R. H. FILMER

CONSTRUCTION OF FOLDING BOXES MADE OF CARDBOARD, &c.

No. 561,508.

Patented June 2, 1896.

Fig.1.

est .					•
	c^2	c^5	c ⁵	c^2	
c^{6}		c^4	E7		c6
	B ²	C	<i>c</i> 3	32	
-61	65			35	76
	b4	Z ³	3	<i>6</i> ⁴	
b ¹	<i>b</i>	a		В	57
7					6-
6					6
	b^{5}	\mathcal{C}^{3}		<i>b</i> ⁵	
	b ²	\boldsymbol{c}	c4	B ²	
Co_		c ⁵	c ⁵		C
	c^{z}	đ		c^{Z}	
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By Amight Bross.

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Fig. 2.

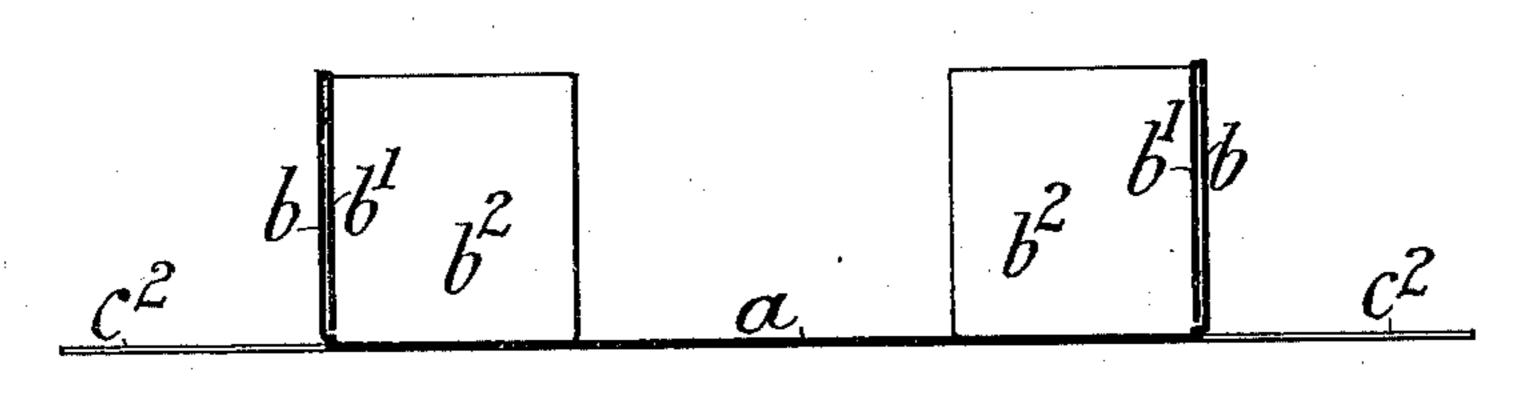
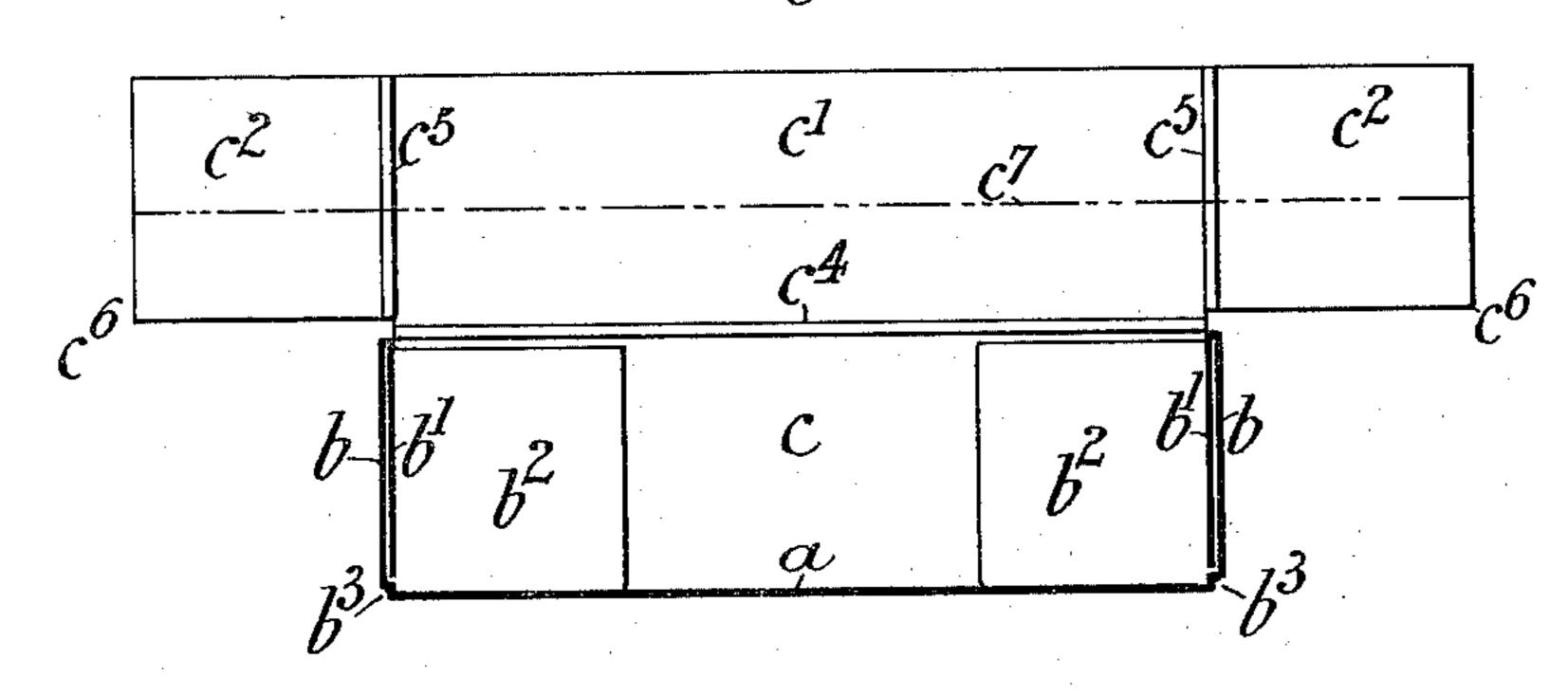


Fig.3.



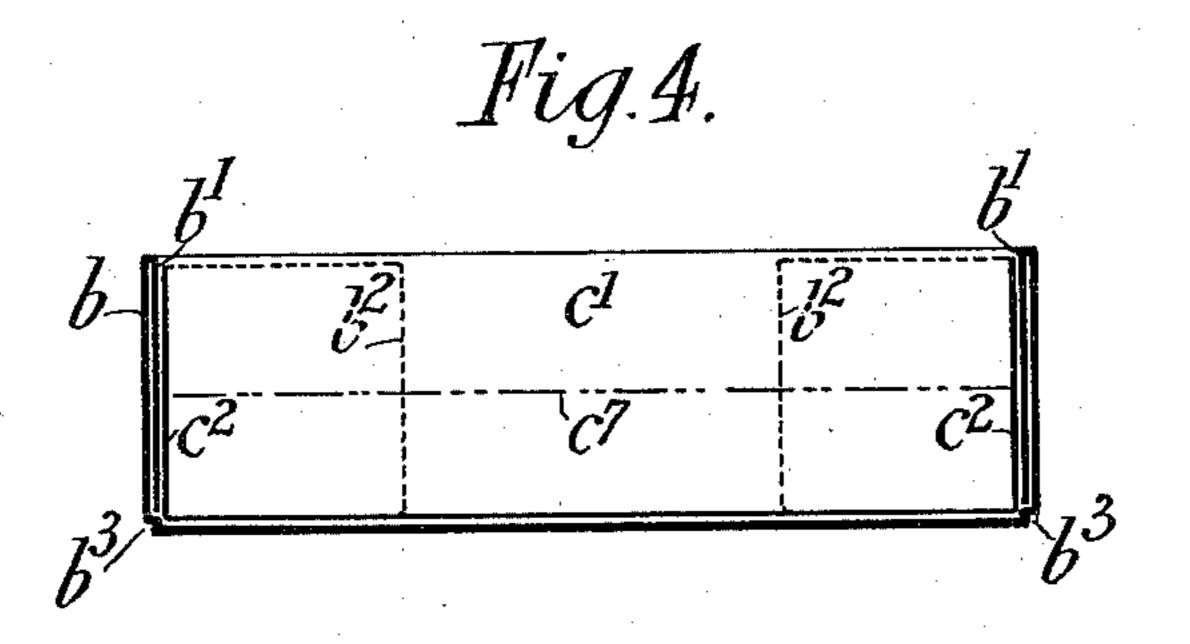
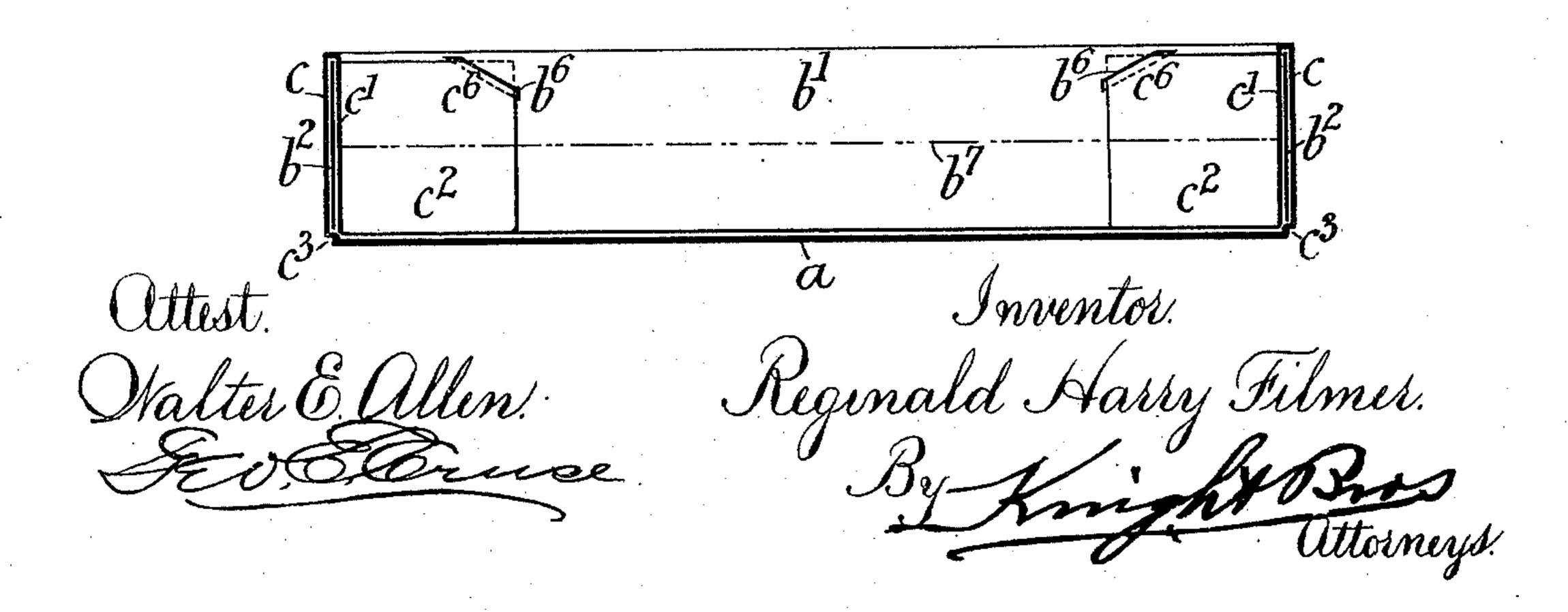


Fig.5.



United States Patent Office.

REGINALD H. FILMER, OF LONDON, ENGLAND.

CONSTRUCTION OF FOLDING BOXES MADE OF CARDBOARD, &c.

SPECIFICATION forming part of Letters Patent No. 561,508, dated June 2, 1896.

Application filed May 11, 1895. Serial No. 548,976. (No model.)

To all whom it may concern:

Be it known that I, REGINALD HARRY FIL-MER, a subject of the Queen of Great Britain, residing at London, England, have invented 5 certain new and useful Improvements in the Construction of Folding Boxes Made of Cardboard, Leather-Board, and Such Like Materials, of which the following is a specification.

The invention has for its object an im-10 proved construction of folding box of cardboard, &c., whereby great strength is obtained on the sides and angles thereof by very simple means.

My improvement consists in novel features 15 of construction hereinafter described and claimed.

My invention is especially applicable to somewhat large-sized boxes, and is represented in the accompanying drawings, in 20 which—

Figure 1 is a plan view of a piece of paper or "blank" cut to the shape required to produce my improved box-body and showing the lines on which it is "bent," scored, or grooved 25 to facilitate the folding thereof. Figs. 2 and 3 are cross-sections showing the same in two stages of the folding to form a box-body; and Figs. 4 and 5 are cross-sections, drawn at right angles to each other, of a finished box-30 body. The lid for such a box-body is made in a similar manner to that of the body. The broken lines in Figs. 1 to 5 show a slight modification.

In all the figures like parts are indicated 35 by similar letters of reference.

In the blank (see Fig. 1) the central rectangular part a forms the bottom of the box, $b\,b'\,b\,b'$ the longer sides, and $c\,c'\,c\,c'$ the shorter sides or ends. The parts b b have at each 40 end a short flap b^2 , and the parts c' c' have at | unequal length, such parts may be of like each end a short flap c^2 .

The parts b b and cc can be folded in relation to the bottom a respectively on the lines $b^3 c^3$; the parts b' c' can be folded in relation 45 to the parts b c respectively on the lines $b^4 c^4$; the flaps b^2 can be folded in relation to the parts b on the lines b^5 , and the flaps c^2 can be folded in relation to the parts c' on the lines c^5 .

In proceeding to fold the blank into a boxbody I fold the parts b', along the lines b^4 , 50 over onto the parts b, fold or turn up the said juxtaposed parts b b', on the lines b^3 , at right angles to the bottom a, (see Fig. 2,) and fold the flaps b^2 inward, on the lines b^5 , at right angles to the parts b b', as also shown in 55 Fig. 2. I then turn or fold up the parts c c'at one end of the blank on the line c^3 , at right angles to the bottom a, (see Fig. 3,) and fold the flaps c^2 outward, on the lines c^5 , at right angles to the part c'. The part c' and parts 60 c^2 , folded as above, are then folded inward, on the line c^4 , so that the part c' shall be inside the box and inclose the flaps b^2 between it and the part c, while the flaps c^2 will rest against the end portions of the parts b', (see 65 Fig. 4,) and can be fixed in position by tucking their corners c^6 through the inclined slots b^6 , formed in such parts b'. (See Fig. 5.) The parts $c c' c^2$ at the other end of the box are treated in a similar manner, thereby finish- 70 ing the box-body.

As shown in the drawings by the full lines, the parts b' c' c^2 are broad enough to extend from top to bottom of the sides of the box, but, if desired, such parts may be made nar- 75 rower and terminate at the dotted lines $b^7 c^7$, or at other desired width.

By the construction of parts herein described the connection of the sides and ends of the box is made very strong and rigid, as 80 the flaps b^2 are held firmly between the parts $c\ c'$ and cannot shift so long as the parts c'are held securely in position by the flaps c^2 , connected with the parts b or b'.

It will be understood that the terms "sides" 85 and "ends" as used above are convertible the one for the other, and, instead of being of length the one to the other.

Having thus described my invention, the 90 following is what I claim as new therein and desire to secure by Letters Patent:

1. A blank for a folding box comprising a central part having inner side portions, each formed with short end flaps, outer side por- 95 tions, each formed with inclined slots, inner

formed with short side flaps; substantially as described.

2. A box comprising a body or lid con-5 structed with vertical outer sides, each formed with short end flaps, vertical inner sides, each formed with inclined slots, vertical outer ends, and vertical inner ends lapping over the end

end portions and outer end portions, each | flaps and each formed with short side flaps adapted to engage in the inclined slots of the 10 inner sides; substantially as described.

R. H. FILMER.

Witnesses:

B. J. B. MILLS, CLAUDE K. MILLS.