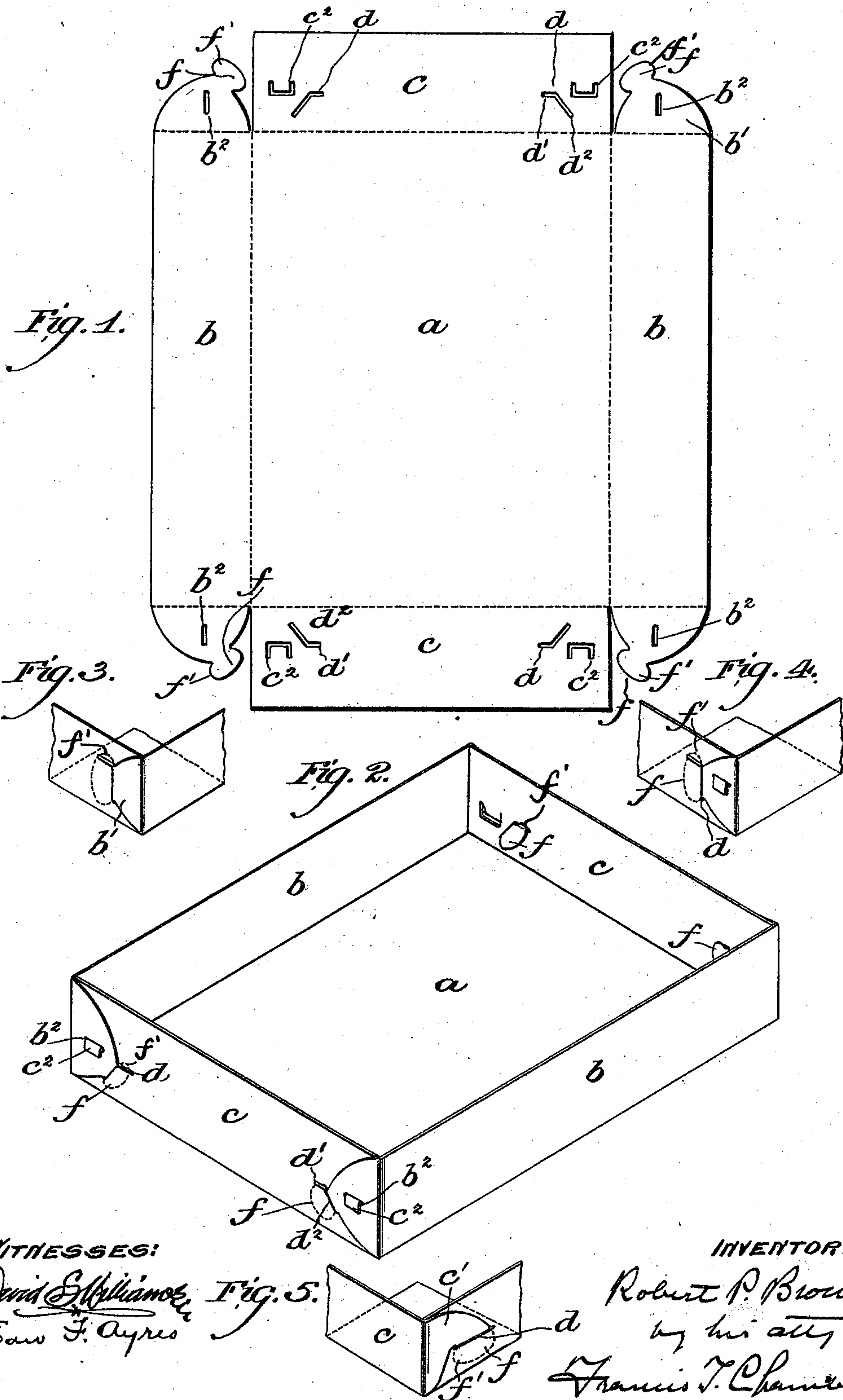


(No Model.)

R. P. BROWN.
PAPER BOX.

No. 504,075.

Patented Aug. 29, 1893.



WITNESSES:

David Williams
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INVENTOR:

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UNITED STATES PATENT OFFICE.

ROBERT P. BROWN, OF PHILADELPHIA, PENNSYLVANIA.

PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 504,075, dated August 29, 1893.

Application filed April 29, 1893. Serial No. 472,291. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. BROWN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a certain new and useful Improvement in Paper Boxes, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to paper boxes, especially to what are known as knock down boxes, which are so made that the box and also the cover can be shipped or transported in a flat condition and made up into a box when required.

My invention consists in so shaping the lock as to hold two parts together more securely to prevent the accidental breaking of the box.

My invention is best described in connection with the drawings in which it is illustrated and in which—

Figure 1 is a plan view of a blank from which my improved box can be formed. Fig. 2 is a perspective view of the box made up. Fig. 3 is a view of one corner of a box showing a modified form of lock. Fig. 4 is a view of a corner of a box showing a lock similar to the lock shown in Fig. 2 but having a cut formed parallel to the end of the box; and Fig. 5 is another modification of the form of lock.

In the drawings *a* represents the bottom, *b* and *c* the side and ends respectively; preferably in the ends I make cuts as shown at *d d'* and *c² c²* and I form at the ends of the sides *b* extending flaps as *b'* and I form locks as *f* having a projecting ear *f'*; and in these flaps I also arrange a cut as shown at *b²*. The cut *d* in the end *c* of the box is preferably formed of two parts *d' d²* which are made as shown in Fig. 1 at an obtuse angle to each other and as shown in Fig. 4 at a right angle to each other. The cut *c²* forms a tongue similar to the one shown and claimed in the patent granted to me on December 13, 1887, No. 374,886; this tongue being adapted to enter the slot *b²* in the same manner as the tongue in my patent referred to. It will of course be evident that while I have shown the lock as formed with flaps extending from the sides of the box and having locks to fit into cuts made in the end thereof, the flap and lock could be

on the ends of the box and the slots into which the lock fits on the sides.

In making up the box, the lock is pushed into the cut *d* and projecting ear *f'* springs inside behind the material of the end just over the part *d'* of the cut *d*; the tongue *c²* is then pushed into the slot *b²* and this locking device effectually secures the side and end of the box together. In Fig. 4 the slot *d* is shown with its two parts at right angles to each other; in Fig. 3 a construction is shown similar to that shown in Fig. 4 with the exception that the tongue *c²* is omitted. In Fig. 5 I have shown a construction whereby a straight cut could be used instead of the cut formed of two cuts at an angle to each other, and the lock *f* on a flap as *c'* has its projecting ear at its inner side as shown.

While I have described *d* and *b²* as cuts it is much more convenient to form these by stamping out a portion of the material; though they could be made as cuts if desired. It is of course obvious that the covers for this box can be made in the same way.

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

1. A paper box formed of a single piece of material and having flaps *b'* extending from its sides, locks *f* having a projecting ear *f'* made with said flaps said box having a continuous cut *d* formed in the ends of the box into which said lock is adapted to fit and so that the ear *f'* of the lock *f* will be caught and held behind the material of the box at one end of the cut *d*.

2. A paper box formed of a single piece of material and having flaps *b'* extending from its sides, locks *f* with projecting ears *f'* formed with said flaps and a continuous cut *d* formed of two parts *d' d²* at an angle to each other into which the lock *f* is adapted to fit, in such a manner that the ear *f'* is caught behind and held by the material of the end of the box over the part *d'* of the cut *d*.

3. A box formed of a single piece of material and having flaps *b'* with cuts as *b²* therein and locks *f* with ears *f'* thereon and ends *c* with cuts *d* formed of two parts *d' d²* at an angle to each other as described and a tongue *c²* adapted to fit in the cuts *b²*.

4. A paper box formed of a single piece of

material and having its sides b formed with
flaps b' having a lock f with a projecting ear
 f' thereon and a cut b^2 therein, and its ends
formed with a tongue as c^2 and a cut d formed
5 of two parts d' d^2 at an angle to each other
whereby when the box is set up the ear f' will
engage with and be held by the material of
the end of the box over the part d' of the cut
 d and the tongue c^2 will project through the
10 cut b^2 .

5. A paper box formed of a single piece of
material, and having flaps b' extending from
its sides with locks f having ears f' formed

with said flaps, cuts d formed in the end of
the box into which the locks f are adapted to 15
fit, said box having also a cut b^2 and tongue
 c^2 formed in the ends and sides respectively,
whereby, when the box is set up the locks f
will engage with the cuts d and the tongues
 c^2 will fit in the cuts b^2 substantially as speci- 20
fied.

ROBERT P. BROWN.

Witnesses:

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EDW. F. AYRES.