(No Model.)

J. H. KREUZIGER.

FOLDING BOX.

No. 587,314. Patented Aug. 3, 1897.

Fig. 1.

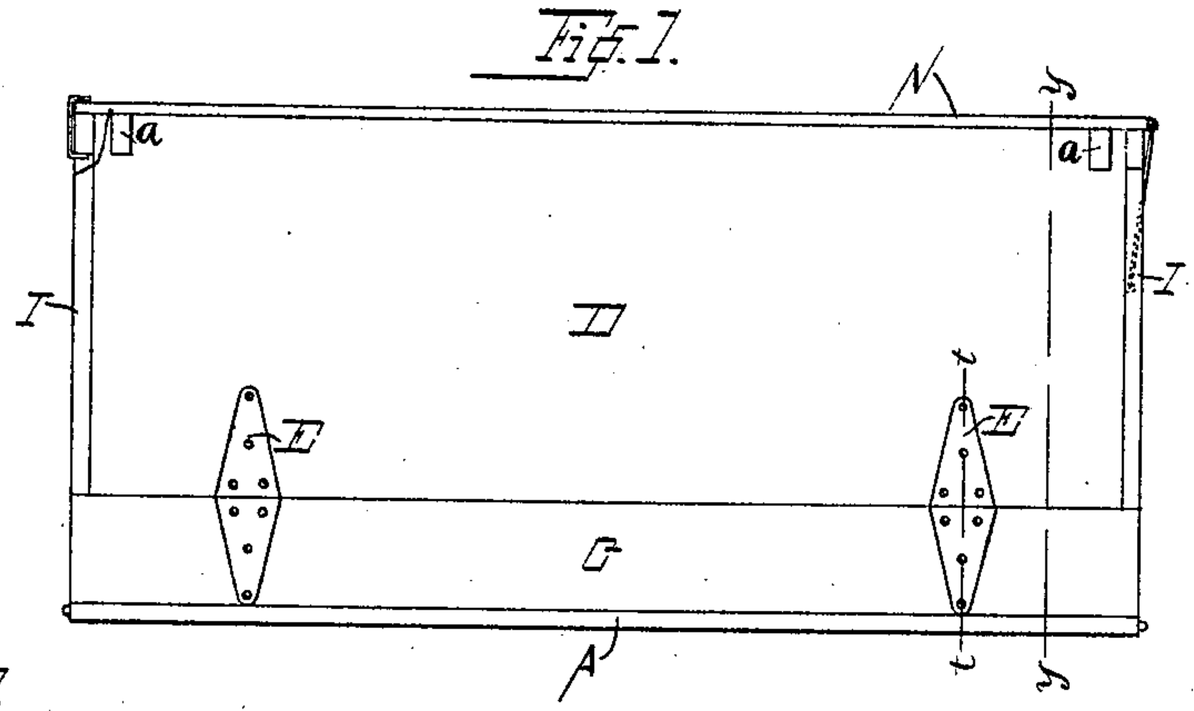


Fig. 2.

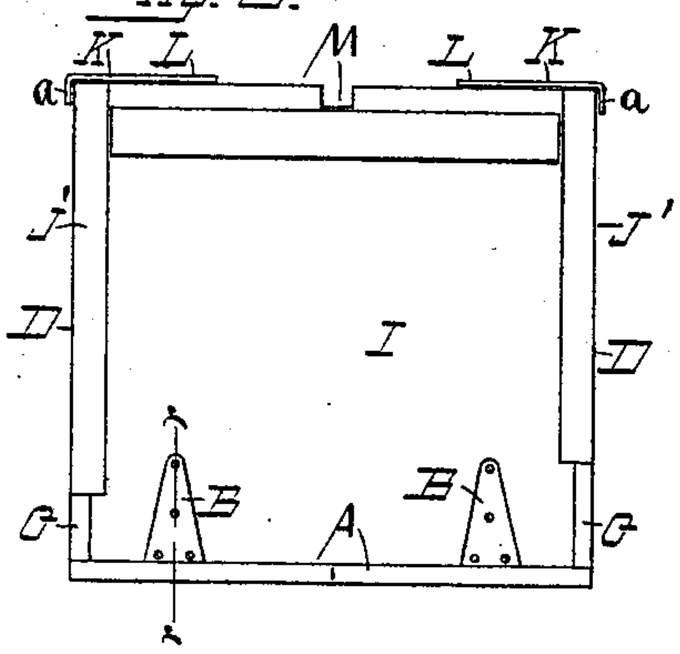


Fig. 3.

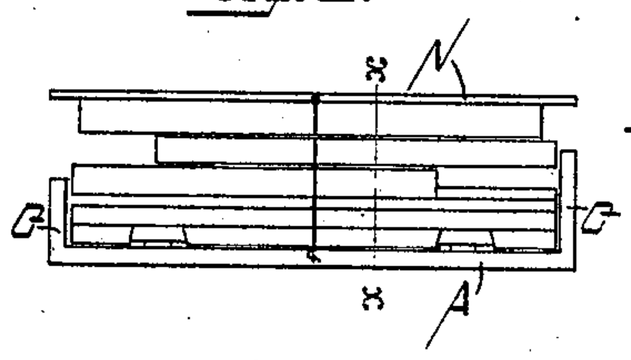


Fig. 4.

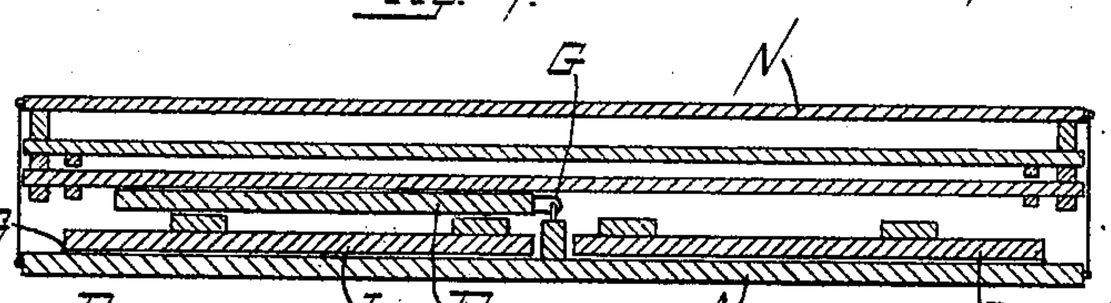


Fig. 5.

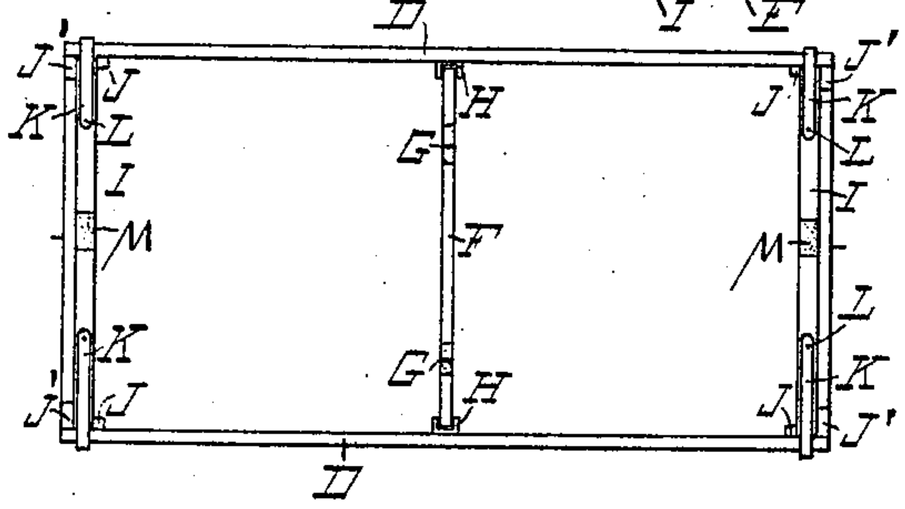


Fig. 6.

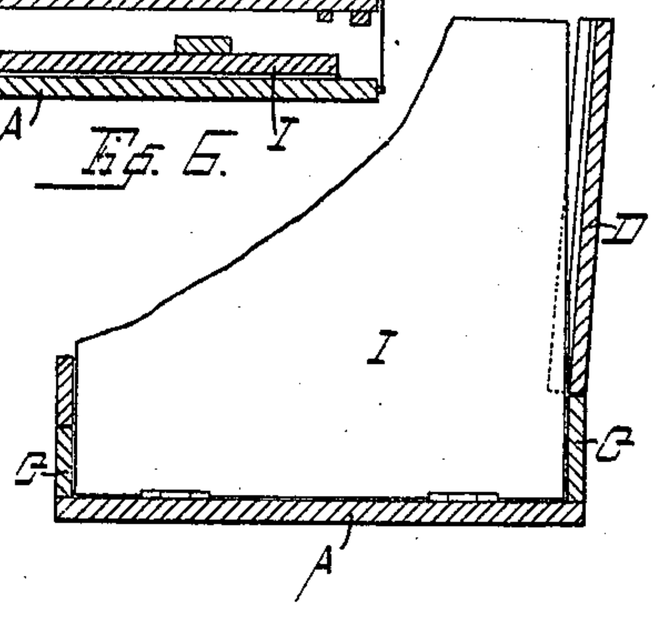


Fig. 7.

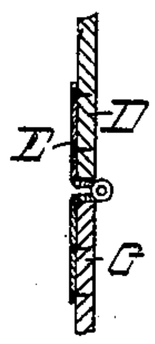
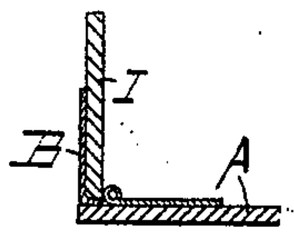


Fig. 8.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN H. KREUZIGER, OF MILWAUKEE, WISCONSIN.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 587,314, dated August 3, 1897.

Application filed March 8, 1897. Serial No. 626,417. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. KREUZIGER, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Folding Boxes, of which the following is a specification.

My invention relates to improvements in folding boxes, and the construction is explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view of the box set up in position for use. Fig. 2 is an end view of the box set up, the cover being removed. Fig. 3 is an end view of the box as it appears with sides and ends folded together. Fig. 4 is a sectional view of the box, drawn on line *x x* of Fig. 3, showing parts folded together. Fig. 5 is a top view of the box set up for use. Fig. 6 represents a vertical cross-section of the box, drawn on line *y y* of Fig. 1. Fig. 7 is a longitudinal section of the side hinges, drawn on line *t t* of Fig. 1. Fig. 8 is a longitudinal section of one of the end hinges, drawn on line *h h* of Fig. 2.

Like parts are referred to by the same reference-letters throughout the several views.

A represents the bottom of the box, to which the end pieces I I are directly secured by the hinges B B.

C C are inclosing side strips, which are rigidly and permanently secured to the bottom A by nails or screws in the ordinary manner.

D D are the side pieces of the box, which are respectively secured at their lower edges to the inclosing side strips C by hinges E E.

F is a central partition, which is secured to the bottom A by two-way hinges G G, which permit the bottom to be folded either toward the right or left, as desired.

The hinges G G are of the ordinary construction. When the partition F is in position for use, as shown in Fig. 5, it is thus secured to the sides D D of the box by the retaining U-shaped brackets H H, which brackets are in turn rigidly secured to such sides, while the respective end pieces I I are secured in a vertical position between the inclosing sides of the box against the corner blocks J J and J′ J′ by the swinging fastening-clamps K K, which fastening-clamps are secured to the upper edges of the end pieces by pivotal bolts L, which bolts L permit said fastening-clamps to be turned on their pivots a half-circle when desirous to fold the box together, whereby their outer and free ends are brought toward each other within the central recess M, formed therefor in the upper edge of the end piece.

The fastening-clamps K are formed of a single piece of metal having an L-shaped bend *a* at its outer end, as shown in Fig. 2, which L-shaped bend extends downward over the respective upper edges of the sides D D and serves to hold them rigidly against the respective end pieces and the central partition when the box is in position for use.

When desirous to fold the box in a compact form for shipping or storing, the fastening-clamps are first turned on their retaining pivotal bolts L, as described, so that the bend *a* is brought within the recess M. The end pieces are then folded inward toward the center above the partition, when the central partition F is then folded down upon the end pieces, when the side piece D upon the left, as shown in Fig. 2, is then folded over and upon the partition, when the side piece D upon the right is folded inward and upon all the other folded parts, whereby all the parts named are brought into a small and compact form to occupy the least possible space.

In view of the fact that the side piece upon the right is folded over and upon the other side piece of the box, the right-hand side piece is hinged proportionately higher from the bottom of the box a distance corresponding with the thickness of the sides, so that when the parts are folded together they will be brought to a horizontal position one above the other.

It is obvious that by this construction a large number of boxes may, when thus folded, be stored in the smallest possible space, and that when desirous to fill the same they may be readily and quickly unfolded and secured together in position for use when they are firmly held together in such position by the four fastening-clamps K, as described.

The cover of the box N may be secured to the box when filled by ordinary hooks or any other convenient manner desired.

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

In a folding box, the combination with the bottom piece A of the folding end pieces I, I, respectively secured to the respective ends of said bottom piece by hinges B, B; central folding partition F hinged at its lower edge to said bottom piece and adapted to be folded in either direction over and upon the same; side strips C, C rigidly affixed at their lower edges to the sides of said bottom piece; folding side pieces D, D respectively hinged at their lower edges to the upper edges of said side strips C, C and adapted to be folded over and upon said folding end pieces; U-shaped retaining-brackets H affixed near the upper edges to the respective side pieces and adapted to engage the respective sides of said partition and hold the same in a vertical position; and two pairs of fastening-clamps K, K respectively secured by pivots to the upper edges of said end pieces and adapted, when the box is set up, to engage the upper edges of the respective side pieces, substantially as and for the purpose specified.

In testimony whereof I affix my signature in the presence of two witnesses.

JOHN H. KREUZIGER.

Witnesses:
JAS. B. ERWIN,
C. L. ROESCH.