

No. 768,131.

PATENTED AUG. 23, 1904.

L. E. LEE.
INNER SEAL CARTON.
APPLICATION FILED DEC. 23, 1903.

NO MODEL.

Fig. 1.

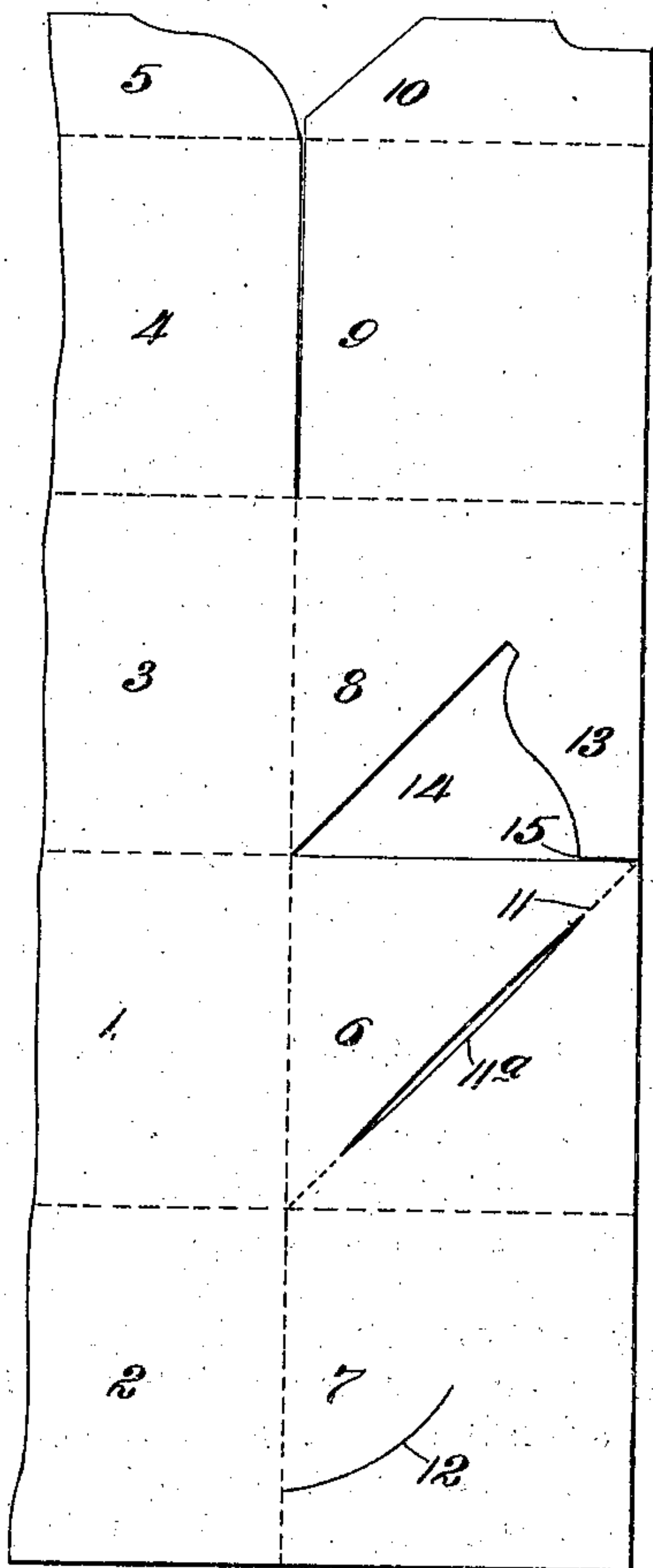


Fig. 2.

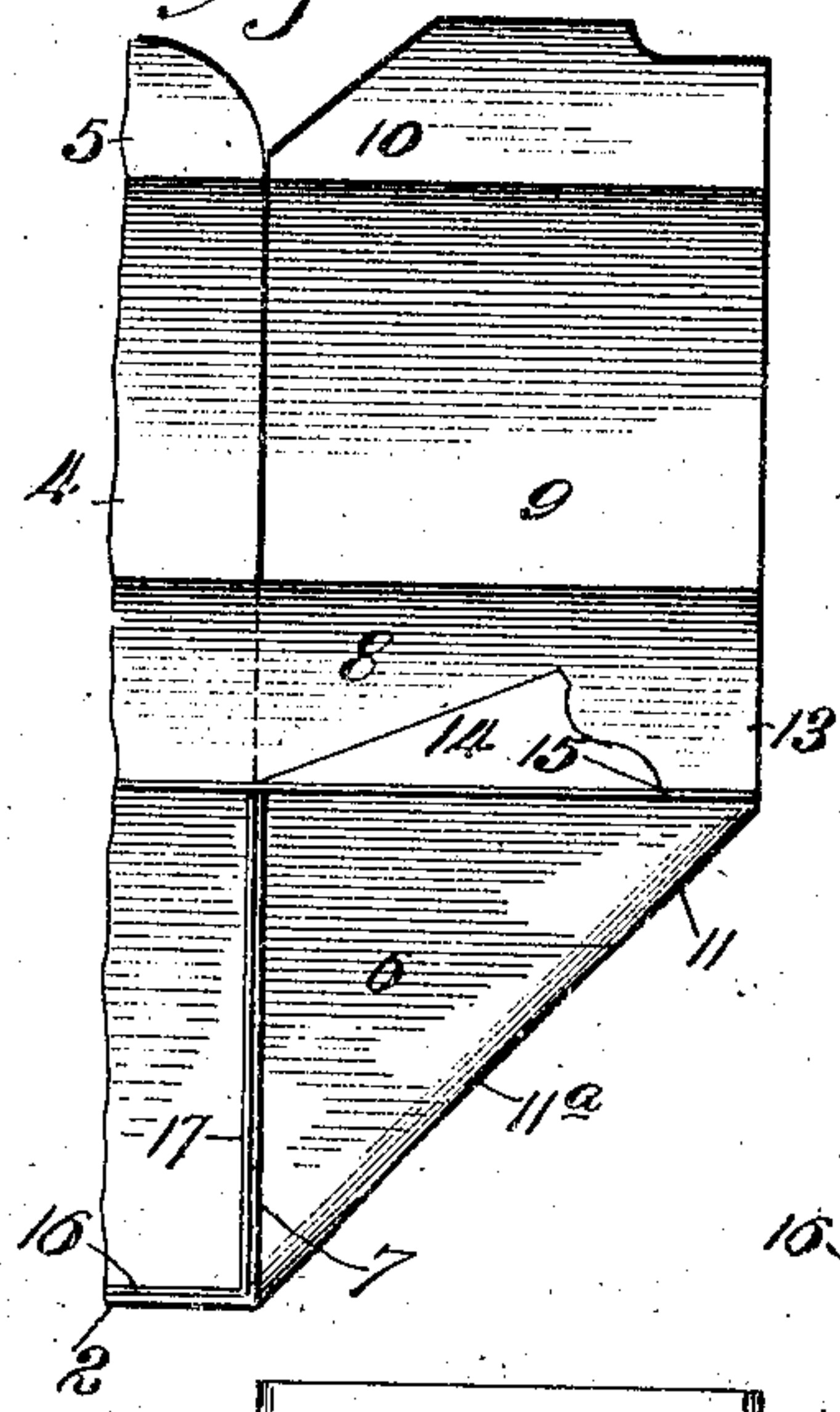


Fig. 3.

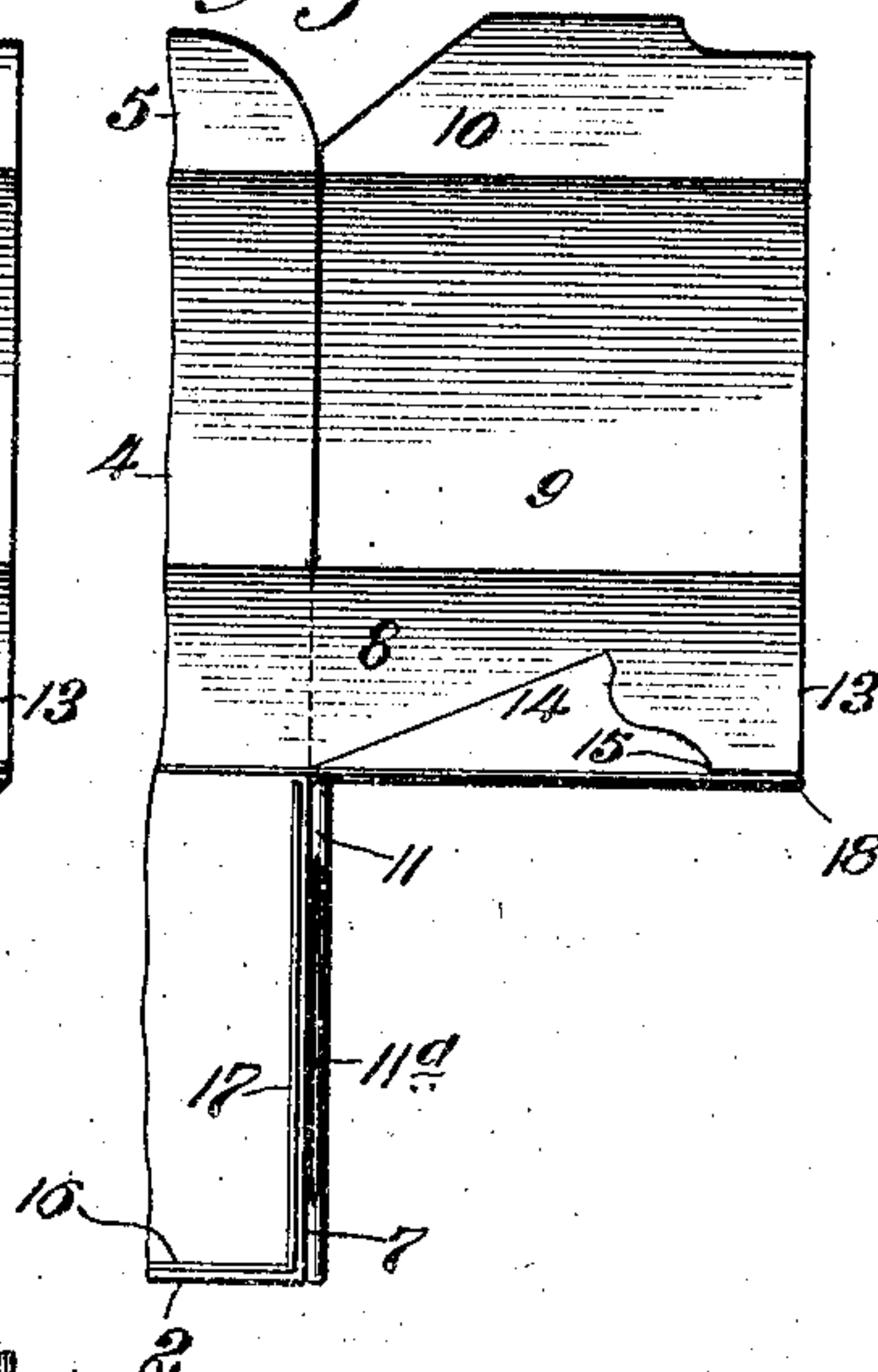


Fig. 4.

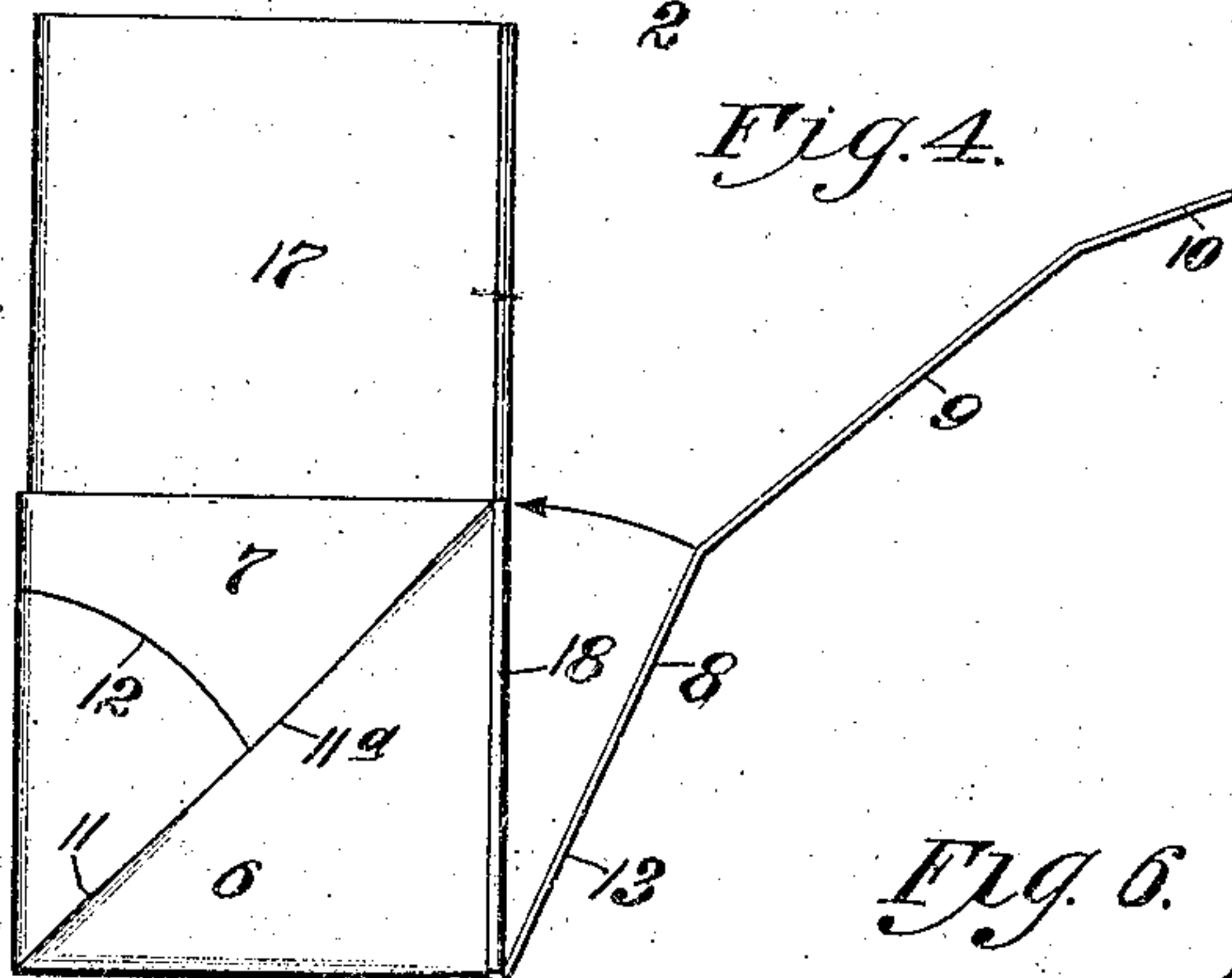
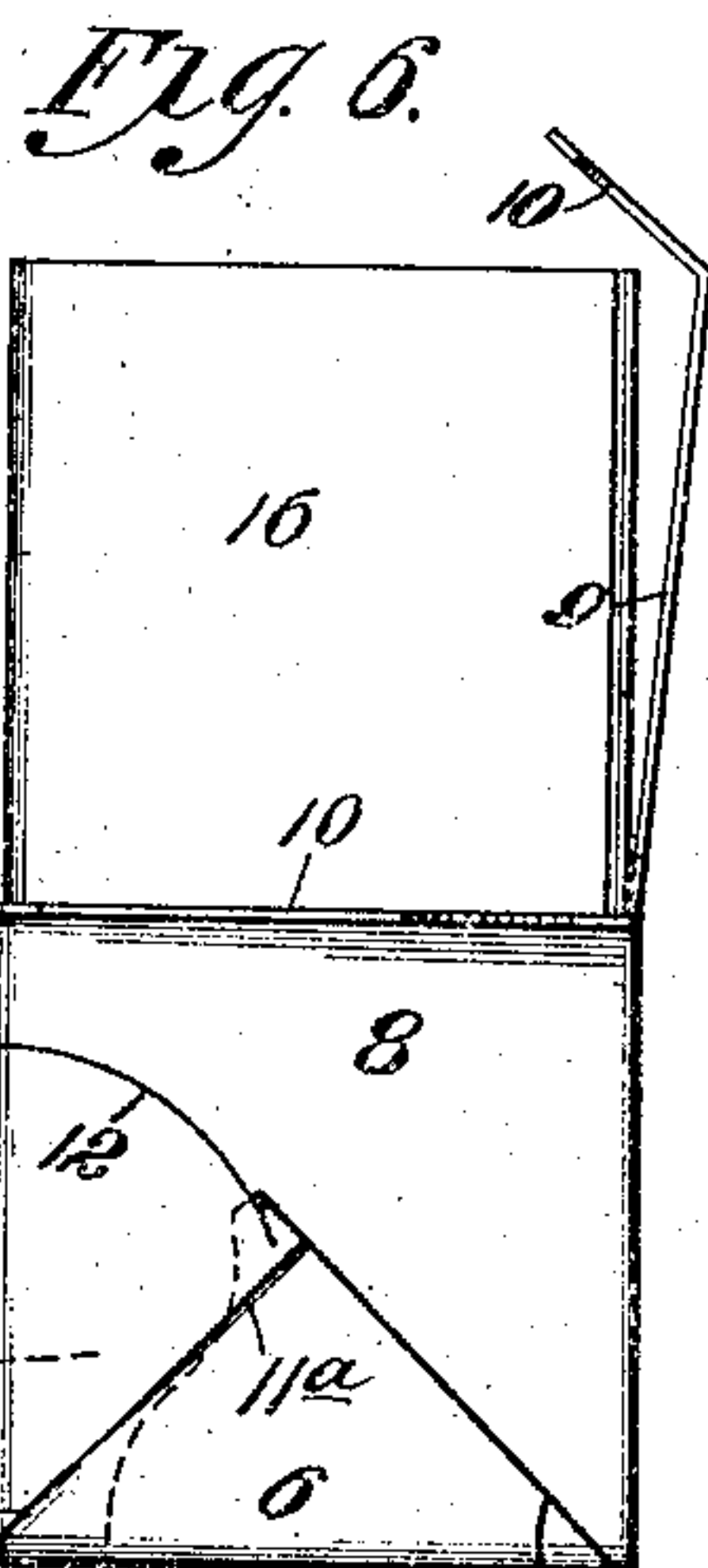
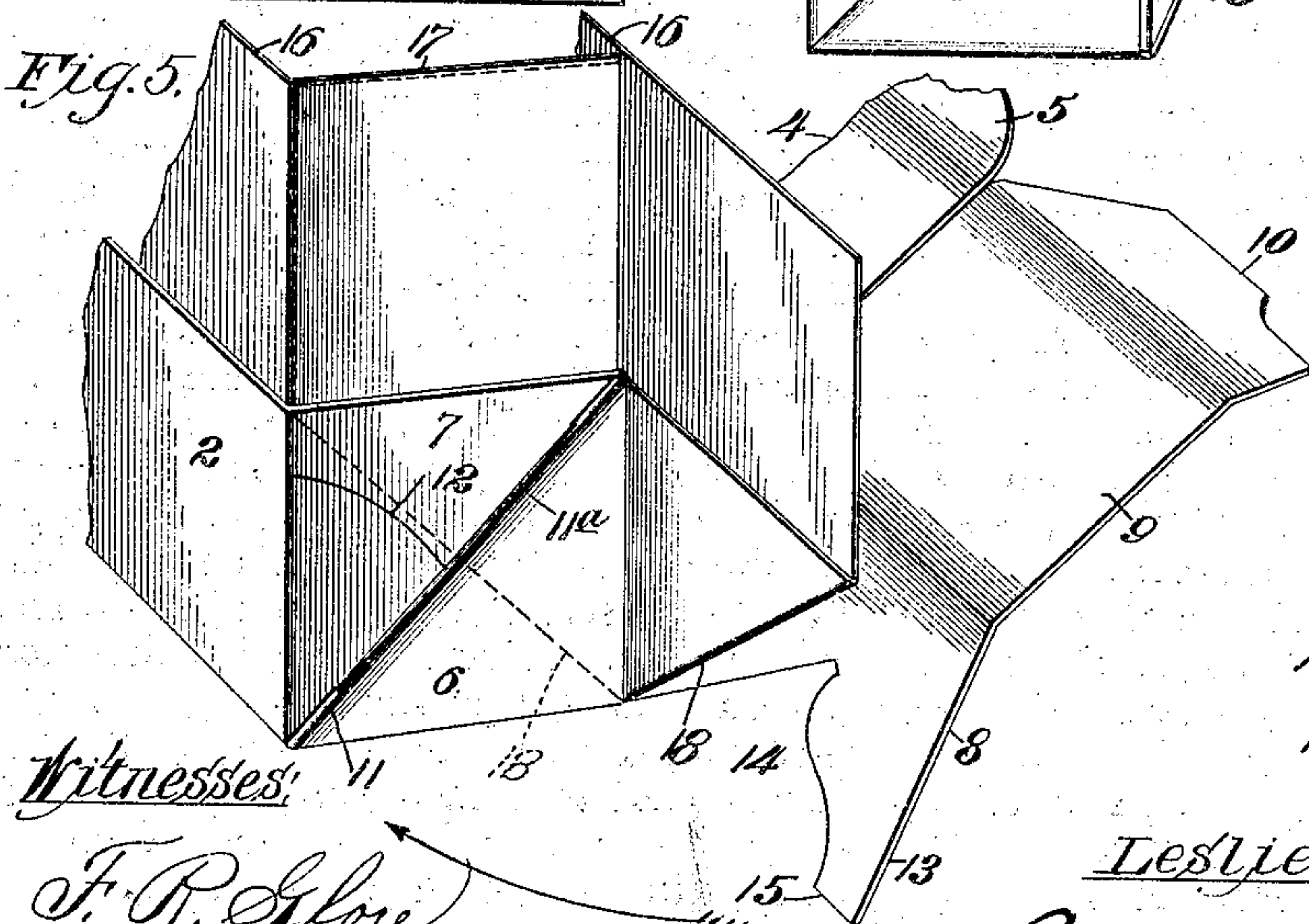


Fig. 5.



Witnesses:

F. R. Shaw
H. C. Rodgers

Inventor:

Leslie E. Lee.

By, George B. Chappin
Att'y.

UNITED STATES PATENT OFFICE.

LESLIE E. LEE, OF KANSAS CITY, MISSOURI.

INNER-SEAL CARTON.

SPECIFICATION forming part of Letters Patent No. 768,131, dated August 23, 1904.

Application filed December 23, 1903. Serial No. 186,388. (No model.)

To all whom it may concern:

Be it known that I, LESLIE E. LEE, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Inner-Seal Cartons, of which the following is a specification.

My invention relates to inner-seal cartons to contain crackers, biscuits, or other articles which it is desirable shall remain crisp and palatable for a considerable length of time; and my object is to produce a carton of this character which can be manufactured cheaply and expeditiously.

To this end the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 represents one end of the blank from which the carton is formed by suitable manipulation. Figs. 2 and 3 represent top plan views of the carton in process of formation. Fig. 4 is an end view of the carton in the process of formation as represented in Fig. 3. Fig. 5 is a perspective view of the carton as represented in Figs. 3 and 4. Fig. 6 is an end view of the carton as completed and ready to receive the crackers or other articles.

In the said drawings the blank is shown as composed of the bottom 1, the front wall 2, the rear wall 3, and the top 4, the top having the usual flap 5 to be tucked down between the upper edge of the front wall and the seal or lining of the carton, as hereinafter referred to. The blank furthermore comprises bottom extensions 6, front-wall extensions 7, back-wall extensions 8, top extensions 9, and top extension-flaps 10, these extensions being only shown at one end of the blank, as the companion extensions are duplicates. The bottom extensions 6 are each creased diagonally, as at 11, to facilitate folding, a portion of said crease-line, if desired, being cut clear through, as at 11^a, to facilitate bending. The front-wall extensions are provided with segmental slits 12 to receive, as hereinafter explained, the tongues 13, formed by recessing

the lower edges of back-wall extensions 8, as at 14, said recesses at their inner edges coinciding with the junction-point of bottom 1, back wall 3, bottom extensions 6, and back-wall extensions 8, the ends of the tongues 13 being also cut completely away from the bottom extensions 6, as at 15.

The lining or inner seal 16 for the carton is in the form of a sheet of waxed or analogous paper of a type in common use for this purpose and corresponds substantially in form and size to and rests flatly upon the blank, so that it shall be bent with the latter around the forming-block in general use, and therefore not shown.

The first operation performed by the operative with the blank and lining upon the forming-block, as explained, and with the front and rear walls properly bent upward is to bend the front-wall extensions 7 rearwardly against the ends of the block, this action incidentally folding the lining portion 17 against the rear ends of the block and bringing the front wall squarely against the face of the block. This folding action furthermore results in bending the bottom extensions 6 on the fold-line 11, so that the front halves of said extensions 6 shall lie upon the rear halves, as shown in Fig. 2. This action furthermore obviously folds that portion of the lining which corresponds to and rests upon extensions 6 between said superimposed portions of extensions 6. The next operation performed, and it is practically a part of the folding operation just described, is the bending upward of the doubled extensions 6 and the interposed lining against the outer side of the previously-folded front-wall extensions 7, this last bend being on the line of junction of bottom 1 and its extensions 6. This action incidentally bends that portion of the lining corresponding to back-wall extensions 8 on a straight line from the junction of said portions with the bottom to the upper or outer corners of said portions 8, as shown clearly in Fig. 5, the bending-line being indicated by the numeral 18. Figs. 3, 4, and 5 show the carton in that stage of its construction where the portions 6 are folded up against the end wall extensions 7 and also show clearly how that

portion of the lining which corresponds to back-wall extension 8 is folded when portions 6 are bent to vertical positions against extensions 7. The next operation is to simultaneously bend inward or toward the end of the carton the back-wall extensions 8 (see arrow, Fig. 5) and upward against the back wall of the block the back wall, as indicated by the arrow, Fig. 4. This action incidentally results in folding or bending the lining on a vertical line coincidental with the rear corners of the carton, so that the portions of the lining corresponding to back-wall extensions 8 and top extensions 9 shall fold against the extensions 6 and lining extensions 17, respectively, the bend-line 18 of the lining when thus folded assuming the position shown by dotted lines in Fig. 5. In the operation which results in folding the lining, as last explained, the tongues 13 are inserted through the segmental slits 12 of the front-wall extensions and forced down their full length—that is, until the junction-line of extensions 8 and 9 occupies a horizontal position, and therefore coincides with the upper edge of extensions 7, as shown in Fig. 6, which leaves the lining projecting up above the body of the carton and ready to be folded down upon the contents thereof, so as to completely incase them.

By reference to Fig. 2 it will be seen that the extensions of the lining corresponding to extensions 6 are folded by and pinched between said extensions when the latter are folded as shown in said figure and that when said extensions are bent up to vertical position the pinched and double portions of the lining likewise are so disposed. As a result the lining is locked and reliably secured at the ends of the carton to the latter and by being bent upward in the folded condition explained forms an air-tight connection between the ends of the carton and its contents, the connection being also air-tight between the front wall and the ends. It will also be apparent that this seal is completed by bending the extensions of the lining corresponding to extensions 8 and 9 forwardly against the ends of the carton and the rearwardly-projecting portions 17 of the lining; furthermore, that by bending and securing the portions of the lining folded on lines 18 between extensions 8 and extensions 6 and 7 an additional lock is provided to guard against dislocation of the seal. In fact, the lock is so secure that in practice the lining cannot be withdrawn without tearing it from the completed carton even when empty.

From the above description it will be ap-

parent that I have produced an inner-seal carton which is of simple and cheap construction and which can be folded from the blank with great rapidity, it being understood, of course, that the carton is closed after being filled by the usual manipulation of the extensions 9, top 4, and flaps 5 and 10.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A carton, comprising a bottom, front and back walls and a top, the front wall having end extensions extending rearward and forming the ends of the carton, and provided with slits; the bottom having extensions folded diagonally from their front to their rear corners, to form doubled triangular portions and at their ends folded vertically upward against the outer sides of said front wall end portions; extensions for the back wall, folded forwardly against the folded extensions of the bottom, and front wall, and provided with tongues extending down through the slits of said front-wall extensions; and a lining for the carton, said lining having portions corresponding to the various extensions and having that portion corresponding to the bottom extensions doubled and pinched between the doubled extensions of the bottom and folded up between the latter against the front-wall extensions, and having that portion corresponding to the back-wall extensions doubled and folded forwardly with said back-wall extensions, against said folded bottom and front-wall extensions and between the latter and said back-wall extensions.

2. A carton, comprising a bottom, front and back walls and a top; end extensions for the front walls and provided with slits; end extensions for the back walls and provided with tongues engaging said slits, and end extensions for the bottom scored to fold diagonally from their front to their rear corners on lines 11, to form doubled triangular portions to be folded upward and occupy a vertical position, and with front and back wall extensions to form the ends of the carton, and a lining for the carton, said lining having portions corresponding to the various extensions and having the portions corresponding to each bottom extension doubled and pinched between the doubled extensions of the bottom.

In testimony whereof I affix my signature in the presence of two witnesses.

LESLIE E. LEE.

Witnesses:

LORING W. LEE,
G. Y. THORPE.