

(No Model.)

2 Sheets—Sheet 1.

E. BARRATH.  
SHEET METAL CAN.

No. 507,305.

Fig. 1.

Patented Oct. 24, 1893.

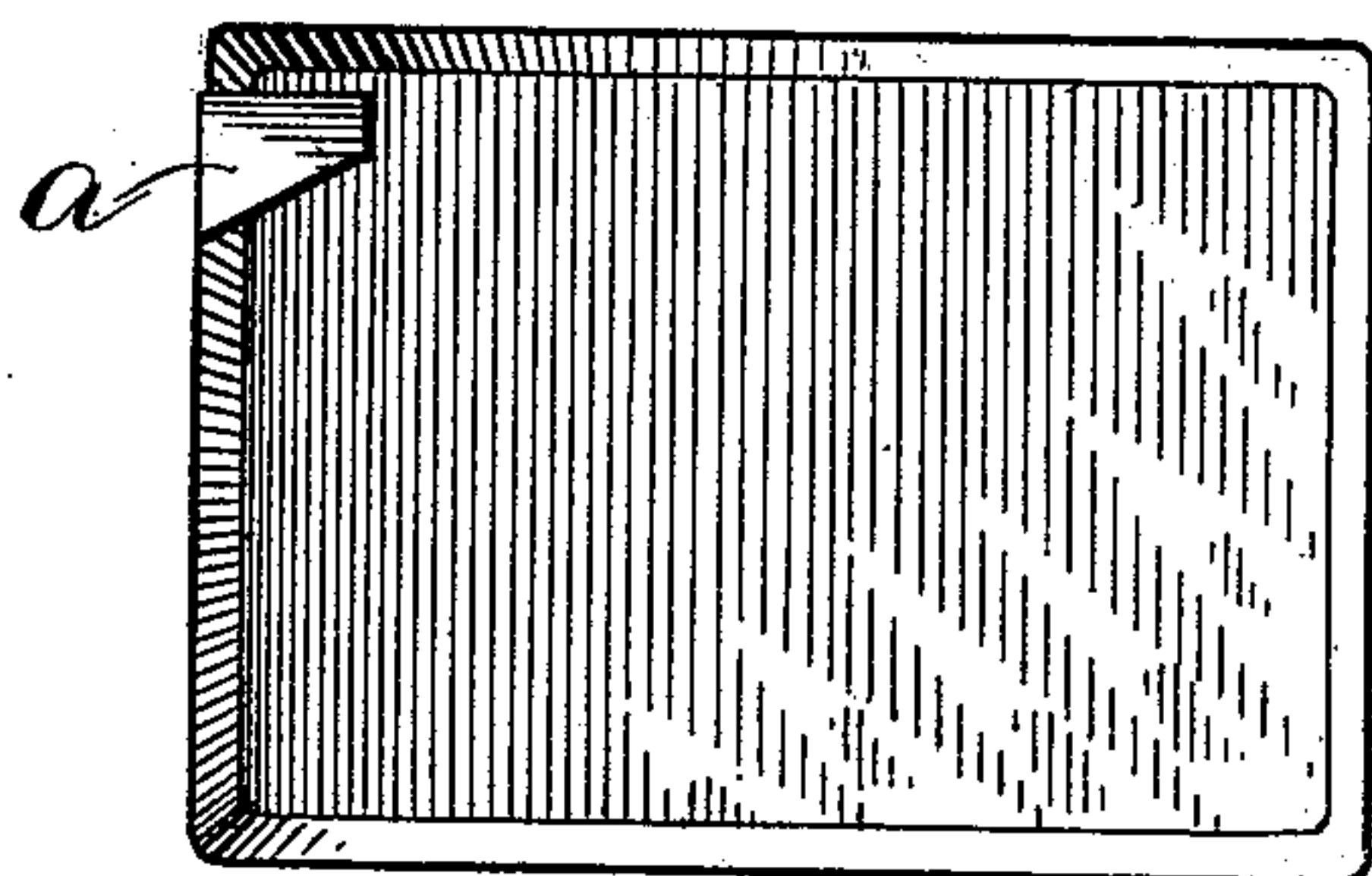
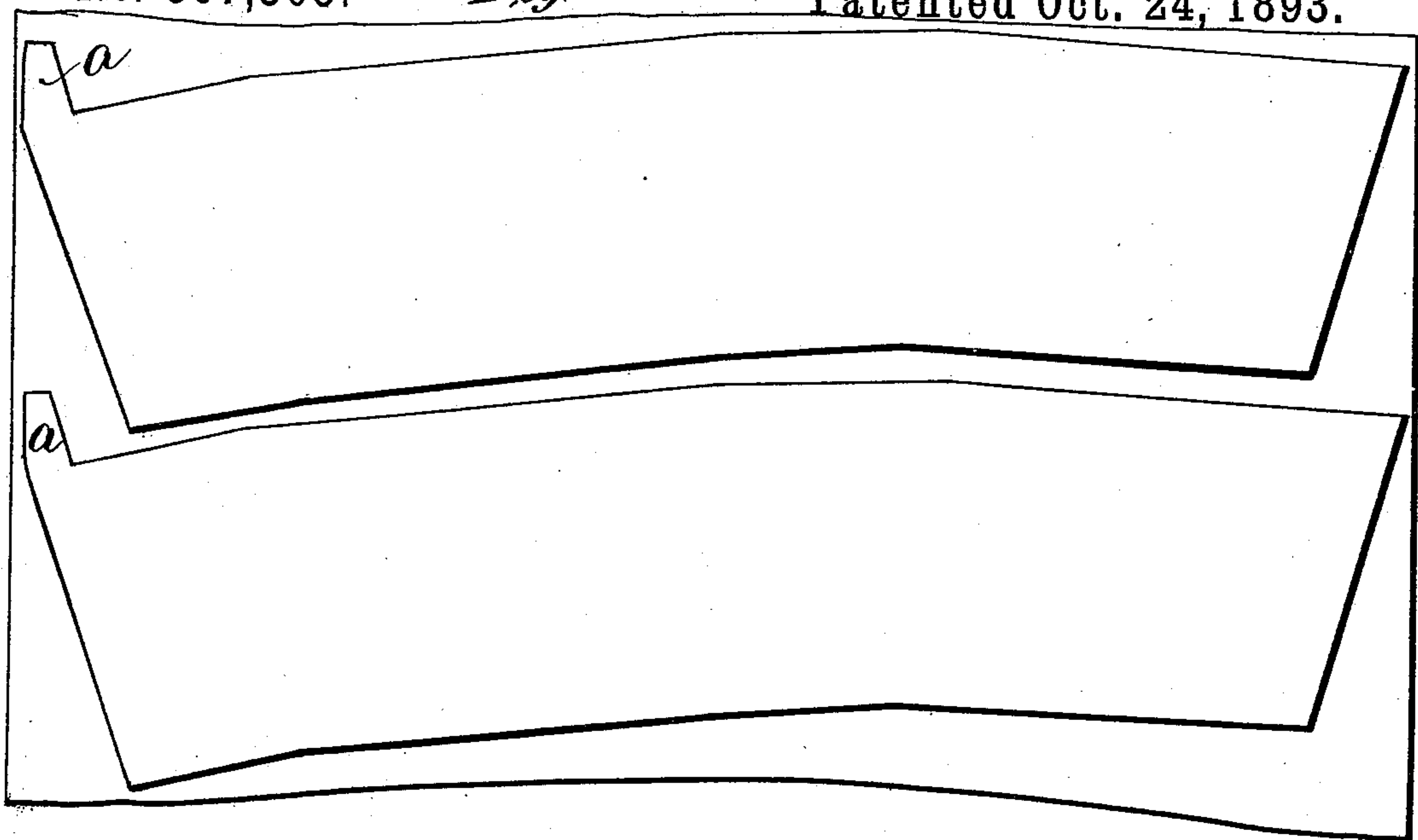


Fig. 2.

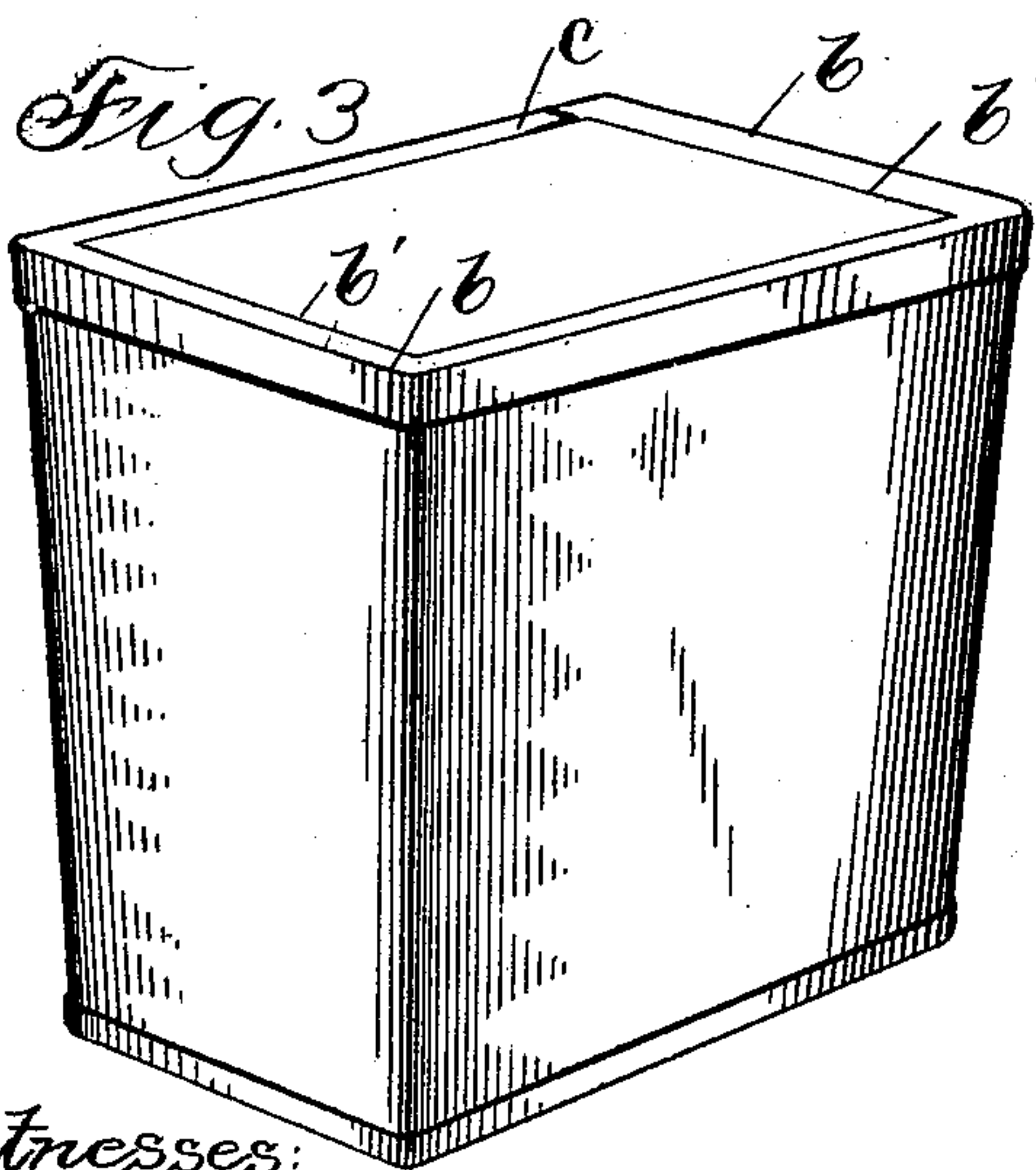


Fig. 3.

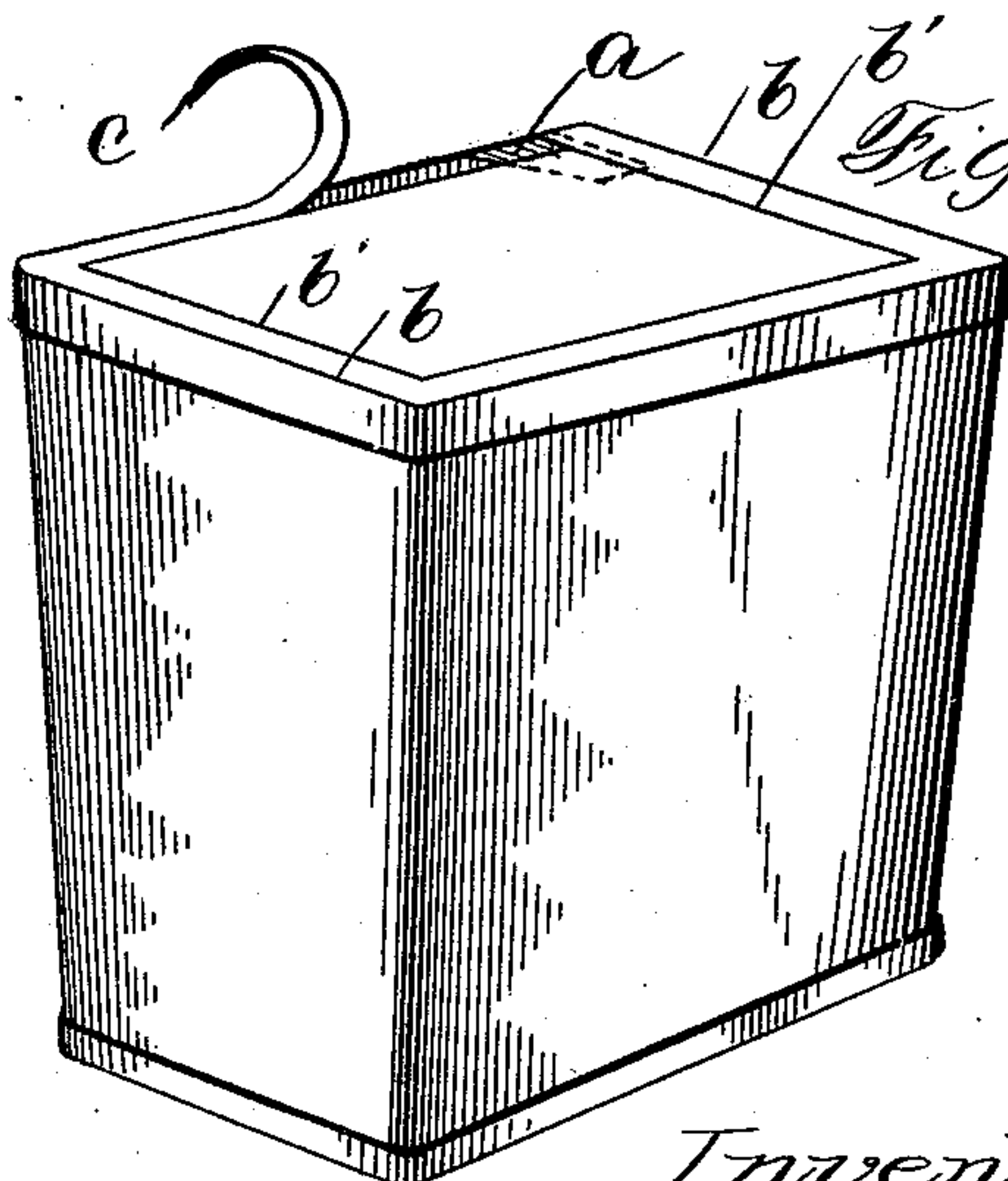


Fig. 4.

Witnesses:

George L. Cragg.

W. Clyde Jones.

Inventor

Eduard Barrath

By Barton & Brown  
Attys.

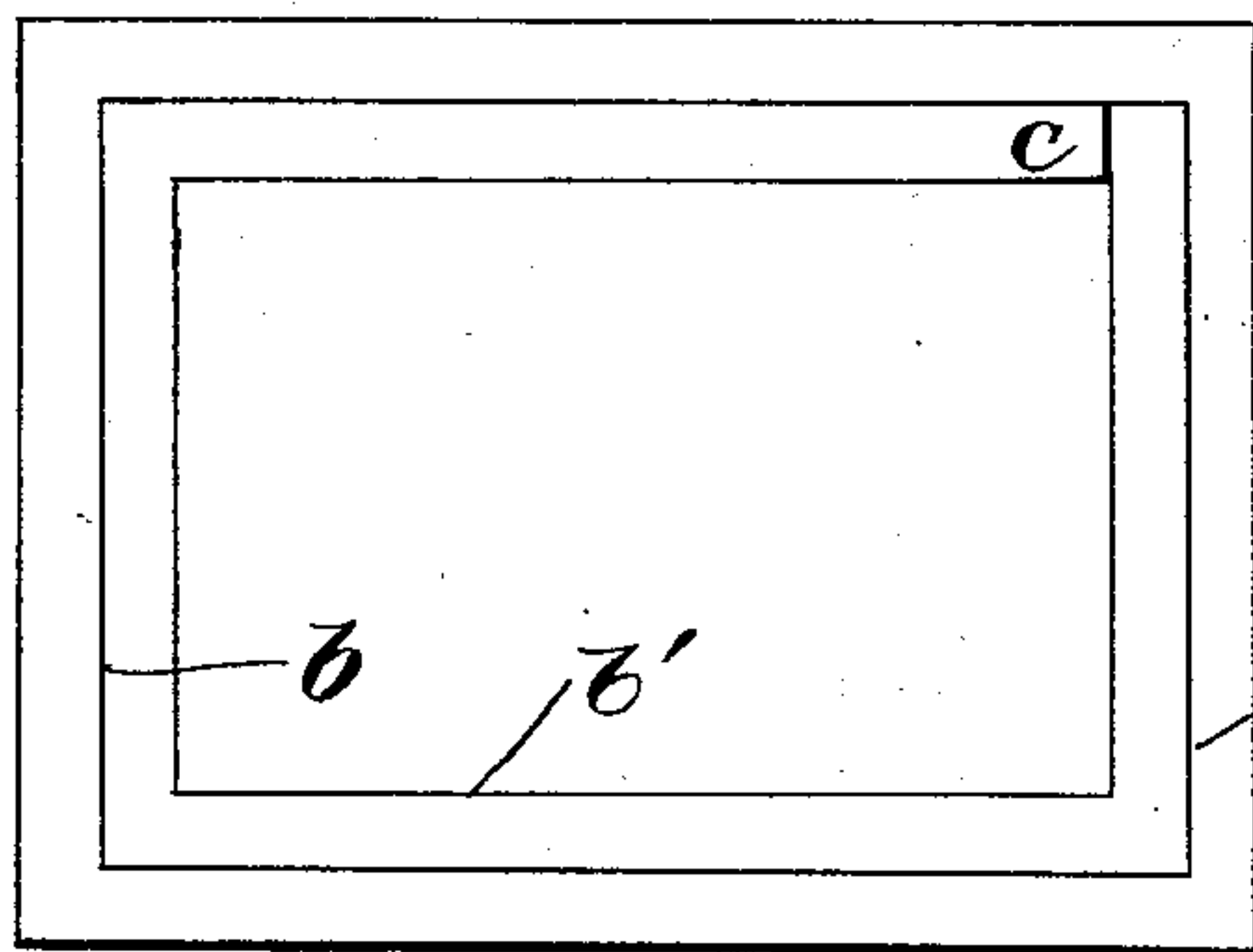
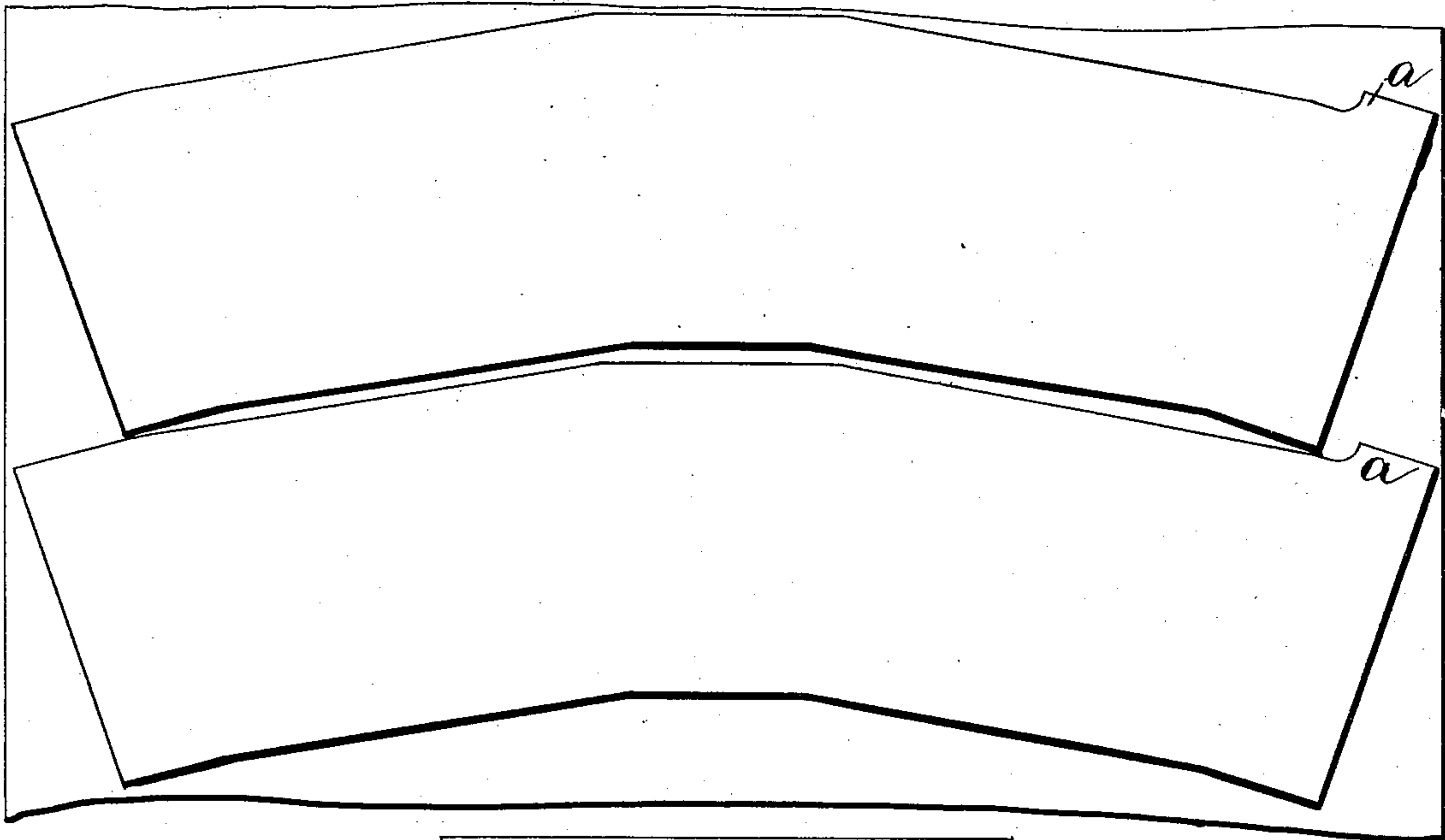
(No Model.)

2 Sheets—Sheet 2.

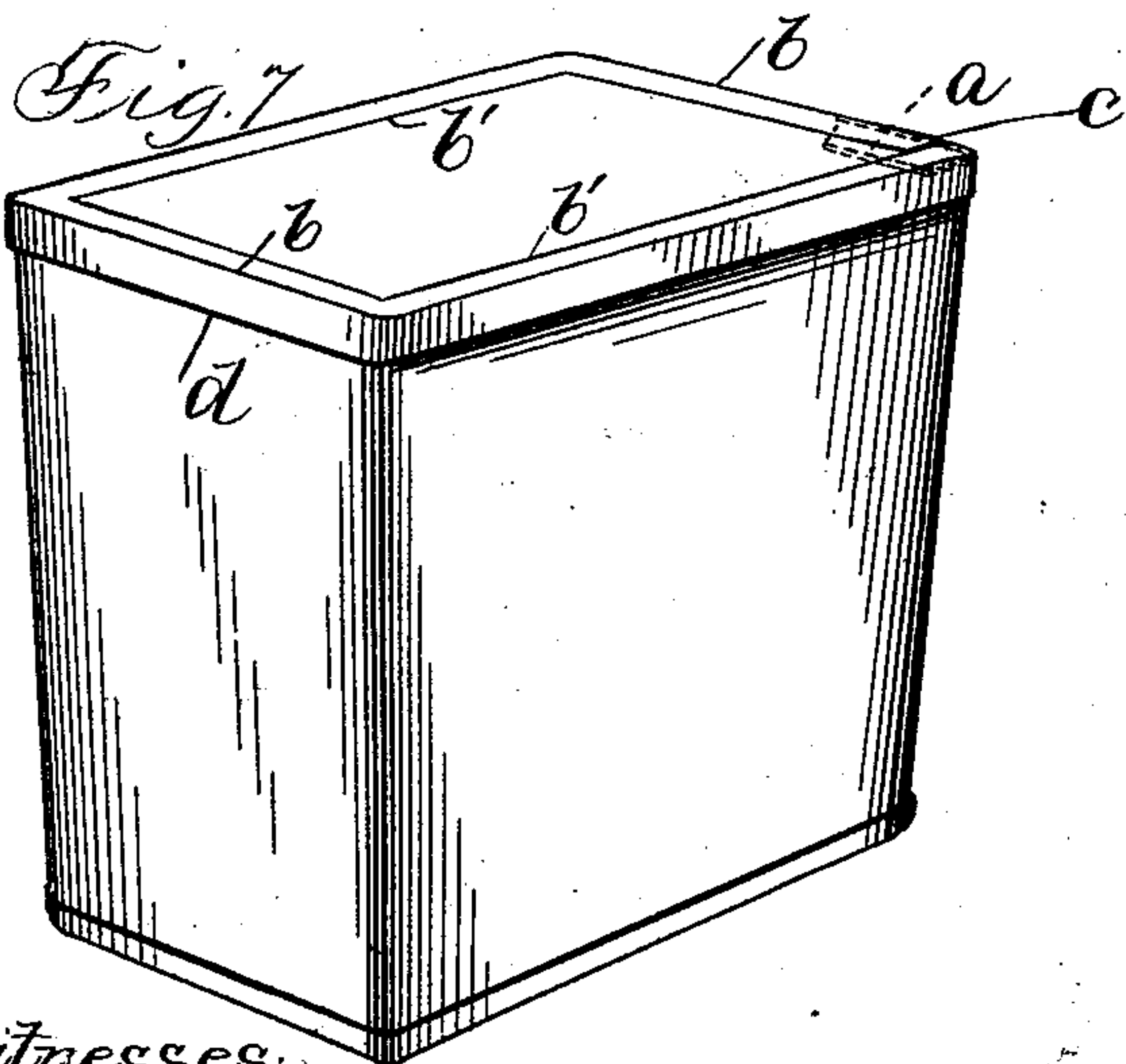
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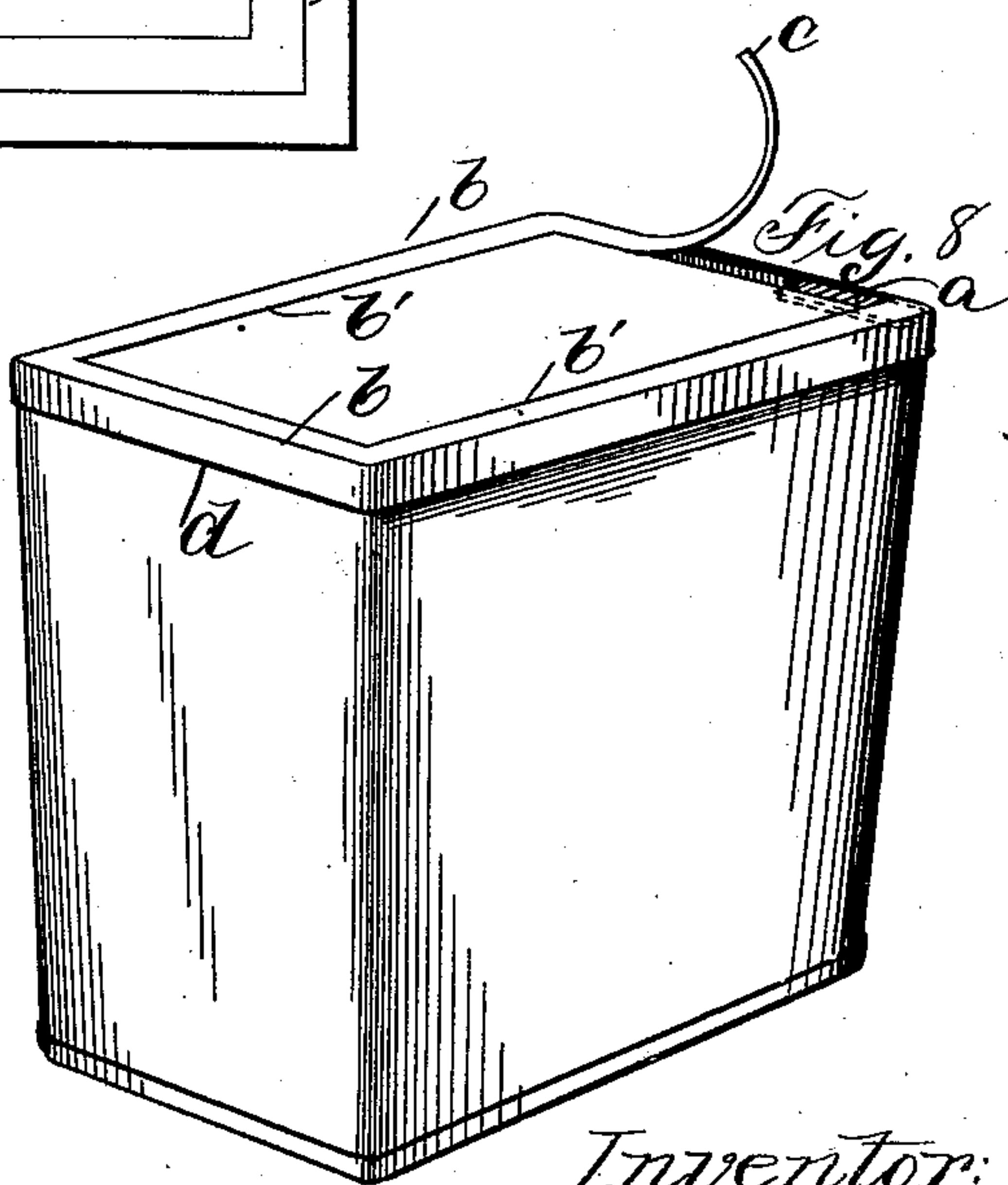
*Fig. 5.* Patented Oct. 24, 1893.



*Fig. 6*



*Fig. 7*



*Fig. 8*

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# UNITED STATES PATENT OFFICE.

EDWARD BARRATH, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE VICTOR KEY-  
OPENING CAN AND MACHINERY COMPANY, OF SAME PLACE.

## SHEET-METAL CAN.

SPECIFICATION forming part of Letters Patent No. 507,305, dated October 24, 1893.

Application filed December 30, 1892. Serial No. 456,837. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD BARRATH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Sheet-Metal Cans, (Case No. 4,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to sheet metal cans, and more particularly to that class known as key opening cans. Its object is to produce a can provided with a cover which may be removed without the use of cutting tools.

My invention consists in a sheet metal can provided with an inwardly projecting shelf, and a cover provided with a free lip whose edges are co-extensive with lines of reduced strength, whereby a portion of the cover may be removed, the free lip being adapted to rest against said projecting shelf, whereby the opening in the cover caused by the formation of said free lip, is sealed.

My invention will be more readily understood by reference to the accompanying drawings, in which—

Figure 1 represents a sheet of metal from which the material for the cans is cut, the blanks being outlined thereon showing the manner of cutting the projection which forms the shelf from the waste material. Fig. 2 is a top view of a can embodying my invention. Fig. 3 shows the can with the cover placed thereon. Fig. 4 shows the can with a portion of the cover, bounded by the lines of reduced strength, torn from its position. Fig. 5 represents a sheet of metal from which the material for the cans is cut the blanks being outlined thereon. Fig. 6 is a view of the cover before the rim has been pressed thereon, showing the position of the lines of reduced strength. Fig. 7 is a view of a can with the cover placed thereon. Fig. 8 is a view of a can with a portion of the cover bounded by lines of reduced strength torn from its position.

Like letters refer to like parts in the several figures.

I have illustrated my invention in connec-

tion with a rectangular can with tapering sides, but it may be applied to cans of any shape or construction with only slight changes in matters of detail. My invention, however, is more particularly adapted to cans with tapering sides, since in such cases the projection that forms the shelf may be cut from otherwise waste material, thus permitting the formation of such cans without added expense of material.

After the can has been formed the projection *a* is bent into a position parallel with the bottom of the can to form a shelf, so that the cover, when placed upon the can, may rest against its upper face. Two lines of reduced strength *b b'* are formed upon the cover by pressing a ridge in the metal, by grinding, or in any other manner. A tongue *c* is also cut from the cover, its edges being coextensive with the lines of reduced strength. These operations may be performed successively, or, they may be performed by the same operation that presses the rim upon the cover. The rim may be pressed upon the cover in such a manner that the line of reduced strength *b* will coincide with the edge of the cover forming the intersection of the rim with the face or top of the cover. The cover having been placed upon the can, it may be soldered thereto along the edge *d* of the rim, and the shelf *a* soldered to the metal of the cover which surrounds the tongue *c*, and the can will thus be completely sealed. The tongue will lie against the upper surface of the shelf *a* upon the can and will be flush with the upper surface of the cover.

When it is desired to gain access to the contents of the can, the tongue is grasped by means of a key provided with a slotted end so that the end of the tongue may be rolled upon it, and an upward pull is exerted upon the tongue, thus breaking the soldered connection between the tongue and the shelf *a*, and causing the cover to rupture along the lines of reduced strength *b b'*. In this manner all of the cover, except the rim, may be removed from the can. Although preferable, it is not essential that the line of reduced strength *b* should coincide with the intersection of the face of the cover with the rim, and



both lines of reduced strength may lie wholly within the line forming the boundary of the face of the cover.

5 It is evident that my invention is susceptible of many changes in minor matters without departing from the spirit of my invention, and I, therefore, do not desire to be limited to the specific construction shown and described.

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

15 1. As a new article of manufacture, a sheet metal can provided with a cover, said cover carrying a tongue cut from the interior material thereof, the edges of said tongue being coextensive with lines of reduced strength provided upon said cover, the end of said tongue being free; whereby the same may be grasped to remove the cover, substantially as described.

20 2. As a new article of manufacture, a sheet metal can provided with an inwardly projecting shelf, a cover carrying a tongue cut from the interior material thereof, the edges of said tongue being coextensive with lines of reduced strength provided upon said cover, said tongue being adapted to lie against said shelf,

the end of said tongue being free; whereby the same may be grasped to remove the cover, substantially as described.

30 3. The combination with the can provided with the inwardly projecting shelf *a*, formed integral with the body portion thereof of the cover provided with the tongue *c*, adapted to rest upon said projecting shelf *a* the edges of said tongue being coextensive with the lines of reduced strength *b b'*, substantially as described.

40 4. In a can provided with tapering sides, the combination with the inwardly projecting shelf *a*, formed integral with the body portion of said can, projecting from the upper edge thereof, and cut from the portion of the plate that would otherwise be waste, of a cover provided with a tongue adapted to rest upon said shelf *a*, the edges of said tongue being coextensive with lines of reduced strength, substantially as described.

In witness whereof I hereunto subscribe my name this 27th day of December, A. D. 1892.  
EDWARD BARRATH.

Witnesses:

CHARLES A. BROWN,  
GEORGE L. CRAGG.