

F. SCHMITZ.
BANANA SHIPPING CASE.
APPLICATION FILED DEC. 8, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

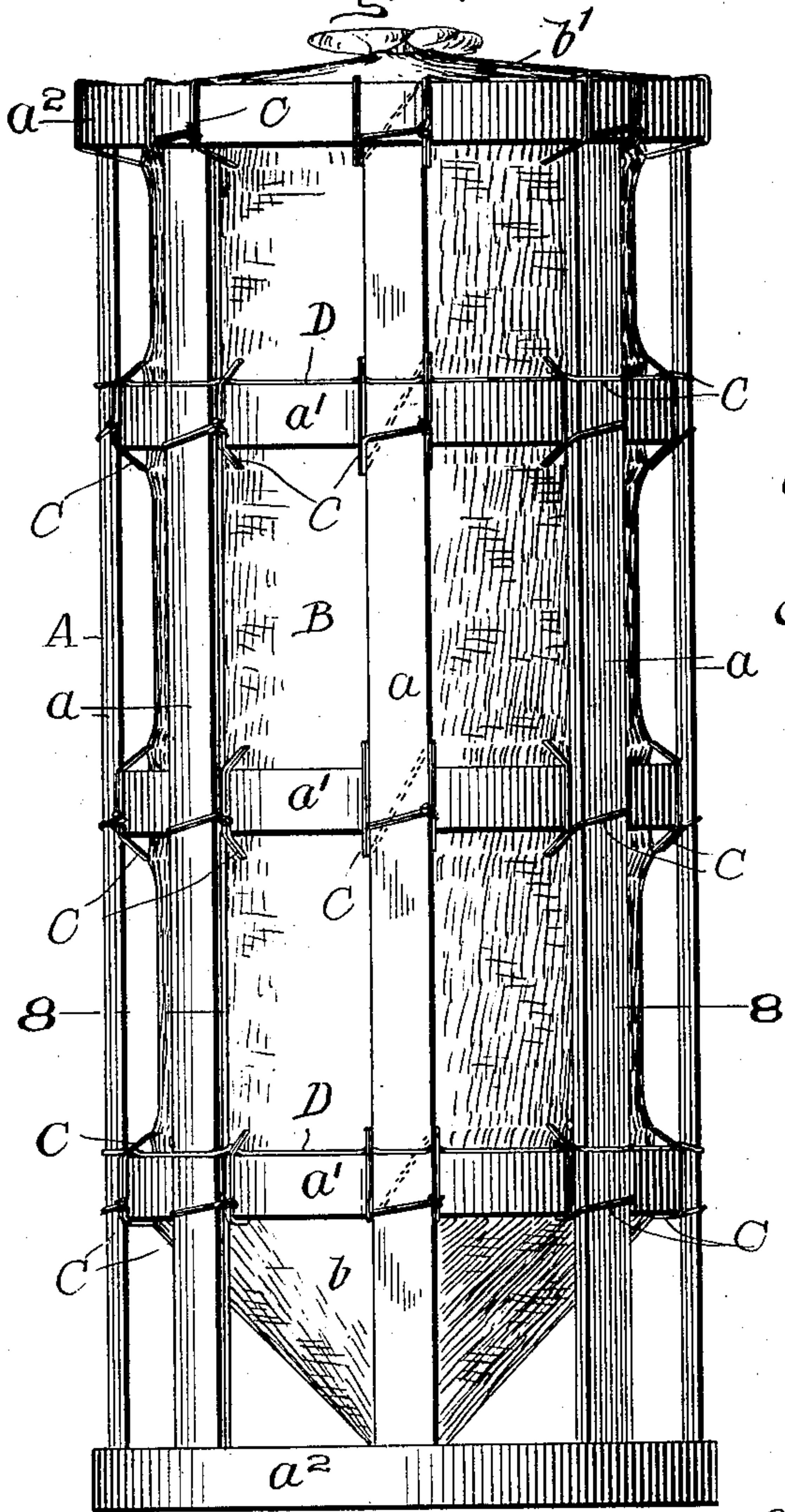


Fig. 2.

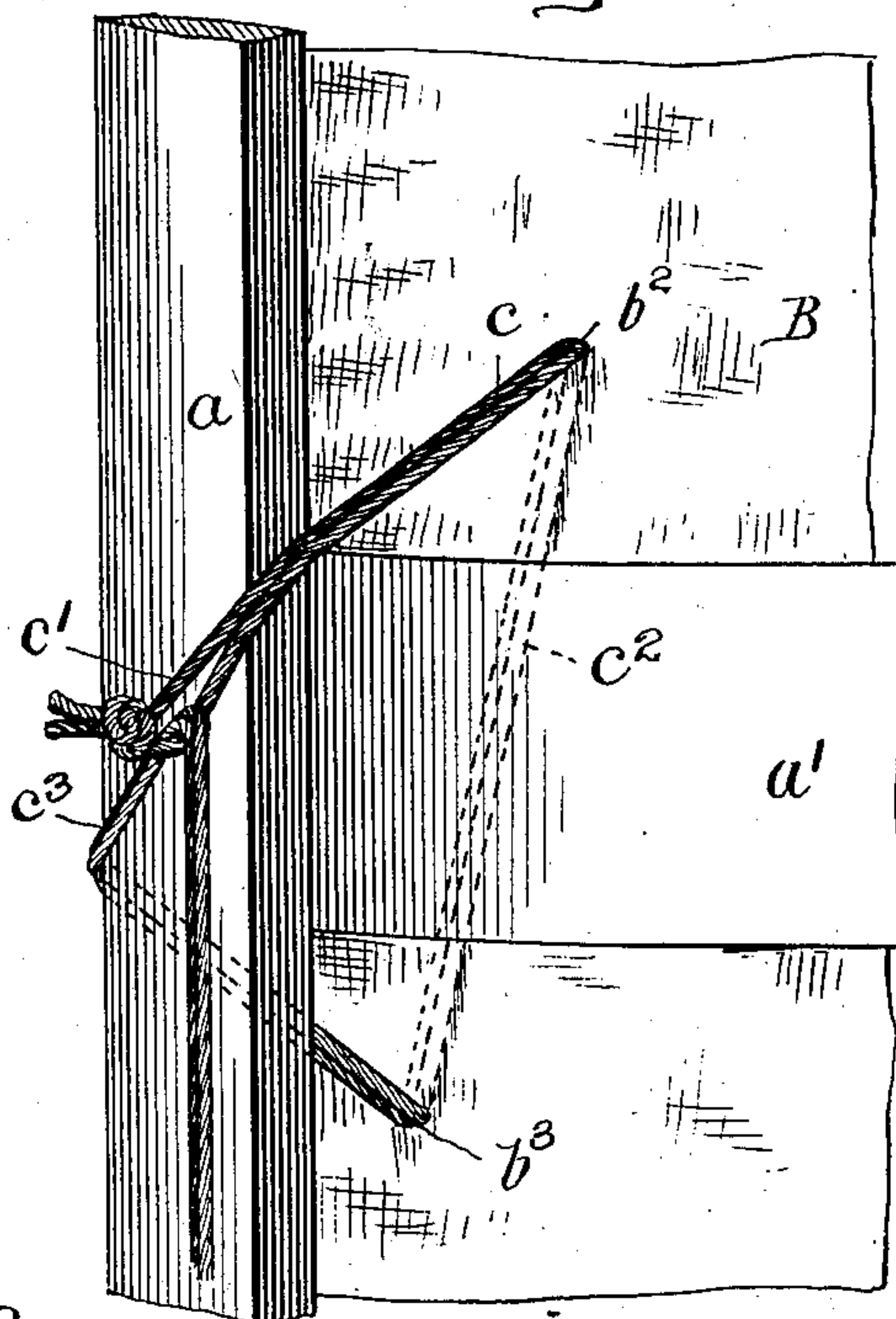


Fig. 3.

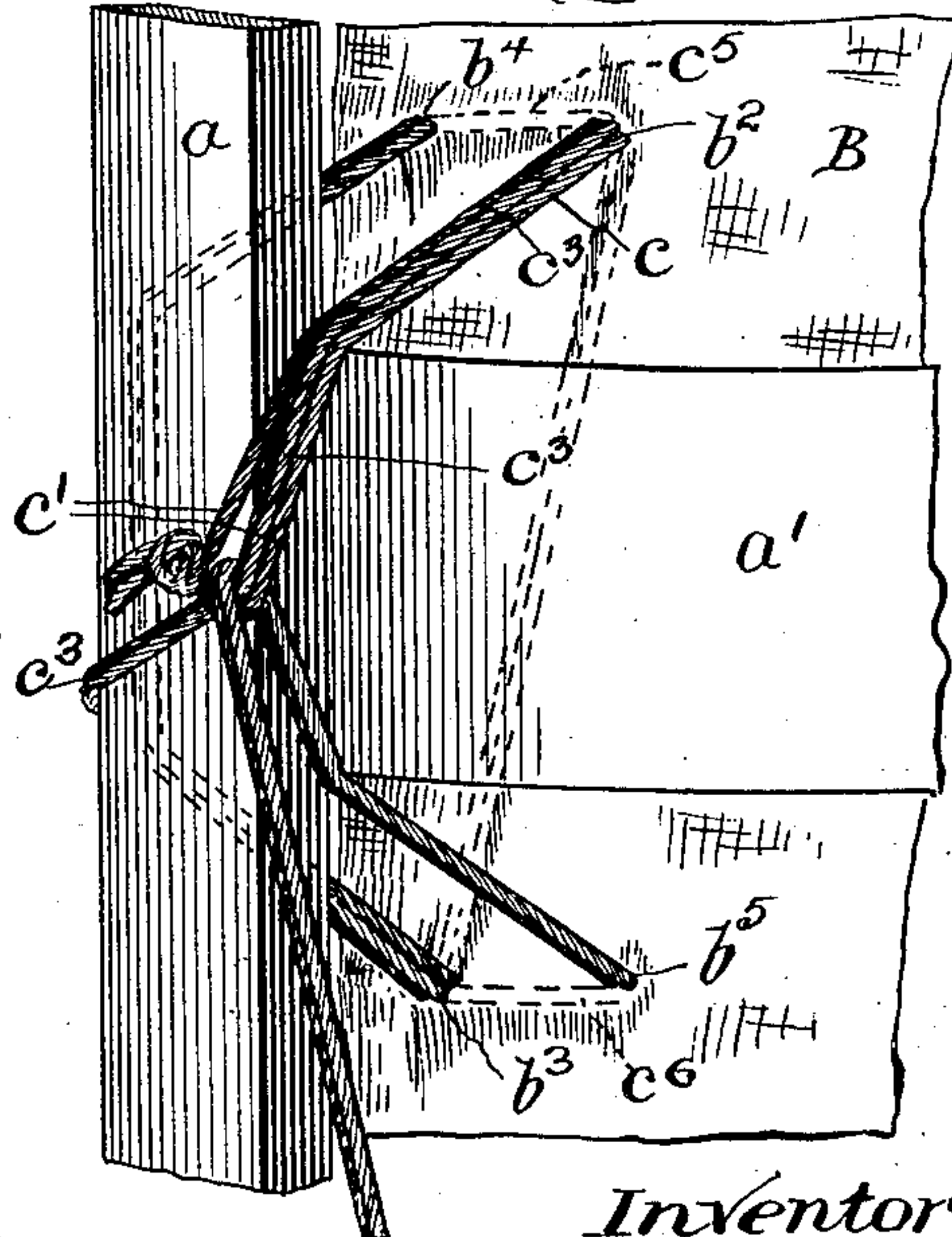
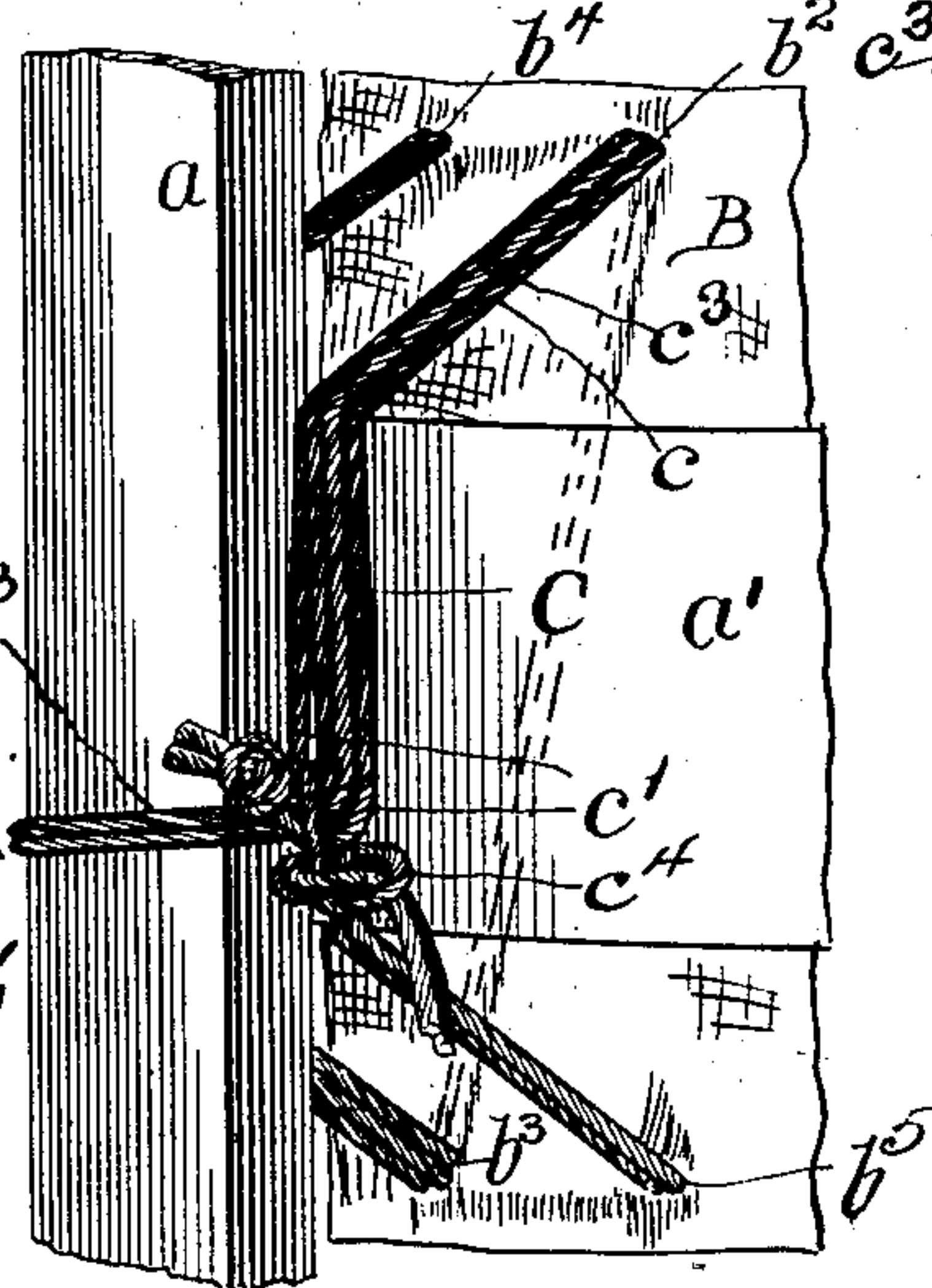


Fig. 4.



Witnesses:
Russell Wiles.
Chas. O. Sharvey.

Inventor:
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by H. B. Butler
Atty.

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2 SHEETS—SHEET 2.

Fig. 5.

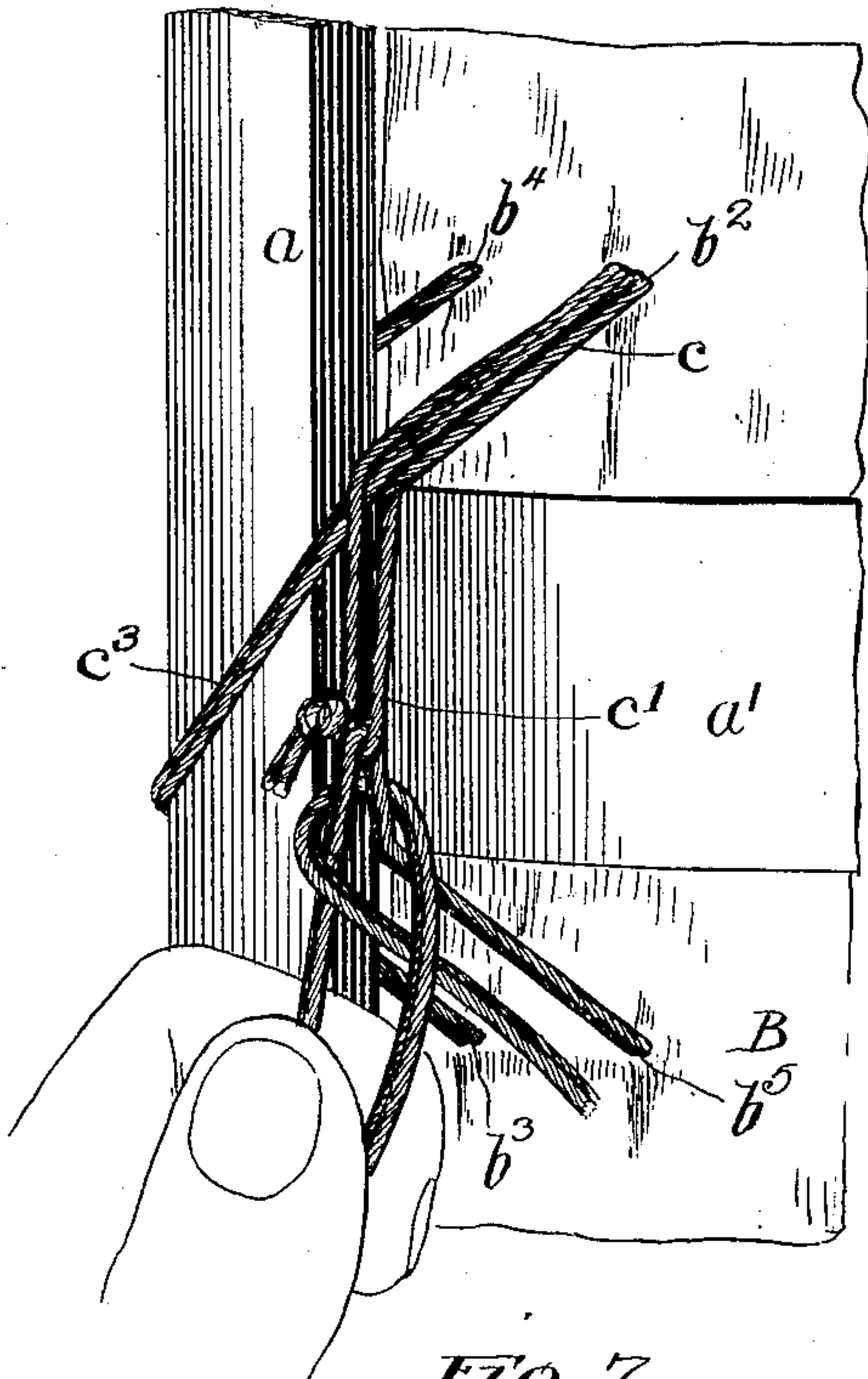


Fig. 6.

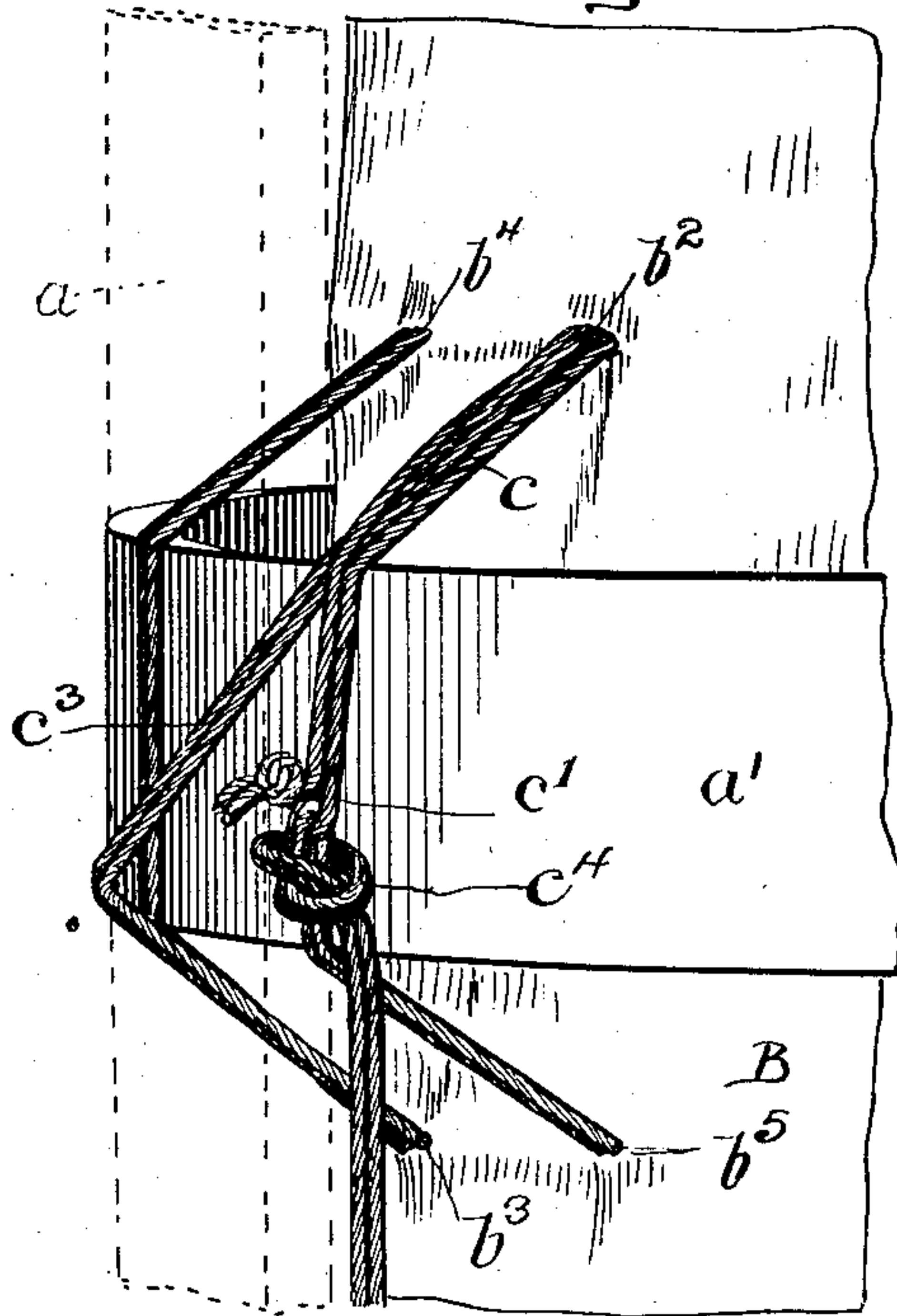


Fig. 7.

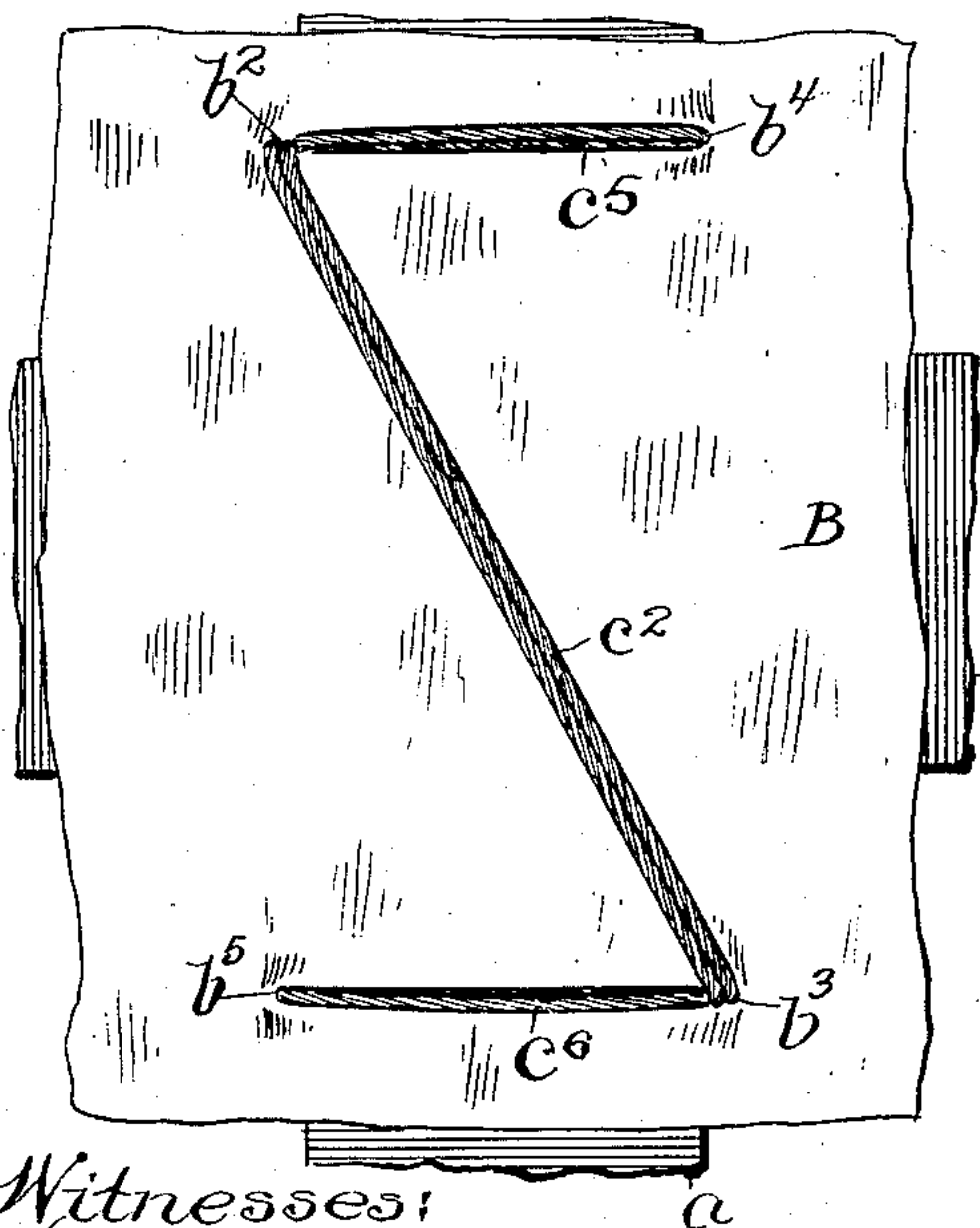
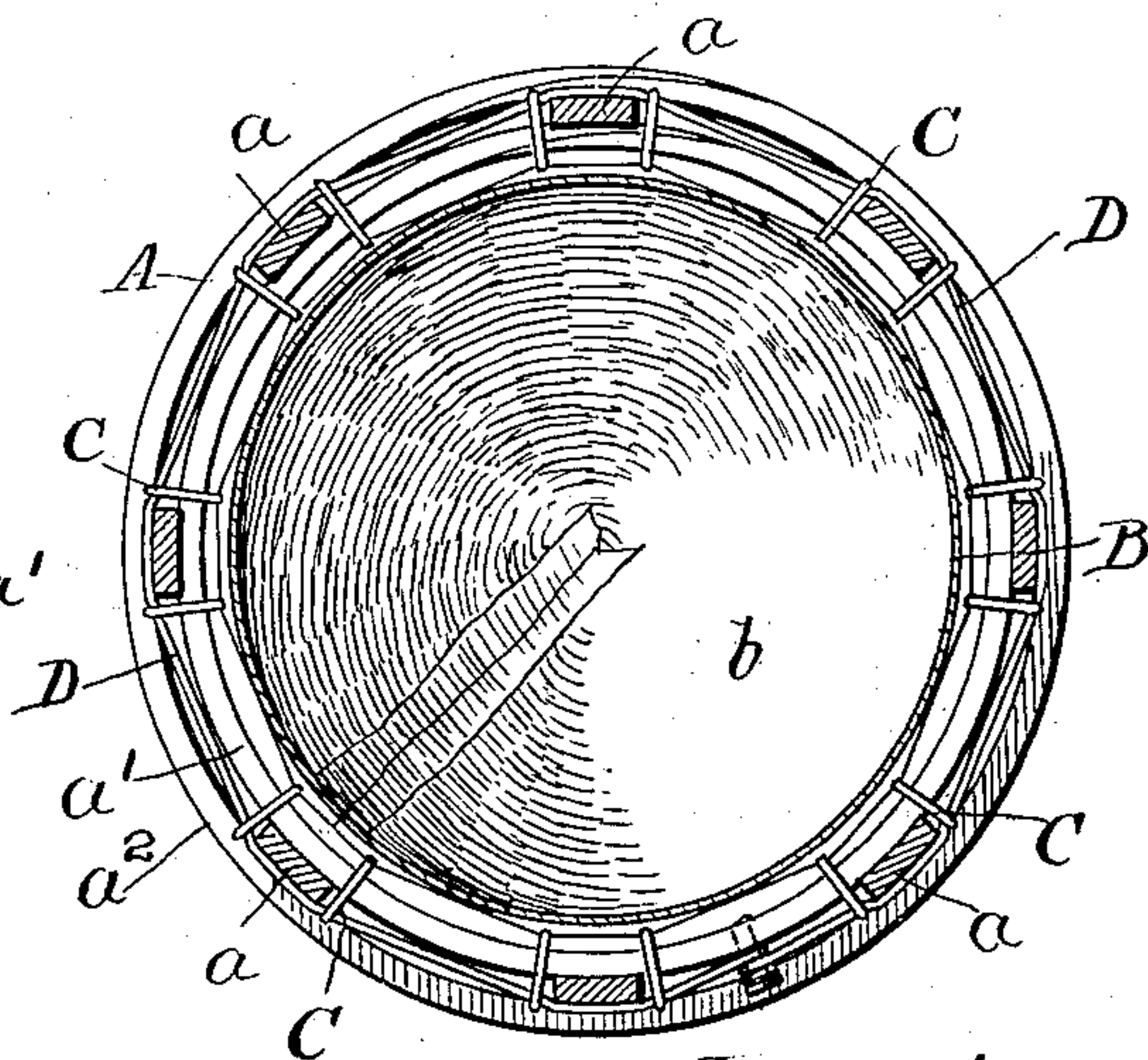


Fig. 8.



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Chas. O. Shervey.

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UNITED STATES PATENT OFFICE.

FRANK SCHMITZ, OF CHICAGO, ILLINOIS.

BANANA-SHIPPING CASE.

SPECIFICATION forming part of Letters Patent No. 735,828, dated August 11, 1903.

Application filed December 8, 1902. Serial No. 134,235. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCHMITZ, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Banana-Shipping Cases, of which the following is a specification.

My invention relates to certain new and useful improvements in banana-shipping cases, the object being directed more especially toward the means for supporting the bag within the crate, so that a more perfect cushioning of the fruit may be had, and in means for taking up the slack when the cushioning devices become less resilient on account of such slack.

The invention is fully described in this specification and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the complete banana-shipping case. Figs. 2, 3, and 4 are fragmental views illustrating the manner of sewing the loop which secures the bag to the frame. Figs. 5 and 6 are similar views of a slightly-modified form of loop. Fig. 7 is a fragmental view illustrating that portion of the loop as it appears from the inside of the bag, and Fig. 8 is a horizontal section in the line 8 8 of Fig. 1.

Referring to Fig. 1, A represents a crate made up of suitable longitudinal slats a and transverse hoops a' , connecting said slats to form a perfectly substantial frame or crate. The ends are provided with hoops a^2 , secured on the outer sides of the slats to strengthen the ends. When lying down, the longitudinal slats or rings are supported free from the floor by the outer hoops a^2 and on account of their flexibility further assist in the cushioning of the fruit within the bag. Said bag is lettered B and may be of the usual type used in devices of this class and provided with a suitable conical bottom b and top b' , the top being adapted to be tied around the stem of the bananas to center the same within the bag. The bag in a device of this class is generally secured to the crate by means of suitable loops, which are threaded through the bag and around the hoops or slats, as the case may be, and considerable difficulty has been found in keeping the bag taut enough, so that it may prevent the fruit from being

jarred back and forth, as is the case when the connecting-loops are loose or the bag is not stretched taut. The tension of the loops is such as to form flat panels between the loops along the surface of the bag, which when a bunch of bananas is inserted therein which fills the same will be distended slightly by said bananas, the bag thereby snugly holding the bananas and yet permitting of a certain amount of give, so as to take up the jarring caused in the transportation of the crates. It has been customary to pass these loops across the hoops adjacent to the slats and then through the bag, the cord extending diagonally from the hoop to the bag, so as to draw the material between the adjacent hoops taut. While this has been quite satisfactory, the material between the two ends of each loop was slacked up considerably, and it is for the purpose of taking up this slack, as well as certain other means for producing tension upon the device, that my invention pertains. To make the construction of this loop perfectly clear, I have illustrated the manner of sewing the same in Figs. 2, 3, and 4. In making this loop it is usual to use the cord double, knotting the ends of the cord and sewing the cord through the sack with a large needle, the needle not being shown in the drawings. The cord is first sewed in at the point b^2 , leaving the end c extending without, then downward at an angle to the point b^3 , leaving a diagonal strand c^2 between said points. These points are approximately equidistant from the edges of the hoop, and the point b^2 is on one side of the slat, while the point b^3 is on the opposite side thereof. The long end of the cord is then passed through a loop c' at the end of the shorter end c of the cord, as seen in Fig. 2, and the bag drawn up toward the hoop. The cord is then held against slipping at this point and the long end of the cord brought diagonally across the slat, as seen at c^3 , and sewed through the bag by passing it in again at the point b^2 and out at b^4 , which is upon the opposite side of the slat, then across the hoop and again in through the point b^3 and out through the point b^5 , which is on the same side of the slat as the point b^2 , the points $b^2 b^5$ and $b^4 b^3$ being approximately one immediately above the other. The end is

then passed through the loop c' and underneath the diagonal part c^3 , lying across the face of the slat, drawing down upon the same until the proper tension is secured upon the bag, when the end may be tied, as seen at c^4 in Fig. 4, forming the complete loop C. It will be understood that the ends of the loop, which are lettered $c^5 c^6$, will draw the material between the hoops toward each other, as before, but the diagonal part c^2 of the cord will take up a great deal of the slack between the ends of the loop.

It is evident that after banana-shipping cases have been used for some time the bag and loops are apt to become slack, and I have provided means whereby said slack may be taken up and the required amount of rigidity may be again imparted to the device. As shown in Fig. 8, D represents a cord extending around the crate, which is passed outside of the slats underneath the loops C. By bringing this cord in front of the hoop and drawing it taut—as, for instance, wrapping it around a nail and driving the nail into the hoop—the loops will be drawn out sufficiently to take up the slack.

Figs. 5 and 6 illustrate a slightly-modified form of tying the loop, the difference being that instead of passing the end through the diagonal portion it is connected only with the looped end c' of the cord and tied.

I claim as new and desire to secure by Letters Patent—

1. In a banana-shipping case having a suitable crate and bag, a loop for securing the bag to the crate, comprising substantially a cord sewed into the bag upon one side of a member of said crate and out through the bag upon the opposite side to form a diagonal strand, then in through the bag and around a member of the crate to form a rectangular

loop, the ends of the cord being tied together, substantially as described.

2. The combination with a crate and bag, of a loop connecting the bag to the crate, having two parallel portions within the bag, portions extending from the corresponding ends of said parallel portions out of the bag and over the members of the crate, and a portion extending from one end of one of said parallel portions to the opposite end of the other parallel portion to form a diagonal strand within the bag, substantially as described.

3. In a banana-shipping case, the combination with a crate composed of suitable hoops and longitudinal slats on the outer side of the hoops, a bag, loops sewed into said bag and across the hoops adjacent to the slats for supporting the bag, and a cord for producing tension upon the loops, passing outside of the slats and underneath the loops, and adapted, when tightened, to raise the loops from the hoops, substantially as described.

4. In a banana-shipping case, the combination with a suitable crate composed of longitudinal members and connecting-hoops, a bag and loops sewed into said bag and across the inner members of the crate, of a cord for producing tension upon the loops passing outside of the outer members and underneath the loops and adapted, when tightened, to raise the loops from the inner members, substantially as described.

In witness whereof I have signed the above application for Letters Patent at Chicago, in the county of Cook and State of Illinois, this 26th day of November, A. D. 1902.

FRANK SCHMITZ.

Witnesses:

CHAS. O. SHERVEY,
RUSSELL WILES.