

(No Model.)

2 Sheets—Sheet 1.

J. C. KOCH.

PAPER BOX FOR CHESS, CHECKERS, &c.

No. 476,019.

Patented May 31, 1892.

Fig. 2.

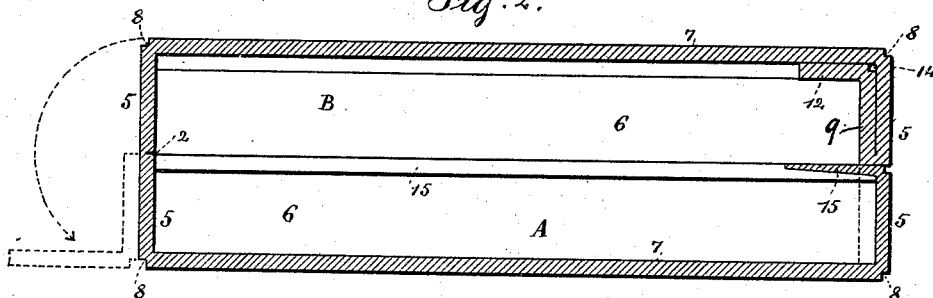
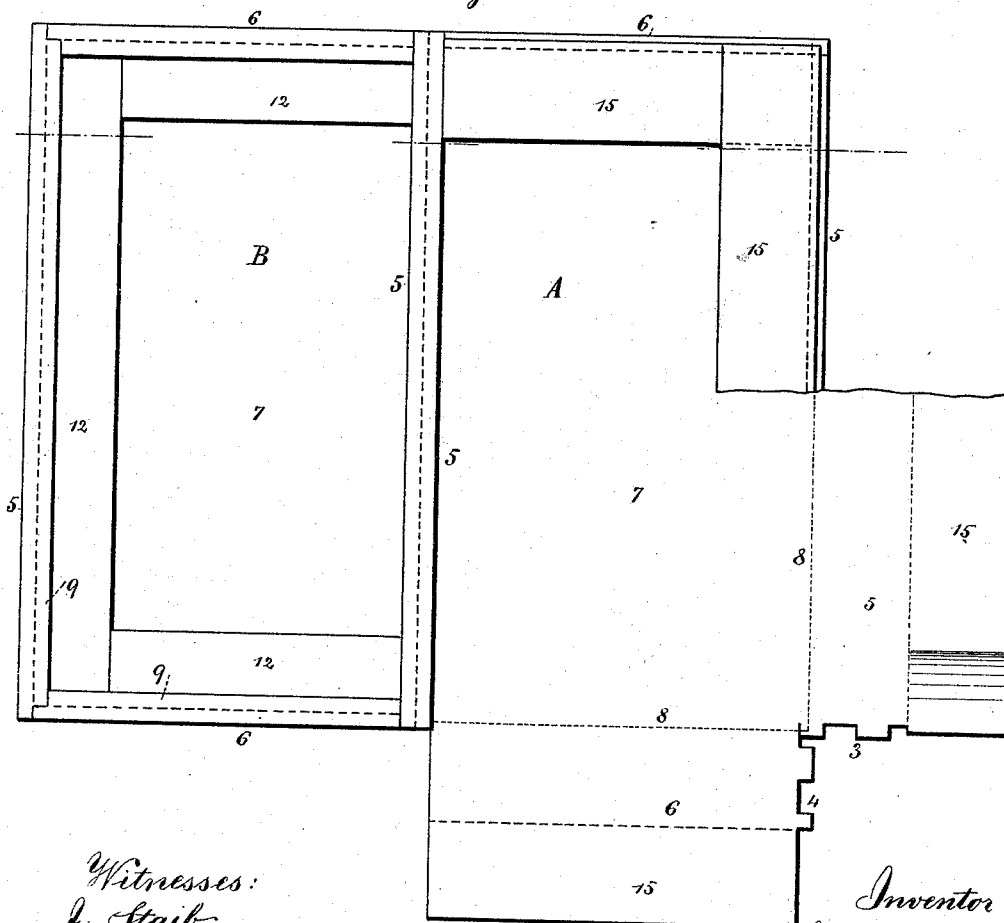


Fig. 1.



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Inventor
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2 Sheets—Sheet 2.

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Fig. 3.

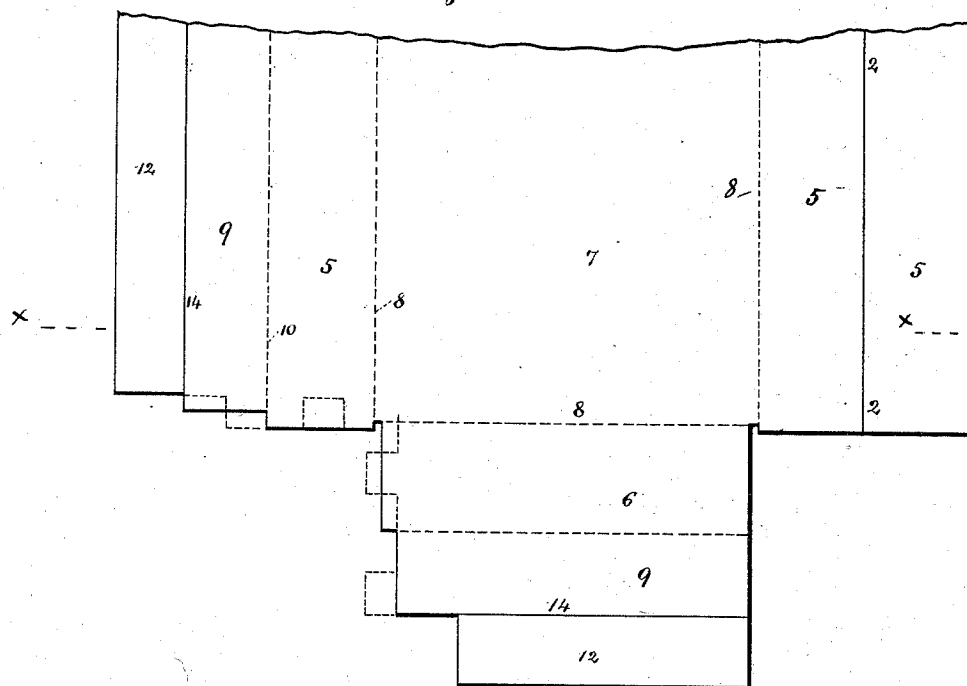
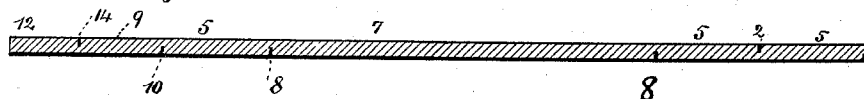


Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN C. KOCH, OF BERLIN, GERMANY.

PAPER BOX FOR CHESS, CHECKERS, &c.

SPECIFICATION forming part of Letters Patent No. 476,019, dated May 31, 1892.

Application filed October 28, 1889. Serial No. 328,471. (No model.)

To all whom it may concern:

Be it known that I, JOHN CASPAR KOCH, a citizen of the United States, residing in Berlin, Germany, have invented an Improvement in Paper Boxes for Chess, Checkers, Toilet-Cases, and Articles of Merchandise, of which the following is a specification.

Boxes have been made of strawboard, cardboard, and other kinds of thick paper, and such board has been partially cut through and folded at the edges of the boxes, but usually the parts are not sufficiently strong for boxes that remain in use for any length of time, such as toilet-cases, checker-boards, &c.

The object of my invention is to strengthen the corners, sides, and angles, so that these parts, which usually give way first, are the strongest part of the box.

In the drawings, Figure 1 is a plan view of the top and bottom portions of a box as opened out, the corner of one part being shown as if the card-board were laid out flat to represent the manner in which the sheet material is cut out. Fig. 2 is a cross-section of the box in larger size. Fig. 3 is a representation of a portion of the sheet material as cut out for making the top of the box. Fig. 4 is a section on the line *xx* of Fig. 3, representing a portion of the card-board with the incisions in it.

The bottom part of the box is represented at A and the top part at B.

The size and shape of the box will depend upon the use for which it is intended, and usually the boxes will be made of one piece or sheet of card-board, mill-board, or similar thick paper. When the bottom and top are made of one piece, the material is usually cut about half-way through on the line 2 2, the remaining portion of the paper forming the hinge upon which the top part swings, or a strip of muslin or similar material is used to form the hinge, as heretofore well known.

In making paper boxes it has heretofore been usual to notch the paper at the corners of the box, make partial incisions where the angles or edges of the box come, and fold the paper in a single thickness to form the rim of the lid and the sides and ends of the body, and the angles have been lapped and glued

and strengthened with muslin strips glued on the outside. One part of my improvement relates to notching the edges of the paper at the angles of the box, as shown at 3 4, the tongues and notches being of equal width and as deep as the thickness of the paper, and the tongue of one part coinciding with the notch on the other part, so that when the sides 5 and ends 6 are bent up at right angles to the bottom or top 7 upon the line of the incisions 8 the tongues at 3 4 interlock and support the paper at the angles, the parts being connected by any suitable means or held together by adhesive material, such as glue, and an exterior tie-strip of muslin or similar material should also be glued around the angles of the box.

In paper boxes the sides and ends, especially of the cover, are not stiff enough to withstand the handling to which such boxes as toilet-cases, &c, are usually subjected.

To stiffen the sides and ends or rim of the box, the paper is sufficiently wide to receive an incision 10, that is parallel to the incision 8, and at this incision 10 the paper is folded inwardly and doubled, so that the rim or sides and the ends are doubled, having an inlay at 9, and to further strengthen the box there are laps 12 turned the other way upon the lines of the incisions 14, so that these laps come against the inner surface of the top or bottom 7, and the double thicknesses 5 9 or 6 9 thus formed are glued or otherwise secured firmly together and form very strong rims or sides and ends to the top or bottom or both parts of the box, and I remark that by cutting out the parts, as shown in Figs. 1 and 3, the laps will lie flat without one part being upon another at the angles, and, if desired, the notches 3 4 may be made, as shown by dotted lines in Fig. 3, so that the notches in the inlays 9 correspond to the notches in the ends and sides 5 6.

In some kinds of boxes it is desirable to have an inward flange or rim 15, especially around the bottom of the box. To make this, the rim 15 has to be folded at right angles to the sides and end and lapped at the corners, one part on the other, and glued or riveted together to form a strong rim or flange to sup-

port the edges of the sides and ends of the box.

The box may be covered and lined with paper or any fabric or material ornamental or otherwise, so as to adapt the box to the intended use.

I claim as my invention—

1. The box of strawboard or similar material having a side or end of double thickness and a reinforcing-lap, the same being formed by partially cutting through the material on the line of the edge and upon the inner surface and folding the material inwardly to form the double thickness and the lap and securing the parts together, substantially as set forth.

2. The box of strawboard or similar material having an inturned rim, formed by partially cutting through the material at the edge of the side or end and turning down such ma-

terial and securing the end portions thereof in place, substantially as set forth.

3. The box of strawboard or similar material having two parts secured together by a hinge, the sides and ends of one part being made of double thicknesses by partially cutting through the material upon the line of the edge and folding the material inwardly and securing the same, the other part of the box having an inturned rim formed by partially cutting the material on the line of the edge and turning the rim inwardly and at right angles to the side or end, substantially as set forth.

Signed by me this 21st day of October, 1889.

JOHN C. KOCH.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.