

(No Model.)

C. A. DANIELS.
FOLDING SHIPPING CRATE.

No. 502,429.

Patented Aug. 1, 1893.

Fig 1.

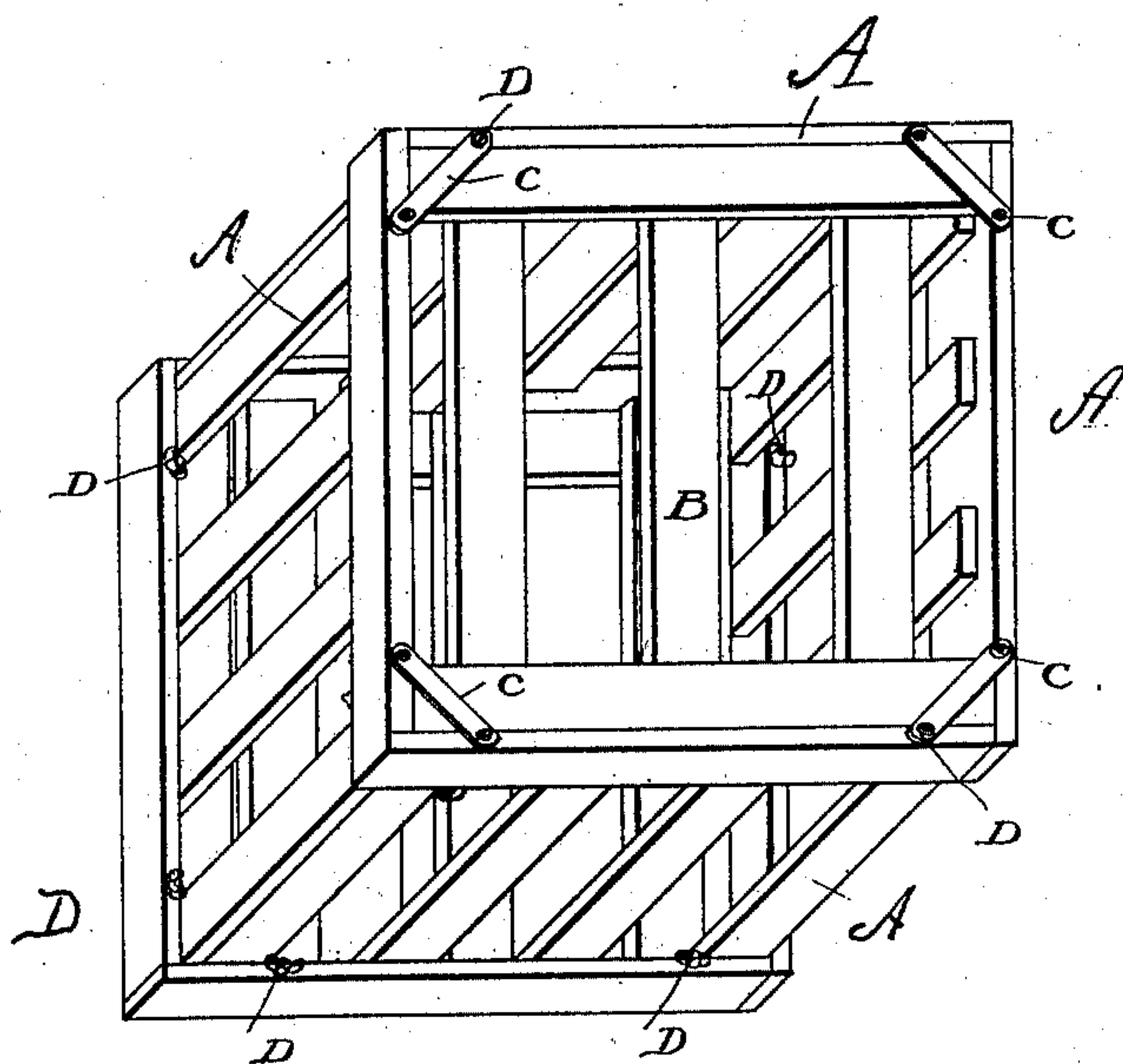


Fig. 2.

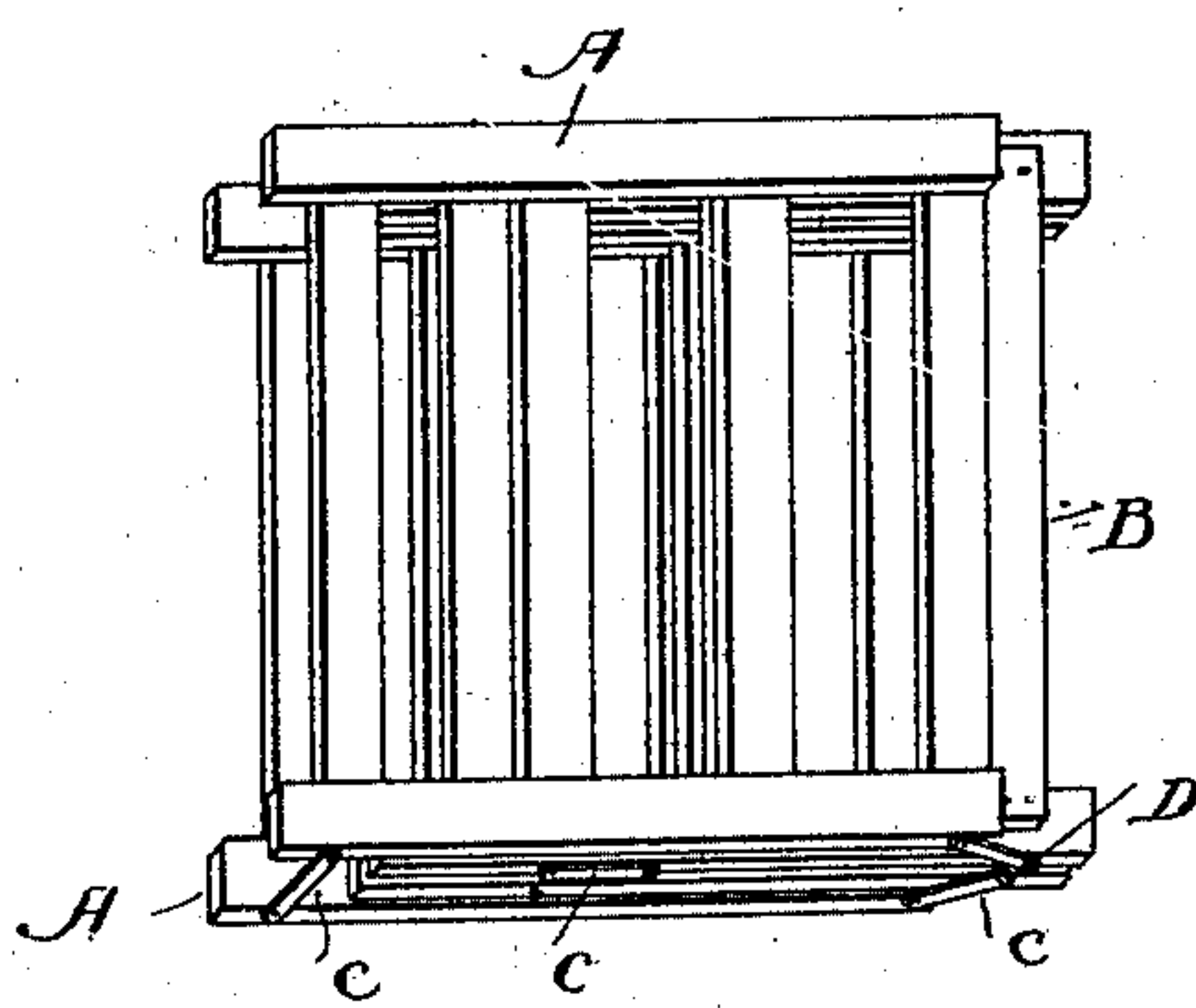


Fig. 3.

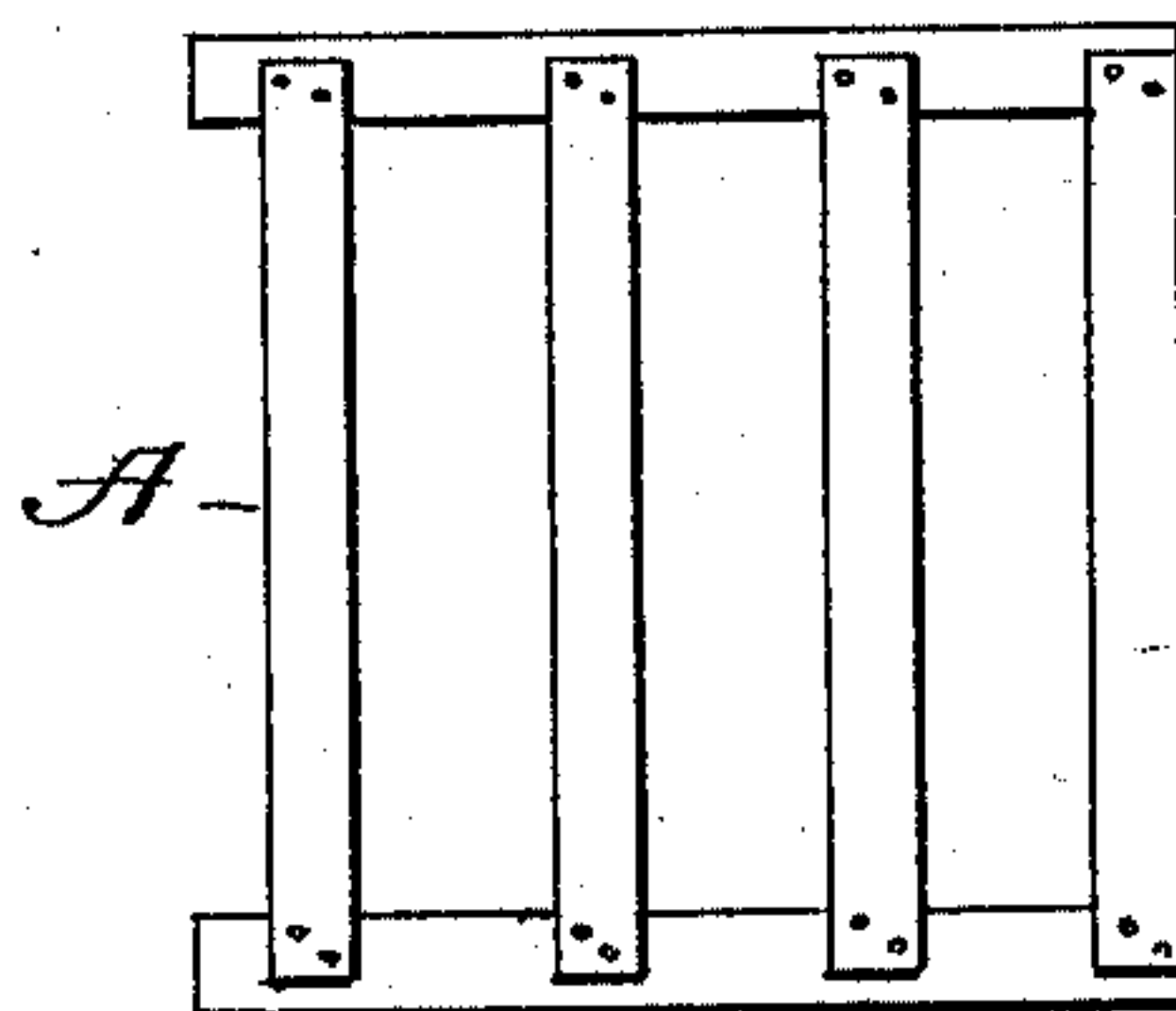
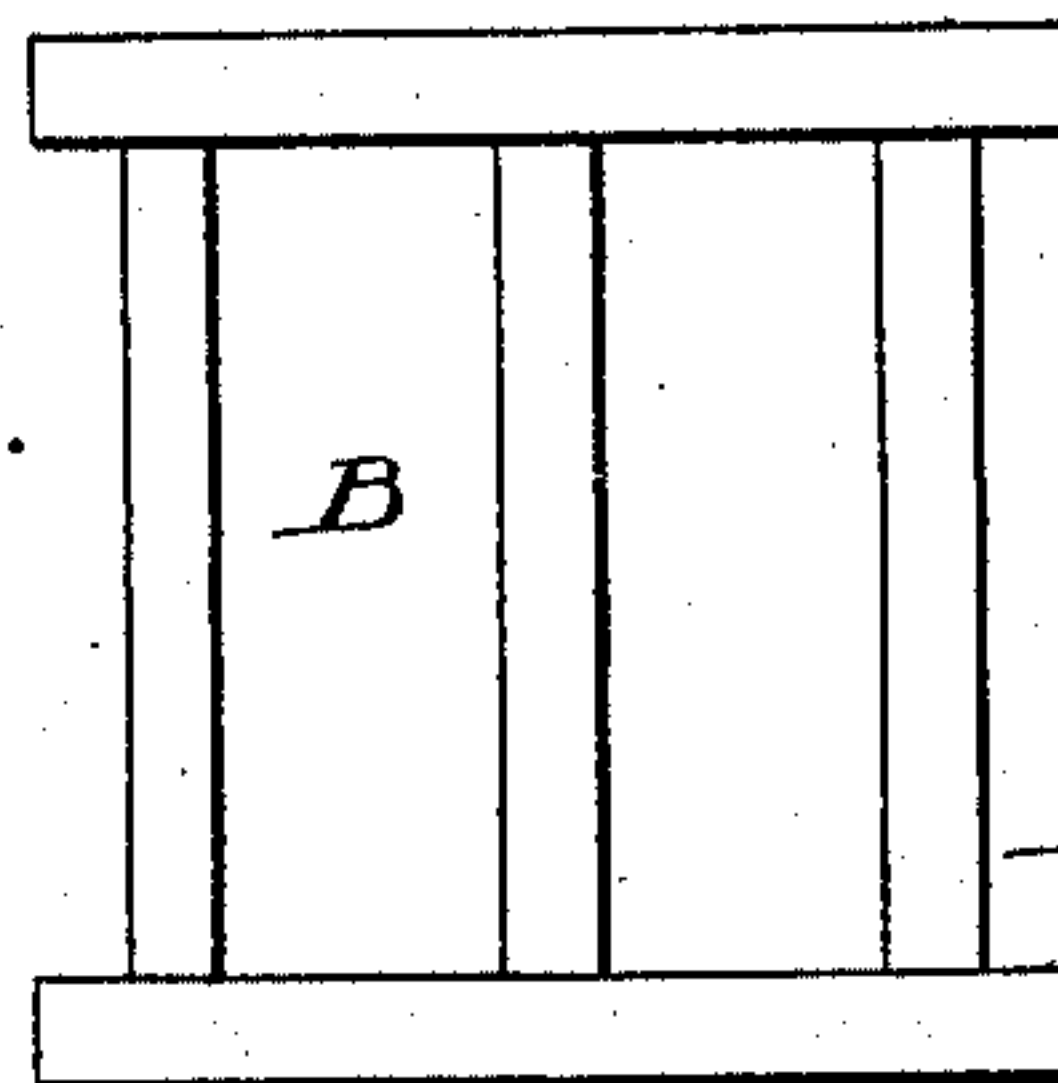


Fig. 4.



Witnesses:

Wallace Burch.
Wm B. Goodwin

Inventor:

Charles A. Daniels

UNITED STATES PATENT OFFICE.

CHARLES A. DANIELS, OF WATERVILLE, NEW YORK.

FOLDING SHIPPING-CRATE.

SPECIFICATION forming part of Letters Patent No. 502,429, dated August 1, 1893.

Application filed April 28, 1892. Serial No. 431,093. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. DANIELS, of Waterville, in the county of Oneida, State of New York, have invented certain new and useful Improvements in Folding Shipping Crates, Cases, or Coops, of which the following is a specification.

My invention relates to shipping crates or cases and it is the object of my invention to provide a crate which is simple and inexpensive in construction, which is strong and durable, and which can be folded when not in use so as to occupy a small area in comparison to its storing capacity when set up.

Referring to the drawings forming a part of this specification, Figure 1 is a perspective view of my improved shipping crate or case when the same is set up. Fig. 2 is a perspective view showing said crate or case in its folded position. Fig. 3 is a detail view of the side frames of the crate, and Fig. 4 is a detail view of one of the end pieces.

Referring to the drawings by letter, A denotes the side frames of the crate or case, which are four in number, and which are formed of any suitable material and in any desired manner.

B denotes the end pieces of the crate or case and which are two in number. Said side frames A are held in place by iron straps C which are placed diagonally to the angle formed by the side frames A, and are held in place by bolts D which pass through said straps C and cleats upon the ends of the side frames A. Said bolts are provided with thumb nuts at their inner ends so that they can be readily removed or inserted. It will be understood that the straps C not only bind the side frames firmly together, but also prevent the end pieces B of the crate or case from falling out since said straps C pass across the corners of the end pieces B. Said end pieces B can be readily removed from the crate or case by loosening the thumb nuts upon the bolts D which hold said straps C, and swinging said straps out of the way.

By reference to Fig. 2 it will be seen that by removing the bolts D from two of the straps C, at opposite ends of the case, the remain-

ing straps act as hinges and permit the sides A to be folded and secured as shown.

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination in a folding crate of four rigid similar, interlocking sides held to each other by straps C pivoted to the edge of each of the sides and spanning the angle or corner of the ends of the crate, and a rack or end piece adapted to fit in the ends of the crate, formed by the four sides and held in place by the straps C passing across the corner of the end piece on the outside thereof, substantially as set forth.

2. The combination in a folding crate of four rigid, similar interlocking sides held to each other by straps C pivoted to the edge of each of the sides and spanning the angle or corner on the ends of the crate, the straps being of a length to allow the two sides at the separating edge to be folded together, and the two thus folded inserted between the remaining two sides, whereby the four sides will all lie parallel with and upon each other, and a rack or end piece adapted to fit in the ends of the crate, formed by the four sides, and held in place by the strap C passing across the corner of the end piece on the outside thereof, substantially as set forth.

3. The combination in a folding crate of four interlocking similar rigid sides connected adjacent to each end by four straps pivoted to the edge of each of the sides, (excepting the end of one strap, which is detachable to allow folding and the introduction of the end piece) and spanning the corners of the crate, and rigid end racks adapted to be received in the ends of the crate and held in position by the straps engaging the corners of the rack on the outside, substantially as set forth.

4. The combination in a folding crate of four folding rigid, similar sides A secured together by straps C pivoted to the edge of each of the sides and spanning the corner when the crate is in extended position, one end of one of the straps being detachable to permit the crate being folded, and the introduction of the end pieces, a thumb screw passing through one of the slats of the side of the

crate from the inside outward, and engaging the detachable end of one of the straps C, and end pieces adapted to enter the end of the crate and be retained in position by the strap
5 C, substantially as set forth.

5. The combination in a folding crate of four rigid sides, each composed of a series of slats and two cross slats on the inside, one of the cross slats being flush with the ends of the
10 slats and the other a little removed from the ends of the slats, whereby, when the crate is in extended position the over-reaching end of the slats will pass by the end of the next side, and the cross slat will abut against the cross
15 slat of the next side, a strap C pivoted to the

edges of the sides and spanning the corners of the crate, and end racks adapted to enter the end of the crate and be retained in position by the strap C, the crate being capable of folding by detaching one end of the strap
20 C at the same corner on each end of the crate, removing the end pieces and turning in the side pieces at the separated corners upon the connected side pieces and folding the connected side pieces down upon each other, sub-
25 stantially as set forth.

CHARLES A. DANIELS.

Witnesses:

WALTER RACE,

WALLACE BURCH.