

J. W. SCHLEICHER.
PACKING BOX.

APPLICATION FILED JULY 12, 1910.

1,039,447.

Patented Sept. 24, 1912.

2 SHEETS—SHEET 1.

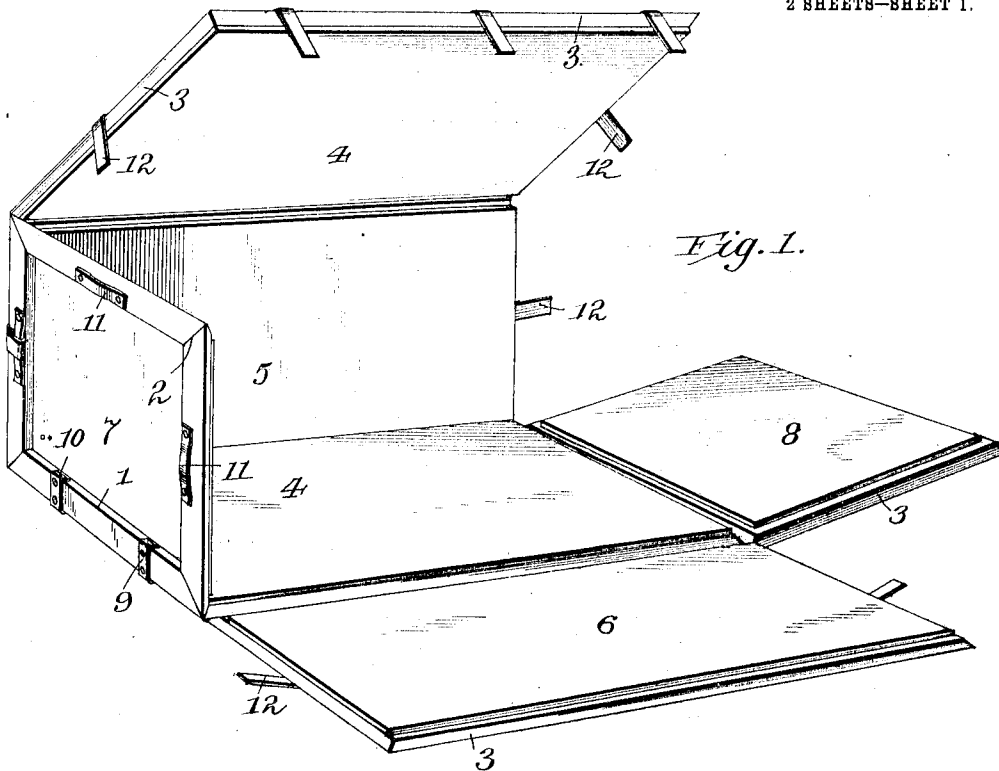


Fig. 1.

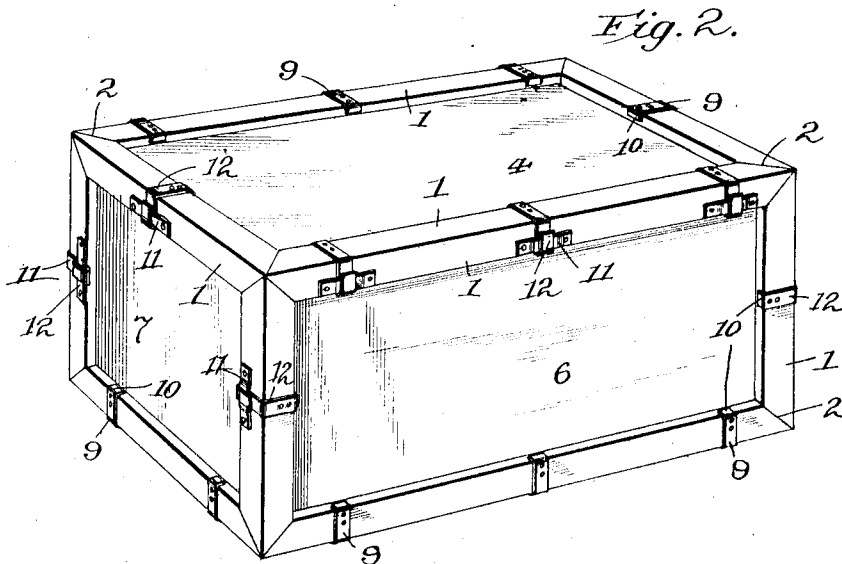


Fig. 2.

WITNESSES
C. H. Gaudin
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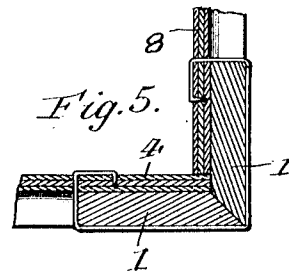
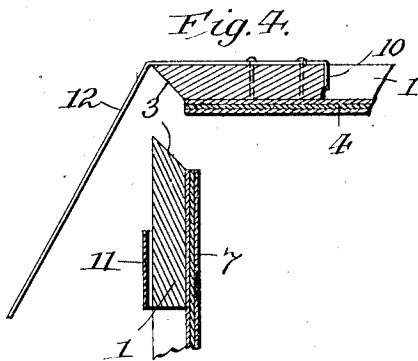
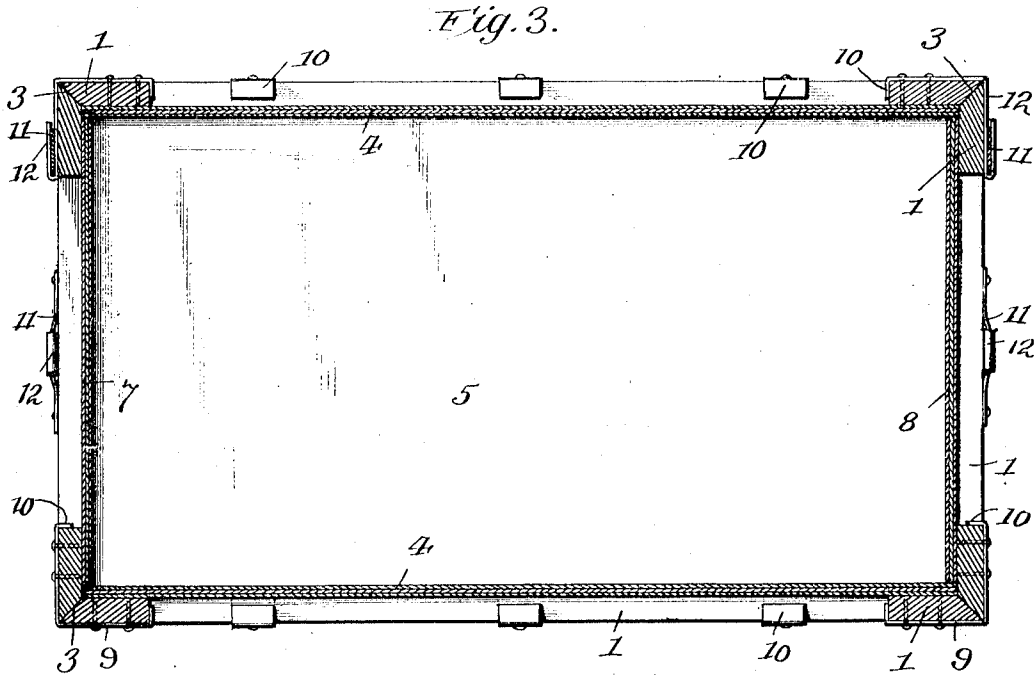
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2 SHEETS—SHEET 2.



WITNESSES
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A. E. Montague

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UNITED STATES PATENT OFFICE.

JOHN W. SCHLEICHER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO MENGEL BOX COMPANY,
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PACKING-BOX.

1,039,447.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed July 12, 1910. Serial No. 571,651.

To all whom it may concern:

Be it known that I, JOHN W. SCHLEICHER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Packing-Boxes, of which the following is a specification.

My present invention pertains to improvements in packing boxes, the construction and advantages of which will be hereinafter set forth, reference being had to the annexed drawings, wherein:

Figure 1 is a perspective view showing the box partly opened and in its knocked-down condition; Fig. 2 a perspective view of the closed box; Fig. 3 a vertical longitudinal sectional view of the box; Fig. 4 an enlarged detail sectional view of a corner of the box; and Fig. 5 a similar view showing a slightly modified form of the fastening device employed.

The object of the present invention is to provide a simple, cheap and strong packing-box, which may be shipped from the factory in its knocked-down condition or position and readily brought to form and secured when it is desired to pack any material therein.

The various members of the box, to wit, the front and back, top and bottom, and the ends, are substantially alike in form, the parts differing only in the width and length of the panels which are secured to the frames composed of battens. The top and bottom in the present instance are of the same shape and dimensions and are each composed of a frame formed of battens 1, the ends of each batten being beveled at an angle of 45°, as at 2, where they abut against each other. The outermost face of each batten is beveled, as at 3, at an angle of 45° so as to make a close joint with the batten of the adjacent side or end as the case may be. Secured by tacking or otherwise to the frame thus formed is a panel 4, preferably made of veneer lumber, said panel being of such dimensions as to overlap the frame and be substantially flush with the inner edge of the beveled faces 3.

The sides, designated generally by the reference numerals 5 and 6, are of the same form as the top and bottom, except that the panels stop short of the beveled edges along two sides of the frames formed by the battens, as will be clearly seen upon reference

to Fig. 1. This construction permits the panels of the top and the bottom to overlap the edges of the panels of the sides when the box is brought to final form or shape. The panels of the front and back, however, extend to the innermost edge of the beveled faces of the end battens, as is clearly shown in the sectional view, Fig. 3.

The ends, designated generally by 7 and 8, are each composed of four beveled battens which are denoted by the same reference numerals as the battens hereinbefore referred to and a panel section secured to the frame formed by the battens. Said panels stop short of the innermost edges of the beveled faces of the frames, as shown in Fig. 1, so that when the box is brought to form the panels of the ends will fit within the panels of the top and bottom, front and back, see Fig. 3. In other words, the panels of the various box members are so proportioned that they overlap each other and form a box, the interior joints or angles of which are flush, thereby serving to strengthen the box and make it more rigid or unyielding when the parts are brought to their final position.

The construction permits the use of relatively heavy material for the battens, and the various beveled faces come together and make close joints throughout the box.

To secure the top to the back, the back to the bottom, the bottom to the front and the ends to the bottom, I have shown flexible metallic straps or hinges 9, the ends of which are preferably bent over the squared inner edges of the various battens, as at 10, Figs. 1 to 3 inclusive. The straps or strips will be of such length that when the box elements are brought to their final position the straps will be taut, and the beveled faces of the battens brought into close and intimate contact.

To secure the ends to the back and front, and also the top to the front, any suitable metallic fastening may be employed. In the present instance I have shown secured to the upright and uppermost battens of the ends loops or straps 11 formed of sheet metal strips secured at their ends to the battens by passing brads or tacks through said ends. To the corresponding battens of the front and back and the top there are secured flexible metallic straps or strips 12, the outermost ends of said strips being free

and adapted to be passed down through the loops 11, and when the parts are fully positioned to be bent upwardly over the loops and thus secure the parts in place. This form of fastening is cheap and yet in practice is found efficient, the parts being readily engaged and as easily secured. The straps 12 may be bent a number of times without breaking.

10 In Fig. 5 is shown a slightly modified form of hinge, wherein instead of tacking the hinges to the battens, the ends are sharpened and driven through the panels and then preferably bent over and inwardly into
15 the inner face of the panels.

As will be readily appreciated, the top, bottom, sides or ends of the box may be used as the lid, the hinges acting as clasps or the clasps as hinges, allowing the box to
20 be opened from either sides or ends or bottom, as well as the top thereof.

Having thus described my invention, what I claim is:

1. A box composed of a plurality of sides,
25 each side being formed of battens having their outer edges beveled, and a panel secured to said battens; and flexible metallic connections for securing said sides together.

2. A box composed of a plurality of sides,
30 each side comprising battens beveled upon their outer edges and a panel secured to the inner face of said battens, the ends being flexibly connected at one edge to the ends of the bottom, the front likewise connected to
35 the bottom, the back likewise connected to the bottom and the top likewise connected to the back; and means for securing the back, top and front to the ends when the parts are brought to their final form or
40 position.

3. A box composed of a plurality of sides, each side comprising battens beveled upon

their outer edges and a panel secured to said battens, the ends being flexibly connected at one edge to the ends of the bottom, the
45 front likewise connected to the bottom, the back likewise connected to the bottom and the top likewise connected to the back; and means for securing the back, top and front to the ends when the parts are brought to
50 their final form or position.

4. A box comprising a front and back, top and bottom and ends, each member being formed of a frame having the outer edge thereof beveled to make a close joint
55 with the corresponding member of the adjacent frame, and a panel secured to each frame, the panels being of such dimensions that when the parts of the box are brought to form they will overlap and produce a
60 substantially flush interior at the angles of the box; and means for securing the various members together.

5. A box composed of a front and back, top and bottom and ends, each of said mem-
65 bers being formed of a frame composed of battens, the outer edges of which are beveled, and a panel secured to each of said frames; metallic hinges for securing the top to the back, the back to the bottom, the bot-
70 tom to the front, and the ends to the bottom; a series of loops secured to the outer face of each end and likewise to the front; and a series of metallic straps secured to
75 the back, top and front, said straps adapted to coact with the loops upon the ends and front, respectively.

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

JOHN W. SCHLEICHER.

Witnesses:

D. J. McGROARTY,
WM. W. WRIGHT.