

No. 637,397.

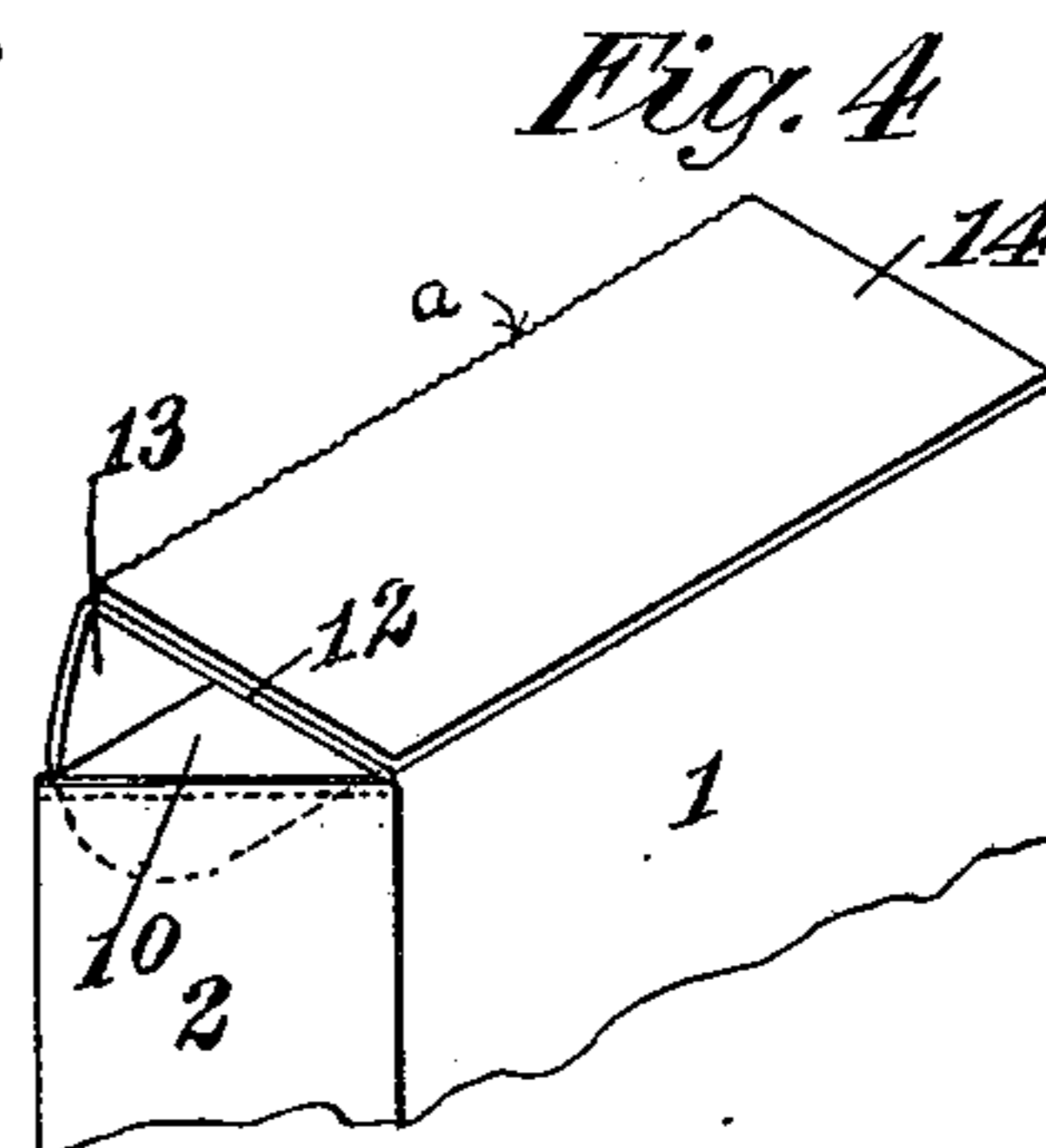
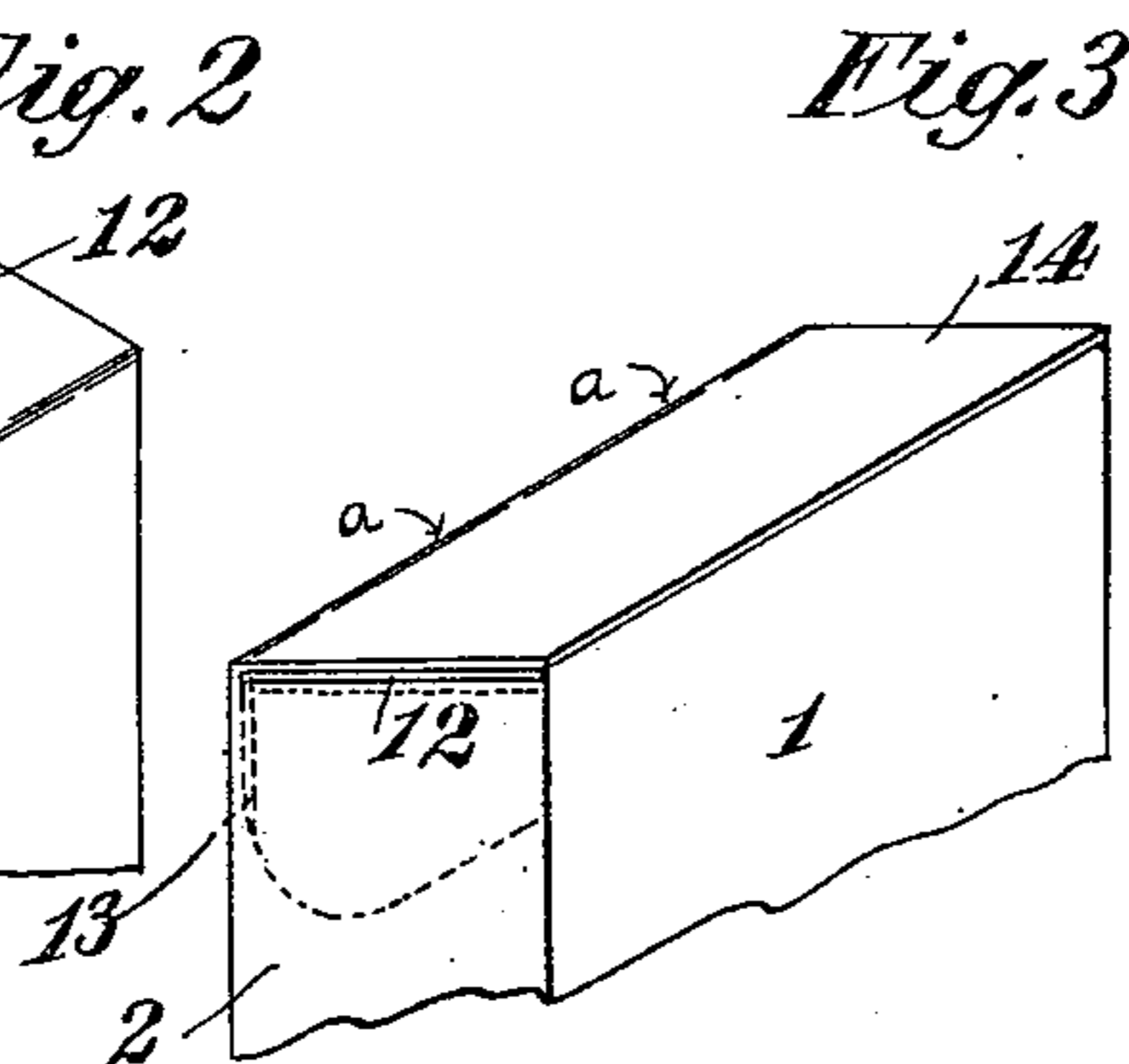
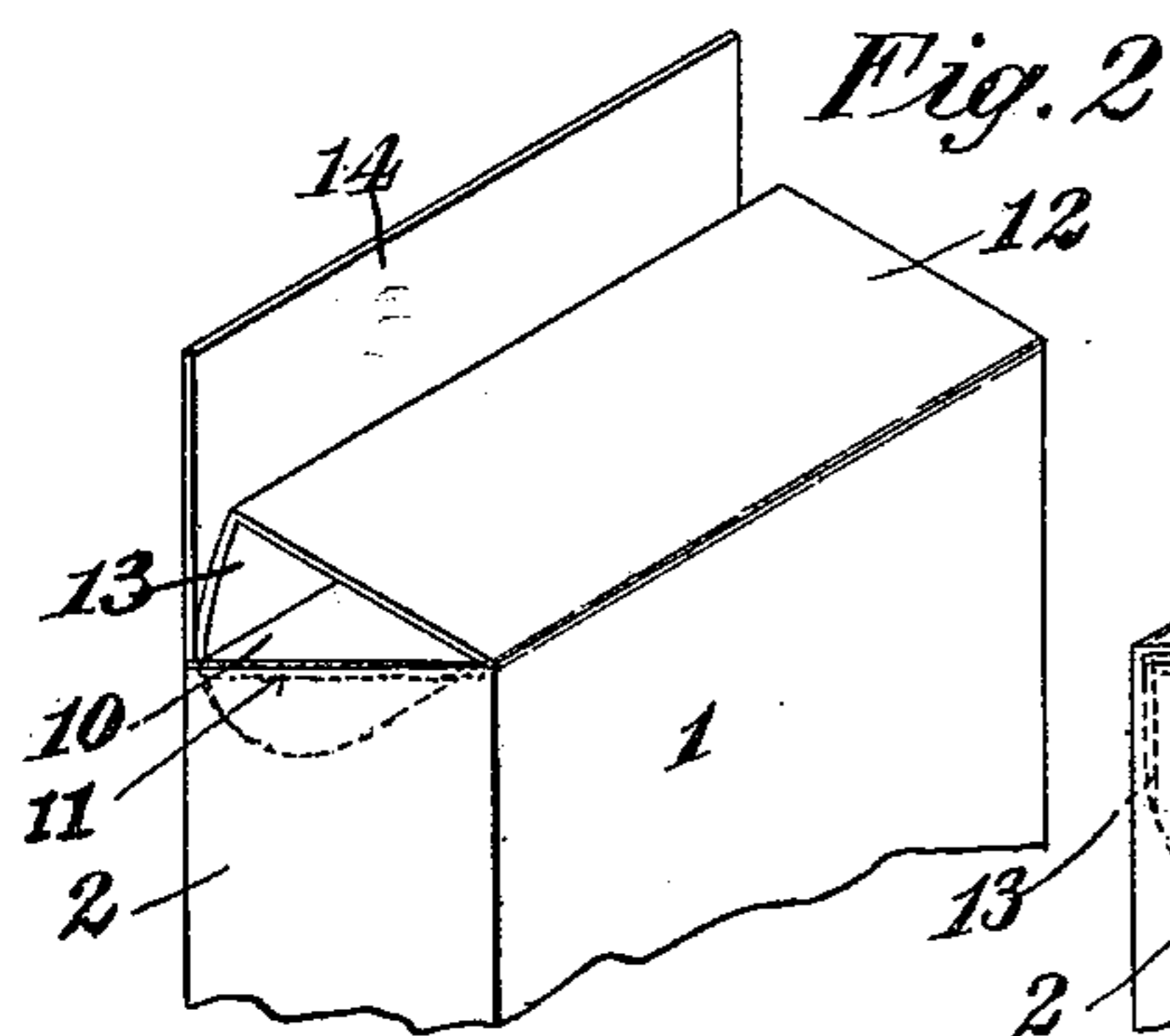
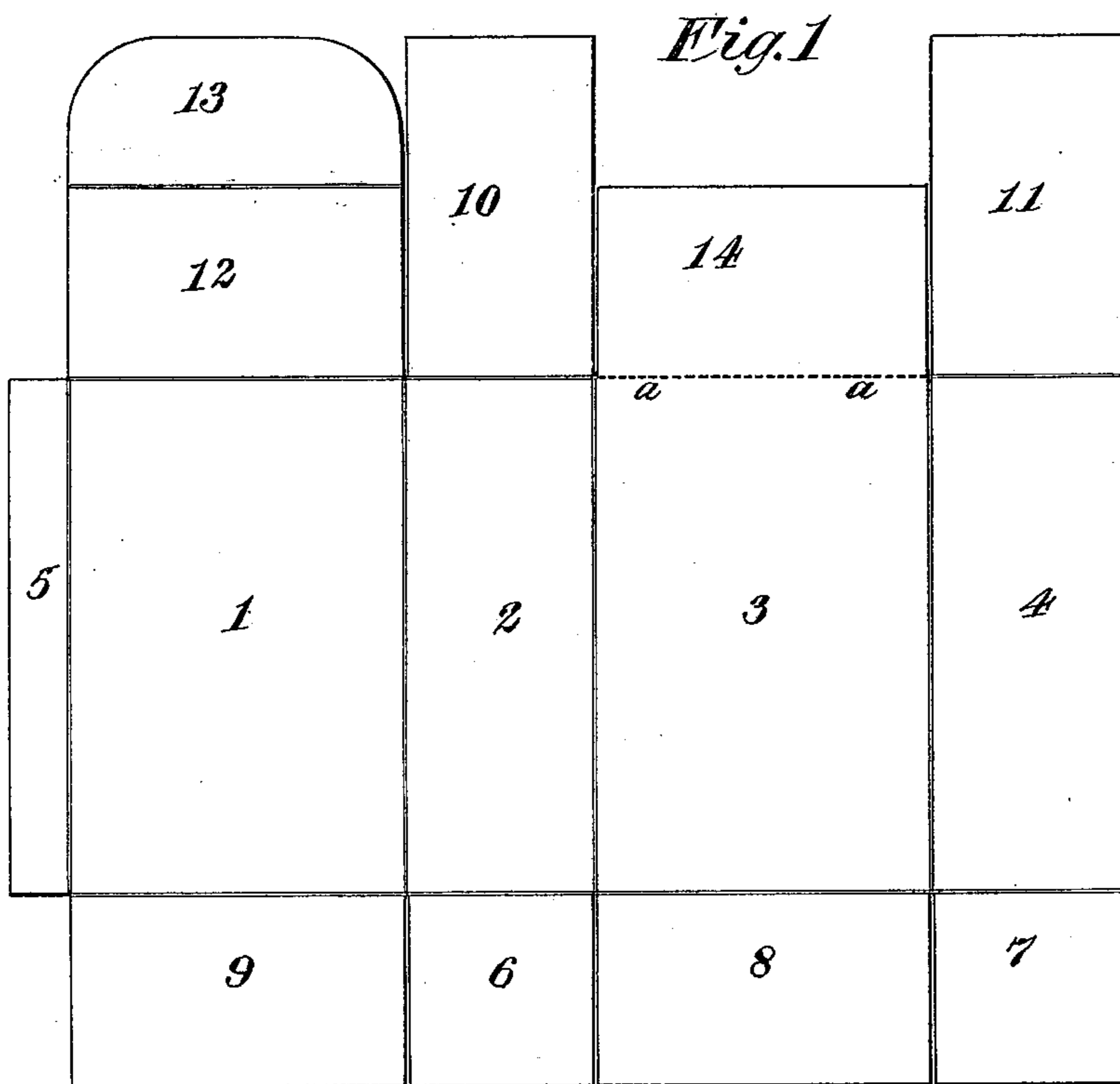
Patented Nov. 21, 1899.

M. T. LYNCH.

KNOCKDOWN OR FOLDING PAPER BOX.

(Application filed Apr. 8, 1899.)

(No Model.)



WITNESSES:

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KNOCKDOWN OR FOLDING PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 637,397, dated November 21, 1899.

Application filed April 8, 1899. Serial No. 712,202. (No model.)

To all whom it may concern:

Be it known that I, MORRIS T. LYNCH, a citizen of the United States, residing in the borough of Brooklyn, city of New York, and State of New York, have invented certain new and useful Improvements in Knockdown or Folding Paper Boxes, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a view of the blank out of which my said boxes are made, the double lines indicating crease-lines and the solid lines cuts. Fig. 2 is a perspective exterior view of the top of the box, showing the same partially closed; Fig. 3, same as Fig. 2, showing the box permanently closed; Fig. 4, the same, showing permanent closing terminated and the box partially opened.

The object of my invention is to provide a box in which finely-comminuted or pulverized materials, such as snuff, can be securely carried after packing, and in a permanently-sealed condition, and which box may, when the occasion for use of its contents arises, be broken open by unsealing and removal of a portion thereof, leaving, nevertheless, a tight and efficient cover capable of being repeatedly opened and tightly closed during the progress of consumption of the contents.

To these ends the invention consists in the production of a knockdown or folding box having the peculiarities of construction and operation which will be hereinafter described.

My box is preferably constructed out of a single sheet or piece of material, as paper, cut and scored as shown, for instance, in Fig. 1, which illustrates the principle of my invention applied to a so-called "tubular" box having four principle sides 1 2 3 4, connected by creased lines in the usual way, and a flap 5, which is preliminarily and permanently glued to the side 4, thus making a tubular body for the box, in which condition, as will be readily understood, the box may be folded or shipped flat, to be set up for use when the occasion arises for filling the same with goods.

When it is required to use the box, the tubular body is expanded so as to present a rectangular cross-section. The bottom of the box is first closed by folding the end pieces 6 7 at right angles to the sides 2 and 4 from

which they respectively extend and next closing and folding down upon them the end pieces 8 and 9 and permanently gluing or otherwise attaching the last or exterior of said end pieces to the one underlying it. The box having next been filled with the intended contents—as snuff, for instance—the top is closed as follows: The end pieces 10 and 11 are bent down to cover the top, resting upon the contents, and substantially at right angles to the sides of which they constitute extensions. The end piece 12, with its projecting tongue 13, is next folded down, the tongue being inserted between the edges of 10 and 11 and the side 3 and forced down until the end 12 lies flat upon and in contact with the upper one of the two previously-downfolded end pieces 10 and 11, as shown in Fig. 3. The top of the box will thus become closed sufficiently to secure the contents and may be readily opened by merely raising the end piece 12 sufficiently to withdraw its tongue 13 from engagement, after which the end pieces 10 and 12 may be raised and the contents exposed for use and the box closed again in the manner stated and these operations repeated as often as occasion arises for access to the contents. In order, however, to securely seal the box against any possible opening or tampering with the contents during the interval between packing and the opening of the same for use, I provide an additional end piece or flap 14, which is a prolongation of the side 3, with which it is connected by a perforated or partially-severed folding-line *a a*, thus constituting a line of weakened material. After the top end of the box has, after folding, been closed down in the manner described I finally fold down upon the end piece 12 the additional or sealing end piece 14 and secure the same permanently to 12 in any convenient manner—as, for instance, by gluing or sealing. (See Fig. 3.) The contents of the box are thus tightly, if not hermetically, sealed up until the occasion arises for the consumer to obtain access to the contents for purposes of use. This then is readily effected by breaking away or otherwise severing the part 14 from the side 3 along the aforesaid partially-severed fold-line *a a*, which may be readily accomplished by cutting or breaking

through the slight connections between the perforations on the line *a a*, when the part 14 being severed from the side 3 becomes only a double thickness of the part 12, and the repeated opening and closing of the top or end of the box may be accomplished, as before pointed out, and as often as may be required. By these means I am enabled to introduce into folding paper boxes at a minimum of expense novel qualities and functions, and thus to furnish a container which is not only of a knockdown or folded character, but also capable of being permanently sealed, so that during one period of its use it is impossible to tamper with the contents without detection, after which the box is none the less efficiently and conveniently opened and closed without further breakage or disturbance.

It will be understood that any other form of bottom adapted to a folding paper box might be equally well used in connection with my invention; also, that the flaps 10 and 11, while preferable, are not essential to the operation of my invention, and that these might be dispensed with.

I am aware that folding boxes have hitherto been constructed from blanks containing many of the features which I have pointed out above, and I am also aware that temporary closure of packages has been effected in such a way as to permit parts of the container to be torn away when access to the goods within was required, and I do not wish to be understood as claiming any such prior features; but I do believe myself to be the first to devise a folding box capable of being sealed up tightly, so as to prevent access to its contents without detection, and also capable, without change in appearance, of being turned into a box efficiently closing and readily opened and reclosed at will by merely separating the material along a partially cut or punctured line—in other words, that I am the first to have devised and applied in a folding paper box a closing side or end composed of two flaps, both integral with the body of the box and superimposed the one upon the other and permanently fastened together to seal the box, the one of said flaps being connected to one side of the box by an ordinary creased line constituting a hinge and the other to another side of said box by a weakened line of the material, so as to be more readily severable to unseal the box, all without in any substantially appreciable manner changing its original, normal, or conventional appearance.

What I claim as new, and desire to secure by Letters Patent, is—

1. A folding paper box consisting of a bot-

tom, a plurality of sides, and a top, the latter being composed of flaps projecting from and integral with the sides, and two at least of which flaps are folded down upon each other to close the box, two of their larger plane surfaces contacting with each other and there permanently fastened together, one of said flaps being permanently united to its connected side by a hinge of more flexible material and the other of said flaps being temporarily united to its connected side by a hinge of weaker material readily severable to free one edge of said top and permit it to swing open, substantially as and for the purposes described.

2. A folding paper box consisting of a bottom, connected sides, 1, 2, 3, 4, and a top, the latter composed of projecting flaps 12, 14, the flap 12 being hinged to the side 1 by flexible material, the flap 14 being connected with the side 3, by a line of material *a, a*, weaker than that constituting the adjacent flap and side, the flap 12 being first folded down to close the box, the flap 14 being superimposed upon and contacting with flap 12, and these two flaps in that position permanently fastened together and the weaker material, along the line *a, a*, being readily severable, to open the box, substantially as and for the purposes described.

3. A folding paper box consisting of the sides 1, 2, 3, 4, flap 5, bottom flaps 6, 7, 8, 9, and top flaps 10, 11, 12, 14, flaps 10 and 11 being first closed down to close the box and then flap 12 likewise turned down, flap 14 superimposed upon flap 12 and permanently secured to the latter, flap 12 being permanently united to one side of the box by a hinge of flexible material and flap 14 to another side by a temporary hinge of material *a, a*, weaker than that constituting its adjacent side and flap, substantially as and for the purposes described.

4. A folding paper box consisting of the sides 1, 2, 3, 4, flap 5, bottom flaps 6, 7, 8, 9, and top flaps 10, 11, 12, 14, flap 12, having projection 13, flaps 10 and 11 being first closed down to close the box and then flap 12 likewise turned down, flap 14 superimposed upon flap 12 being permanently united to one side of the box by a hinge of flexible material and flap 14 by a temporary hinge of material *a a* weaker than that constituting its adjacent side and flap, substantially as and for the purposes described.

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