

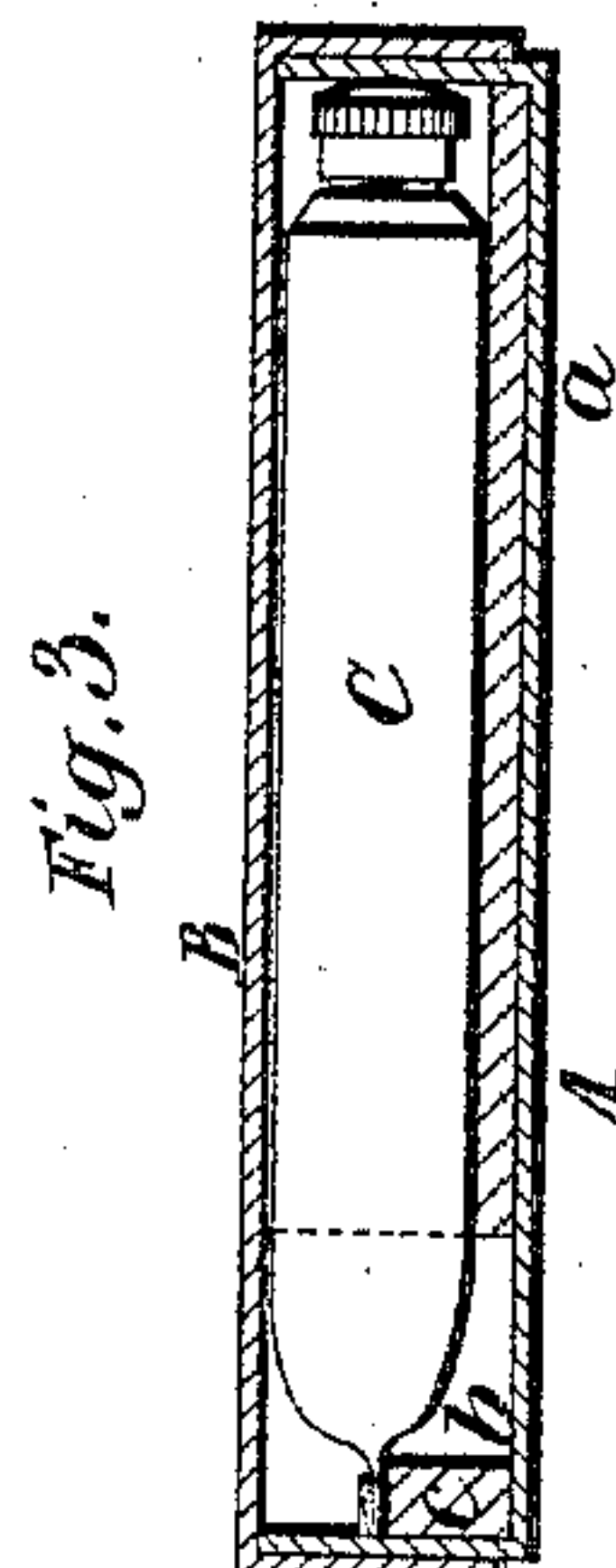
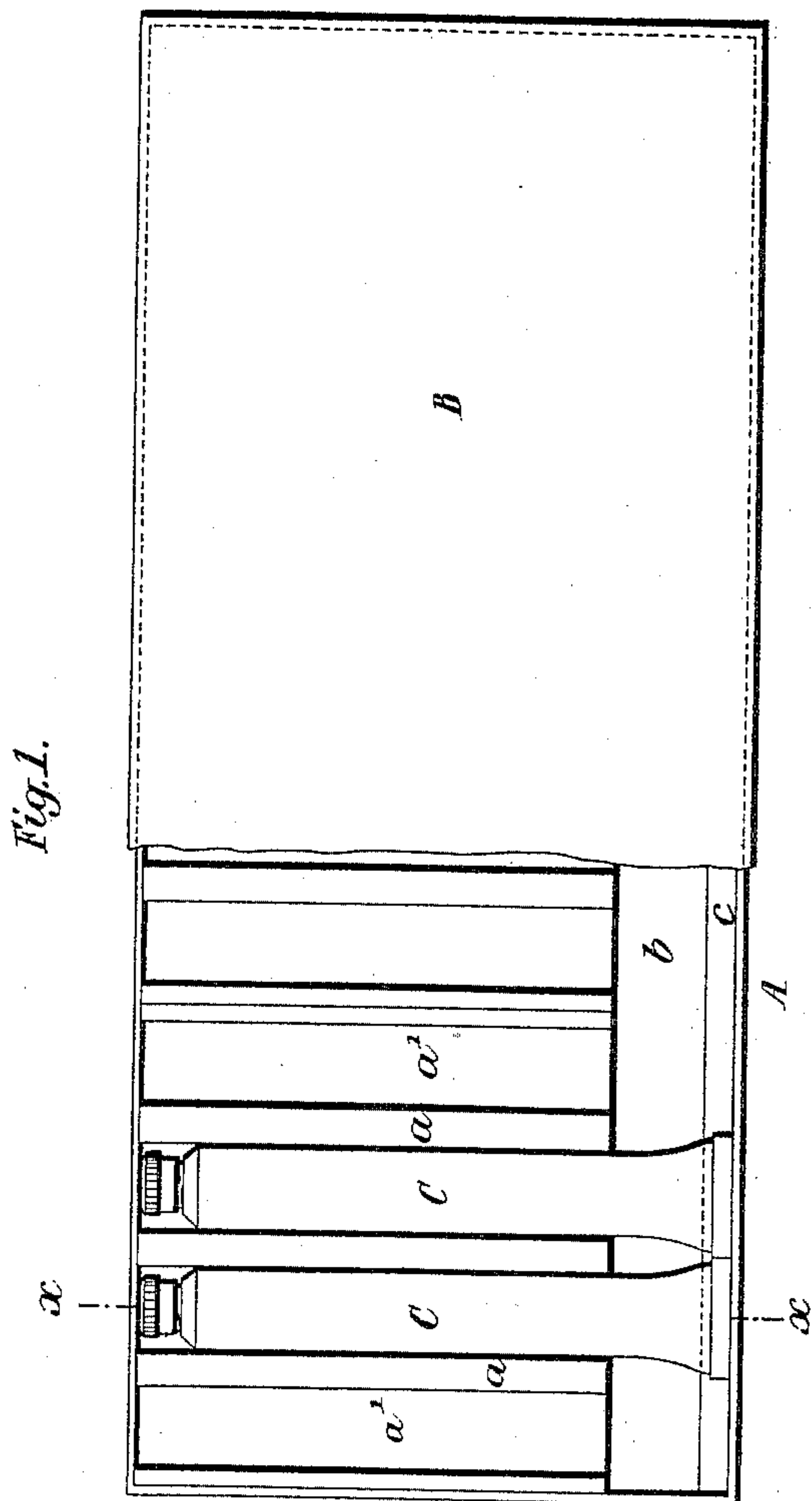
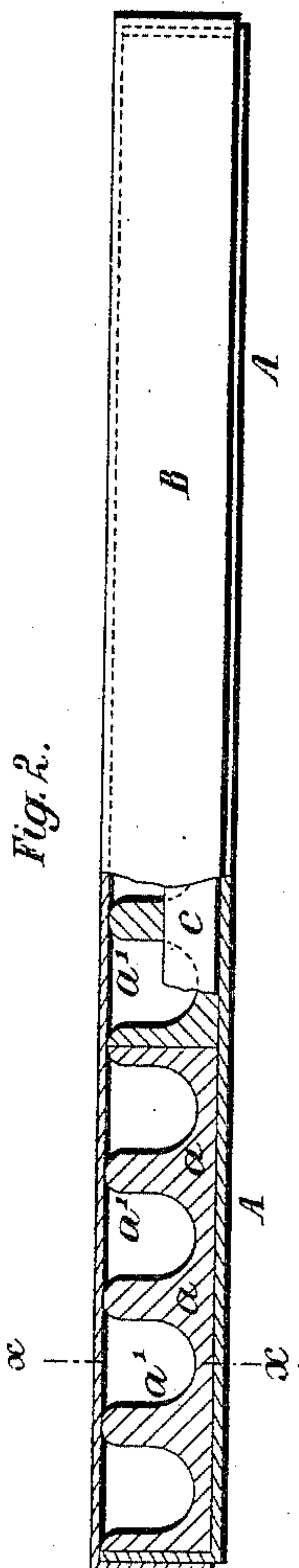
(No Model.)

2 Sheets—Sheet 1.

H. C. SANDERS.
PAINT TUBE BOX.

No. 440,507.

Patented Nov. 11, 1890.



Witnesses:

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Inventor:

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(No Model.)

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Fig. 4.

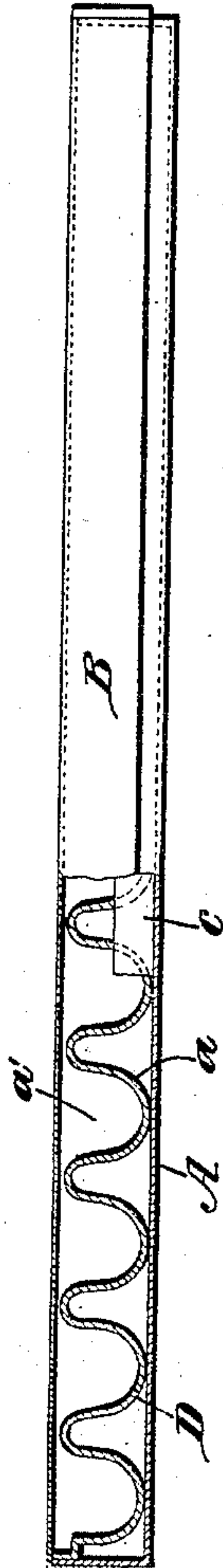
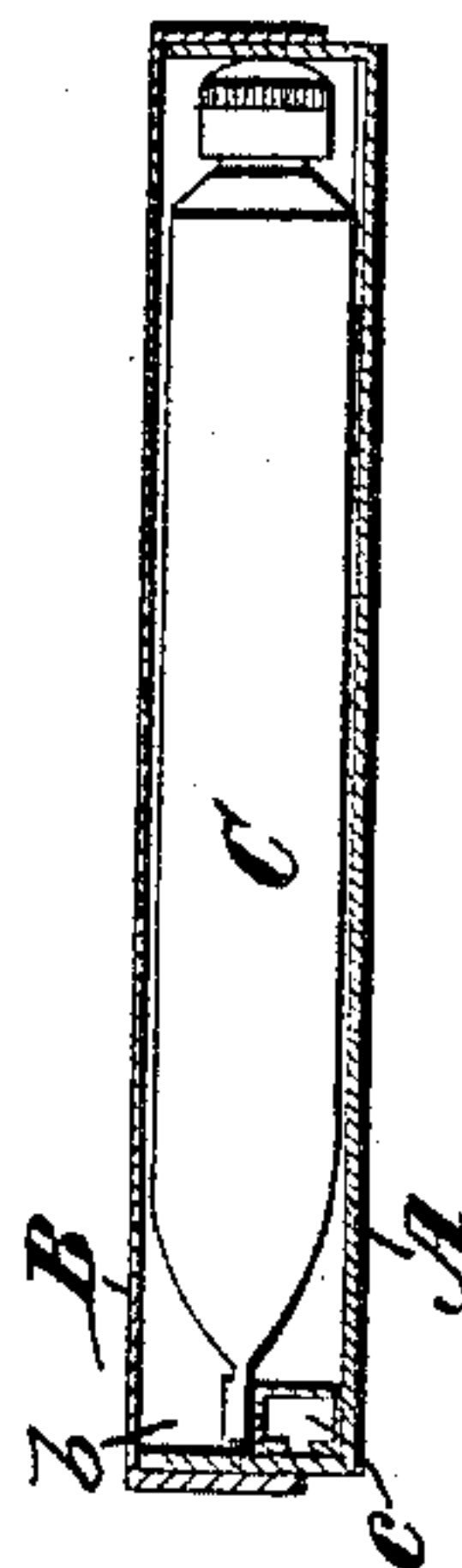


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY CONRAD SANDERS, OF LONDON, ENGLAND.

PAINT-TUBE BOX.

SPECIFICATION forming part of Letters Patent No. 440,507, dated November 11, 1890.

Application filed June 2, 1890, Serial No. 353,927. (No model.) Patented in England November 26, 1888, No. 17,188.

To all whom it may concern:

Be it known that I, HENRY CONRAD SANDERS, manufacturer, a subject of the Queen of Great Britain, and a resident of London, England, have invented certain new and useful Improvements in Boxes or Cases Chiefly Designed for Holding Collapsible Tubes, (for which I have obtained a patent in Great Britain, No. 17,188, bearing date November 26, 1888,) of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to boxes or cases chiefly designed for holding collapsible tubes; and its object is to improve the construction of such boxes or cases.

In packing collapsible tubes of the kind or class generally used for holding artists' colors, perfumes, shaving-soap, cosmetics, and like materials, it is desirable to employ boxes provided with compartments or divisions in order that the said tubes may be held out of contact with each other. It has been customary heretofore to use boxes or cases of a rectangular or other suitable form, having transverse divisions so arranged as to form a series of compartments, cells, or chambers, each of which compartments, cells, or chambers is of suitable dimensions to hold one collapsible tube. These boxes have generally been made of card-board, mill-board, or wood, each division being composed of a separate piece fastened to the front and rear wall of the box by being let into grooves in the said walls, or in any other convenient manner. Boxes or cases constructed in the manner hereinabove described are liable to various objections. For example, if made of wood their cost is too great, and if made of card-board or mill-board they are usually too weak, especially with respect to the divisions. To obviate the above defects, I provide the box or case with one or more filling-pieces each of which has one or more recesses or cavities adapted to receive the collapsible tubes. The said recesses or cavities are so shaped as to contain and support the said collapsible tubes in such a manner as to preserve them from indentation or other damage. Moreover, I preferably provide means for preventing turning of the said tubes while in the box or case.

In the accompanying drawings I have shown

how my said invention may be conveniently and advantageously carried into practice.

Figure 1 is a plan, a portion of the lid or cover being removed; and Fig. 2 is a side elevation, partly in vertical section, showing one form of my improved box or case. Fig. 3 is a transverse section on the line $x x$, Figs. 1 and 2. Fig. 4 is a side elevation, partly in section; and Fig. 5 is a transverse section of a slight modification.

Like letters indicate corresponding parts throughout the drawings.

A is the box or case, and B is the lid or cover thereof.

C C are the collapsible tubes. a is a filling of wood or other suitable material secured in the box or case A by means of rivets, glue, or in any other convenient manner, and provided with recesses a' , forming cells or compartments in which the collapsible tubes C are placed. The filling a may be continuous—that is to say, formed of one piece—or it may be in sections of any convenient length, as shown.

b is a space to receive the flattened portions or extremities of the collapsible tubes C. c is a support upon which the said extremities rest. The collapsible tubes C are thus firmly held in position in the corrugations, cavities, or cells a' , when the lid or cover B is in position, and any chance of their becoming damaged or shifted during transport so as to conceal the labels or printing thereon is obviated. Moreover, when the said cover is removed the box or case A may be advantageously employed for exhibiting or displaying the said collapsible tubes in a shop-window, or elsewhere. The space b permits the ready removal of the collapsible tubes, when desired, from the box or case A and their replacement in position therein, thus rendering the said box or case valuable to artists or others for holding the collapsible tubes while in use, or for storage purposes.

My improved box or case or any part of it may be constructed of tin or other metal, or of wood, card-board, mill-board, or of any other suitable material, or of any combination of these materials, and of any convenient shape or dimensions. It is obvious, moreover, that my improved boxes or cases may be employed for articles other than collapsible tubes, if found desirable.

Instead of the hereinbefore-described wooden or other filling-piece, I can employ metal or other suitable material, corrugated or curved so as to form recesses or cavities, 5 each of which is of the desired size and shape to hold one collapsible tube. This continuous piece is corrugated or curved before being placed in position in the box or case and can be very readily and securely fastened at each 10 extremity in such manner that the entire structure is very strong. When the said box or case and corrugated or curved piece are constructed of metal, the latter may be soldered or riveted at the two ends, and, if desired, at other points, also. When made of 15 wood, the said piece may be glued or otherwise fastened. When of card-board it may be secured by metallic fasteners or in any other suitable manner. In some instances I em-

ploy single or separate curved pieces for each 20 compartment or cell in lieu of one continuously corrugated or curved piece, and the separate compartments or cells may in this instance be fastened to each other in any convenient manner. In some cases I may provide 25 two or more tiers of cells or compartments.

What I claim is—

The improved box for packing collapsible tubes, consisting of the casing A, a filling-piece dividing the box into separate compart- 30 ments, and the longitudinal support c at one side of the casing adapted to receive the flattened ends of the tubes and prevent their turning, substantially as described.

HENRY CONRAD SANDERS.

Witnesses:

CHAS. B. BURDON,
A. H. DEATH.