No. 704,549. Patented July 15, 1902.

M. KLEIN.

SAFETY BOX.

(Application filed June 20, 1901.)

(No Model.)

Fig. 1.

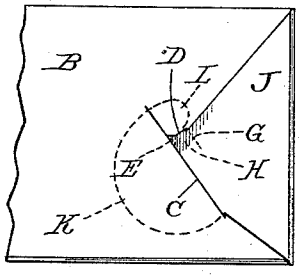


Fig. 2.

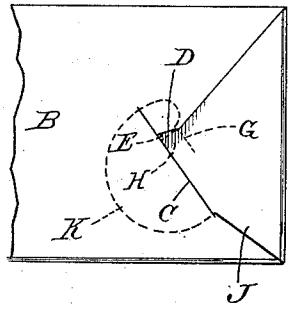


Fig. 3.

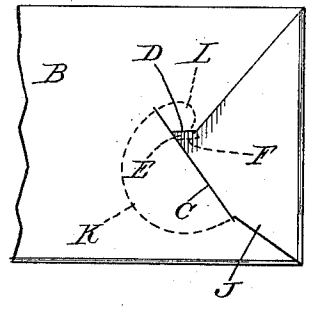


Fig. 4.

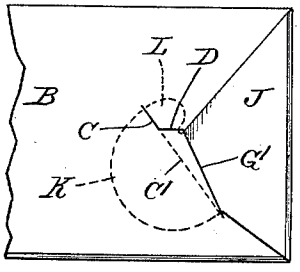


Fig. 5.

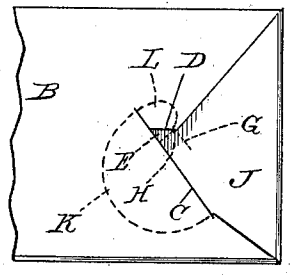


Fig. 6.

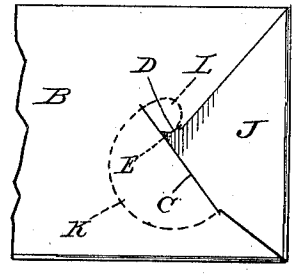
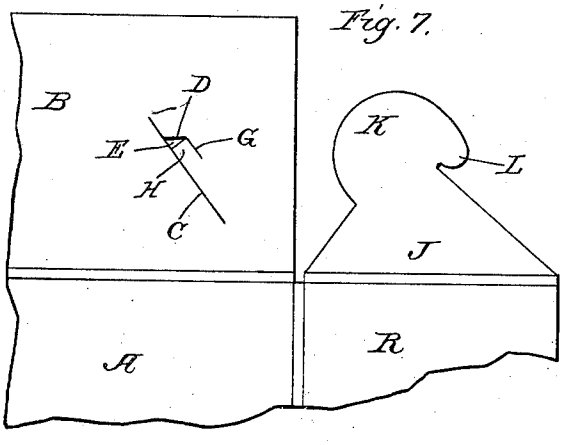


Fig. 7.



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by Parker & Carter
his Atty's.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MOSES KLEIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO AMERICAN FOLDING BOX COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SAFETY-BOX.

SPECIFICATION forming part of Letters Patent No. 704,549, dated July 15, 1902.

Application filed June 20, 1901. Serial No. 65,243. (No model.)

To all whom it may concern:

Be it known that I, MOSES KLEIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Safety-Boxes, of which the following is a specification.

My invention relates to folding boxes which are intended to be made in the form of blanks or flat sheets properly cut and fitted, so that the parts can then be quickly folded into proper position and locked together and so that such box when completed will be strengthened and stayed.

It is a particular object of my invention to provide a locking device which shall constitute a permanent lock of such a nature that the portions of the material of which the box is composed are interlocked even when the projecting lip sometimes used is torn away; and a further particular object of my invention is to provide suitable strengthening reinforcement-pieces.

Figure 1 is a view of a folded corner of a box containing my improvement with parts shown in dotted lines. Fig. 2 is a modification of same. Figs. 3 to 6, inclusive, are further modifications of the same. Fig. 7 is a plan view of the corner portion of a box.

Like parts are indicated by the same letter in all the figures.

It will be understood, of course, that the several corners of the box should be treated in the same manner; but I have only shown one corner, because that is sufficient for the purposes of illustration.

A is the bottom of the box, B the side, and R the end. In the side of the box I form a slot, preferably diagonal, which slot is indicated in the various figures by the letter C. In Fig. 4 this slot may be looked upon as an interrupted slot, the part C′ (indicated by dotted lines) being theoretically a part of said slot. This is used as an illustration of the fact that the precise form of the slot may be considerably varied. Associated with this slot is a lateral cut, (indicated in the several drawings by the letter D,) and this lateral cut may be provided with the open mouth, as indicated at E, such openings being of various depths, sizes, and shapes, or there may be two such cuts, as indicated by D F in Fig. 3. There may also be a return incision in the material of the box, as at G, to form the tongue H. This is not essential in every case. In Fig. 4 the construction is modified, for, as previously suggested, the slot C is not cut through at C′ and the return incision G is prolonged, as indicated at G′. The operation of the device, however, is very similar to that of the several modifications.

Projecting from the end piece of the box is the enlargement J, preferably somewhat triangular in shape, with the head K, adapted to pass through the slot C, and the lip L, adapted to engage the tongue H or to take under the fabric of the side of the box in a case where such tongue is not formed—as, for example, in the constructions shown in Figs. 3 and 4. In devices of this character it is evident that the length of the slot must be greater than the width of the material at the neck or section back of the head. In other words, the slot must be big enough to receive the head and in effect small enough to grasp the part of the end of the box immediately back of the head and hold it in engagement with the side, so as to make a securely-locked corner-fastening.

The common practice in folding boxes having corner-fastenings is to rely upon a lip like the lip L, which is intended to engage some portion of the side of the box and hold the parts together. It commonly occurs, however, that such lip is torn away, and in the ordinary forms of boxes there is therefore no further attachment, and the parts are free to escape one from the other. Now in my device it will be observed that when the parts are interlocked, as shown in Fig. 1, the lip L does in fact lie under a portion of the side of the box; but the relation is such that if the lip be torn away the parts still tend to remain in engagement. For example, if all that portion of the lip L indicated in dotted lines in Fig. 1 be torn away still the parts are interlocked.

I have spoken of my invention as being realized in slots and parts connected with ends and sides; but of course these terms will be understood to have been broadly used, as the interlocking parts can be variously located,

it being only necessary that they be so located as to hold the box together at the corner. Thus by using the term "corner" I mean to include all constructions that may have any such relation to the corner of the box as to hold the parts together at that point.

I claim—

1. In a safety-box, a corner-fastening consisting of a diagonally-arranged slot, having a lateral slit-like offset, on one part of the box, with a projecting part on the overlapping part of the box, adapted to enter such diagonal slot and provided with a lip shaped so as to enter and engage the slit-like offset, the lip underlying the fabric of the box between the lower end of the slot and the offset.

2. In a safety-box, a corner-fastening consisting of a diagonally-arranged slot, having a lateral slit-like offset, on one part of the box, with a projecting part on the overlapping part of the box, adapted to enter such diagonal slot and provided with a lip shaped so as to engage the slit-like offset, and a return incision to form a tongue, the lip underlying the fabric of the box between the lower end of the slot and the offset.

3. In a safety-box, a corner-fastening consisting of a slot, having a lateral slit-like offset, on one portion of the box, with a projecting part having a lip on the overlapping portion of the box and shaped so as to enter such slot and enter and engage the slit-like offset, and a return incision to form a tongue, the lip underlying the fabric of the box between the lower end of the slot and the slit-like offset.

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Witnesses:
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