No. 674,220. Patented May 14, 1901.

J. A. SCOTT.

PAPER BOX.

(Application filed Dec. 13, 1900.)

(No Model.)

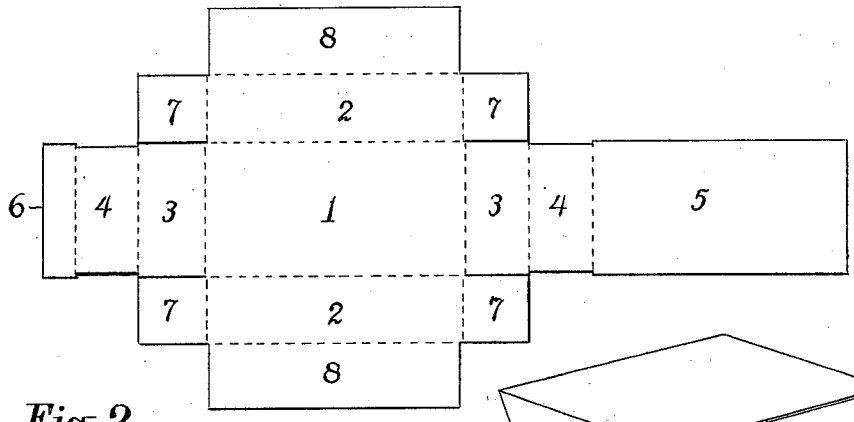

Fig. 2

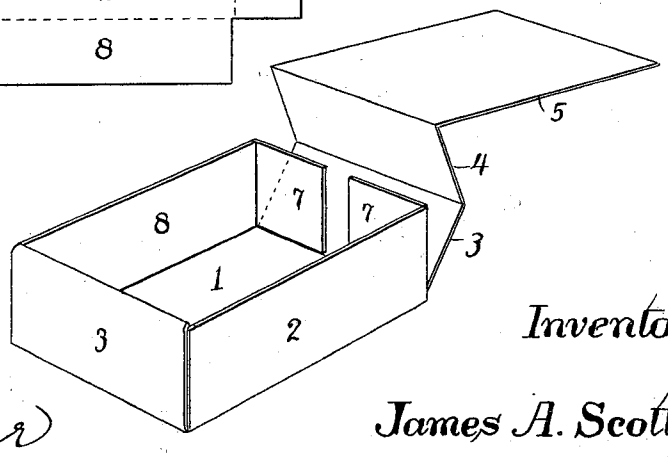

Fig. 1

Witnesses;

Chas. E. Tucker

F. C. Fuller

Inventor,

James A. Scott;

By A. B. Upham,

His Attorney.

UNITED STATES PATENT OFFICE.

JAMES A. SCOTT, OF SOMERVILLE, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO CHARLES E. FULLER, OF SAME PLACE.

PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 674,220, dated May 14, 1901.

Application filed December 13, 1900. Serial No. 39,650. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. SCOTT, a citizen of the United States, residing in the city of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Paper Boxes, of which the following is a full, clear, and exact description.

This invention is in the line of paper boxes in which the same are designed to be shipped flat or knockdown and to be put into condition for use by means of certain interlocking devices formed integral therewith.

My invention has for its object the construction of means whereby such a box is more easily put together, is locked more securely, the fact of its being a knockdown box is less apparent to the eye, and in general construction it is more durable and more attractive in appearance.

Referring to the drawings forming part of this specification, Figure 1 is a perspective view of a box made in accordance with my invention, showing certain parts not yet brought into place. Fig. 2 is a plan view of the paper blank laid flat.

The bottom of the box is indicated by the reference character 1, the dotted lines around it designating the scorings or creases for enabling the sides 2 and ends 3 to be folded or turned up. Each side 2 is formed with the terminal flaps 7 and the side extensions 8, while the ends 3 are formed with the extensions 4, one of which has the flap 6 and the other the false bottom 5. Of all the scorings indicated by the dotted lines only those between the ends 4 and the flap 6 and false bottom 5 are cut into the paper from the upper side, the remainder being made in the under side of the goods.

In putting the box together the extensions 8 are first folded flat against the sides 2 and the latter turned up at right angles to the bottom 1, the flaps 7 being turned in toward each other. The end 3, associated with the flat 6, is then turned up against the flaps 7 and the extension 4 folded down against the same, the flap 6 having first been folded so as to come flush with the bottom 1. The opposite end 3 being now turned up against the flaps 7 and the extension 4 folded down, inclosing the same, the false bottom 5 is pressed down within the box, with its free end resting upon the flap 6 and serving to prevent the extension 4 at that point from unfolding.

As shown in Fig. 2, the extensions 4 are narrower than the ends 3 and false bottom 5 in order that when the box is put together said extensions may come between the opposite extensions 8, and so keep the latter in place. Further, the false bottom being equal in width to the bottom 1, and hence wider than the space between the extensions 8, and said extensions being proportioned not to reach the bottom 1 when folded down against the sides 2, said false bottom requires to be crowded down into place with some little force until its lateral edges enter the spaces between the bottom 1 and the edges of the extensions 8. This locks the false bottom in place, and thus supplies the final means for rigidly securing this box together, for, as is evident, the extensions 4 lock the flaps 7 in place, as also the extensions 8. The false bottom locks the extensions 4 in place, and the extensions 8 lock the false bottom in place, this final locking device being almost incapable of disengagement except after considerable effort.

Although this construction is the one I prefer, it is capable of numerous modifications without departing from the essence of my invention. For instance, the false bottom 5 may be an entirely separate piece and each extension 4 formed with a flap 6, each end of the false bottom resting upon such flap.

Among other advantages obtained from my preferred construction are the following: When comparatively thin stock is used finished or tinted on one face only, this face is the only one exposed, the unfinished face being entirely concealed. Further, there are no joints or seams in this box at any points except the corners. Hence for neatness and attractiveness this box cannot be excelled by any, whether of the knockdown or of the gummed varieties. The double thicknesses of stock render the box unusually rigid and strong, while the peculiar method of securing the sides and ends together gives them a powerful resistance to strain.

In putting this box together each movement is easily and quickly performed, being

simply the entirely natural ones of folding the parts more or less. There are no difficult and awkward introductions of certain peculiarly-cut flaps into narrow slits—nothing but the straightforward folds followed by pressing the false bottom into place.

Although I speak of the ends 3 as formed with the extensions 4 and the sides 2 with the flaps 7 and extensions 8, I use the terms "sides" and "ends" interchangeably, being a mere matter of relative dimensions.

While my invention is particularly applied to paper boxes, it can equally well serve for boxes made from other sheet materials, as press-board, thin metal, celluloid, &c.

What I claim as my invention, and for which I desire Letters Patent, is as follows, to wit:

1. The combination with the box comprising the bottom, the sides having the flaps and the extensions slightly less in depth than the sides, and the ends having the extensions equal to them in depth and inclosing said flaps; of the false bottom holding said end extensions in place and being itself locked in position by the engagement of its lateral edges beneath said side extensions, substantially as described.

2. The combination with the box comprising the bottom, the sides having the flaps and the extensions slightly less in depth than the sides, and the ends having the extensions equal to them in depth and inclosing said flaps; of the false bottom holding said end extensions in place and being itself locked in position by the engagement of its lateral edges beneath said side extensions, said false bottom being formed as a prolongation or extension of one of said end extensions, substantially as described.

In testimony that I claim the foregoing invention I have hereunto set my hand this 10th day of December, 1900.

JAMES A. SCOTT.

Witnesses:
BURT F. UPHAM,
A. B. UPHAM.