(No Model.)

R. P. BROWN.

PAPER BOX.

No. 525,586. Patented Sept. 4, 1894.

FIG. 1.

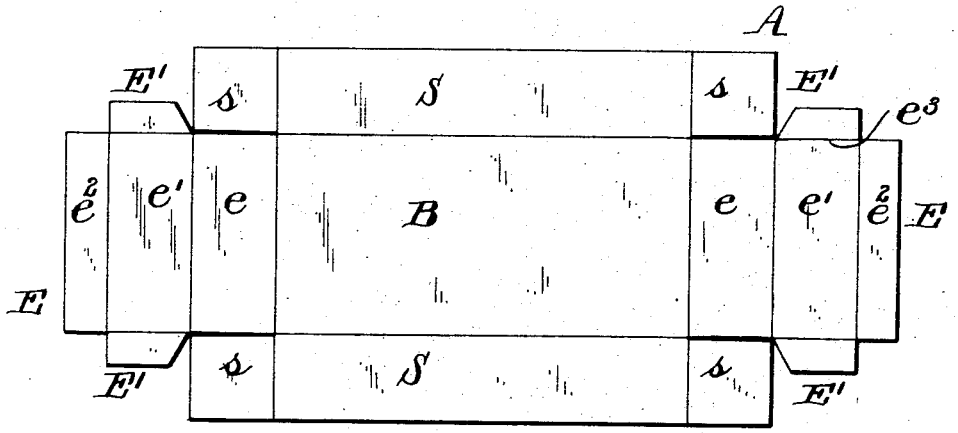


FIG. 2.

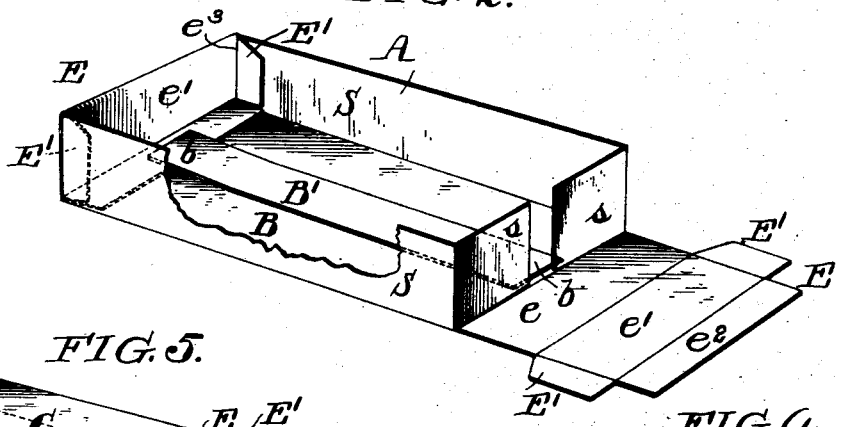


FIG. 5.

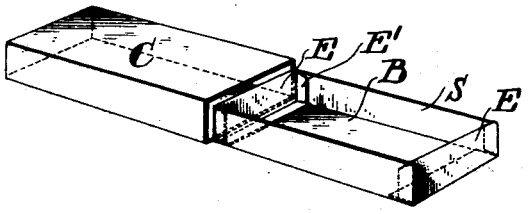


FIG. 4.

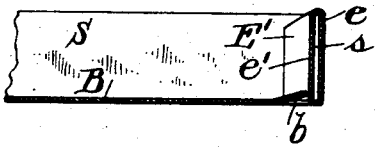
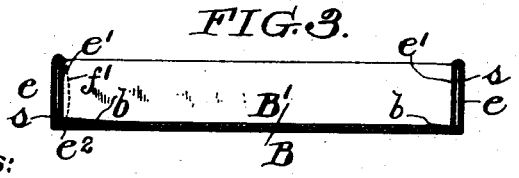


FIG. 3.



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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. 525,586, dated September 4, 1894.

Application filed June 28, 1894. Serial No. 515,910. (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 a new and useful Improvement 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 card board boxes, and has for its main object to provide a box which may be very easily set up and when set up will be very firm and stiff.

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

Figure 1 is a view of the blank from which I construct my preferred form of box. Fig. 2 is a view of a box, formed from the blank shown in Fig. 1, showing the box partly set up and with a portion of the side torn away so as to show the end. Fig. 3 is a vertical section illustrating a modified form of box. Fig. 4 is an end view in section, on an enlarged scale illustrating a slight modification of the box shown in Fig. 2, and Fig. 5 is a perspective view of a box completely set up and in position to be pushed into a telescope cover.

A is the blank from which I construct my box and consists, as shown in Fig. 1, of a bottom B, sides S S and ends E E. The sides I provide with wings *s s* extending from each extremity thereof, as shown in Figs. 1 and 2; these wings, when the box is set up, as shown in Fig. 2, are adapted to form part of the ends of the box. The ends consist of flaps *e e* which are adapted to fold outside of the wings *s s* and of flaps *e′ e′* which are adapted to fold inside the wings *s s*. In the construction shown in Fig. 1 I provide these flaps *e′ e′* with wings E′ E′ which project from their sides substantially as shown; these wings E′ E′ fold against the sides S S of the box, as shown in Fig. 2. I also preferably provide additional flaps e^2 e^2 which fold against the bottom of the box and serve to further secure the ends and hold them in place. I also may in some cases provide additional locks *b b* for the ends of the box, which locks may consist, as shown in Fig. 2, of a strip of card board B′ whose ends abut against the end flaps *e′ e′* and hold them in position, or fold over the flaps e^2 if these are employed, or I may form the locks by cutting tongues in the material of the bottom of the box. The piece B′, if used, may be broad enough to form a false bottom, or may be simply a narrow strip, and, in the latter case, I prefer to secure it to the bottom of the box, as by pasting it will be noted that when a piece of cardboard is employed it not only serves as a lock but stiffens the box.

I may dispense with the wings E′ and construct the box, as shown in Fig. 3, where the strip or piece B′ is alone employed to hold the ends in position, but unless very stiff material is used I find that the flaps *e′* will bulge, as indicated in dotted lines at *f*, Fig. 3, the action of the wings is that of a brace or strut, and as they make a right angle with the flap *e′* at the bend e^3 they serve to keep this flap very neatly in position. In most cases, I prefer, however, to dispense entirely with the additional locks *b b* and depend entirely on the wings E′ E′ or these wings and the flaps e^2 e^2 to hold the ends in position; these flaps e^2 e^2, as I have indicated, may however, if it is found desirable, be dispensed with, as shown in Fig. 4.

A box constructed from a blank, similar to that shown in Fig. 1, will be found very stiff, as the ends are formed of three thicknesses of material, and very easy to set up since there are no locks to be engaged, and in practice the ends have been found to be firmly held by the wings E′ E′, which are crowded against the sides of the box, without any additional locks; such a box is shown in Fig. 5. Any sort of cover may, of course, be provided, either a cover formed in the same way or a telescope cover, as indicated at C, Fig. 5.

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 B, sides S provided with wings *s s* extending from both extremities of said sides and adapted to form part of the ends of the box, and end pieces E consisting of flaps *e e* adapted, when the box is set up, to fold outside of the wings *s s*, flaps *e′ e′* adapted to fold inside of the wings *s s*, and wings E′ E′ projecting from

each side of the flaps e' e' and adapted to fold against the sides S S of the box, substantially as shown.

2. A knock down box having a bottom B, sides S provided with wings *s s* extending from both extremities of said sides and adapted to form part of the ends of the box, and end pieces E consisting of flaps *e e*, adapted when the box is set up, to fold outside of the wings *s s*, flaps e' e' adapted to fold inside of the wings *s s*, wings E′ E′ projecting from each side of the flaps e' e' and adapted to fold against the sides S S of the box, substantially as shown, and flaps e^2 e^2 adapted to fold against the bottom of the box.

3. A knock down box having a bottom B, sides S provided with wings *s s* extending from both extremities of said sides and adapted to form part of the ends of the box, end pieces E consisting of flaps *e e* adapted, when the box is set up, to fold outside of the wings *s s*, flaps e' e' adapted to fold inside of the wings *s s* wings E′ E′ projecting from each side of the flaps e' e' and adapted to fold against the sides S S of the box, substantially as shown, and locks *b b* adapted to hold the flaps e' e' in place.

4. A knock down box having a bottom B, sides S provided with wings *s s* extending from both extremities of said sides and adapted to form part of the ends of the box, end pieces E consisting of flaps *e e* adapted, when the box is set up, to fold outside of the wings *s s*, flaps e' e' adapted to fold inside of the wings *s s*, wings E′ E′ projecting from each side of the flaps e' e' and adapted to fold against the sides S S of the box, substantially as shown, and flaps e^2 e^2 adapted to hold against the bottom of the box, and locks *b b* adapted to project over the flaps e^2 e^2 and hold the ends in place.

5. A knock down box having a bottom B, sides S provided with wings *s s* extending from both extremities of said sides and adapted to form part of the ends of the box, end pieces E consisting of flaps *e e* adapted, when the box is set up, to fold outside of the wings *s s*, flaps e' e' adapted to fold inside of the wings *s s* and a piece of card board B′ whose ends form locks *b b* adapted to hold the ends in place.

ROBERT P. BROWN.

Witnesses:
ALF. H. FABER,
EDW. F. AYRES.