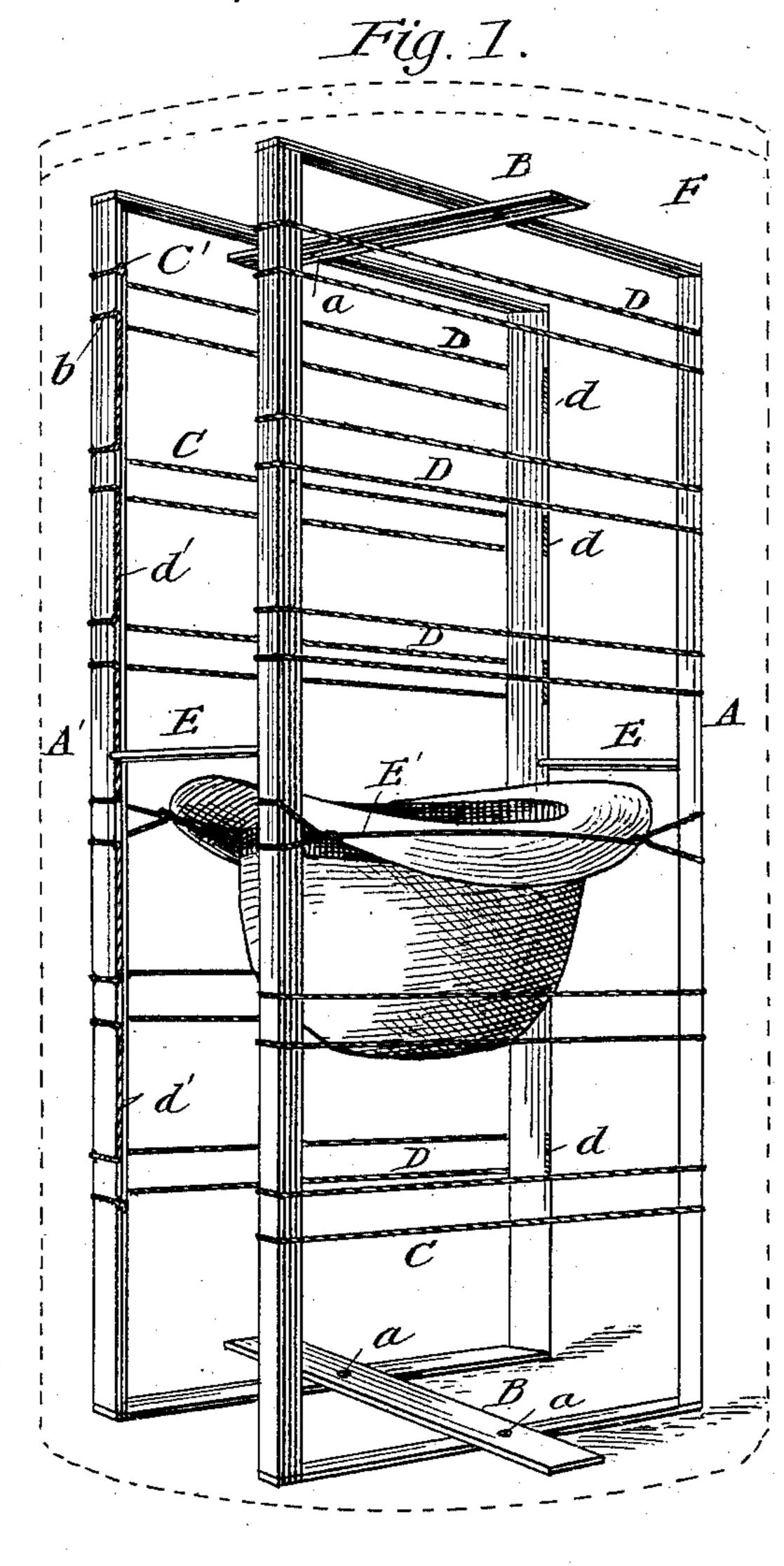
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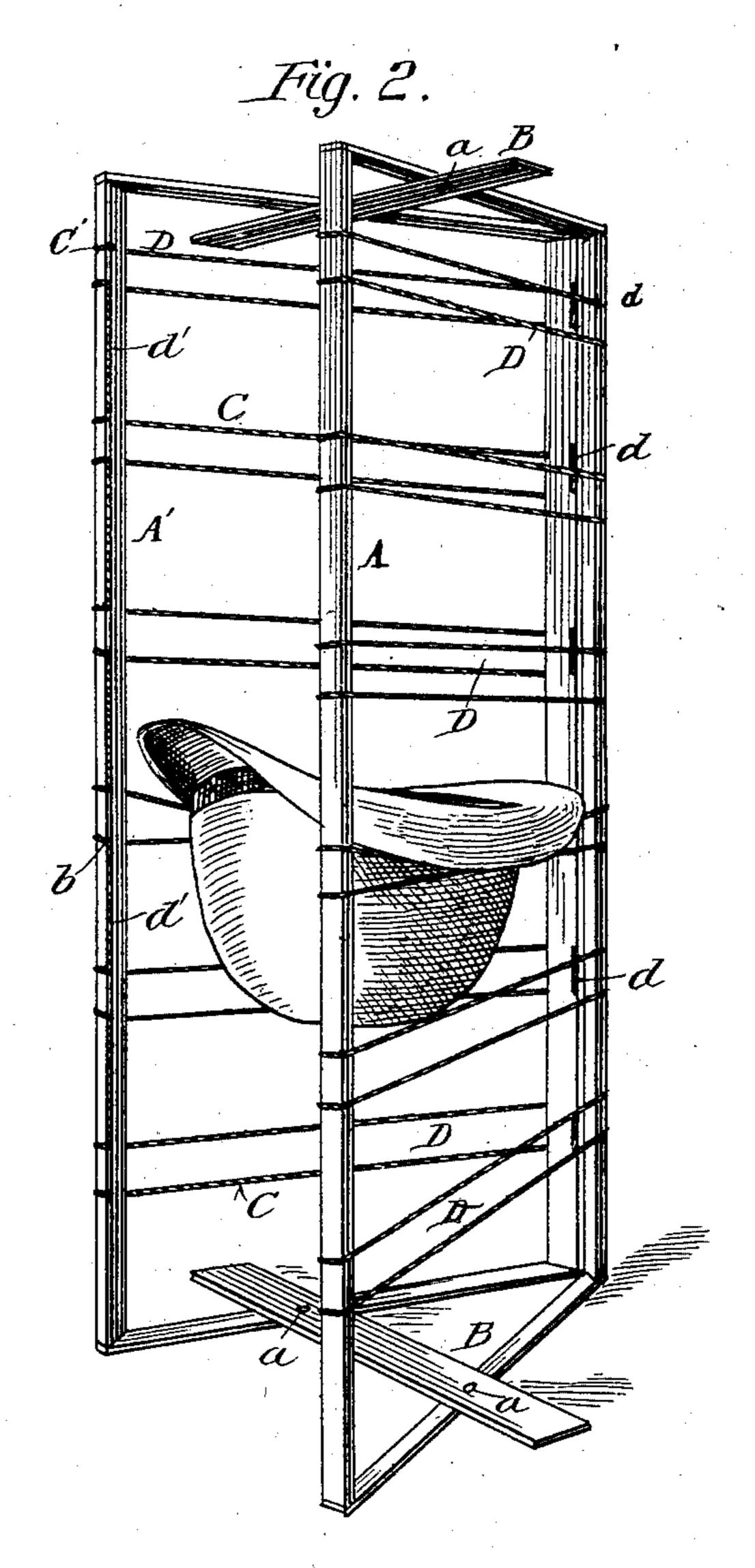
S. P. SVENSSON.

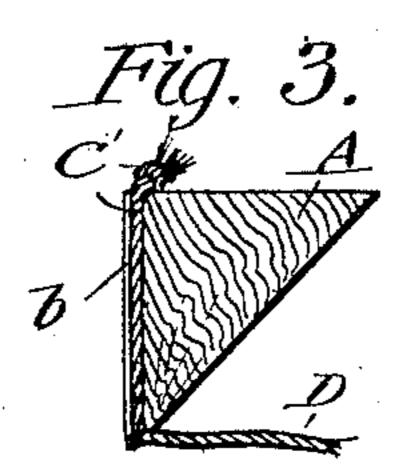
CRATE FOR SHIPPING AND PACKING HATS.

No. 370,989.

Patented Oct. 4, 1887.







WITNESSES:

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CRATE FOR SHIPPING AND PACKING HATS.

SPECIFICATION forming part of Letters Patent No. 370,989, dated October 4, 1887.

Application filed July 27, 1887. Serial No. 245,439. (No model.)

To all whom it may concern:

Be it known that I, SVEN PETER SVENSSON, of Orange, in the county of Essex and State of New Jersey, have invented a new and Im-5 proved Crate for Shipping and Packing Hats, of which the following is a full, clear, and ex-

act description.

My invention relates to an improvement in crates for shipping and packing hats, and has 10 for its object to provide a means whereby each and every hat packed will be independently supported, and wherein one hat will not rest upon another, and wherein, also, the crate may be thrown upon either side or end in shipping 15 without disarranging or injuring the hats in the least.

The invention consists in parallel frames pivoted to each other, having attached transverse series of cords or lines adapted to engage 20 and clamp the hat-brim, and so spaced as to hold one hat independent of the other, and also in the construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate

corresponding parts in all the figures.

Figure 1 is a perspective view of the crate 3c in position for shipment, the packing-box being shown in dotted lines. Fig. 2 is a perspective view of the crate positioned to receive the hats, and Fig. 3 is a detail sectional view.

Heretofore in packing and shipping hats they 35 have been supported in the boxes by means of cylindrical stays, all the weight in such cases being upon the lower hat. The hat is not only marked by the stay, ofttimes beyond remedy when sent a distance, but the shape of the brim 40 is frequently so altered as to render the hat unsalable. Not only does the lower hat suffer, but likewise the others, as should the box in which the hats are packed be thrown upon the side or top the entire contents are more or less 45 damaged, worn, and marred.

It is the object of the present invention to overcome these difficulties and provide a crate in which, when the hats are once placed, they will each have an independent support one 50 above the other and be so closely held without injury, so that the crate may be thrown about

upon any side or end without disturbing the contents. To this end two rectangular frames, A and A', are provided, made, preferably, of light strips of wood, the strips being triangu- 55 lar in cross-section, as shown, square or of other desired shape, fastened together by screws,

nails, or equivalent means.

The frames A A' are of the same height and width, and pivotally united by transverse 60 strips B, loosely riveted upon the inner side centrally at the top and bottom, as shown at a. The outer longitudinal edge of each frame is provided with a series of transverse grooves, b, arranged in pairs, each pair being at a given 55 distance, or preferably at equidistance apart, the space intervening between the pairs being substantially equal to the height of the hat to be packed. A cord, C, is knotted and entered into the upper groove upon one side, as 70 shown at C', Figs. 1 and 3, and passed transversely of the frame to the opposite side, forming a transverse line, D. It is then entered into the corresponding groove upon that side, carried vertically downward at the rear, as at 75 d, entered into the next lower groove constituting the first pair, and carried over again parallel with the first line to the corresponding lower groove of the first pair upon the side from which the line was started. The 80 cord is now carried vertically downward upon the inside, as shown at d', and entered into the first groove of the second pair, and is then carried transversely to the opposing side, forming the first line, D, of the second pair of 85 lines, and so on until a series of spaced lines in pairs have been stretched equaling the number of hats to be packed in the crate. Two frames of equal size are provided, pivoted one to the other, having a series of spaced 90 aligning cords or lines, arranged in pairs, extending substantially from top to bottom of the frame.

In operation, to place the hats in the crate, the frames are carried at an angle to each 95 other, as shown in Fig. 2, two of the contiguous longitudinal sides being brought in contact and the two opposite sides away from each other. The hats are now placed with the shape or crown down and the upper surface of 100 the brim resting upon the upper line of one pair, as shown in Fig. 2. When the hats have all

been placed and the crate filled with as many as desired, the frames are again brought to a parallel position, and detachable braces E are interposed between the sides, as shown in Fig. 1, 5 which braces may be of any form or number necessary, being adapted to preserve the parallel position of the frames and strengthen the same. The upper cord of each pair of lines is pulled down below the under cord and the two 10 lines given one complete twist to form the loops E'. The loops being formed on the side or curled edge of the brim, are entered in the sameone loop for each side. The tension brought to bear upon the brim is not sufficient to wear 15 it in the least, but amply sufficient to retain the hat, under all conditions of treatment, in a fixed position. It will be observed that hats thus packed are held independently one above the other. The mode of fastening the cord to

20 the side frames may be varied without departing from the spirit of my invention. After the hats have been packed in the crate, as above set forth, the crate is placed in a box, F, of suitable size and shape to neatly accom-25 modate the same, as shown in dotted lines, Fig. 1. It will be further observed that, in addition to each hat being independent of the other, they are so packed that it is impossible

to change the oval in the head or the set of the 30 brim when properly placed in the crate, and that any size, depth, or variety of hat may be packed in the same crate—as, for instance, a high or silk hat or derby, one or more of each at the same time.

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

1. The combination, with two parallel frames

pivoted to swing at an angle to each other, of a series of spaced aligning cords arranged in 40 pairs upon said frames and adapted to be twisted to form a loop over opposite sides of a hat-brim, substantially as shown and described.

2. The combination, with two parallel frames 45 pivoted to swing at an angle to each other, of a series of spaced aligning cords arranged in pairs upon the frames, the said pairs adapted to be twisted to form a loop over opposite sides of a hat-brim, and means for retaining 50 the frames in a parallel position, as set forth.

3. The combination, with a cylindrical case, of two parallel frames pivoted to swing at an angle to each other, adapted to enter said case, and provided with a series of spaced aligning 55 cords arranged in pairs adapted to be twisted to form a loop over opposite sides of a hatbrim, and transverse braces adapted to intervene the side bars of the frame and retain the frames in a parallel position, as set forth.

4. A crate for shipping and packing hats, consisting of two frames pivoted together at top and bottom, each provided with a series of aligning cords arranged in pairs, substantially as shown and described.

5. A crate for shipping and packing hats, consisting of two frames of equal size pivoted together at top and bottom, each provided with a series of aligning cords arranged in pairs and extending transversely, and trans- 70 verse braces intervening the side pieces of the frames, substantially as shown and described. SVEN PETER SVENSSON.

Witnesses:

J. F. ACKER, Jr., OLAF SVENSON.