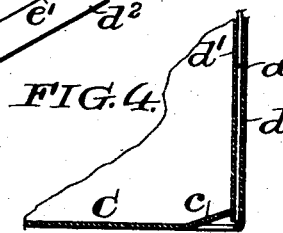
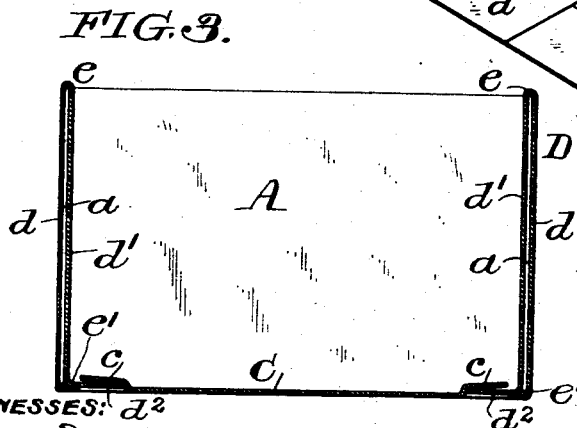
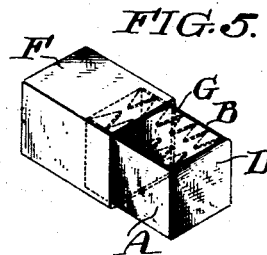
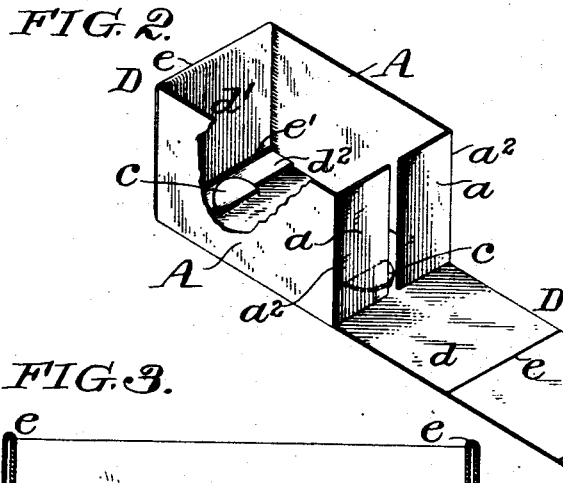
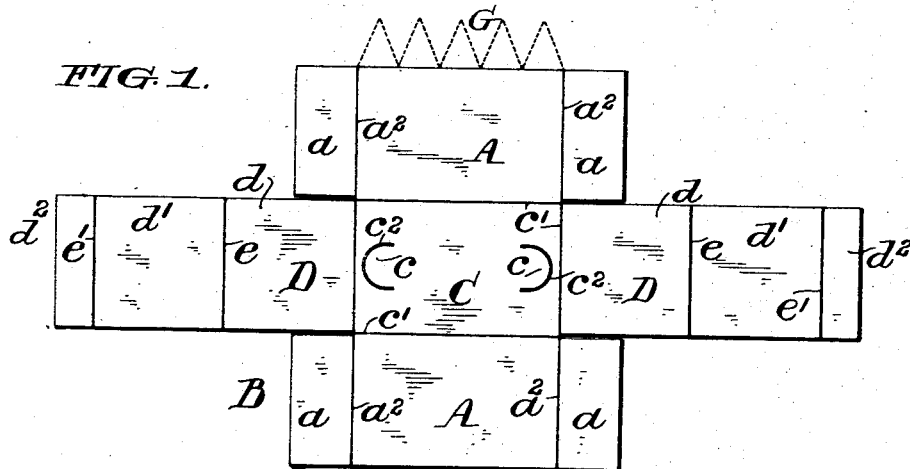


(No Model.)

R. P. BROWN.
PAPER BOX.

No. 525,585.

Patented Sept. 4, 1894.



WITNESSES: *d²*
Henry D. ...
Edw. F. Ayres.

INVENTOR:
Robert P. Brown
by his atty.
Francis J. Chambers.

UNITED STATES PATENT OFFICE.

ROBERT P. BROWN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HIMSELF AND EDWARD L. BAILEY, OF SAME PLACE.

PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 525,585, dated September 4, 1894.

Application filed May 23, 1894. Serial No. 512,170. (No model.)

To all whom it may concern:

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

My invention relates to knock-down paper or cardboard boxes, and has for its main object to provide a box which, when set up, will be very firm and stiff.

My invention is best explained in connection with the accompanying drawings, in which—

Figure 1 is a view of the blank, which, when set up, forms the box. Fig. 2 is a perspective view of the box partly set up; a portion of one side being torn away to show the mode of fastening the ends. Fig. 3 is a transverse vertical section of the box when completely set up. Fig. 4 is a detail view of a modification, showing how the locking flap at the extremity of the end pieces may be dispensed with; and Fig. 5 shows a completed box with one form of cover therefor.

B is the blank, from which the improved box is constructed, and consists of a bottom piece C, and side and end flaps A A D D. The bottom piece C is provided with tongues *c c* formed by cuts *c² c²*; these tongues are formed near the ends of the bottom piece and are designed to lock the end pieces, as will be explained. The side-flaps A A have wings *a a*, extending from each extremity, as shown, which wings are adapted to form part of the ends of the box. The end-flaps D D consist, as shown in Figs. 1, 2 and 3, of portions *d d*, *d' d'* and *d² d²*, score marks *e e'* being preferably provided to cause the material to bend in the proper places. The parts *d d* are adapted to fold up outside of the wings *a a*; when these are folded, substantially as shown in Fig. 2, the parts *d d'* fold inside of the wings *a a* and the locking flaps *d² d²* are then caught under the tongues *c c* locking the whole end in place.

It will be noted that, as the wings *a a* are folded under the end flaps D D, the sides A A are held in position thereby, and also that

there are three thicknesses of material at the ends, thus making a very stiff box; one of the thicknesses of the material, namely the flaps *d' d'* fits inside the box and further stiffens it.

In some cases it may not be necessary to provide the tongues *c c*, but simply bend down the flaps *d' d'* inside the box. I prefer, however, to provide these tongues *c c*, even if the locking flaps *d² d²* are omitted, since, as seen in Fig. 4, if the tongues *c c* are arranged at the extremities of the bottom C, they will engage with and hold in place the parts *d' d'* of the end flaps in the manner shown in Fig. 4. Suitable score marks, such as are indicated at *a² c'*, may, of course, be provided where necessary.

I also contemplate, in some cases, to form flaps G integral with the sides A A, as shown in dotted lines in Fig. 1; these, when folded down as shown in Fig. 5, not only serve to give the box an ornamental appearance, but also serve to prevent small articles, such, for instance, as matches, if the boxes are used to hold these, from readily falling out, taking the place of the independent piece of paper or cardboard often used for that purpose.

In Fig. 5 I have shown the completed box provided with a slide cover F; it will, of course, be understood that any suitable cover can be employed.

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

1. A knock-down box having a bottom C with tongues *c c* formed therein, sides A provided with wings *a a* extending from both extremities of said sides, and adapted to form part of the ends of the box, and end flaps D consisting of parts *d d* adapted, when the box is set up, to fold outside of the wings *a a* and parts *d' d'* adapted to fold inside of the wings *a a* and be held in position by the tongues *c c*, all substantially as specified.

2. A knock down box having a bottom C, sides A provided with wings *a a* extending from both extremities of said sides and adapted to form part of the ends of the box, end flaps D consisting of parts *d d* adapted when the box is set up to fold outside of the wings *a a*, parts *d' d'* adapted to fold inside of the wings *a a* and locking flaps *d² d²* and

a suitable lock adapted to engage with the locking flaps $d^2 d^2$ and hold the ends in place.

3. A knock-down box having a bottom C with tongues $c c$ formed therein, sides A provided with wings $a a$ extending from both extremities of said sides and adapted to form part of the ends of the box and end flaps D consisting of parts $d d$ adapted, when the box is set up, to fold outside of the wings $a a$ and parts $d' d'$ adapted to fold inside of the wings $a a$ and flaps $d^2 d^2$ adapted to extend under the tongues $c c$, all substantially as specified, and so that firm and stiff ends will be formed from the folds $d d'$ and wings $a a$.
4. A knock-down paper box having sides A

provided with flaps G and with wings a extending from both extremities thereof and adapted to form part of the ends of the box, a bottom C having tongues $c c$, and ends D formed of parts $d d' d^2$ said parts d adapted to fold outside, and the parts d' inside of the wings $a a$ and so form the box ends and the parts $d^2 d^2$ adapted to fit under the tongues $c c$, all substantially as specified, and so that a firm and stiff box will be provided.

ROBERT P. BROWN.

Witnesses:

EDWARD F. AYRES,
D. STEWART.