

No. 631,539.

Patented Aug. 22, 1899.

G. F. DEWDNEY.  
METAL CHEST, BOX, OR THE LIKE.

(Application filed Mar. 29, 1897.)

(No Model.)

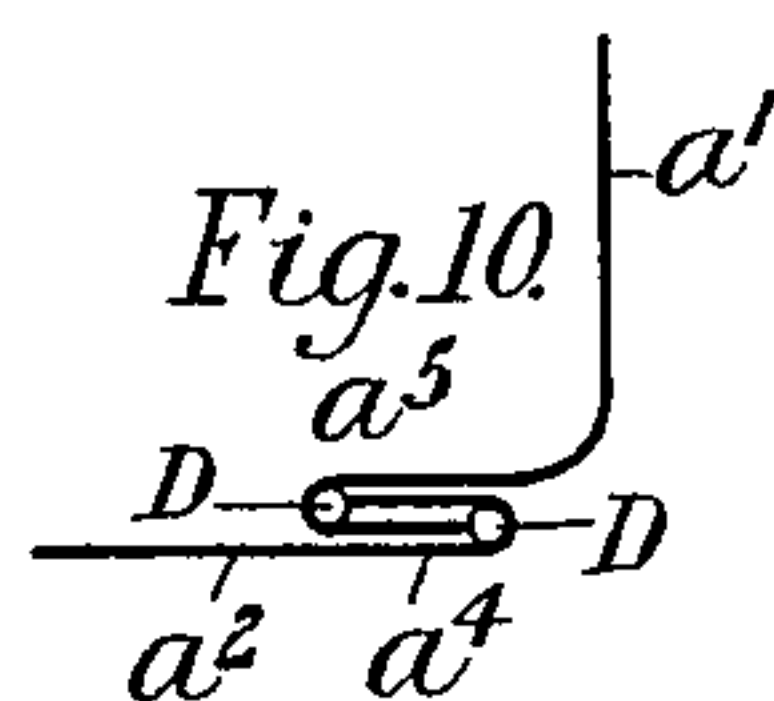
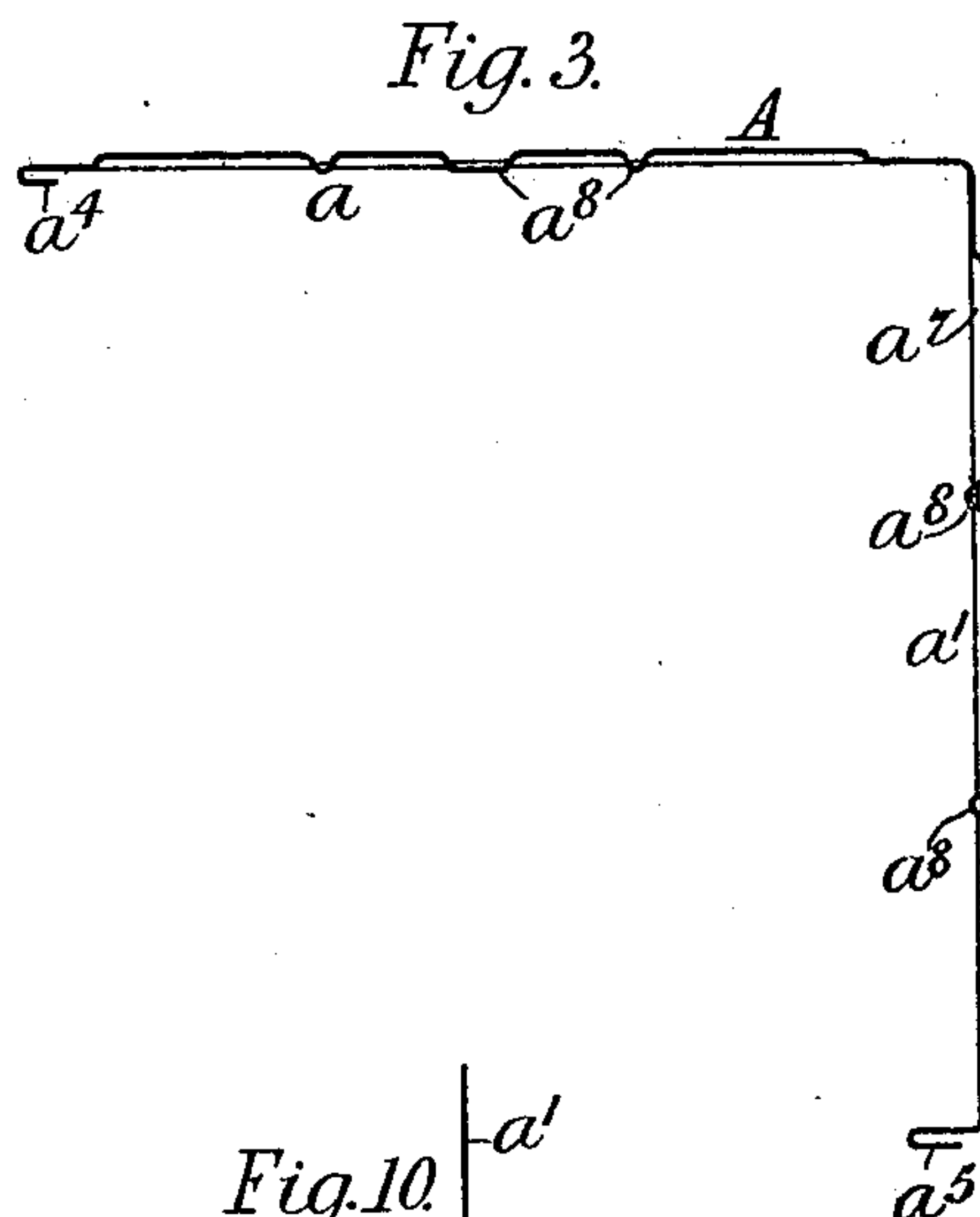
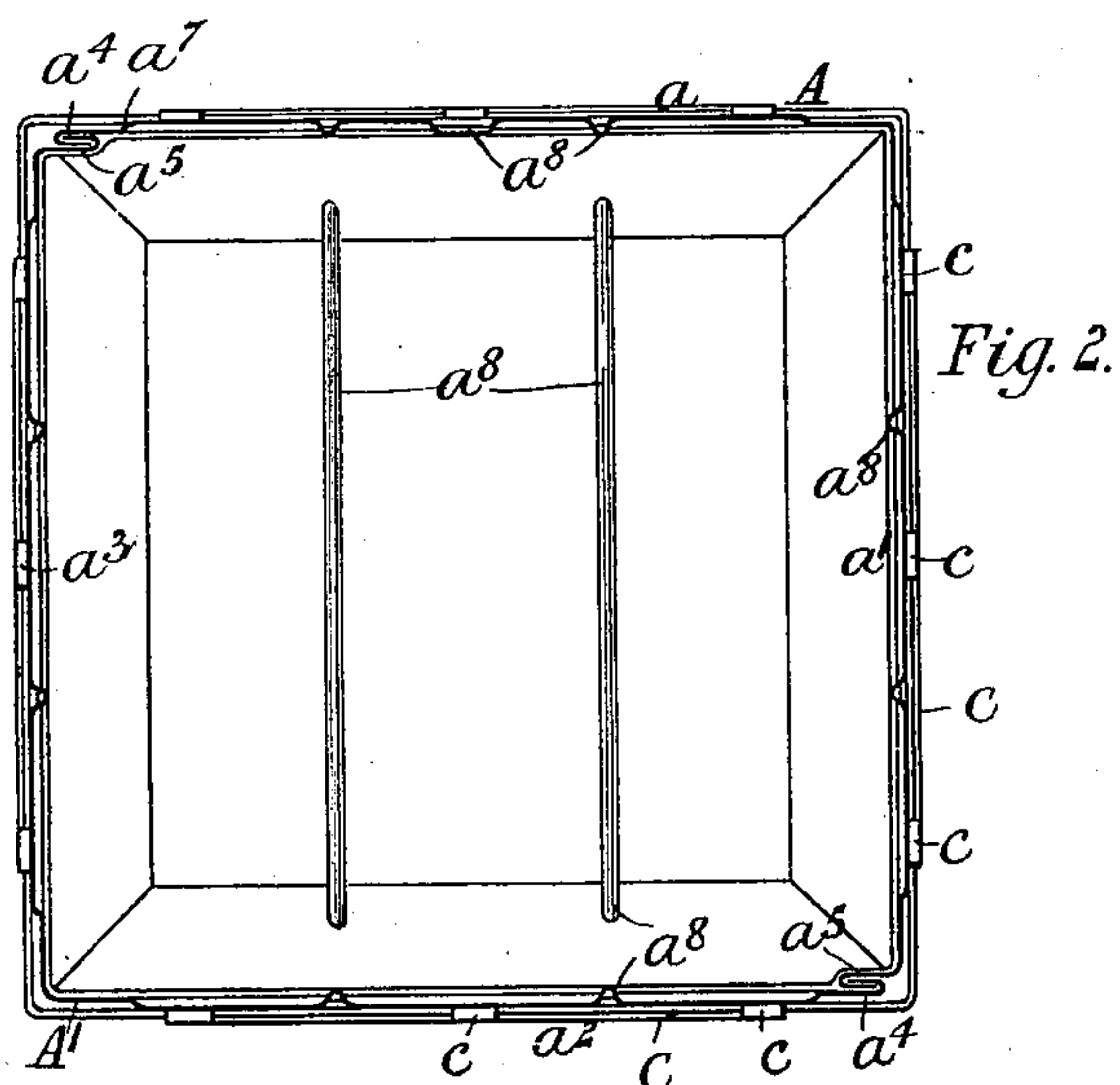
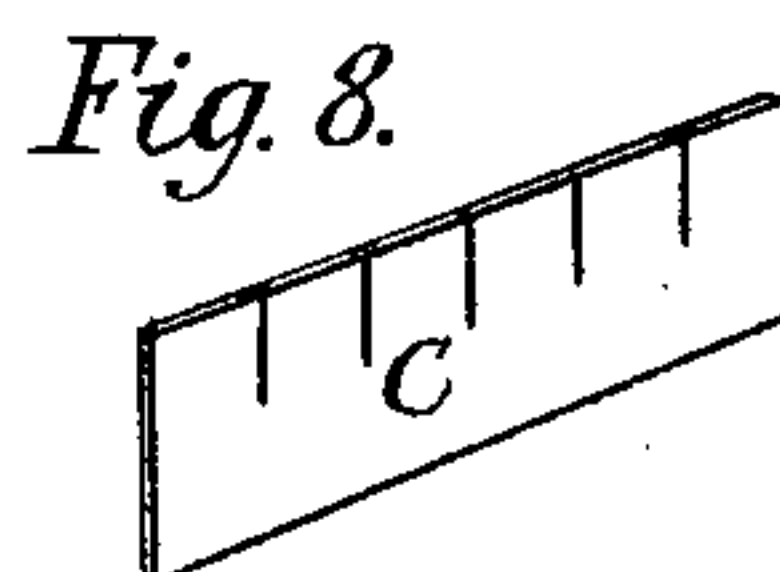
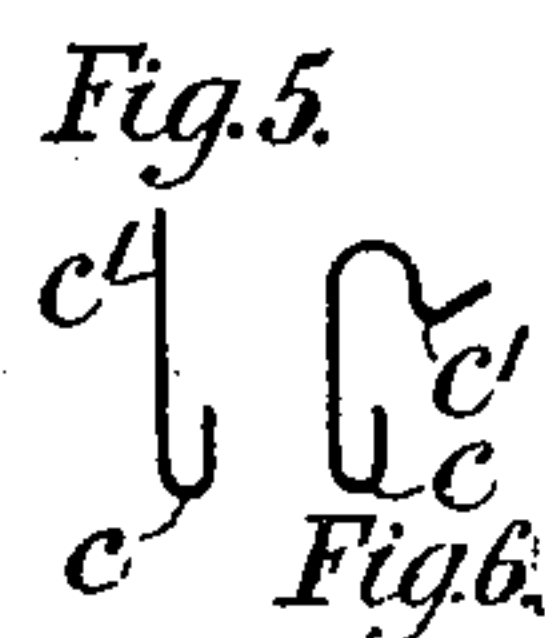
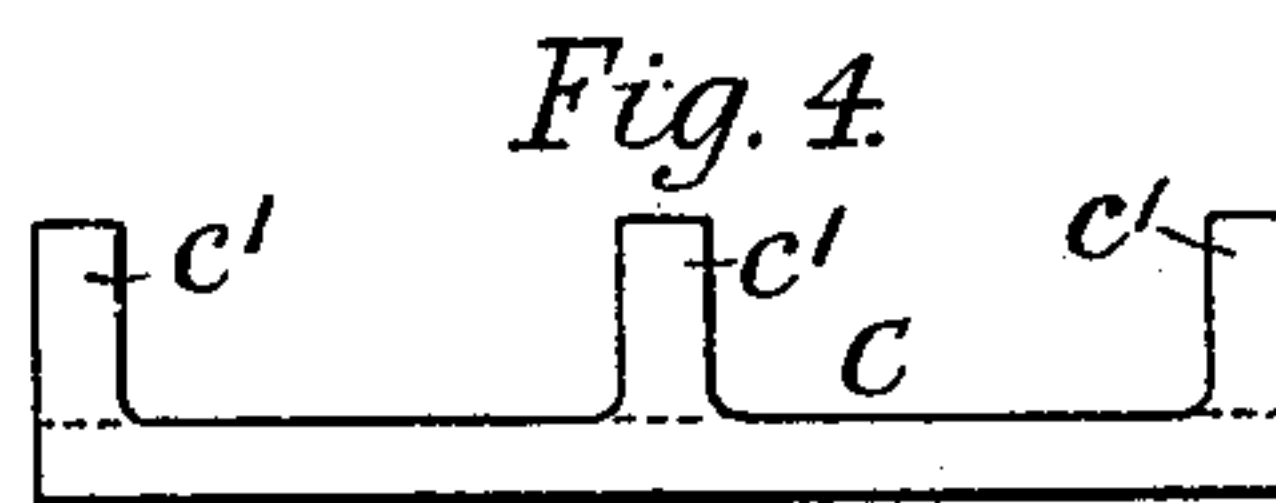
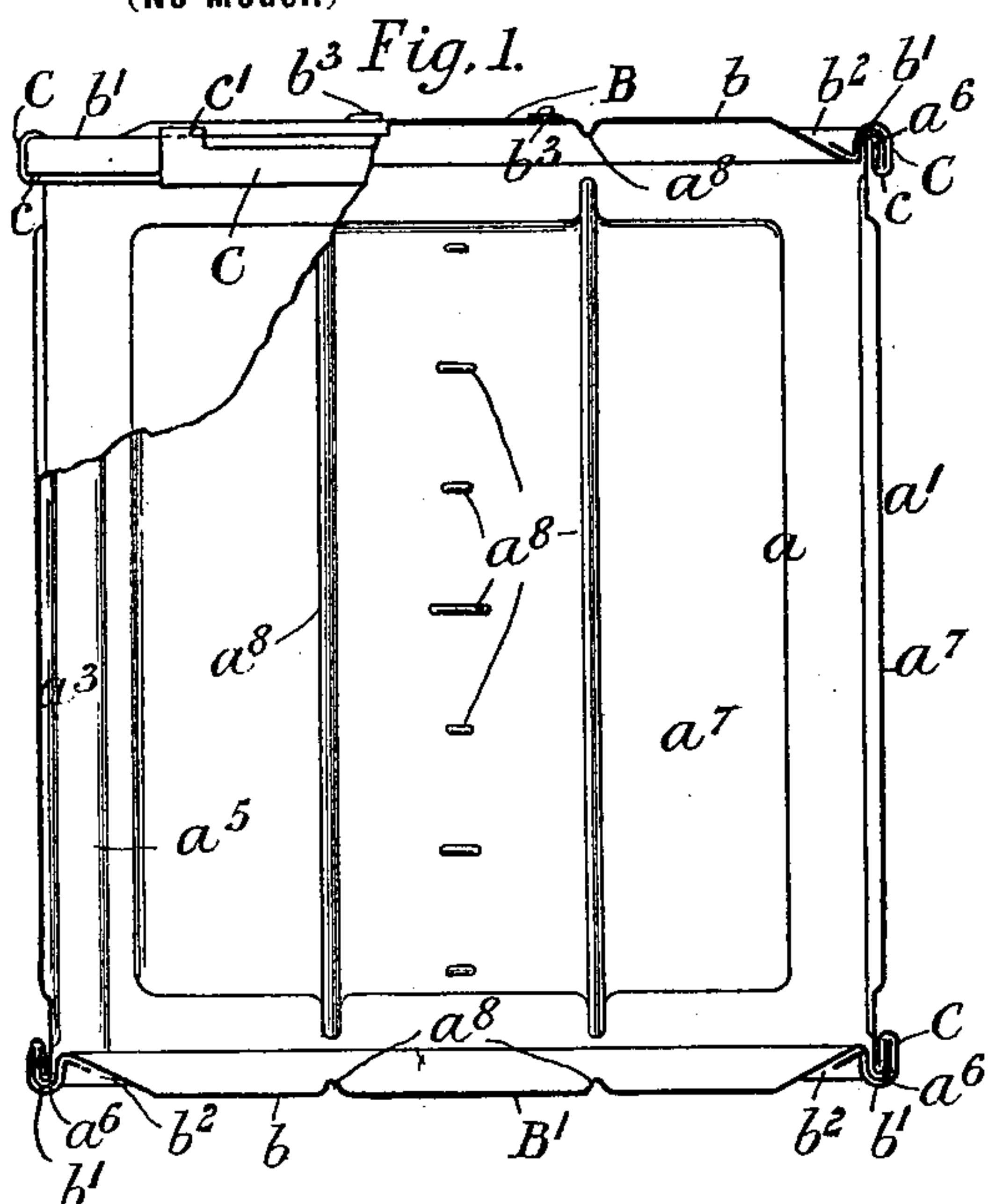
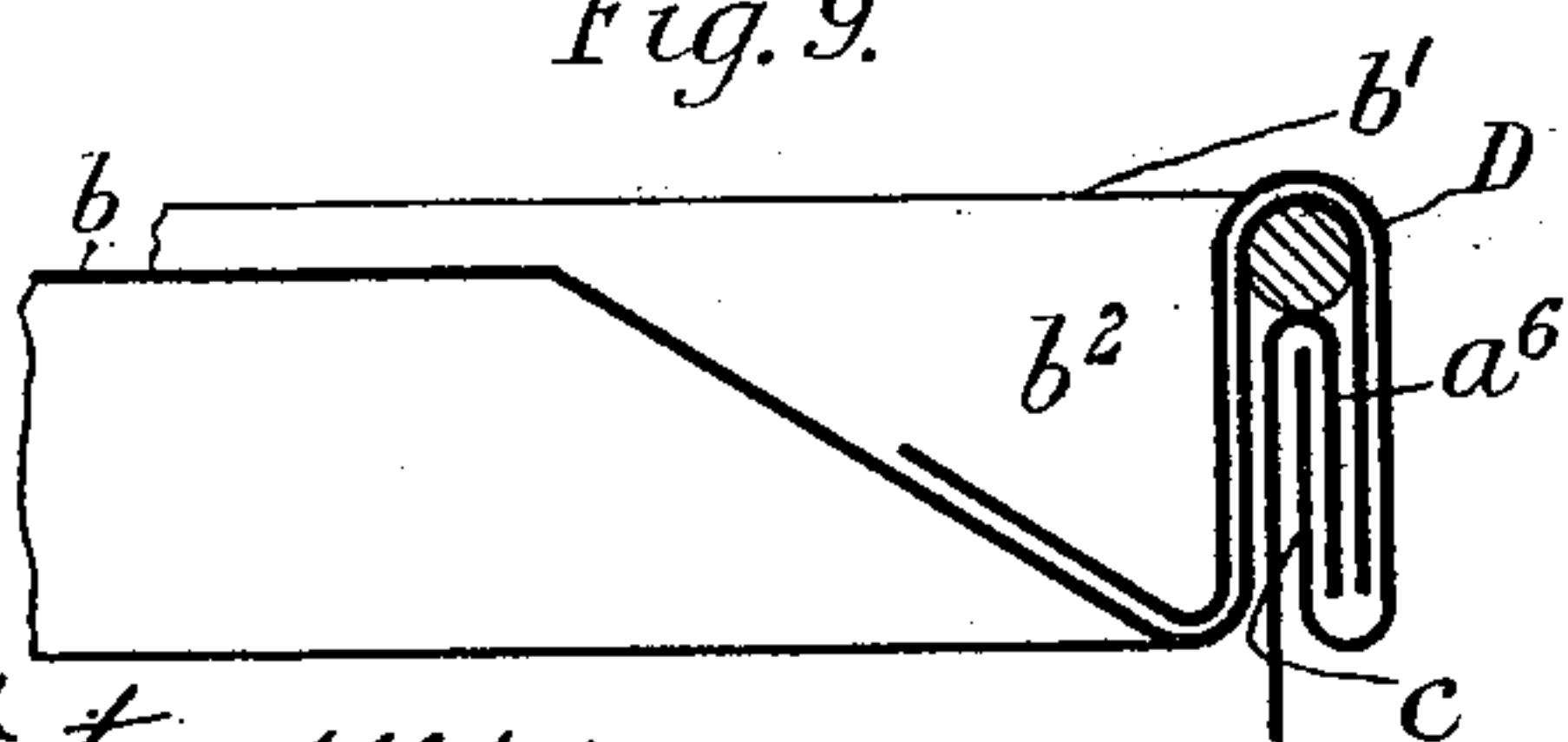


Fig. 9.



Witnesses:

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# UNITED STATES PATENT OFFICE.

GEORGE FILEWOOD DEWDNEY, OF CARDIFF, ENGLAND.

## METAL CHEST, BOX, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 631,539, dated August 22, 1899.

Application filed March 29, 1897. Serial No. 629,759. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE FILEWOOD DEWDNEY, a subject of the Queen of England, residing at Cardiff, Wales, England, have invented certain new and useful Improvements in Metal Chests, Boxes, or the Like, of which the following is a specification.

This invention relates to sheet-metal chests, boxes, and tanks specially applicable for containing tea, coffee, and other goods, and has for its object to construct these chests or the like of a number of parts capable of being readily fitted together or taken apart, and which parts separated may be packed one within or close to one another, so as to occupy very little space.

The invention will be best understood by reference to the accompanying drawings, in which—

Figure 1 is a view of one of my improved chests or boxes shown partly in vertical section and partly in front elevation. Fig. 2 is a horizontal section of Fig. 1. Fig. 3 is a horizontal section of one of the separable portions of the vertical walls of the chest or box shown in Figs. 1 and 2. Fig. 4 is a front elevation, and Fig. 5 an end elevation, of one of the clips shown in Fig. 1 for securing the top and bottom of the chest in position, this clip being represented as in its normal condition, or before it is bent; and Fig. 6 is an end elevation of the same clip after it is bent. Figs. 7 and 8 are perspective views of other forms of clip. Figs. 9 and 10 are sections showing one manner of packing the joints when it is desired that they should be fluid-tight, these two figures being drawn to a scale larger than that to which the other figures are drawn.

Like letters of reference indicate like parts throughout the drawings.

As shown in the drawings, the vertical walls  $a$ ,  $a'$ ,  $a^2$ , and  $a^3$  are formed in two non-soldered parts  $A$   $A'$ , each part  $A$  or  $A'$  constituting or embodying, respectively, two of the walls  $a$   $a'$  or  $a^2$   $a^3$ . As an example, the part  $A$ , comprising the walls  $a$   $a'$ , is shown in Fig. 3 as separated from the other part. The two parts  $A$   $A'$ , if desired, may be similar to each other in all respects, so that both of them may be formed by the same apparatus, and, as will be well understood, a number of them, for transportation or other pur-

poses, may be "nested" together, so as to occupy a very small amount of space.

The walls  $a$   $a^2$  are formed with similar folded or hooked vertical edges  $a^4$ , and the walls  $a'$   $a^3$  are formed with folded edges  $a^5$ , capable of engaging with the edges  $a^4$ , as shown in Fig. 2, and the upper and lower edges of the walls  $a$   $a'$   $a^2$   $a^3$  are folded over outward and downward, as at  $a^6$ , as shown in Fig. 1.

The top  $B$  and bottom  $B'$ , which may be alike and interchangeable, are each formed so that the central or main portion  $b$  thereof is level or nearly level with the surrounding turned-over edge  $b'$ , between which and the portion  $b$  is formed a channel or valley  $b^2$ . The turned-over edges  $b'$ , which, as it were, constitute a continuous recess, are adapted to fit tightly over or onto the folded or hooked turned-down edges  $a^6$  of the parts  $A$   $A'$ , whereon they may be rigidly secured by clips  $C$ . Each of these clips  $C$  is formed with a hook or hooked portion  $c$ , capable of engaging with one of the folded edges  $a^6$  and with projecting portions or tabs  $c'$ , which may be readily bent over one of the turned-over edges  $b'$ , as shown in Fig. 1. Fig. 6 represents the shape of one of the clips  $C$ , with the tabs  $c'$  bent as last previously described. The part  $c$  of the clip when passed into the space between the body of the box and the overhanging flange  $a^6$ , Fig. 9, serves as a wedge to force the latter outward against the contiguous flange of the cover and so aids in making a tight joint. Further, it acts to protect the box against accidental deformation. Each clip  $C$  may have any desired number of tabs  $c'$ . As examples, two different forms of the clip are represented in the drawings, that shown in Fig. 4 having three tabs and that shown in Fig. 7 having only one such tab, or the clip may be a continuous strip, slit only for greater convenience of bending, as in Fig. 8. Any of these connecting-strips can be continued around a corner and be curved for that purpose.

The edges of the parts  $A$   $A'$  being bent or folded over in the manner previously described render these parts very rigid; but to increase the rigidity of these parts they may be formed with panels  $a^7$  or corrugations  $a^8$ , or, as shown in the drawings, with both panels and corrugations, and some of these corruga-



tions, as shown in Fig. 1, may constitute a scale by which the quantity or bulk of the contents of the chest may be readily ascertained. The top B and bottom B' may also be  
5 provided with corrugations  $a^8$ , as shown, and the top may have small pockets  $b^3$  or other devices thereon for receiving an address card or label.

When the chest, box, or tank is to be used  
10 for containing liquid, I may provide each of the before-described joints with a packing D, of hemp or other suitable material. As shown in Fig. 9, the packing D is placed in the recessed edge  $b'$  of the top or bottom B or B',  
15 and, as shown in Fig. 10, two strips of packing may be used, one within the folded edge  $a^4$  and the other within the folded edge  $a^5$ . The packing employed might be a plastic or cement packing, or such a packing could be  
20 combined with the hemp packing aforesaid. By careful construction and a choice of proper packing, boxes or vessels according to this invention will not leak even though charged with such a searching fluid as, say, petroleum.

25 If desired, one or more of the clips C or the tabs thereof may be soldered to the body of the chest and the solder sealed, so as to secure

the contents of the chest against opening by any unauthorized person.

The chest, box, or tank, instead of being 30 rectangular, as shown in the drawings, may be of other desired shape. For example, it may be cylindrical, and instead of the body being formed in two parts any other desired number may be employed. 35

I claim—

In a sheet-metal box or tank, the combination with a body having its open end turned outward into hook form, a cover formed with an annular groove or channel to receive the 40 hooked end of the body and a fastening device consisting of a strip of metal inserted in the hooked end of the body and bent over the edge of the cover to hold the latter detachably in place, of a packing-piece arranged in the 45 said groove or channel of the cover, substantially as specified.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

GEORGE FILEWOOD DEWDNEY.

Witnesses:

M. H. INGRAM,  
F. G. MILLS.