

(No Model.)

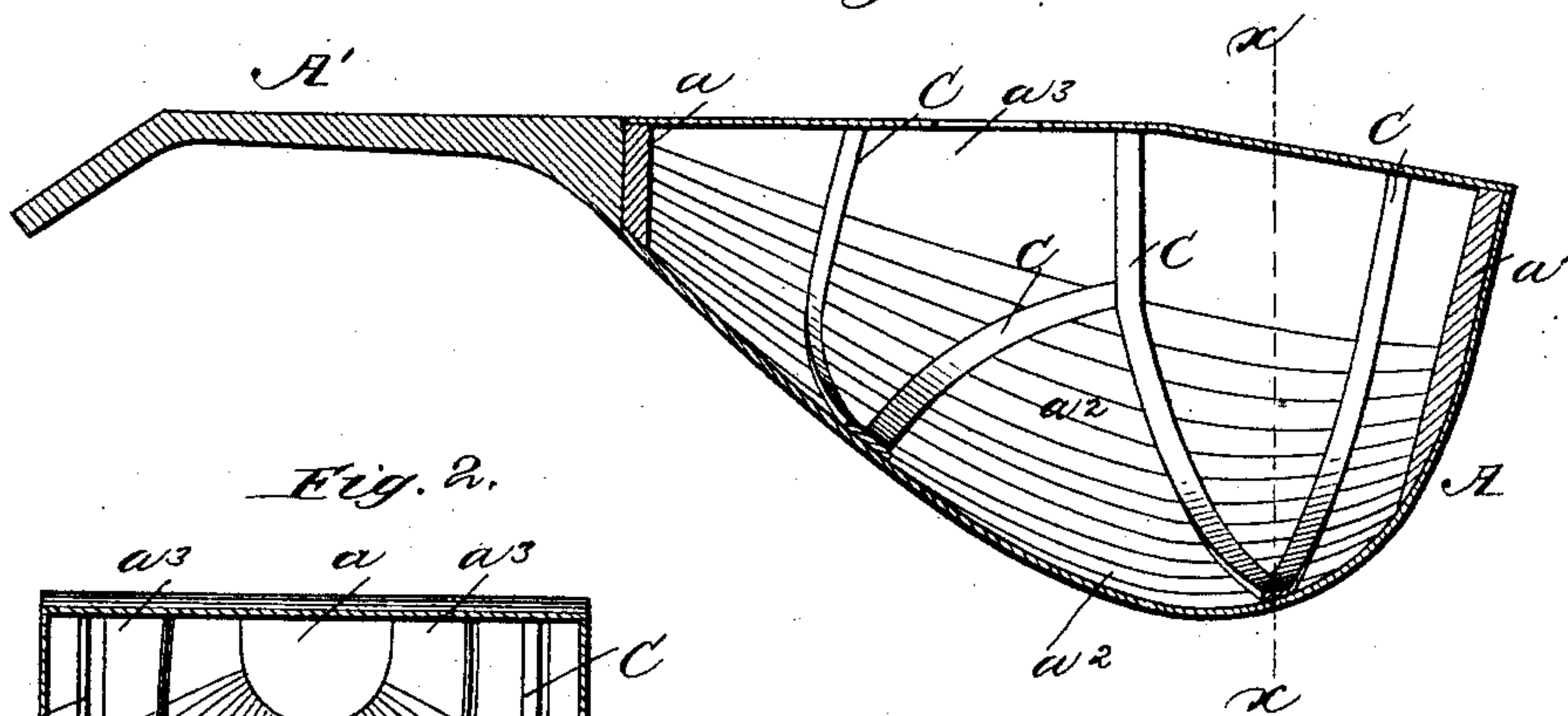
G. B. DURKEE.

MANDOLIN.

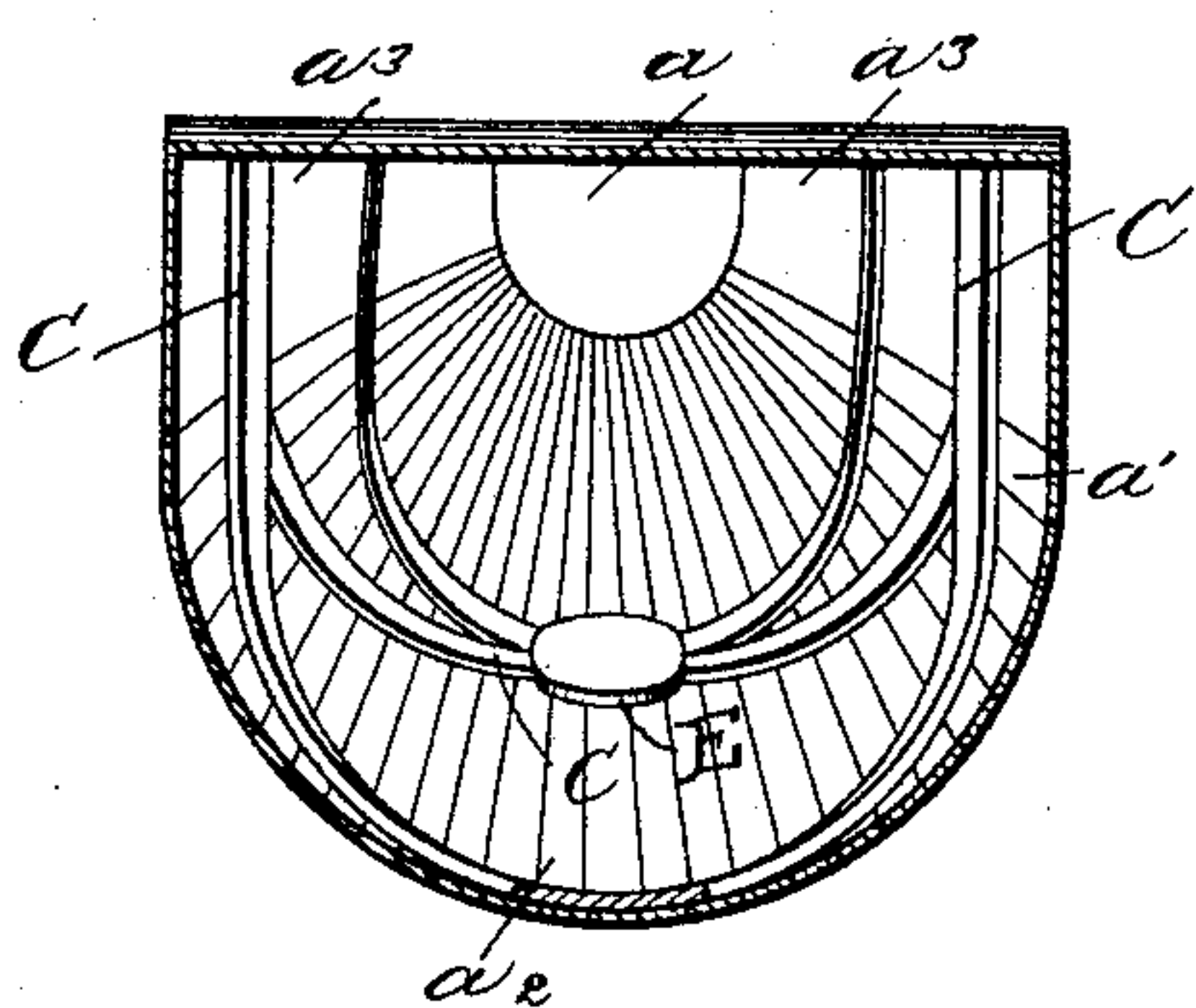
No. 368,461.

Patented Aug. 16, 1887.

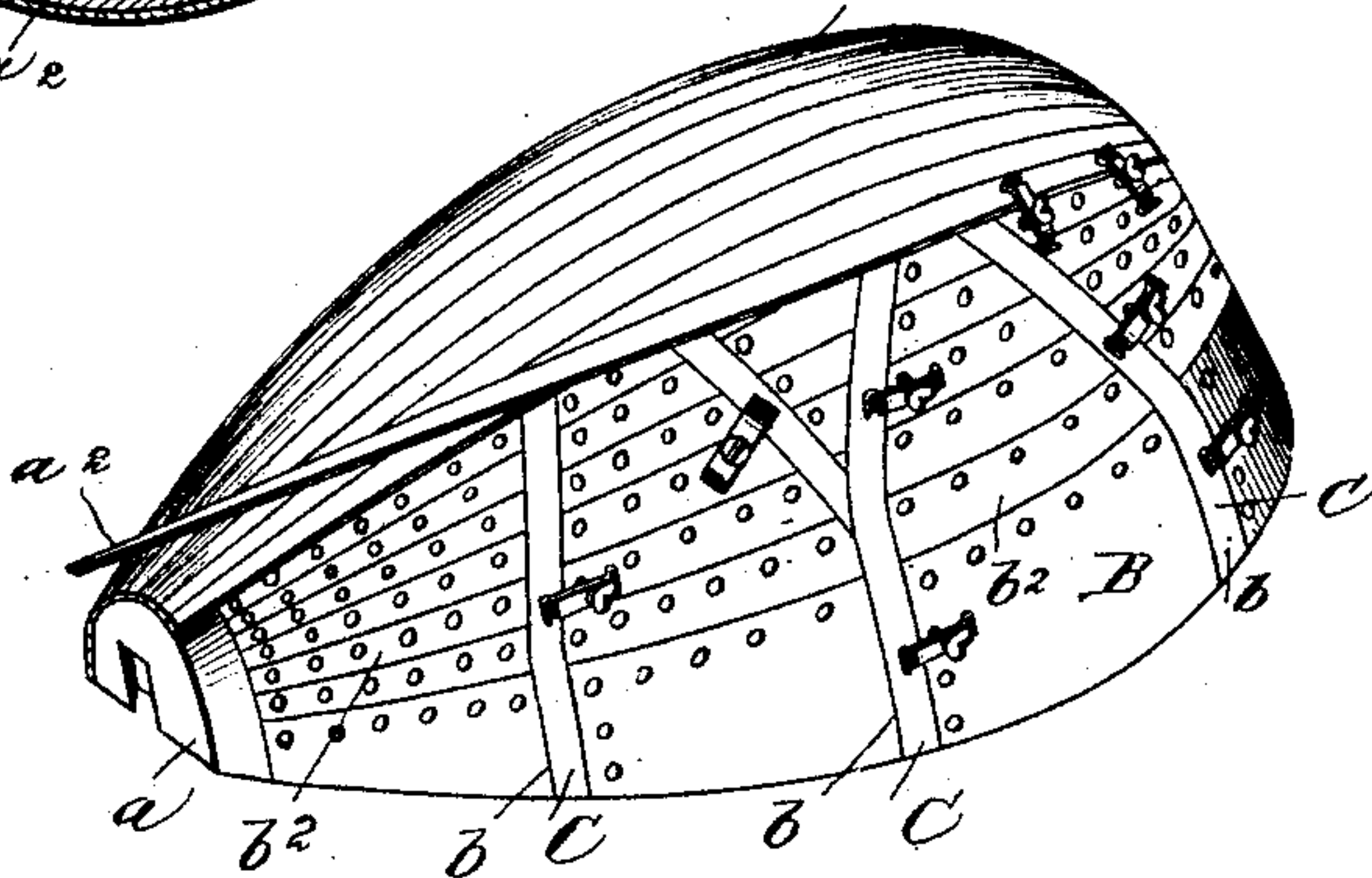
*Fig. 1.*



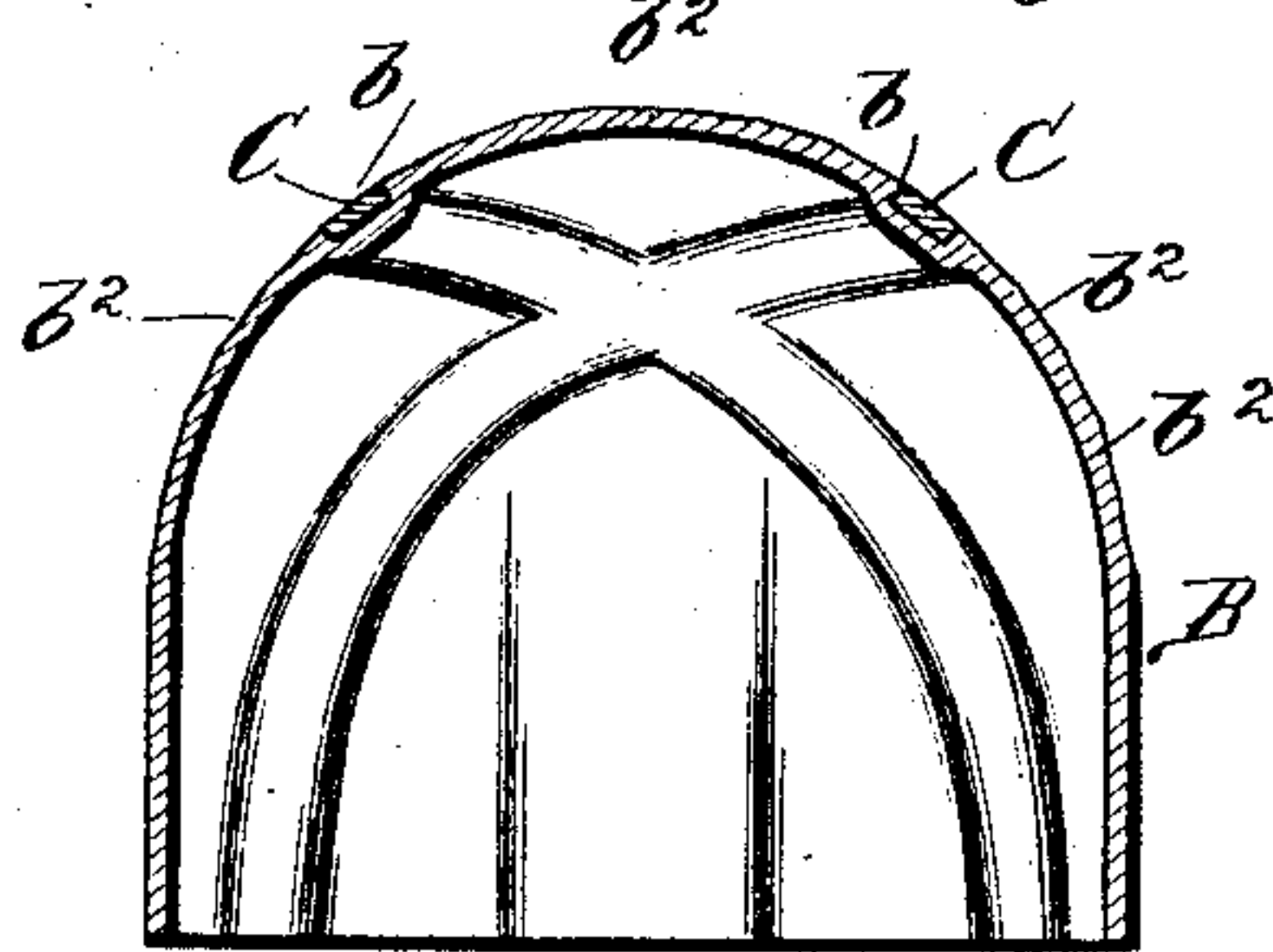
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## MANDOLIN.

SPECIFICATION forming part of Letters Patent No. 368,461, dated August 16, 1887.

Application filed July 5, 1887. Serial No. 243,461. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE B. DURKEE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Mandolins, of which the following is a specification.

The popular and peculiarly-shaped instrument known as the "mandolin" is formed with a proximately half-pear-shaped body having a stem or neck that serves as the finger-board of the instrument. The half-pear-shaped body of the mandolin is provided with a flat or substantially flat face or sounding-board having a small opening, over which the strings pass.

The peculiar shape of such instrument renders it necessary to construct its body portion of longitudinal strips properly bent and extending between the front and the rear or tail end of the body, such strips being glued together along their meeting edges.

Prior to my invention the strips for forming the body of the mandolin have been bent upon a properly-shaped block and glued together along their meeting edges as they are placed on the block, each newly-laid strip being held in place until the glue has hardened by tying it upon the block. The glue joints between the meeting edges of the strips have been found to be of insufficient strength, and hence after forming the concavo-convex portion of the body it has been customary to glue within the same a backing or lining of tough paper or cloth, the flexibility of either article permitting it to be applied and fitted to the inner half-pear-shaped body of the instrument.

The object of my invention is to dispense with the use of the internal paper or cloth lining heretofore employed in the manufacture of mandolins, and to provide means whereby the strips may be secured together more firmly than before, at the same time avoiding the deadening effect resulting from the use of a paper or cloth lining, which must necessarily impair the resonance of the instrument.

To the attainment of the foregoing and other useful ends my invention consists in matters hereinafter described, and particularly pointed out in the claim.

In the drawings, Figure 1 represents in longitudinal section a mandolin constructed in accordance with my invention. Fig. 2 is a transverse section of the mandolin on the line  $x$ , Fig. 1. Fig. 3 represents in perspective a block or former with a portion of the mandolin-body formed thereon. Fig. 4 is a transverse section of the block or former.

In said drawings, A represents the body of a mandolin, and A' the neck thereof. At one end of the body, and within the half-pear-shaped shell of which said body is composed, is the front piece or block,  $a$ , and at the opposite end is the rear block or tail-piece,  $a'$ .

The longitudinal strips  $a^2$  are bent substantially as shown, and are glued together along their meeting edges, although no particular attention need be paid to such glue joints. In forming such body, I provide a half-pear-shaped block, B, having a set of transverse grooves,  $b$ , formed in its convex face. At one end of this block I temporarily secure the front block,  $a$ , and at the opposite end secure the tail-piece or block  $a'$ . In the grooves  $b$ , I fit wooden strips C, which should be of such thickness as to rise slightly from the flat surface widths  $b^2$ , that are formed along the face of the block, it being observed that the block has a series of longitudinal flat surface widths  $b^2$ , corresponding in number to the desired number of longitudinal strips  $a^2$ , of which the mandolin-body is to be formed.

The cross-strips C may and preferably will be flush with the slightly longitudinally raised edges of the angles between the surface widths  $b^2$  on the block, so that the portions of the strips C between such angles can be filed down flat to correspond with the flat surface widths  $b^2$ , and hence to correspond with the strips  $a^2$ . The longitudinal strips  $a^2$  are to be laid upon the block substantially as illustrated in Fig. 3, and, while preferably glued together along their edges, will be glued onto the cross-strips C, which, after being filed down, will present along their outer sides series of flat widths corresponding to the widths of the longitudinal strips  $a^2$ . It will be observed, however, that the strip  $a^3$  along each longitudinal edge of the body of the mandolin is desirably wider than the width of any one of the strips  $a^2$ , although



all of the strips could evidently be made of uniform width. After gluing down a couple of middle strips,  $a^2$ , on the cross-strips C, held in the grooves of the block, clamps D or other suitable means can be used for holding the strips  $a^2$  in place until the glue becomes hardened, after which two more strips can be similarly laid, and so on until the body has been completed.

10 It will be observed that the cross strips C could not be practically fitted and held in the body after the formation of the latter, and that the longitudinal strips must be laid on the cross-strips in the manner aforesaid. The strips C may run directly across from edge to edge, but desirably intersect one another, substantially as herein shown.

20 In Fig. 2 I have shown certain strips united at the point of intersection by a piece, E, which, while further holding together the strips, provides a bed for the name of the maker.

The tone of a mandolin thus composed of bent longitudinal strips glued to the bent transverse wooden strips is found to be decidedly

superior to a paper or cloth lined instrument, 25 since there is no deadening effect, and, furthermore, the parts retain their position and adherence together as a body in such a way as to avoid all jarring sound.

In conclusion, it may be stated that the form- 30 er-block herein shown, and also the devices for temporarily holding the strips thereon, constitute the subject of an application for Letters Patent of the United States heretofore filed by me, and numbered 237,386. 35

What I claim as my invention is—

The herein-described improvement in mandolins, consisting in the substantially half-pear-shaped mandolin-body composed of longitudinal strips laid upon and secured, substantially as described, to the bent cross-strips C, which lie within the completed mandolin-body, substantially as and for the purpose set forth. 40

GEORGE B. DURKEE.

Witnesses:

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