

(No Model.)

G. SLOAN.
BOTTLE.

No. 353,600.

Patented Nov. 30, 1886.

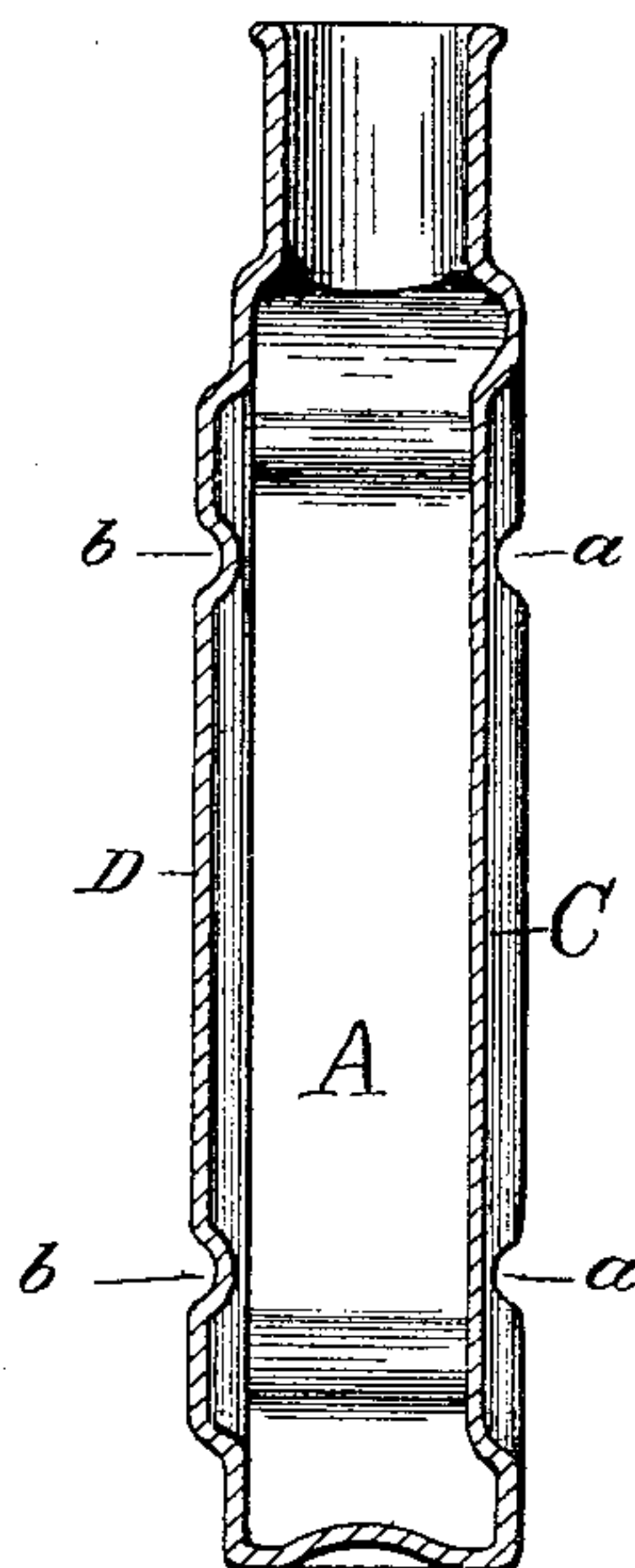


FIG. 1

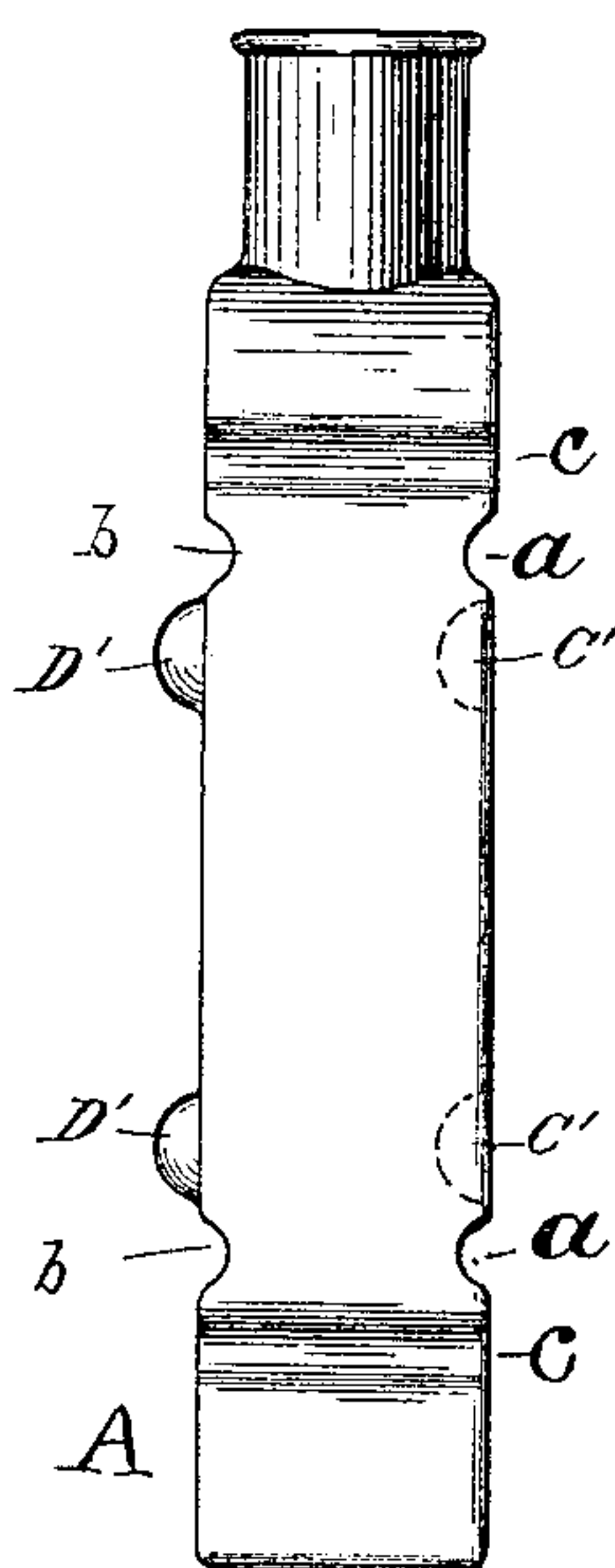


FIG. 5

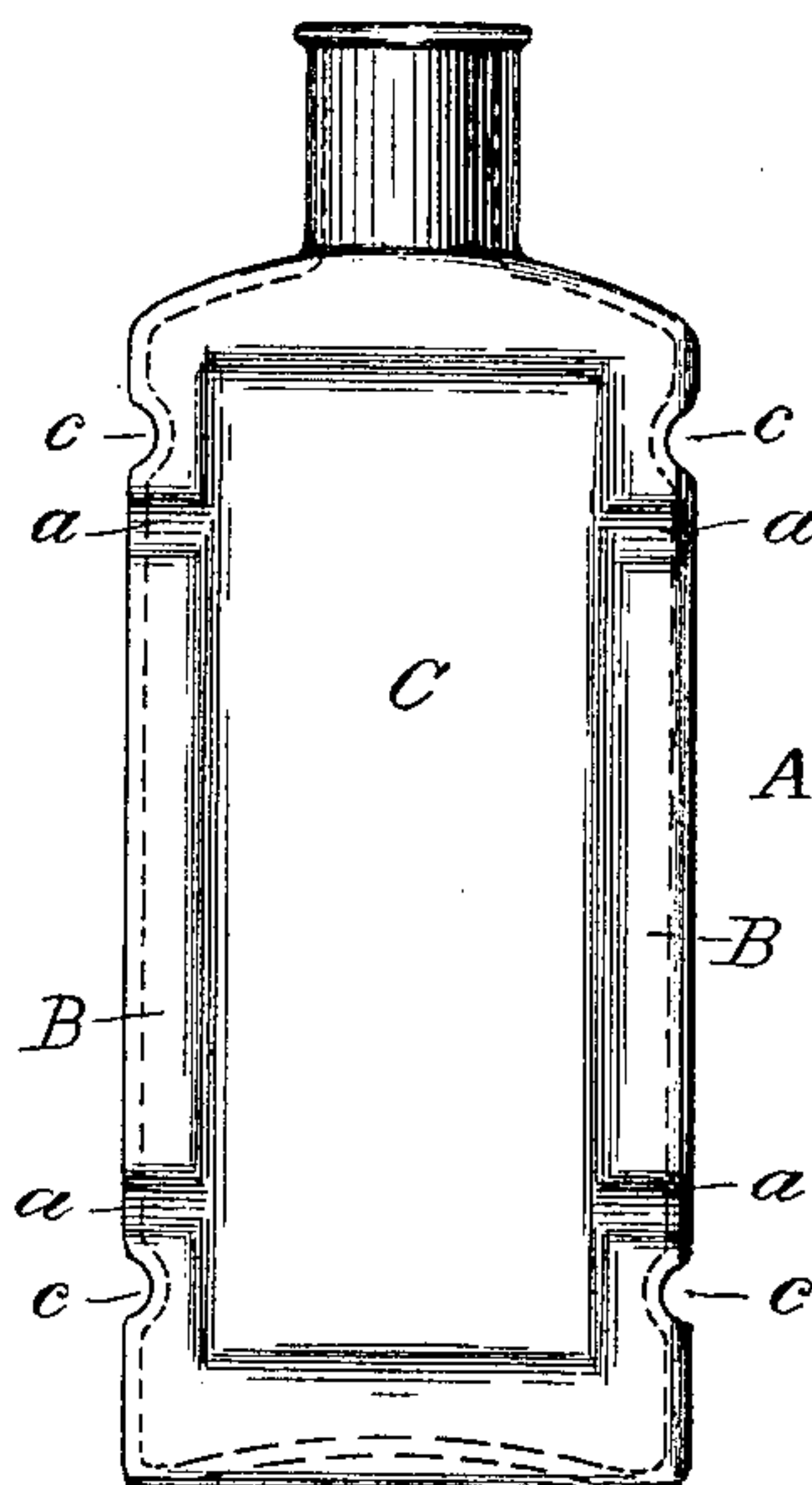


FIG. 2

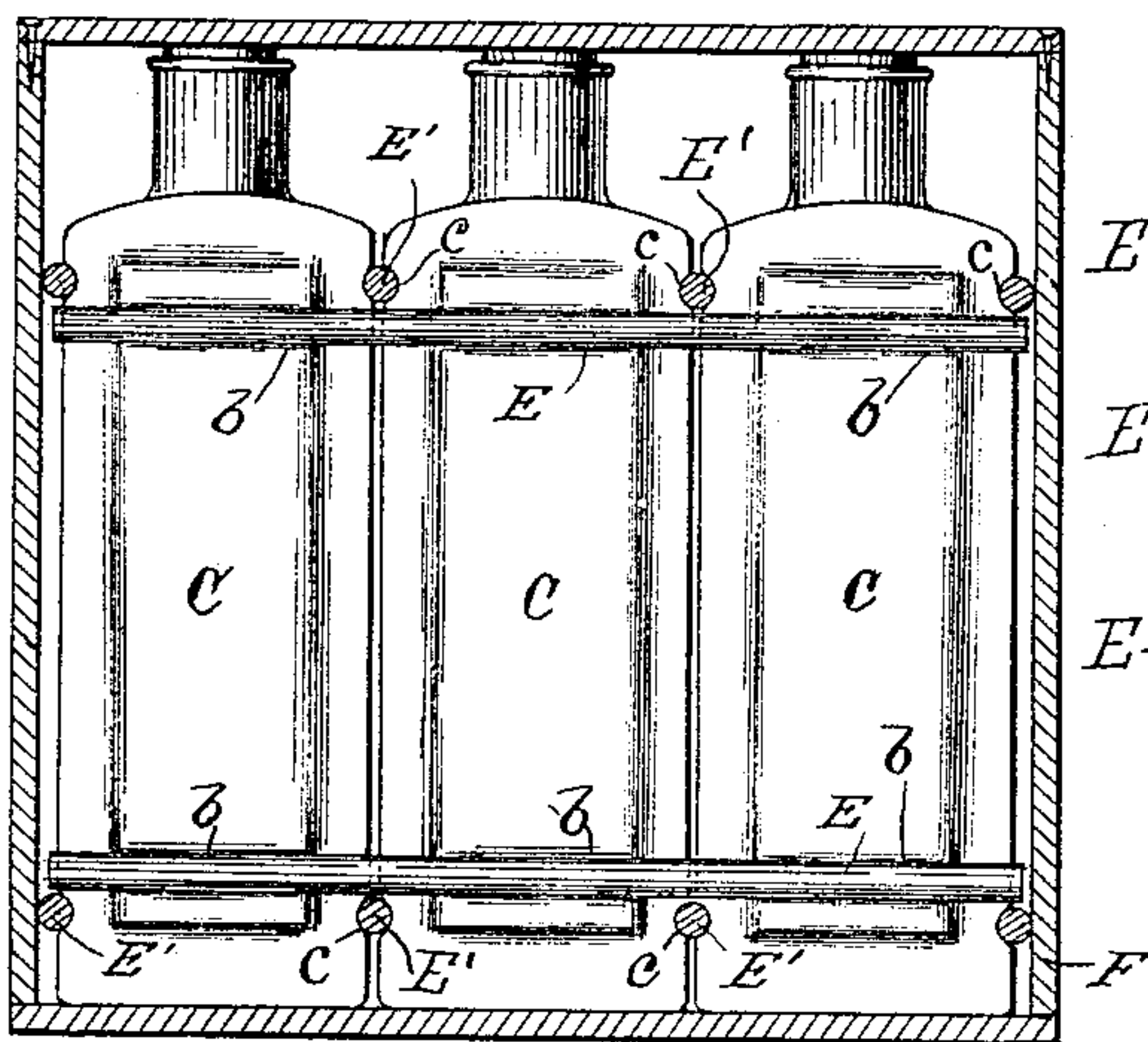


FIG. 3

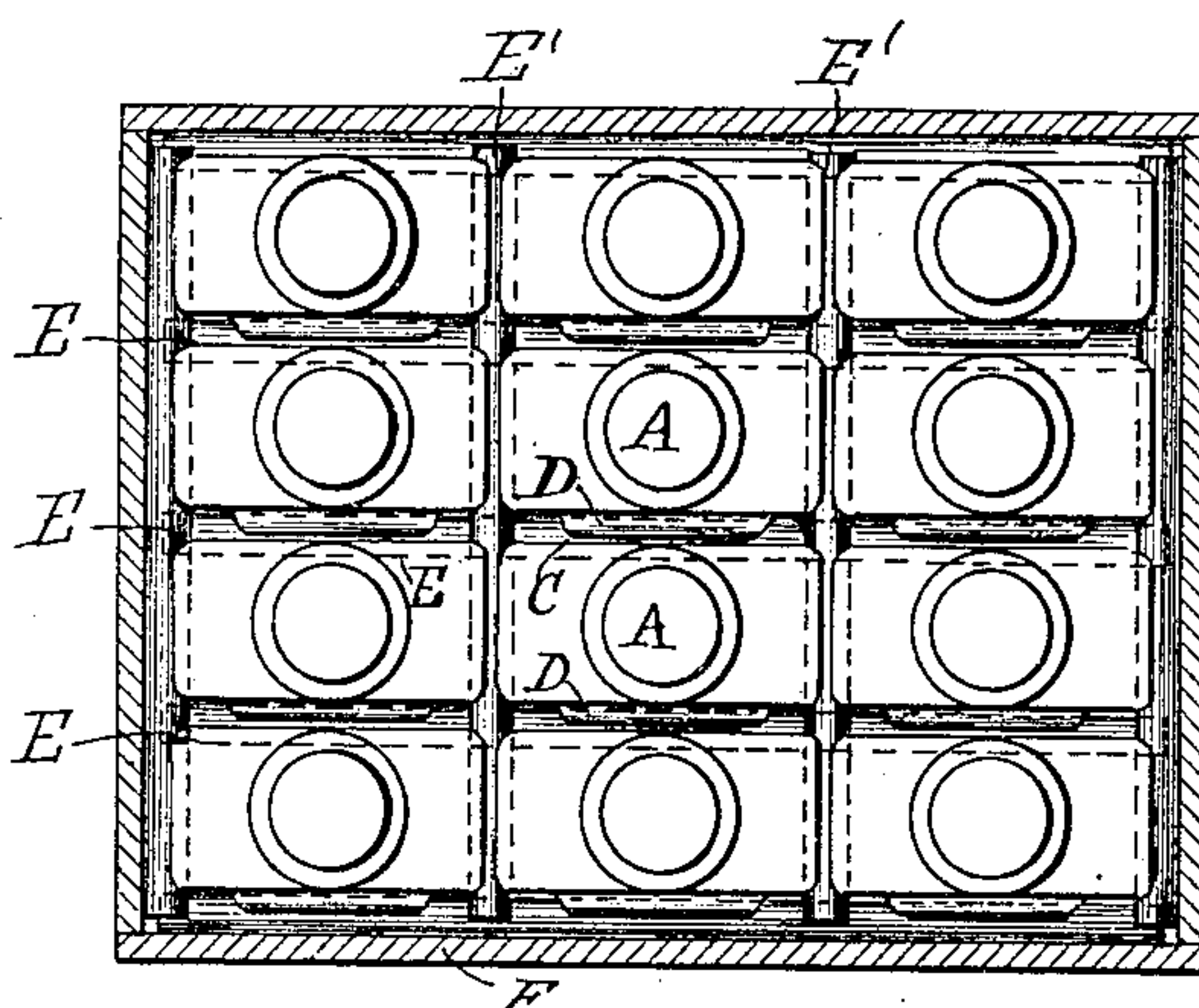


FIG. 4

WITNESSES:
Franklin Brett.
C. D. Miles

INVENTOR:
George Sloan,
By Wm. Robison,
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE SLOAN, OF OTTER RIVER, MASSACHUSETTS.

BOTTLE.

SPECIFICATION forming part of Letters Patent No. 353,600, dated November 30, 1886.

Application filed July 6, 1886. Serial No. 207,189. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SLOAN, a citizen of the United States, residing at Otter River, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Bottles, (for which I have not obtained a patent in any country,) of which the following is a specification.

My invention relates to an improvement in the external construction of bottles, whereby they may be packed more securely, simply, cheaply, and expeditiously than at present.

The nature of my invention will be understood from the description which follows.

In the accompanying drawings, which form a part of this specification, Figure 1 represents a vertical cross-section of a bottle illustrating my invention. Fig. 2 is an elevation showing the concave surface of my improved bottle. Fig. 3 shows a box of bottles packed, the box-cover removed and the convex surfaces of the bottles exposed. Fig. 4 is a plan view of a box of bottles packed in accordance with my improvement; and Fig. 5 shows a modification of my improved bottle.

Similar letters indicate like parts in all the figures.

A is a bottle, provided on one side with the corner ribs, B, surrounding the concave panel C. Said ribs B are provided with horizontal grooves *a a*. The opposite side of the bottle is provided with a convex panel, D, corresponding in size and shape to the concave panel C, whereby the convex panel of one bottle will fit closely into the concave panel of an adjacent bottle of similar construction. The convex panel D is provided across its face with the horizontal grooves *b b*, corresponding in size and height to the grooves *a a* on the opposite side of the bottle. The ends of the bottle are also preferably provided with similar grooves, *c c*.

To pack bottles constructed as described, a sufficient number to cover the bottom of the box F is laid therein, then rods E, of wood, rubber, or other suitable material, are placed in the grooves of the bottles, as shown in Figs. 3 and 4, and another row of bottles is laid in the box, the convex surface of one

row fitting into the concave surface of the next and the rods E falling into the corresponding grooves of both rows of bottles.

The rods E' run between the bottles, across their ends, at right angles to the rods E, and within the end grooves, *c c*, of the bottles, as shown. The rods E and E' separate the adjacent bottles slightly from each other, thus preventing possible breakage from contact, and at the same time affording a simple and effective packing.

The packing-rods may be made of wood, paper, rubber, or any other suitable material, but are preferably made of some slightly-elastic substance.

The convex surface of one bottle entering the concave surface of the bottle adjacent prevents the bottles from slipping off or past each other.

It will be observed that bottles grooved as described may not only be securely packed with packing-rods in boxes, but may be piled up on counters or shelves without boxes and without danger of falling.

The complementary concave and convex surfaces C and D may be variously modified without departing from the proper scope of my invention. For instance, in Fig. 5, which shows a modification in the construction of the bottle A, D' D' are teats corresponding to the depressions C' C' on the opposite side of the bottle, whereby the teats D' of one bottle, fitting into the depressions C' of an adjacent bottle, will prevent them from slipping off or past each other.

The only essential feature of this part of my invention is that the depression on one side of the bottle shall correspond to a complementary projection on the opposite side of the same.

What I claim as my invention is—

1. A rectangular bottle having one side provided with a convex surface and its opposite side with a corresponding concave surface, its opposite sides being also provided with grooves parallel to each other in the same horizontal plane, substantially as and for the purpose described.

2. The combination, with bottles having

their opposite sides provided with horizontal grooves, of packing-rods entering the corresponding grooves of adjacent bottles, substantially as and for the purpose set forth.

- 5 3. In combination with rows of bottles having their sides provided with horizontal grooves, packing-rods running between said

rows of bottles, said rods fitting into corresponding grooves in the sides of adjacent rows of bottles, substantially as described.

GEORGE SLOAN.

Witnesses:

H. W. CONANT,
THATCHER B. DUNN.