

No. 622,495.

Patented Apr. 4, 1899.

F. KNOBELOCH.  
PAPER BOX.

(Application filed June 24, 1898.)

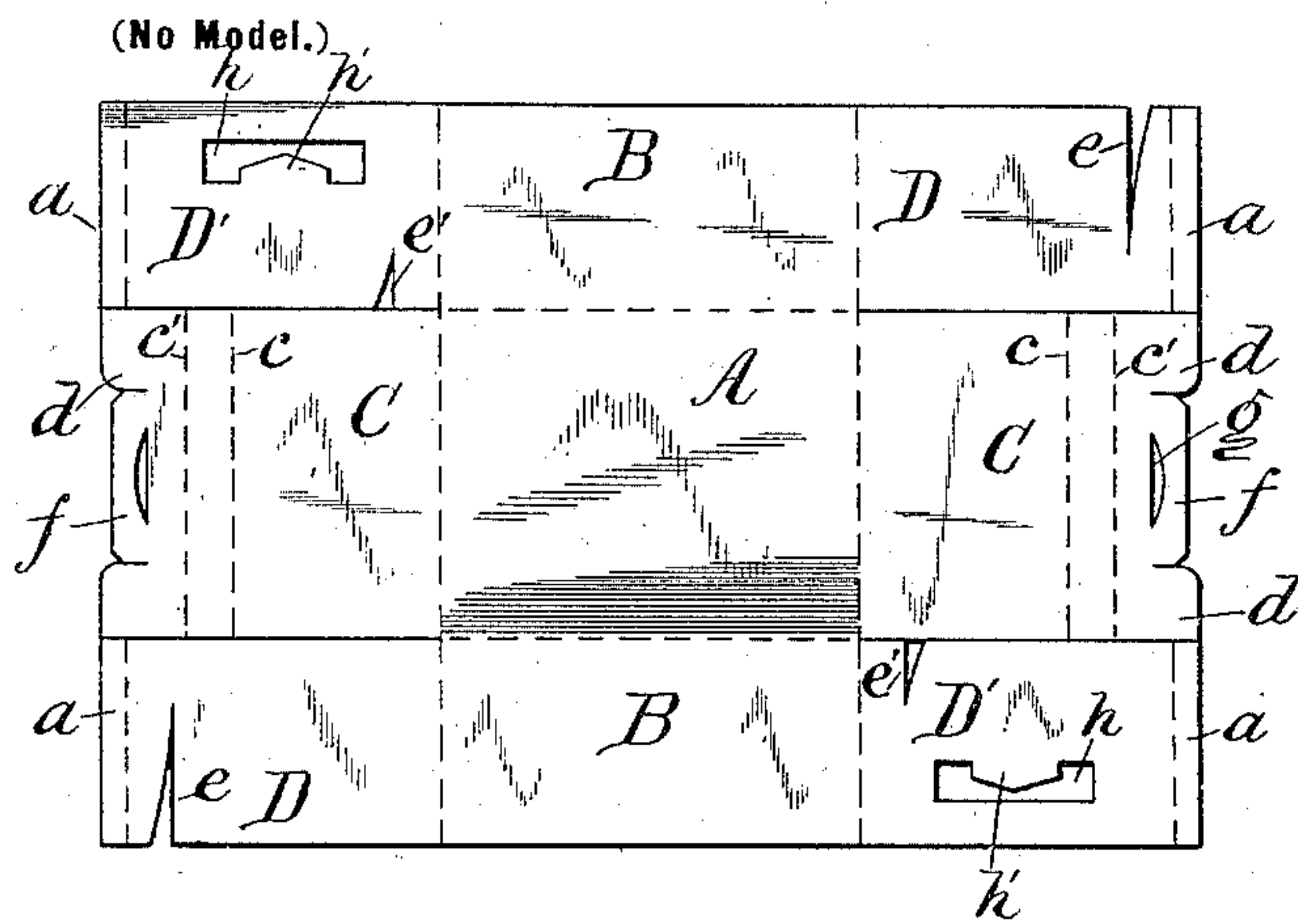


Fig. 4.

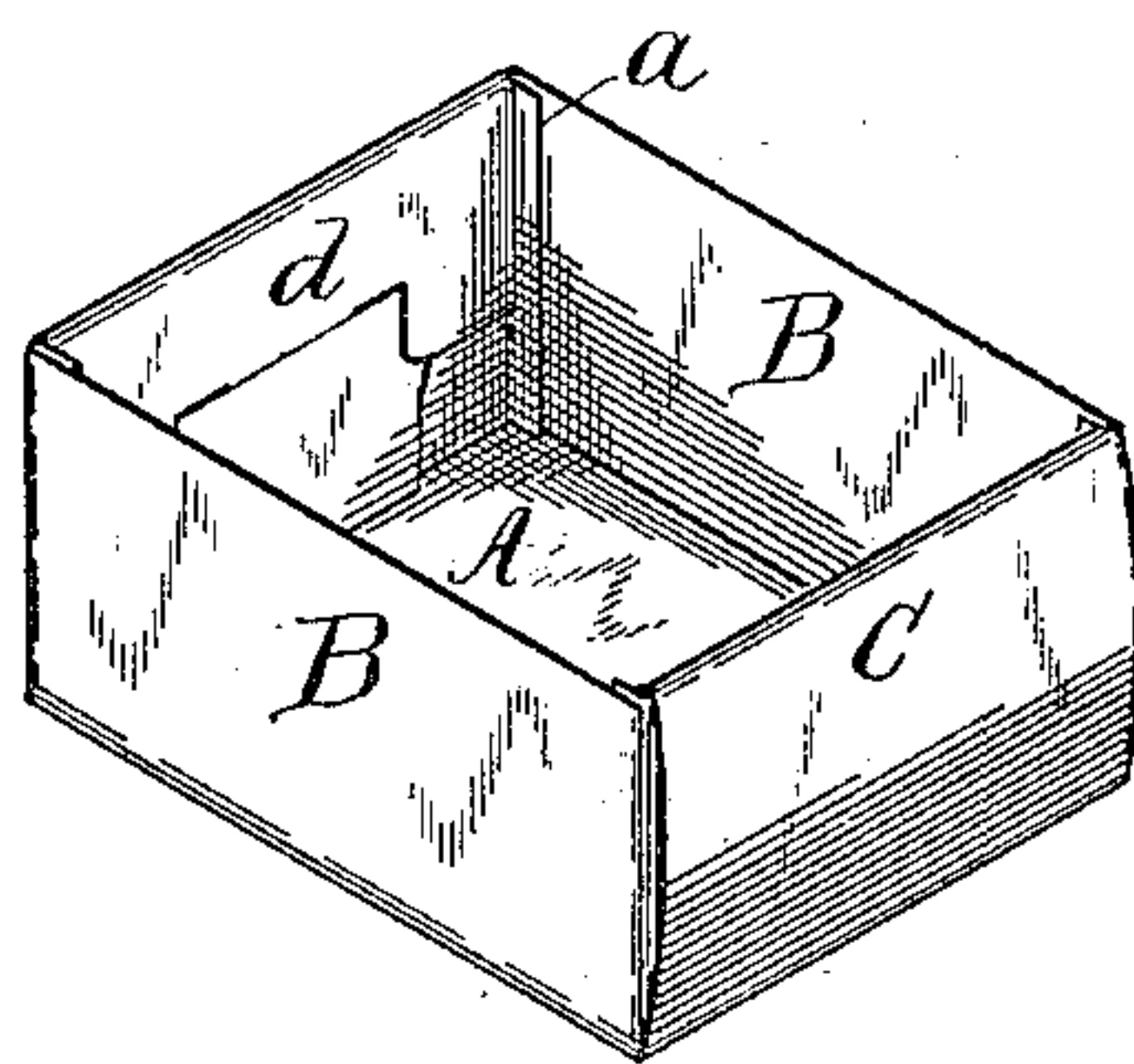


Fig. 3.

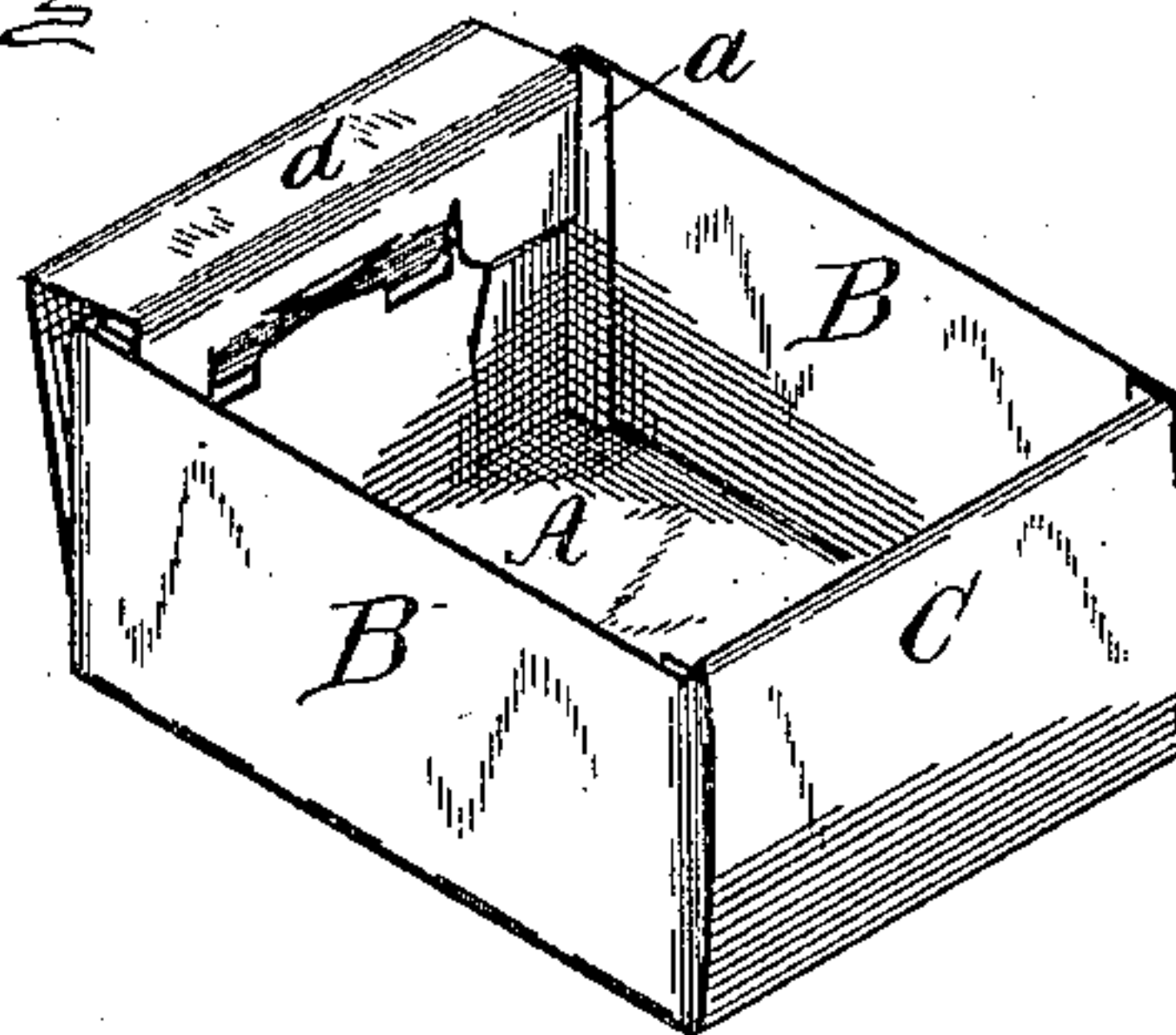
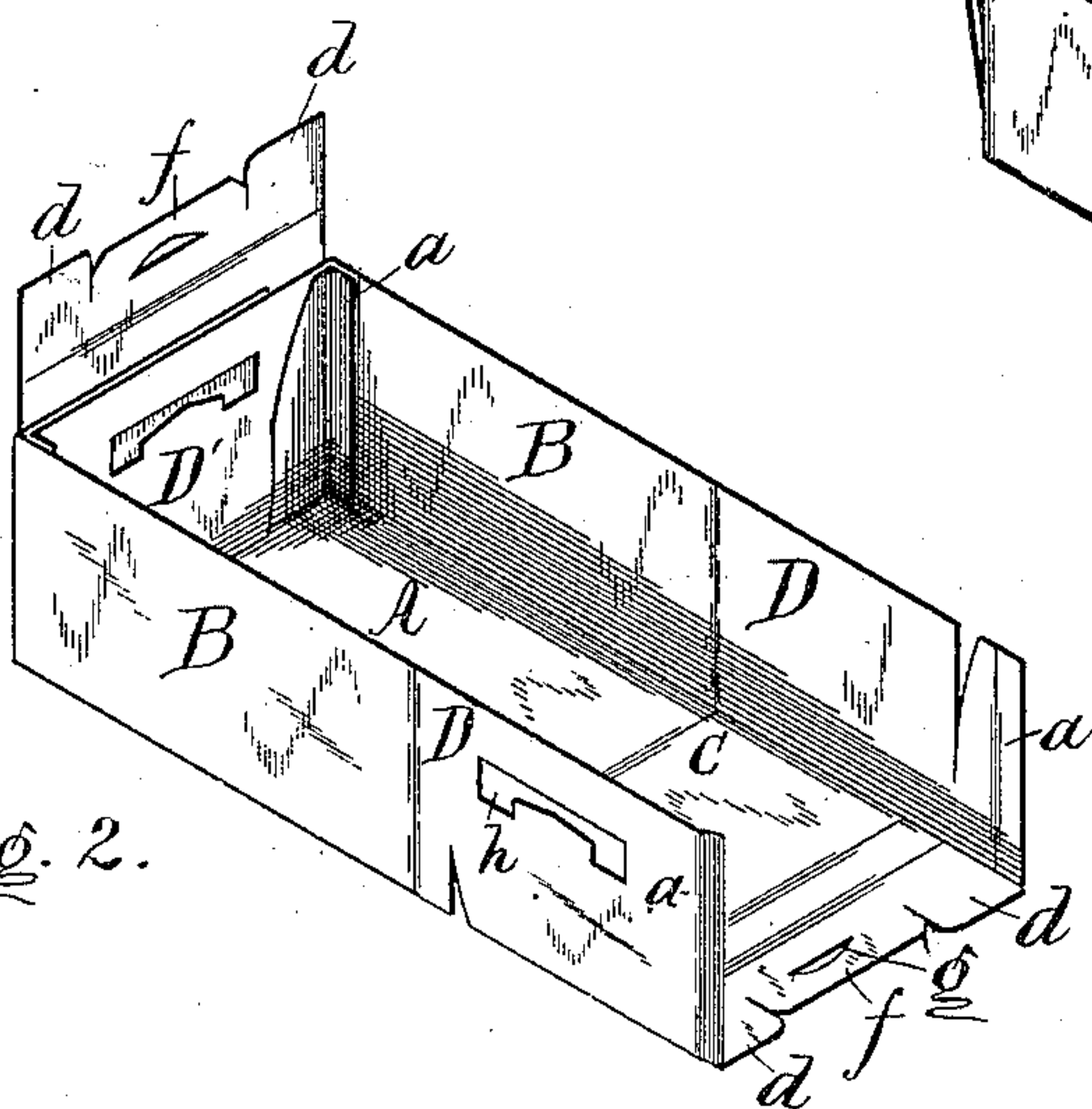


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 622,495, dated April 4, 1899.

Application filed June 24, 1898. Serial No. 684,401. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK KNOBELOCH, a citizen of the United States, and a resident of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Paper Boxes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to new and useful improvements in collapsible paper boxes, which for purpose of economy and ease in shipping and storing same are to be packed in a collapsed condition to be folded into shape by the user; and my invention consists of certain novel construction and arrangement of parts to be hereinafter more fully described and claimed.

In the drawings which form a part of this specification, Figure 1 is a plan view of a blank cut and scored to form my improved box. Fig. 2 is a perspective view of the box in process of folding, showing the first folding operation. Fig. 3 is a perspective view of the box, showing the last folding or locking operation. Fig. 4 is a perspective view of a complete box.

The box blank is cut from a suitable sheet of cardboard or other suitable material either rectangular or square in shape. In the drawings the heavy lines indicate the cut portions of the blank and the dotted lines scores or creases for folding.

A is the bottom, B B the sides, and C C the ends. Integral with the sides B B are side flaps D D D' D'. The side flaps have attached to them strips *a*, and the ends C C have extensions with tongues *d* and *f*, the tongue *f* having slits *g*.

To form the box, the sides B B are bent up at right angles to the bottom and the side flaps bent in at right angles to the sides. These side flaps are provided with gores *e e'*, by means of which the side flaps are interlocked, as shown in Fig. 2, a portion of flap D overlapping a portion of flap D'. I prefer to construct the box with these gores, though they are not absolutely essential. The side flaps D' are provided with a slit *h*, corresponding in size with the tongue *f* on the ends C. This slit *h* is so cut as to leave a tongue *h'*, which tongue corresponds with slit *g* in the tongue

*f* on the ends C. The strips *a* are then bent in at right angles at the end score or crease, permitting them to lie adjacent the sides B, forming an additional brace for the corner. The ends C C are then folded up and bent over the side flaps D D' at the score *c*, which forms the upper edge of the end, and the tongues *f*, which are provided with slits *g*, are inserted in the slit *h*, while the tongue *h'* is passed through the slit *g*, as seen in Figs. 3 and 4, the tongues *d d* overlapping the side flaps on the inside of the box, thus securely locking the sides and ends in place.

For convenience and to facilitate the locking of the various tongues on the ends C in place I provide an intermediate score *c'*, at which point the ends C may be slightly bent, as seen in Fig. 3, thus enabling the user to quickly insert the tongues in their respective positions. By this arrangement a very strong and neat appearing box or lid is produced, which will not pull apart, having reinforced ends.

I have shown and described my improved box as having side strips *a*, which reinforce and brace the corners. It will of course be readily understood that these strips may be omitted, if desired.

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

1. A collapsible box cut and scored from a single blank of cardboard or other suitable material, having bottom, sides and ends, in combination with end flaps provided with tongues, one of said tongues having a slit, of side flaps provided at proper points with interlocking gores to lock and hold the side flaps in position, one of said flaps provided with slit and tongue to interlock with the slit and tongues on the end flaps, substantially as and in the manner described.

2. A collapsible box cut and scored from a single blank of cardboard or other suitable material, having bottom, sides and ends, in combination with end flaps provided with tongues, one of said tongues having a slit, of side flaps, one of which is provided with slit and tongue to interlock with the slit and tongues on the end flaps, substantially as and in the manner described.



3. A collapsible box cut and scored from a single blank of cardboard or other suitable material, having bottom, sides and ends, in combination with end flaps provided with  
5 tongues, one of said tongues having a slit, of side flaps provided with slits and tongues to interlock with the slit and tongues on the end flaps, substantially as and in the manner described.
- 10 4. In a collapsible box cut and scored from a blank of cardboard or other suitable material, the combination of the bottom and sides having end and side flaps to form the ends, with interlocking gores in the side flaps and  
15 reinforcing-strips integral with said side flaps, and tongues on the end flaps one of which tongues is provided with a slit, said tongues and slit to register and interlock with tongue

and slit in the side flaps, substantially as and in the manner described.

5. In a collapsible box cut and scored from a blank of cardboard or other suitable material, the combination of the bottom and sides having end and side flaps to form the ends, with interlocking gores in the side flaps, and tongues on the end flaps one of which tongues is provided with a slit, said tongues and slit to register and interlock with tongue and slit in the side flaps, and intermediate score in the end flaps to permit the interlocking of said tongues and slit, substantially as shown and described.

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Witnesses:

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