two cuts 17 and 18, preferably at right angles to each other at one of its inner corners, which are adapted to register with corresponding cuts 19 and 20 of one of the edge folds 21 that registers with or forms an extension of one of the edge strips, as 13, thus forming two flaps 22 and 23 respectively, which are adapted to fit over each other when the box is closed and to leave an opening and to stand edge to edge relatively to each other and form a spout for the box or package when they are extended.

The outer edge of the flap 22 is extended out substantially even with the sealing or fastening strip 15 and has its ends formed into tongues 24 so as to form a temporary fastener 25 when the tongues 24 are passed through slits 26 in the flap 23. The flap 22 is creased in alignment with the crease 3 so as to permit of the fastener 25 with its tongues 24 being bent parallel to the flap 23 so as to lie against it when the tongues have been inserted in the slits 26 as above described and thereby complete the trough like spout which is adapted to extend from one



corner of the package at the opening 27 which is formed by opening the flaps and fastening them together in this manner. The end fold 28 that corresponds with the side section 11 is creased longitudinally, as shown at 29, so that its free edge can be folded up to form a side 30 of the spout after said free edge or section has been unloosened along the front edge of the box.

In forming a box or package from a blank cut in the manner as above described the strip 15 is glued or otherwise suitably fastened to the edge of strip or section 13, preferably upon the inside, and the carton is completed by folding the end pieces 21 and 31 inwardly and then folding the top section 16 in upon them and securing it thereto except at the flap 22 which registers with the flap 23 and between which flaps the fastener 25 and tongues 24 are folded as shown at 32 in Fig. 4. The end fold 28 is then folded over the fold 16 and secured thereto by gluing it in the usual manner, the free edge of said section or fold being preferably only glued around its edges so as to permit of the insertion of a knife blade or other instrument for detaching it and permitting its being raised into a vertical position to form the side wall 30 as shown in Fig. 2 or folded back upon the undetached portion as shown at 33 in Fig. 1.

The package or carton can be used with or without the usual outside wrapper, as will be well understood, and, therefore, the outside wrapper has been omitted in the drawings. When the crease 29 extends entirely across the length of the section 28 as shown in the drawings and the entire length of the free edge of said section is released and turned up the wall or section 30 will extend entirely across the package but such wall may be entirely removed or dispensed with by folding it down upon the remaining portion of the section as shown at 33, or it need only extend the width of the spout by providing said free edge with a slit or cut at the point at which it is desired said wall shall terminate as shown in dotted lines at 34 in Fig. 3.

To open the box a knife or other suitable instrument is inserted under the free edge of the flap 28 when the same has been pasted down, as would preferably be the case where the outside wrapper is omitted, and said flap raised into its vertical position or folded back on top of the carton as may be desired. The two flaps 22 and 23 are then folded out into their extended positions so as to stand at right angles to each other with the fastener 25 projecting beyond the outer edge of the flap 23. The fastener is then folded upon its crease so as to permit of the tongues 24 being passed through the slits 26 and the fastener brought up flat against the side of said flap 23. In this manner the

trough like spout is caused to project from the corner of the package which will cause the contents of the package when emptied through the opening 27 to pass down said spout and to be delivered into any receptacle which may be desired. Normally the stiffness of the paper will cause the released portion 30 of the free edge 28 to rest against the free edge of the flap 23 and thereby form the third wall for such spout when desired. After as much of the contents have been emptied as is desired the flap or section 30 is folded down over the opening 27 which will thereby close the same and prevent the entrance of dust or other foreign substance after the package has been set away. By forcing the corner of said section or flap down into the hole or opening in the package a slight distance one of the edges of the section will pass under one of the tongues 24 as shown at 35 and will thereby be retained against removal. When it is again desired to remove some of the contents of the package the section 30 is forcibly raised or lifted which will cause its edge to be drawn out from under said tongue 24 without doing damage to either one and raised into its vertical position, or folded back upon the top of the package as heretofore described, and the desired amount of contents poured out as before, after which said flap or section is again folded over the opening and locked so as to close said opening as heretofore described.

When desired a reinforce or strengthener 36 can be provided which is preferably formed from thin metal which is folded upon itself at the center and creased or folded longitudinally to cause its sides to stand at right angles to each other as shown at 37 and 38. In using such a reinforce it is passed over the abutting edges of the two flaps 22 and 23 when in their extended position as shown in Fig. 5, with the folded or doubled portion 39 engaging with the outer edges of said flaps or spout, the free edges of said reinforce preferably extending into the body of the package or carton as shown at 40.

The reinforce is preferably secured between the free edge of the section 28 as shown in dotted lines at 41 with one of its edges passed through a slit 42 in the section 16 and the end section 31 that is folded thereunder. In this manner the reinforce can be placed in position when the carton is closed and sealed and there will be no possibility of its becoming lost or misplaced so long as the package remains sealed, but after the package has been opened the reinforce can be removed from its temporary quarters and placed in permanent position upon the spout.

By constructing a package or carton in the manner above described it is evident that



it can be done without any additional cost of material except for the reinforce, when used, as all that will be necessary to provide for such construction is to provide one end of the blank with the additional cuts and creases which can all be made at the time of the formation of the blank.

Having described my invention, I claim:--

1. A blank for forming packages, said blank being formed from a substantially rectangular sheet of material creased longitudinally so as to form side and edge sections and a fastening strip for the body and creased transversely at said end to form end sections, said end sections being slitted in alinement with said creases, two of said end sections being cut on lines at substantially right angles to each other to form two flaps of substantially the same area, one of said flaps being slitted transversely and the other one provided with a tongued and creased extension at one edge for engaging with the other flap and another one of said end sections being creased substantially at its middle.

2. A package provided with an opening at one end, a collapsible spout at said opening, and a covering adapted to cover said spout when the same is in its folded condition and to cover said opening when the spout is extended.

3. A package having an opening in one end and provided with a collapsible spout adapted to close said opening when the spout is in its closed position, and a member adapted to cover said spout when the same is collapsed and to cover the opening and be retained thereover when the spout is extended.

4. A package having an opening in one end and provided with a collapsible spout at said opening, one member of said spout being adapted to fold over the other two members when the package is closed, and to close the opening or to engage with one of the other spout members and thereby form a wall of the spout when said other members of the spout are extended.

5. A package having an opening at one end and provided with foldable flaps at said opening, one of said flaps being provided with means for engaging with the other flap when said flaps are extended and thereby form a spout at said opening.

6. A package having an opening at one end and provided with two foldable flaps at said opening, one of said flaps being

slitted and the other flap being provided with tongues for passing through said slits and thereby locking said flaps together to form a spout.

7. A package having an opening at one end and provided with two flaps of substantially the same area and adapted to lie one upon the other when the package is closed, one of said flaps being slitted and the other flap being provided with a tongued fastener projecting from one edge, said fastener being adapted to be folded in between said flaps when the package is closed and to have its tongues projected through said slits and thereby lock said flaps together to form a spout when said flaps are extended.

8. A package having an opening at one end and provided with two registering flaps adapted to be folded upon each other when the package is closed, one of said flaps being slitted and the other one provided with a tongued fastener which tongues are adapted to be passed through said slits and thereby lock said flaps together to form a spout, and a cover for the package adapted to fold over said flaps when the package is closed and to have its free edge forced down under the edge of one of said tongues and be thereby locked in position when said cover is forced down to close the opening formed in said package by the removal of said flaps to form a spout.

9. A package having an opening at one end and provided with a collapsible spout, and a reinforce adapted to be secured to said spout.

10. A package having an opening at one end and provided with foldable flaps which are adapted to be extended and secured together to form a spout for the package, and a reinforce comprising a thin sheet of metal folded upon itself and creased longitudinally so as to cause the sides of said folded portions to stand at right angles to each other, said reinforce being adapted to be forced over said flaps when they are extended and secured together.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 7th day of August 1908.

OTIS R. TYSON.

In presence of--

W. S. BOYD,

FRANK L. A. GRAHAM.