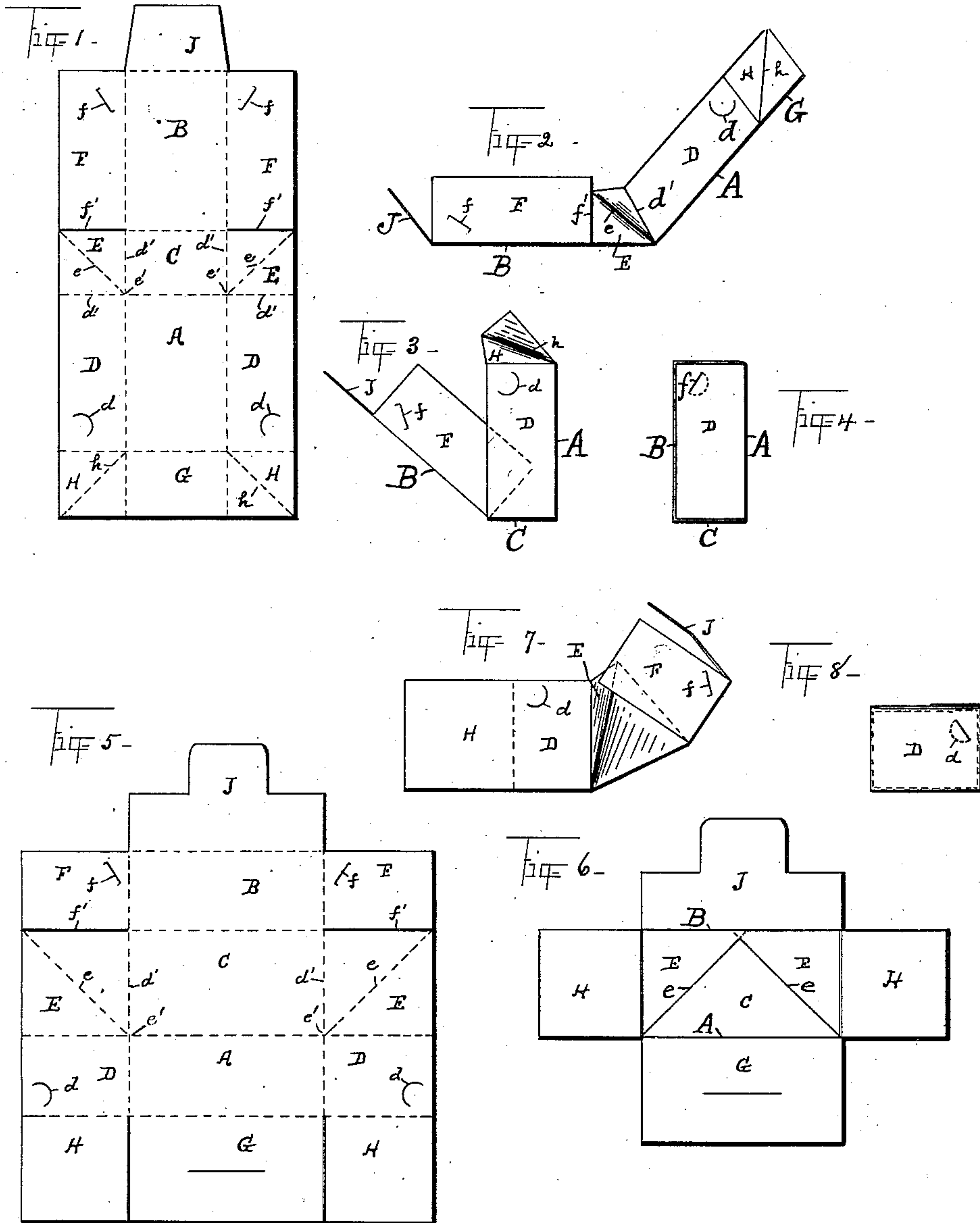


(No Model.)

A. C. LOHMANN.  
KNOCKDOWN PAPER BOX.

No. 432,885.

Patented July 22, 1890.



WITNESSES,  
N. H. Fay  
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INVENTOR.  
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# UNITED STATES PATENT OFFICE.

ALBERT C. LOHMANN, OF AKRON, OHIO.

## KNOCKDOWN PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 432,885, dated July 22, 1890.

Application filed October 7, 1889. Serial No. 326,221. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT C. LOHMANN, a citizen of the United States, and a resident of Akron, county of Summit, and State of Ohio, have invented certain new and useful Improvements in Knockdown Paper Boxes, of which the following is a specification, the principle of the invention being herein explained, and the best mode in which I have contemplated applying that principle, so as to distinguish it from other inventions.

My invention relates to knockdown paper boxes; and it consists of an improved manner of forming the bottom, whereby the corner-fold flap of said bottom when the box is in set-up and complete form is held in folded position by engagement with one of the side panels, which is formed free from said corner-fold flap.

Referring to the drawings, Figure 1 is a plan view of one form of box-blank. Fig. 2 is a side view of the box in partly-closed position. Fig. 3 is a second side view of the box in position more nearly closed than that shown in the previous figure. Fig. 4 is a side view of a complete box. Fig. 5 is a plan view of another form of blank. Fig. 6 is a plan view of this second form of box in partly-closed position. Fig. 7 is a side view of the second form of box in partly-closed position. Fig. 8 is a side view of the complete box of the form shown in the two preceding figures.

A and B are, respectively, the front and rear panels of the box.

C is the bottom panel, and D the two primary side panels, which have formed integral with them, respectively, and also with the opposite sides of bottom panel C, bottom corner-fold flaps E. Said bottom corner-fold flaps have a diagonal score *e* that extends from the inner common corner *e'* of said primary side panels. Said bottom panel and said corner-fold flaps outwardly to the diagonally-opposite free corner of said fold-flaps. Secondary side panels F are respectively formed free from said corner-fold flaps but integral with rear panel B. Top-fold panel G is formed integral with front panel A, while top corner-fold flaps H are integral with panel G and side panels D. Said fold-flaps H are each provided with diagonal scores *h*, that extend

outwardly from the corner point of juncture of said fold-flap H with panel G and side panels D. Slits *f* are formed in the secondary side panels F and tongues *d*, formed in the primary side panels D, respectively, fit into said slits and serve to hold said primary and secondary side panels in close engagement with each other when the box is in closed position. A top tuck-fold J is formed integral with rear panel B. The transverse width of side panels D is substantially equal to the width of bottom corner-fold flap E, and also with the width of side flaps F, whereby the body portion of the blank is rectangular in form and little or no paper is wasted in cutting out the same. Panels F are respectively separated from their adjacent bottom corner-fold flaps E by a cut, while the remaining panels are defined by the usual scores, whereby they may be readily bent or folded into position when it is desired to set up the box in complete form.

To set up the box shown in Figs. 1, 2, 3, and 4 in its complete form bottom corner-fold flaps E are folded upon themselves along the line of the score *e*, as shown in Fig. 2, until the adjacent ends *d'* of primary side panel D and bottom panel C are in close proximity with each other, being separated merely by the folded thickness of fold-flap E. The secondary side panels F are then folded inwardly until they are in engagement with the inner faces of primary side panels D, whereupon tongues *d* are interlocked with the walls of slits *f*. When in this position, the ends *f'* of the panels F are in engagement with and have edge bearing against the folded corner-flaps E along the line of scores *d'*, and by their bearing prevent said fold-flaps from unfolding. Thus a tight solid bottom is formed, and all liability of leakage of the box contents obviated.

Referring to the form shown in Figs. 5, 6, 7, and 8, the proportions are varied from the form shown in Fig. 1; but in all essentials the forms are the same. Fold-flaps H are formed plain without scores, and top tuck-flap J is provided with a tongue.

The proportions of panels and flaps may be varied without departing from the principle of my invention.



The foregoing description and accompanying drawings set forth in detail forms in embodiment of my invention; but change may be made therein, provided the principles of formation respectively recited in the following claim are employed.

I therefore particularly point out and distinctly claim as my invention—

10 In a knockdown paper box, the combination of panels A B C, side panels D and F, and corner-fold flaps E, provided with diagonal fold scores *e*, and respectively formed integral with panels D and C, and free from

panels F, the end of said panels F, respectively, engaging with and having edge bearing on said corner-fold flaps along the line of junction of said corner-fold flaps with said panels D. 15

In testimony that I claim the foregoing to be my invention I have hereunto set my hand 20 this 2d day of October, A. D. 1889.

A. C. LOHMANN.

Witnesses:

J. B. FAY,  
E. E. PATE.