

(Model.)

J. M. GRIEST.

BOX.

No. 397,980.

Patented Feb. 19, 1889.

Fig: 1.

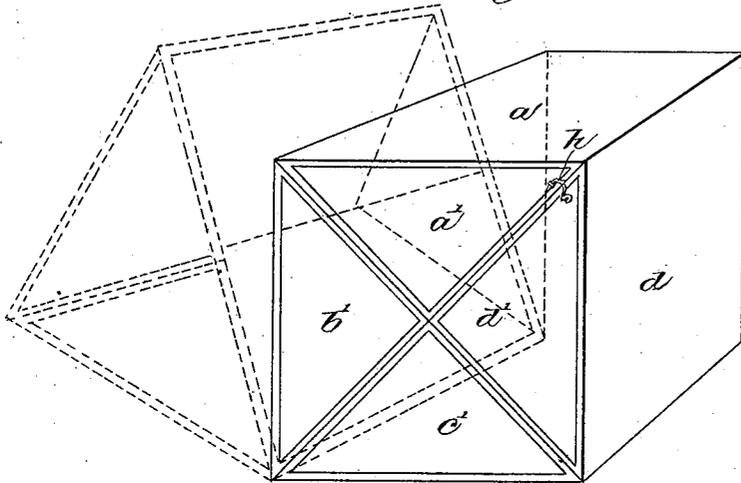


Fig: 4.

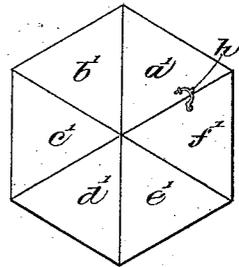


Fig: 3.

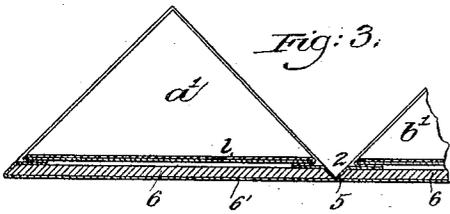


Fig: 2.

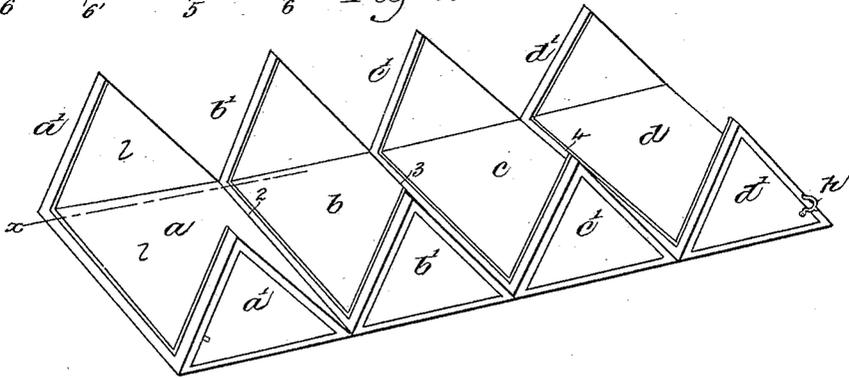
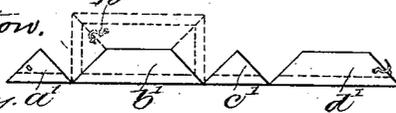


Fig: 5.

Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN M. GRIEST, OF BAYONNE, NEW JERSEY, ASSIGNOR TO THE SINGER
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BOX.

SPECIFICATION forming part of Letters Patent No. 397,980, dated February 19, 1889.

Application filed August 6, 1888. Serial No. 282,071. (Model.)

To all whom it may concern:

Be it known that I, JOHN M. GRIEST, of Bayonne, county of Hudson, State of New Jersey, have invented an Improvement in Boxes, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a novel box, one especially adapted, among other things, to contain sewing-machine attachments, the box being attractive in appearance and compact in construction.

The improved box herein to be described is so constructed that it may be folded into a compact body or be unfolded or opened out flat, or substantially so, the end portions of the box standing up substantially at right angles to the sides and being angular in shape, the free ends of the end pieces meeting substantially at the center line of the box when closed.

This invention consists, essentially, of a box composed of a plurality of sides flexibly jointed together and of end pieces composed of a number of matching segments equal to the number of sides and secured to the opposite ends of the sides, the angular or inclined edges of the end pieces abutting together when the box is closed and meeting in line of the center of the ends of the box, substantially as will be described.

Figure 1 in full lines shows a box embodying this invention, the dotted lines showing it half-open. Fig. 2 on a half-scale shows the box fully open. Fig. 3 is a partial section of Fig. 2 in line *x*, but on a larger scale, to better show the particular construction of the bearings entering into the production of the box. Fig. 4 is an end view of the modified form of box closed up; and Fig. 5 is yet another modification in end view, the dotted lines showing the box closed.

My improved box, as herein shown, is composed of a plurality of side pieces, *a b c d*, (shown in Figs. 1 and 2 as four in number,) the box shown in Fig. 4 being hexagonal in cross-section.

The side pieces of the box are composed each of paper or wood, *6*, covered with leather,

paper, or textile material, *6*, the said side pieces being flexibly jointed edge to edge by means of a strip, as *5*, preferably of cloth or leather, so as to make flexible joints, as *2 3 4*, between the different sides entering into the composition of the box.

The heads or end pieces are composed of a number of matching segments, *a' a', b' b', c' c'*, and *d' d'*, equal in number to the number of sides *a b c d*, and affixed to the sides at right angles thereto. As shown in Figs. 1 to 4, these segments are triangular in outline, and, as shown in the oblong box, two of the segments are triangular and the other two are trapezoidal. These end pieces are of such thickness that when the box is closed the adjacent or meeting edges of the end pieces are abutted together face to face, one co-operating with the other to form end supports for the side pieces.

It is not desired to limit this invention to the precise shape for the box in cross-section, as it is obvious that many changes in cross-section may be made and yet the box contain the gist of this invention—as, for instance, in Fig. 4 in end view I have shown a box hexagonal in cross-section, the said box having six side pieces and corresponding pairs of end pieces, (marked in Fig. 4 from *a'* to *f'*, inclusive.) In Fig. 5 I have shown in end view an oblong box, it having, as will be seen, side pieces of different widths from the end pieces; but the angles of the end pieces are alike as to their inclination when the box is opened out flat.

The box, when folded up, is held closed by means of a fastening device, *h*, (herein shown as a hook and eye.)

The sides and ends of the box may be lined with any suitable fabric, such as cotton flannel or other material. Such lining is best shown at *l* in Figs. 2 and 3. One or more thicknesses may be used, and the individual edges of the lining for the various sides and their ends may be made by folding under, as shown in Fig. 3. The lining may be secured to the sides and ends by paste, or other fastening medium may be used.

I do not limit my invention to any particular kind of lining or mode of fastening or ap-

plying the same, nor, indeed, to the use of a lining of any character.

I claim—

1. A box composed of a plurality of side
5 pieces flexibly jointed together so as to fold
out flat, and end pieces or heads each com-
posed of matched segments equal in number
to the number of side pieces and secured to
such side pieces, the adjacent edges of such
o segments abutting to form the heads of the box
when folded, substantially as set forth.

2. A box composed of a plurality of side
pieces flexibly jointed together so as to fold
out flat, and end pieces or heads each com-

posed of matched segments equal in number 15
to the number of side pieces and secured to
such side pieces, the adjacent edges of such
segments abutting to form the heads of the
box when folded, combined with a fastening 20
device to keep the box closed, substantially
as set forth.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

JOHN M. GRIEST.

Witnesses:

JAMES G. GREENE,
E. W. MCCORMICK.