

(No Model.)

2 Sheets—Sheet 1.

O. S. FELLOWS.
DEVICE FOR OPENING SEALED PACKAGES.

No. 557,365.

Patented Mar. 31, 1896.

Fig. 2.

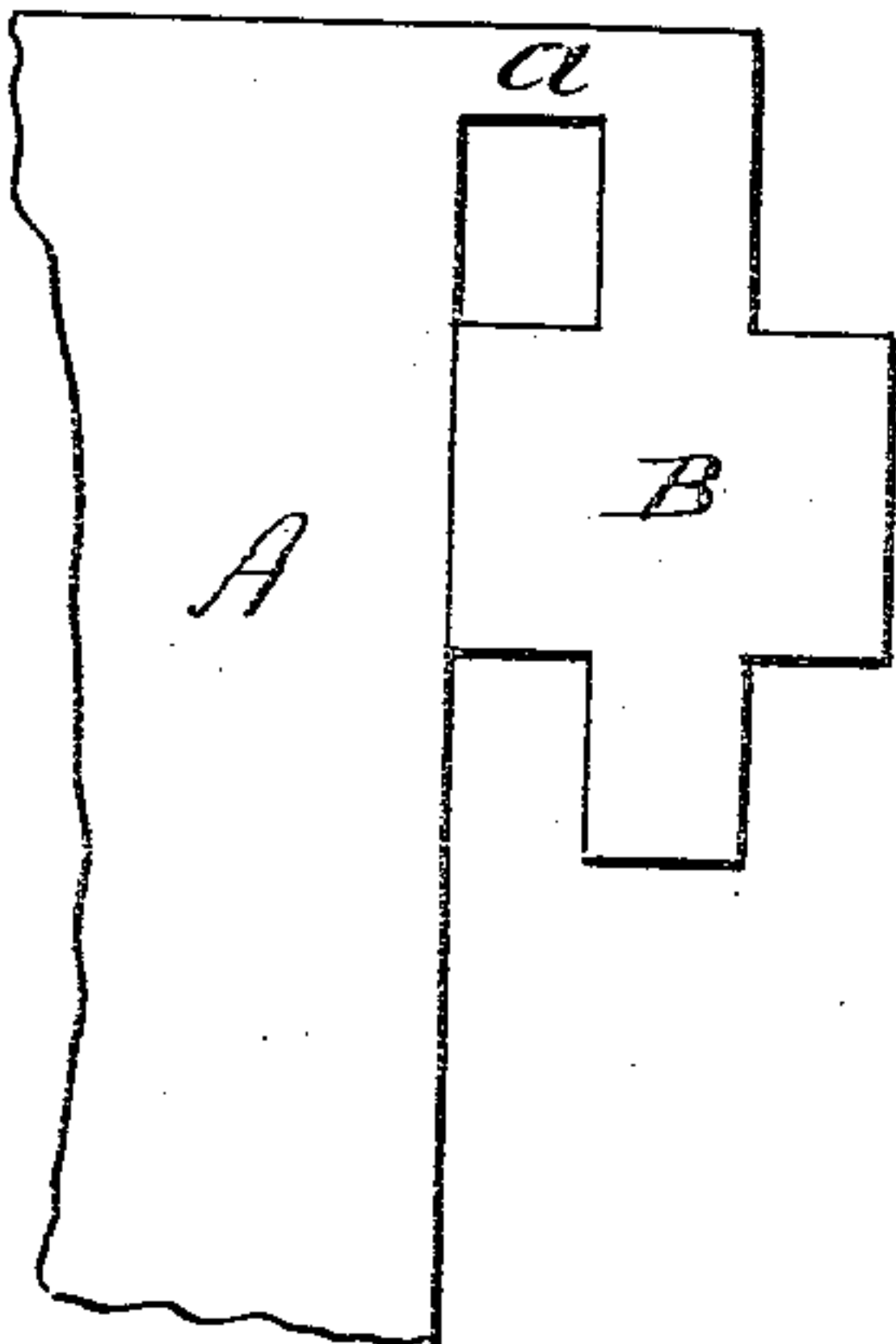


Fig. 1.

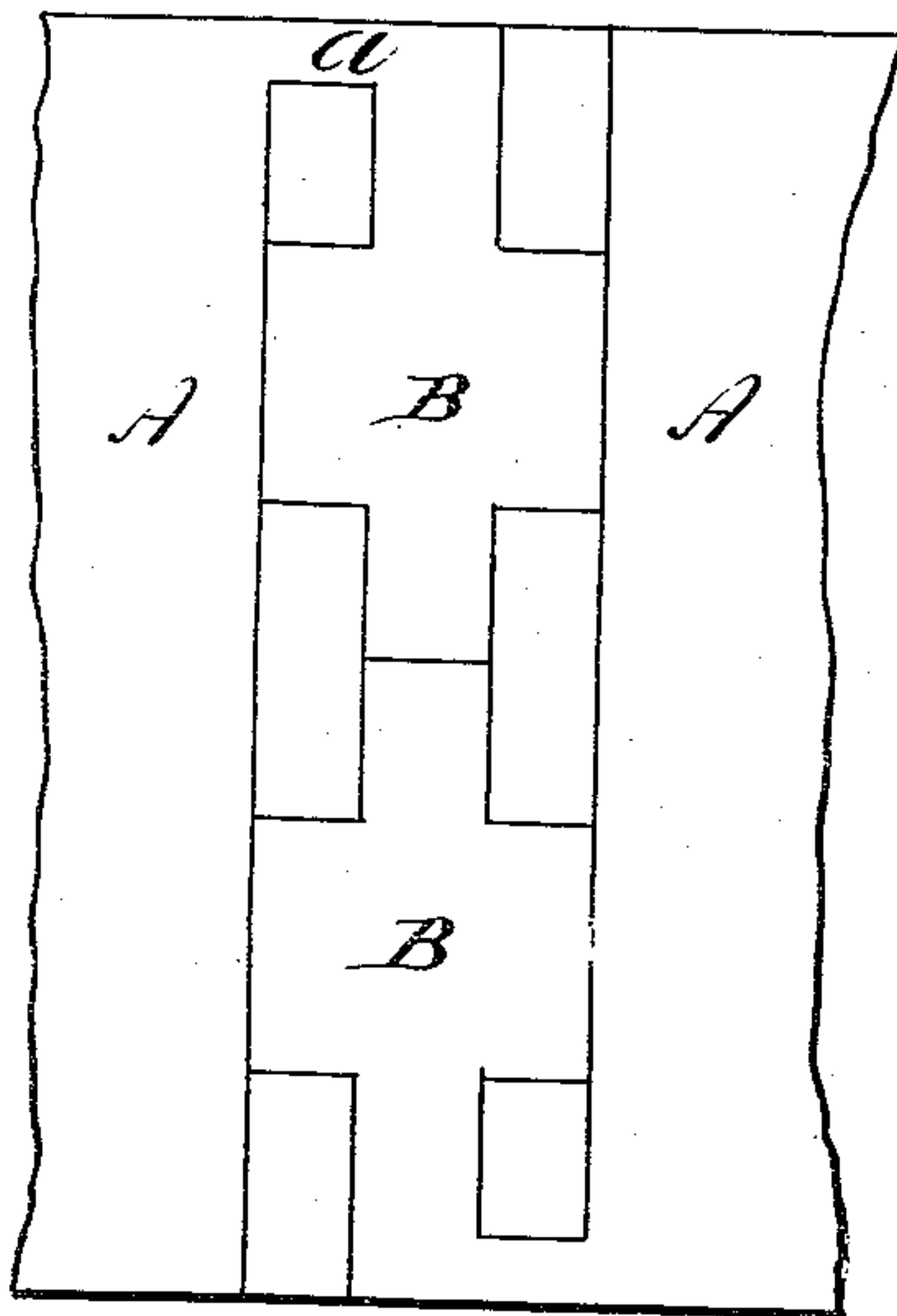


Fig. 3.

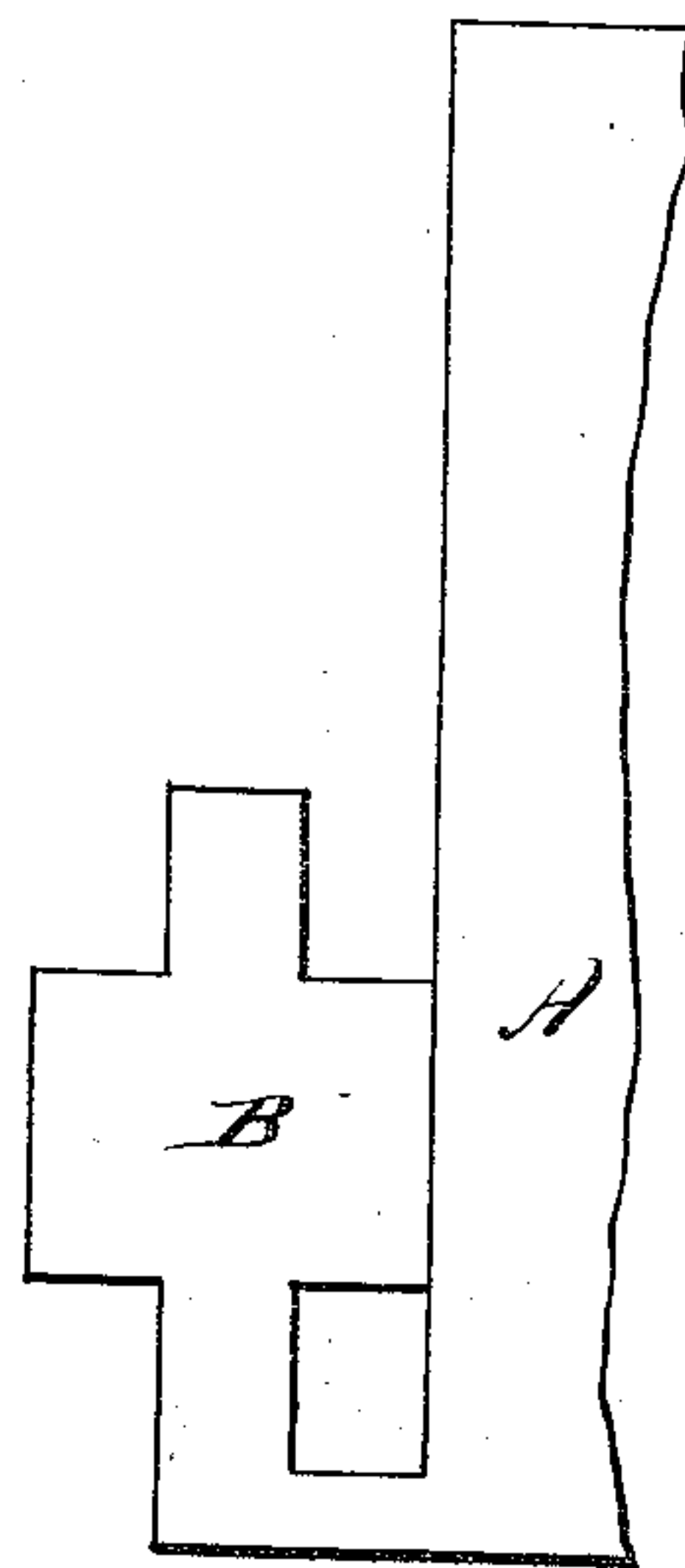


Fig. 4.

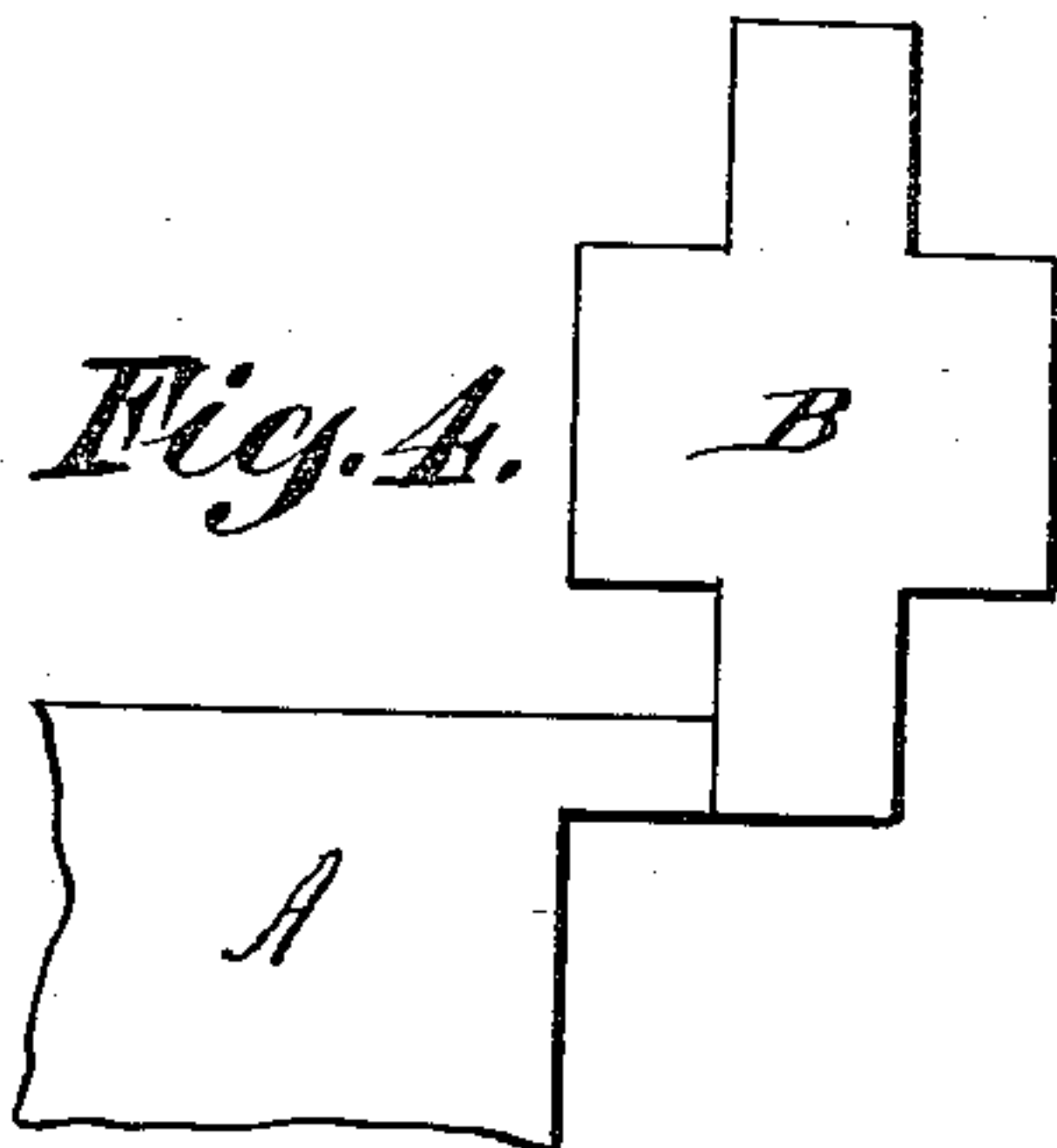


Fig. 8.

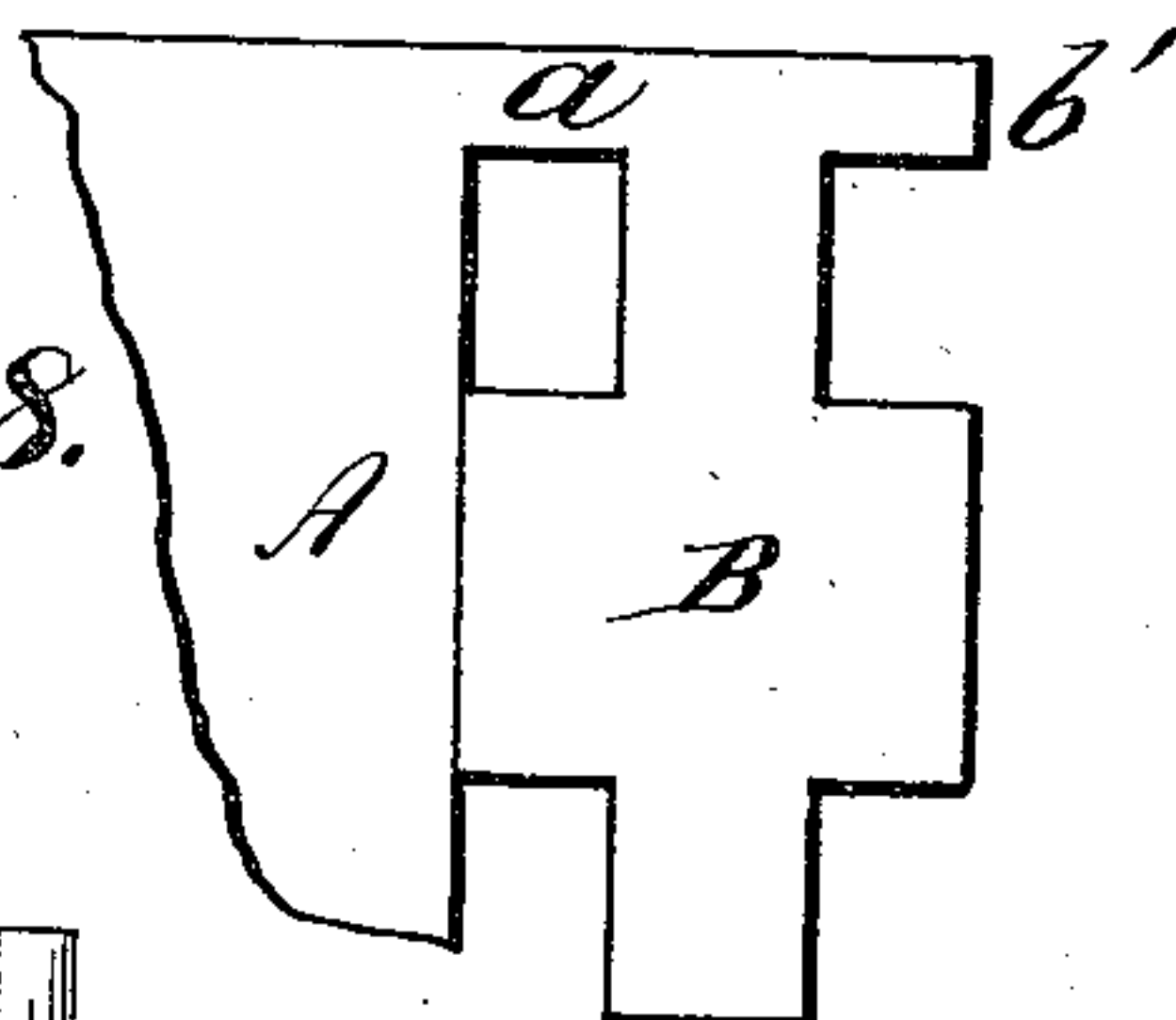


Fig. 9.

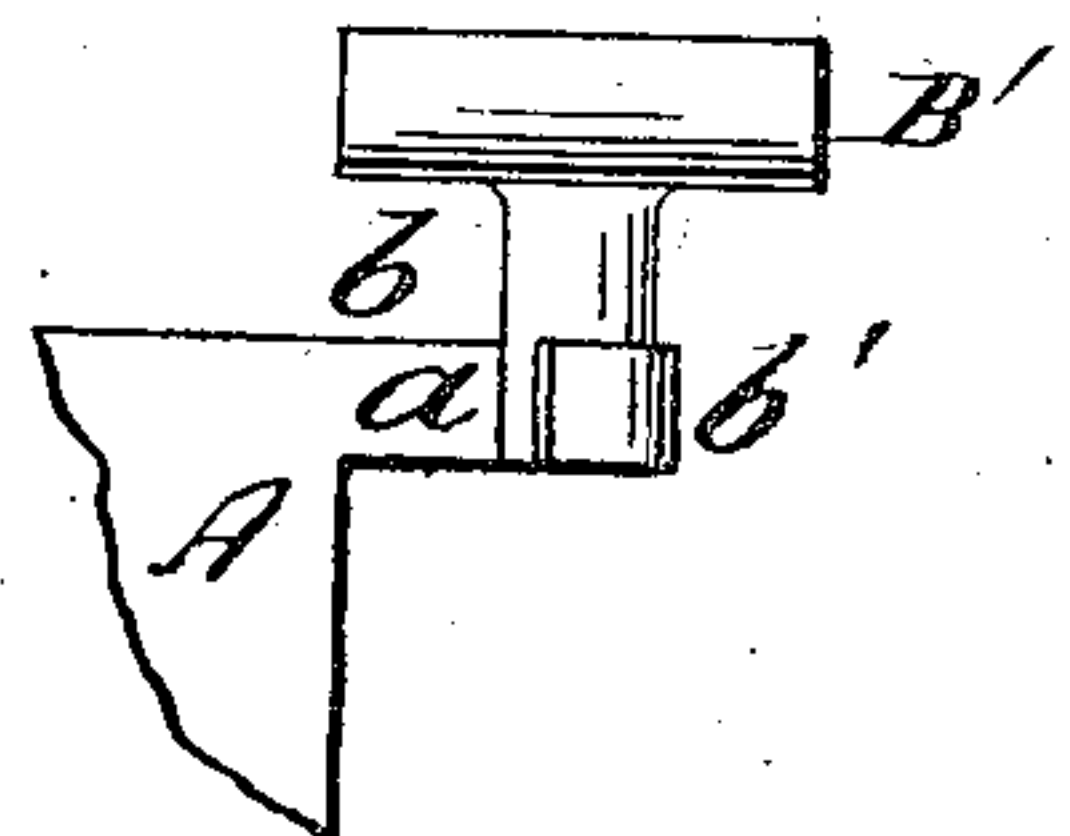


Fig. 5.

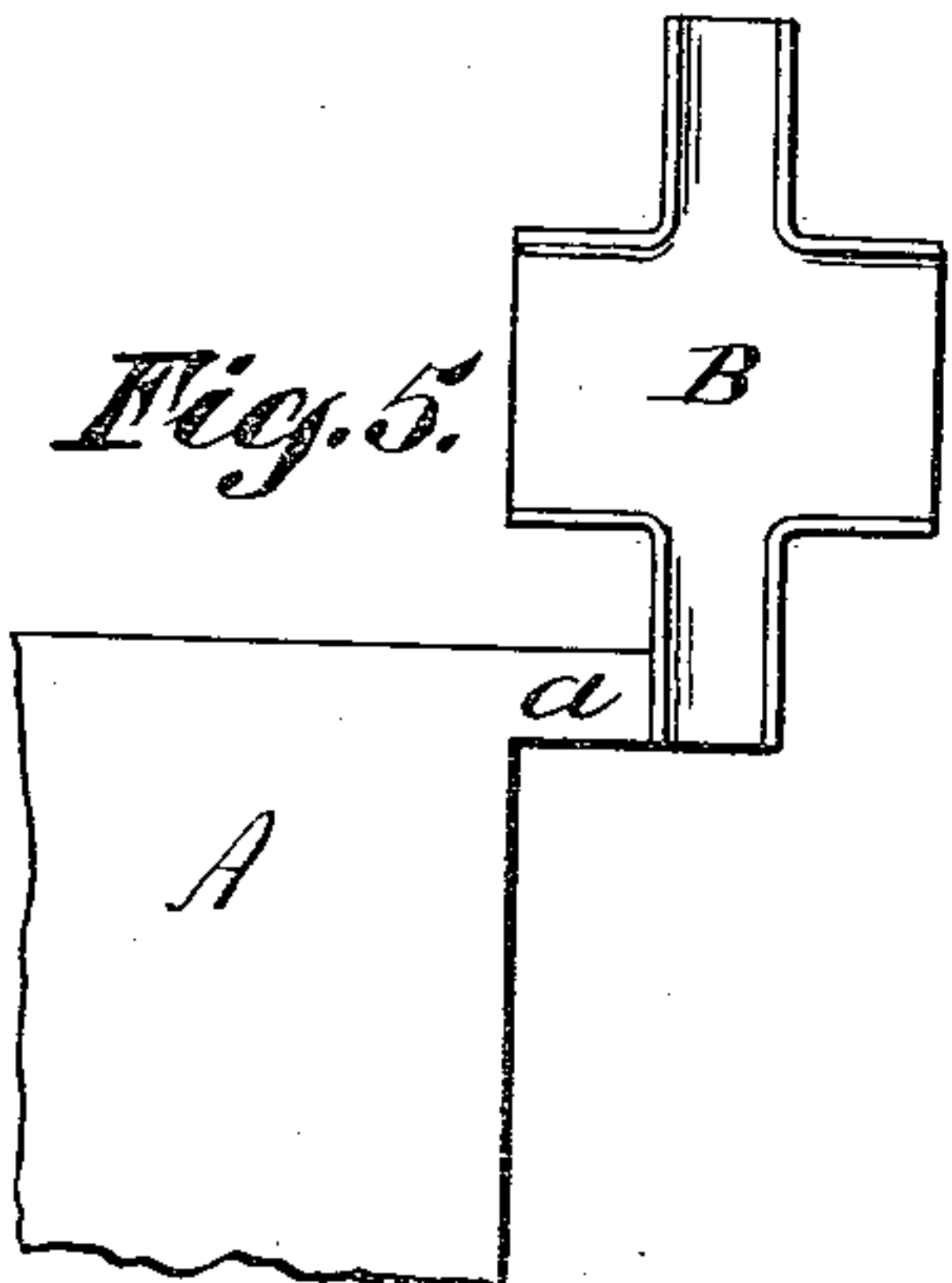


Fig. 6.



Fig. 7.

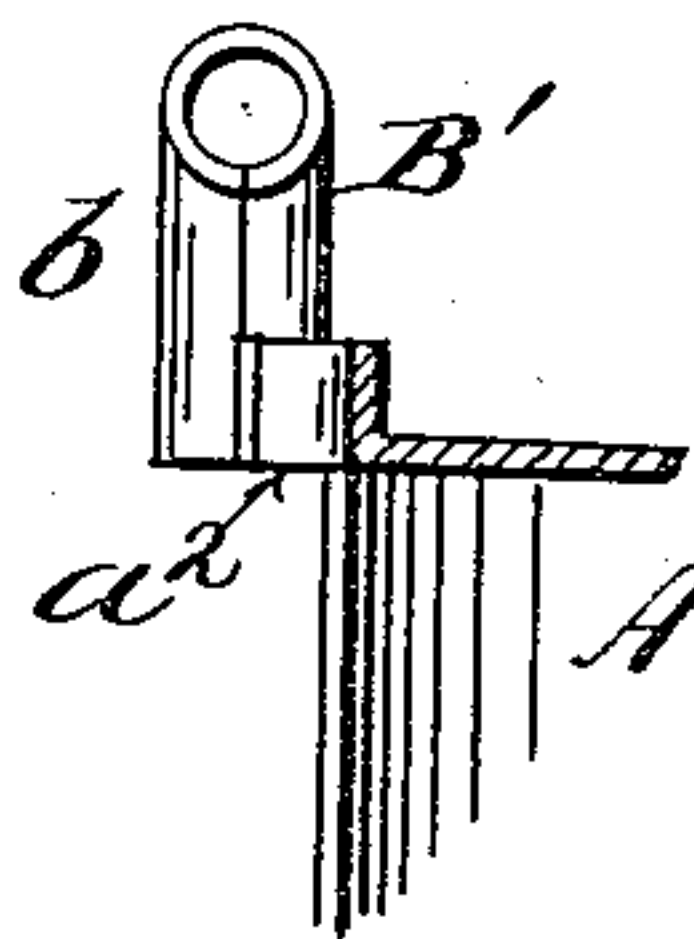
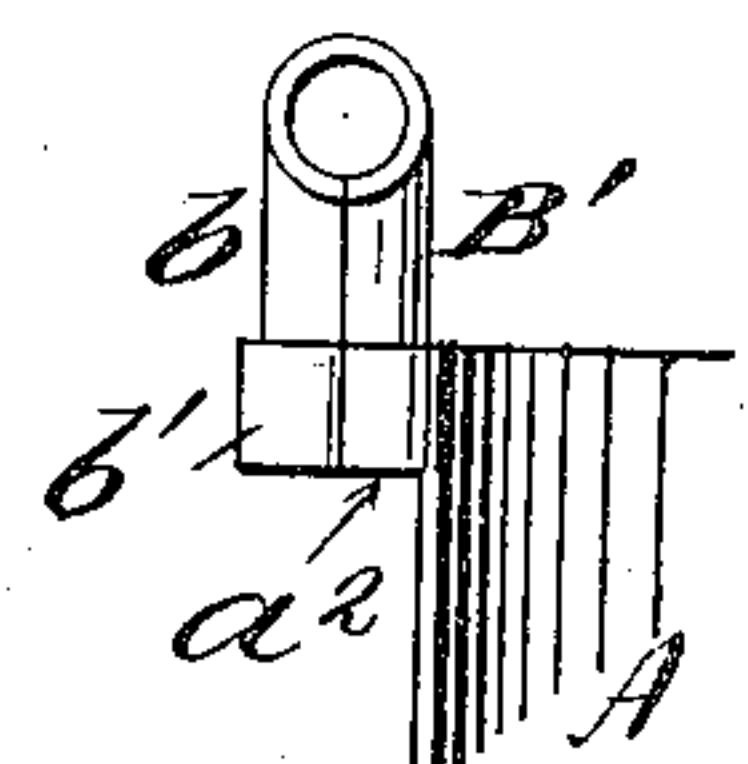


Fig. 10.



Witnesses:
O. W. Gardner.
S. V. Brown

Inventor:
Olin S. Fellows
By his Attorney
George William Smith

(No Model.)

2 Sheets—Sheet 2.

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Fig. 11.

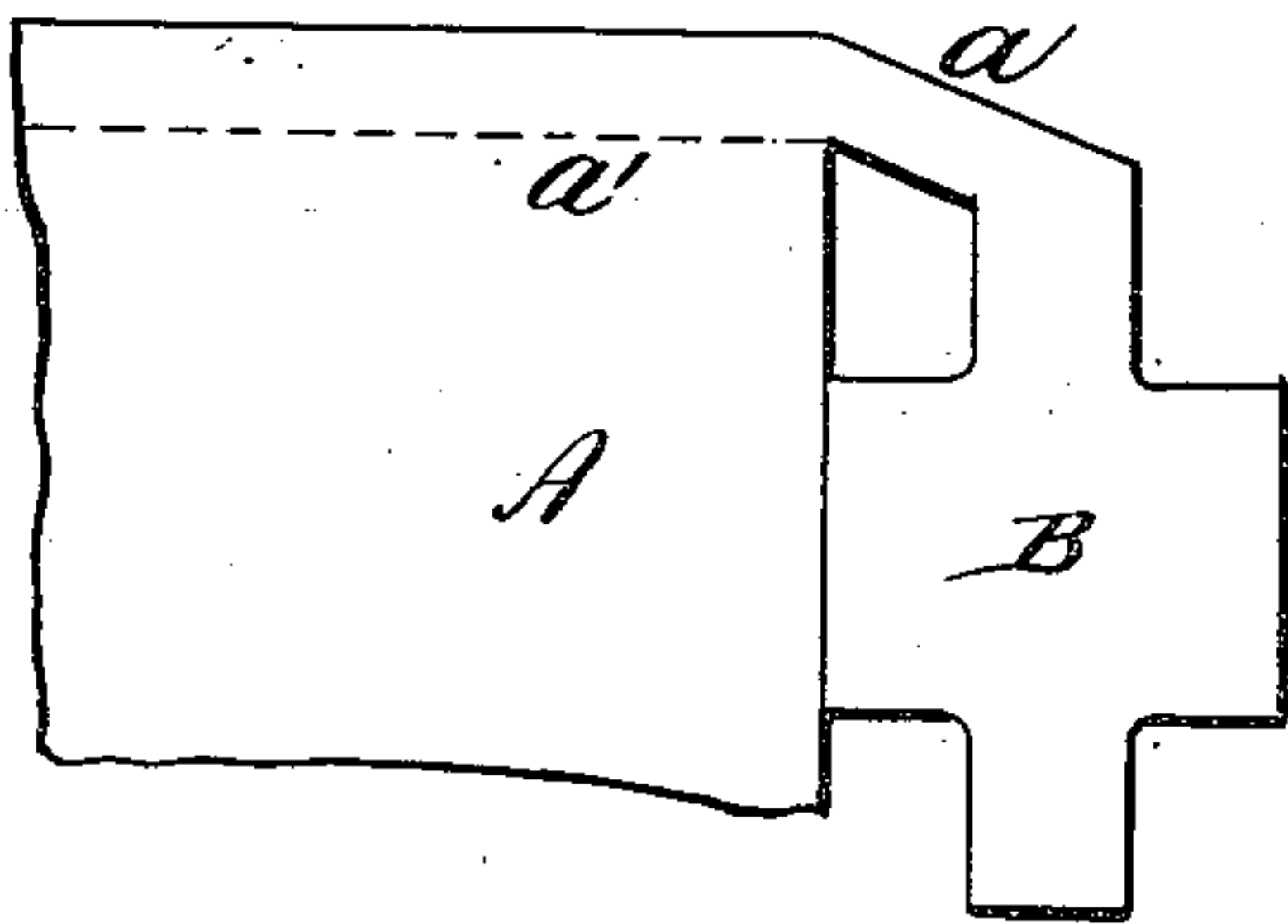


Fig. 12.

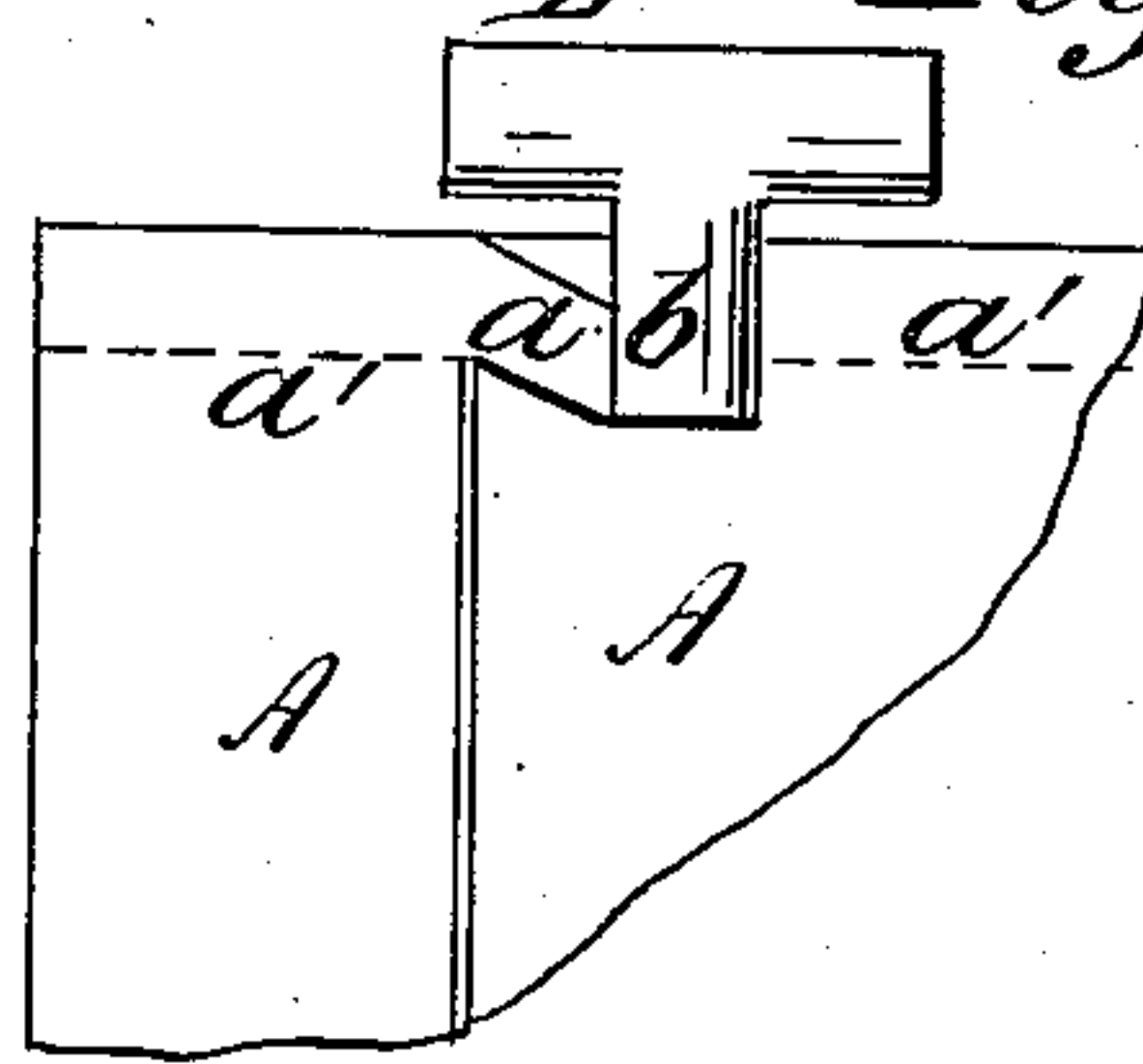


Fig. 13.

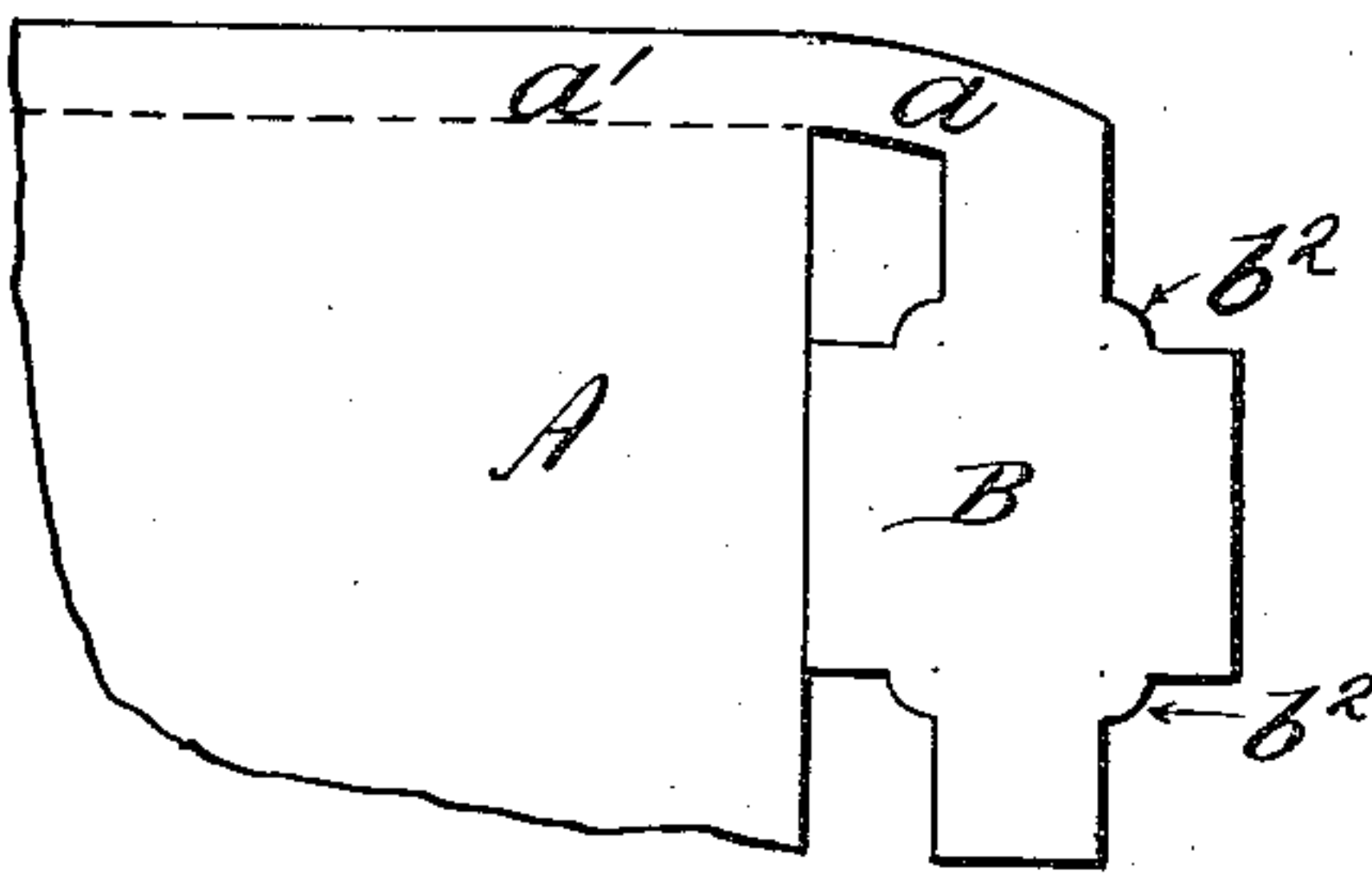


Fig. 14.

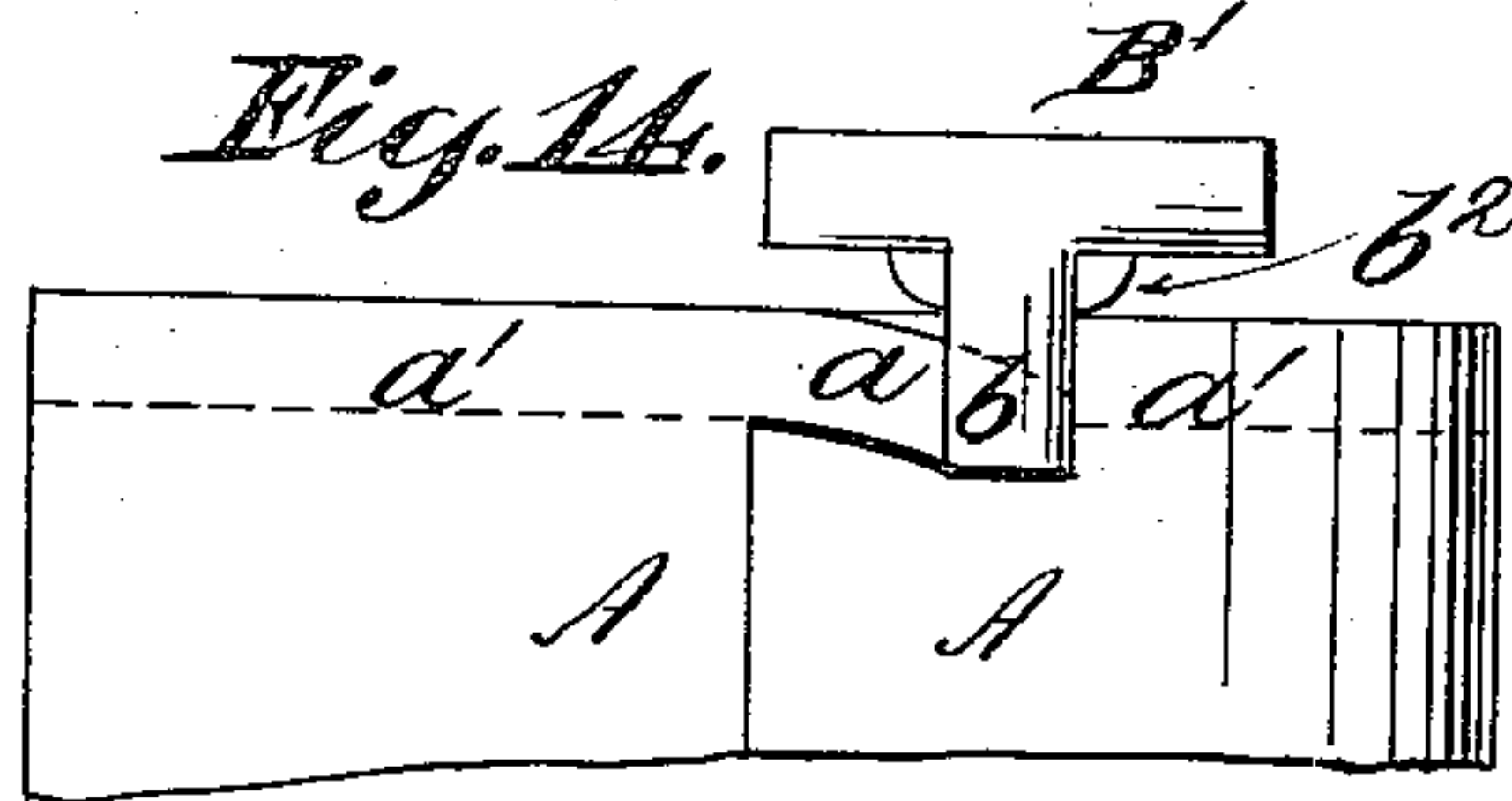


Fig. 16.

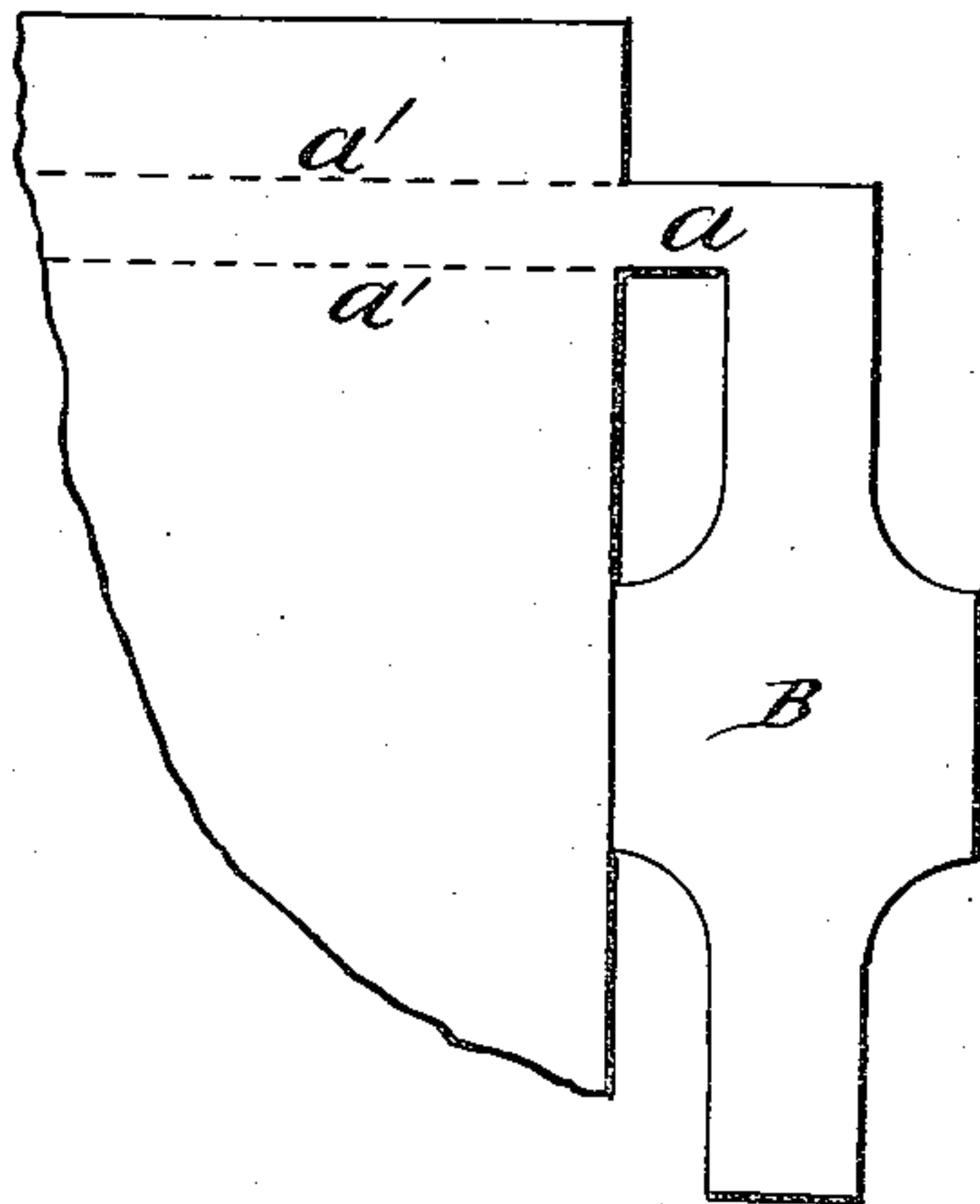


Fig. 17.

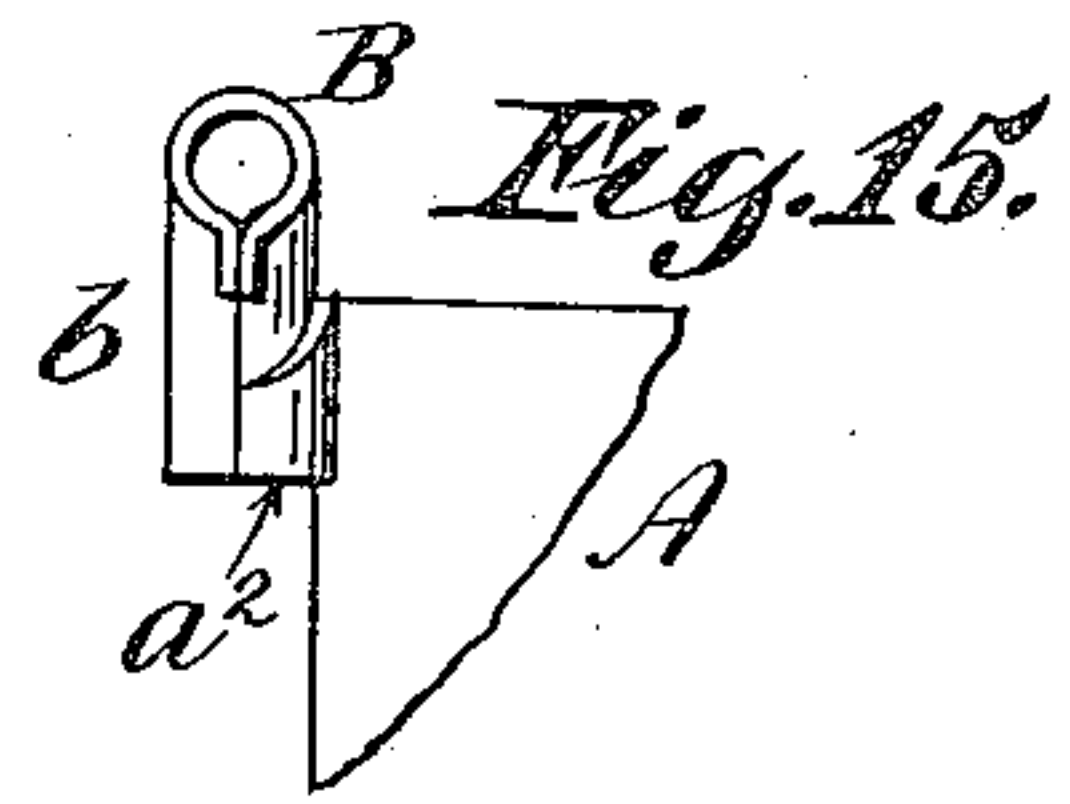
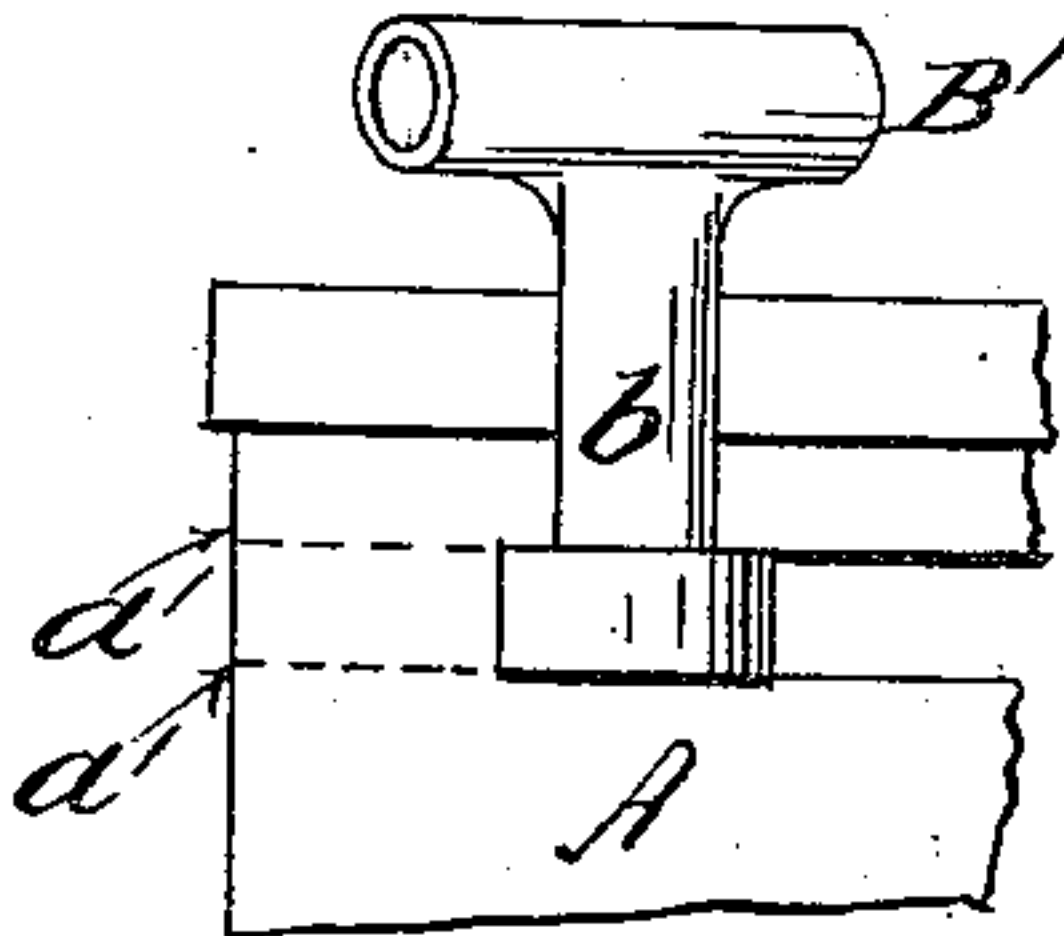
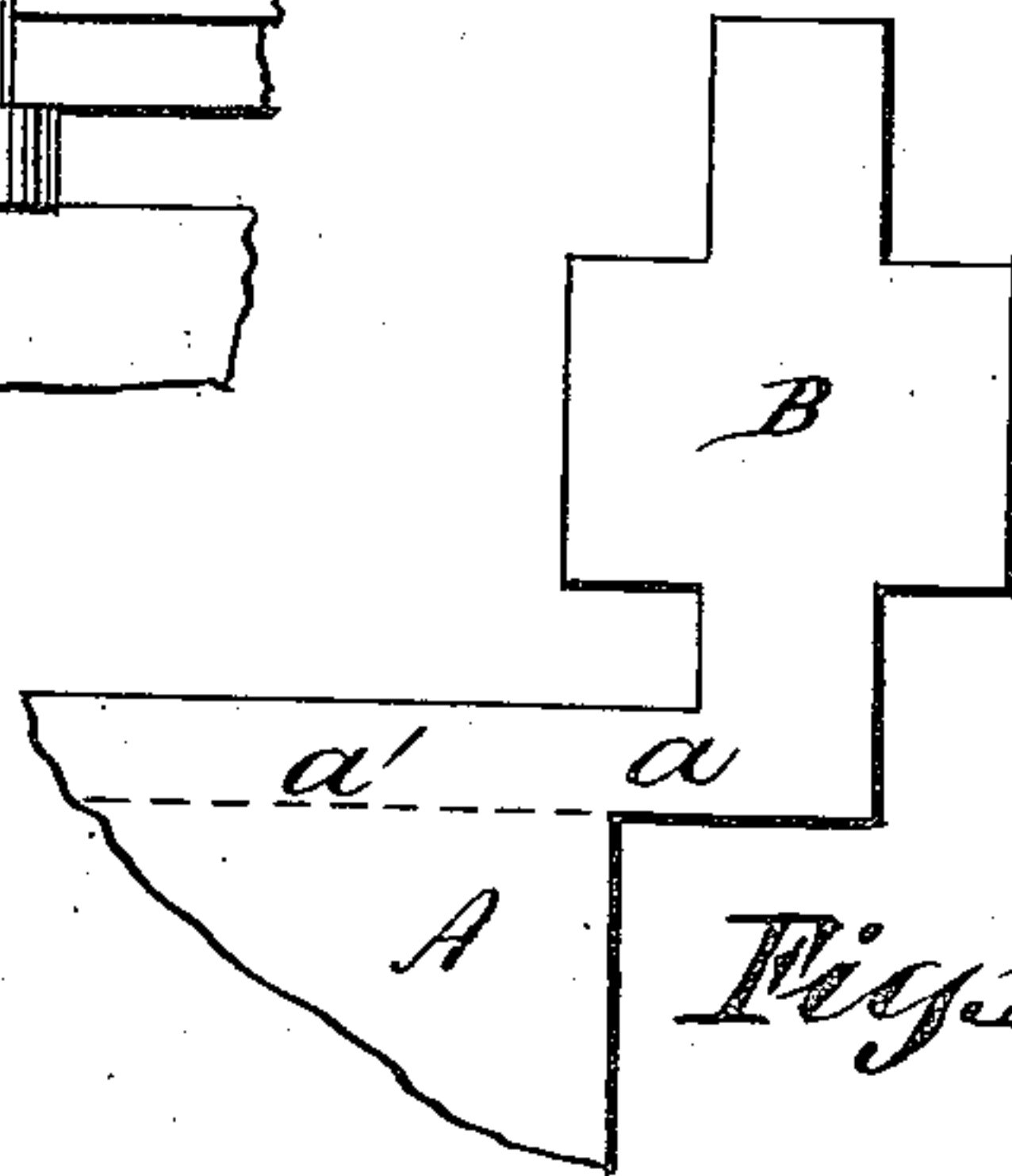


Fig. 18.



Witnesses:

A. W. Gardner.

A. W. Bourke.

Inventor:

O. S. Fellow.

By his Attorney

George William Mott.

UNITED STATES PATENT OFFICE.

OLIN STEPHEN FELLOWS, OF MIDDLETOWN, NEW YORK.

DEVICE FOR OPENING SEALED PACKAGES.

SPECIFICATION forming part of Letters Patent No. 557,365, dated March 31, 1896.

Application filed November 12, 1894. Serial No. 528,567. (No model.)

To all whom it may concern:

Be it known that I, OLIN STEPHEN FELLOWS, a citizen of the United States, residing at Middletown, in the county of Orange and State of New York, have invented certain new and useful Improvements in Devices for Opening Sealed Packages, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My improvement relates to sheet-metal cans having strip-winding keys formed integral with the portion to be stripped off to open the can, as set forth in my concurrent application, Serial No. 528,566, in which a special construction is shown having a flange of an end plate for a stripping portion which is removed from the can-body by being wound upon the shank of the stripping-key.

My present invention consists, essentially, in forming the stripping portion and the strip-winding key integral with the can-body, either in one piece therewith or otherwise positively united thereto, the strip-winding key consisting of or forming an extension of the portion of the strip to be wound around the shank of the key portion to open the can.

Incidentally my invention includes an extension of the stripping portion beyond the edge of the can-body and between said edge and the key portion, so that in starting to open the can such extension of the strip will form a wrap to the doubled portion of the key forming the shank thereof before the actual stripping operation or severance of the metal is commenced. By this means the key is securely held and the proper starting of the strip from the can-body is assured.

In the accompanying drawings, Figure 1 is a diagram of the adjoining ends of two can-body blanks cut from the same sheet of metal, showing an economical method of cutting the blanks for the opening device or key. Figs. 2 and 3 represent, respectively, the ends of the can-bodies shown in Fig. 1. Fig. 4 shows the key-blank bent over across the stripping-tongue; Fig. 5, the same struck up and ready for bending double; Fig. 6, a side view of Fig. 5; Fig. 7, a similar view after the blank has been folded to form the key. Fig. 8 shows the blank cut with a lapping tongue, and Figs. 9 and 10 the use of the lapping tongue.

Figs. 11 and 12 illustrate a modification in the formation of the key and stripping-tongue with relation to the edge of the can-body; Figs. 13, 14, and 15, another modification thereof. Figs. 16 and 17 illustrate the application of my invention to the stripping off of a band of metal from the body of the can instead of the edge thereof. Fig. 18 shows the key-blank as struck from the same sheet with the can-body but projecting beyond the outline thereof.

The can-body A is cut or stamped out of sheet-tin in the usual manner, except that the blank B for the stripping-key is formed in one piece therewith. The further shaping of the key B' may be accomplished either before or after the attachment of the end plates to the can-body, as may be preferred. In certain cases it may be deferred until after the can has been filled, sealed, and labelled, the blank during the latter operation being bent over the adjoining end of the can. In either case the blank is embossed, or stamped, or drawn up so that when bent over upon itself a shank b of convex exterior will be formed, the concavity imparted to the opposed inner surfaces being preferably such as to render the shank b cylindrical in cross-section, as shown in the drawings, although a perfectly cylindrical shank is not absolutely essential.

Reference may be had to my concurrent application, Serial No. 528,565, for an understanding of special features and variations in the form of my sheet-metal strip-winding key, which is here shown in its simplest form, the essential feature in this connection consisting in the formation of the strip-winding key and the stripping portion in one piece with the can-body.

The blank B may be so cut that when the key is shaped and bent up its shank b will immediately adjoin the edge of the can-body; but I prefer to leave a portion of metal a, equivalent to the old form of stripping-tongue, between the edge of the body A and the side of the shank, by which the key is attached to the body. By this means the ends of the two halves of the blank will be firmly bound together by the connecting-tongue d during the first turn of the key in starting to strip and before the severing of the strip has begun, thereby insuring and preserving the cylin-

dricial shape of the shank, as well as reinforcing it against the sudden strain to which it is subjected in first overcoming the resistance of the metal to the stripping action.

5 The usual circuitous incision or other reduction in thickness a' is formed on a line with the inner edge of the tongue a when the edge of the can-body is to be stripped off, or where a strip is to be removed from the can-
10 body beyond its edge, as in Figs. 16 and 17, two such incisions or reductions are made, so that in either case the tongue a encounters the line of least resistance and the stripping is effected rapidly and evenly, the cylindrical
15 form of the key-shank contributing to this result.

In order to prevent accidental derangement of the shank, it is well in the case of comparatively thin metal to form the blank with a
20 binding-tongue b' , as shown in Figs. 8 and 9, to hold the ends of the shank snugly together. Means for preventing the overlapping of the opposed edges may also be provided, as the lugs $b^2 b^2$, (shown in Figs. 13 and 14,) or any of
25 the other forms shown in my concurrent application for patent hereinbefore referred to.

It is to be noted that where the key-blank is cut within the line of the can-body and bent over the tongue a , as in all but Fig. 18 of the
30 drawings, a fold a' is formed, which strength-

ens the end of the key-shank and renders it less liable to exert a transverse strain on the tongue a .

By my invention I am enabled to make a can that is practically self-stripping in the
35 sense that no separate device is essential to the opening thereof. The can is thus ready for instant use at all times, and the delay and inconvenience caused by lost keys, can-open-
40 ers, &c., is avoided.

I do not seek to cover herein, broadly, a sheet-metal can formed with a stripping-tongue, but limit my present invention to the formation of the stripping-key in one piece
45 with the can-body, as specified below, to wit:

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

A sheet-metal can having a stripping-key formed in one piece with the can-body, consisting of a blank cut within the line of the
50 can-body doubled upon itself to stiffen it and to form a shank connected to the edge of the can-body by a tongue across which the shank of the key is folded to strengthen the end of
55 the shank, substantially in the manner described.

OLIN STEPHEN FELLOWS.

Witnesses:

GEORGE WILLIAM MIATT,
D. W. GARDNER.