

(No Model.)

T. COCKCROFT.

METHOD OF PACKING BOTTLES AND OTHER ARTICLES.

No. 258,379.

Patented May 23, 1882.

Fig. 1.

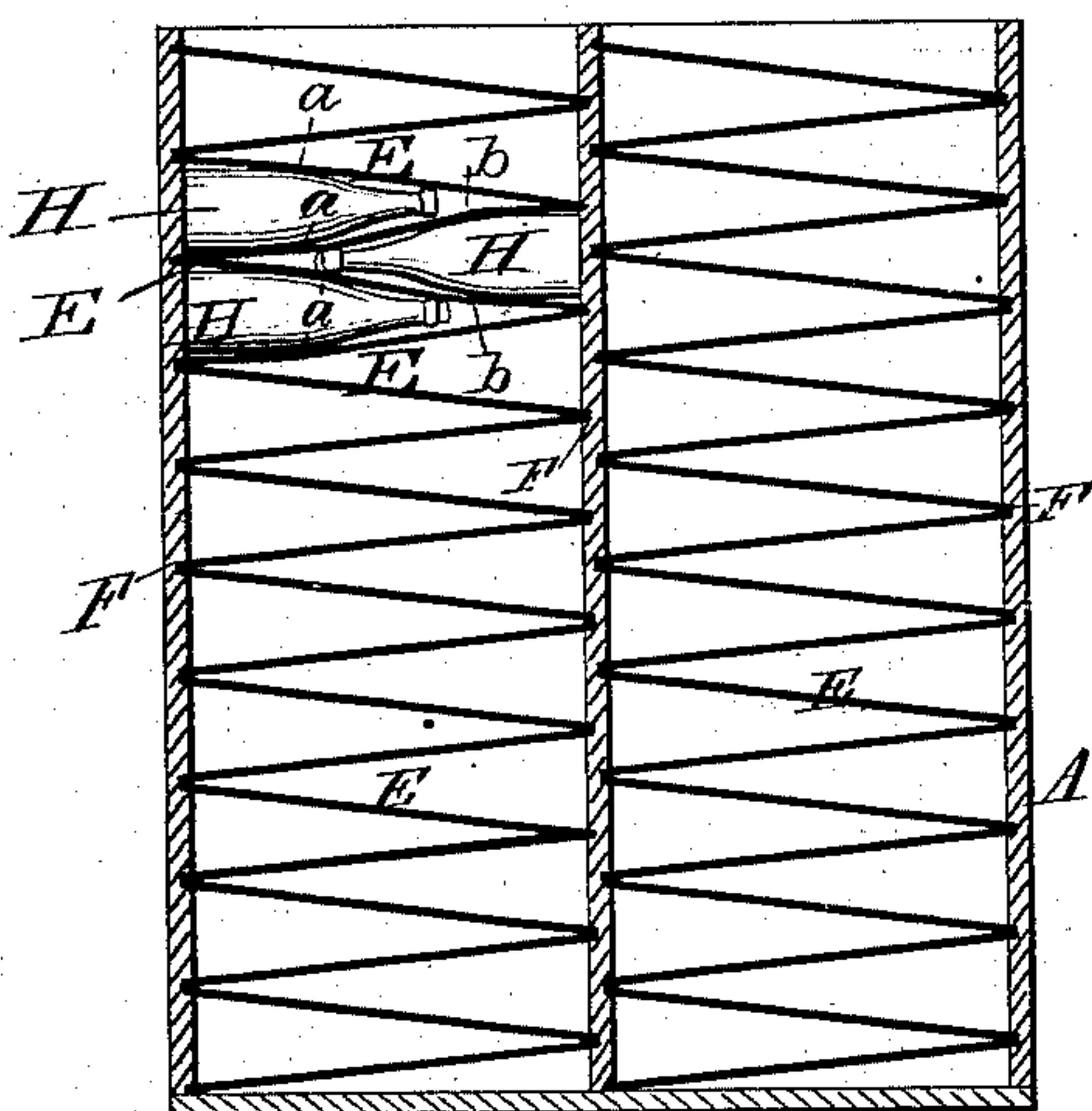


Fig. 3.

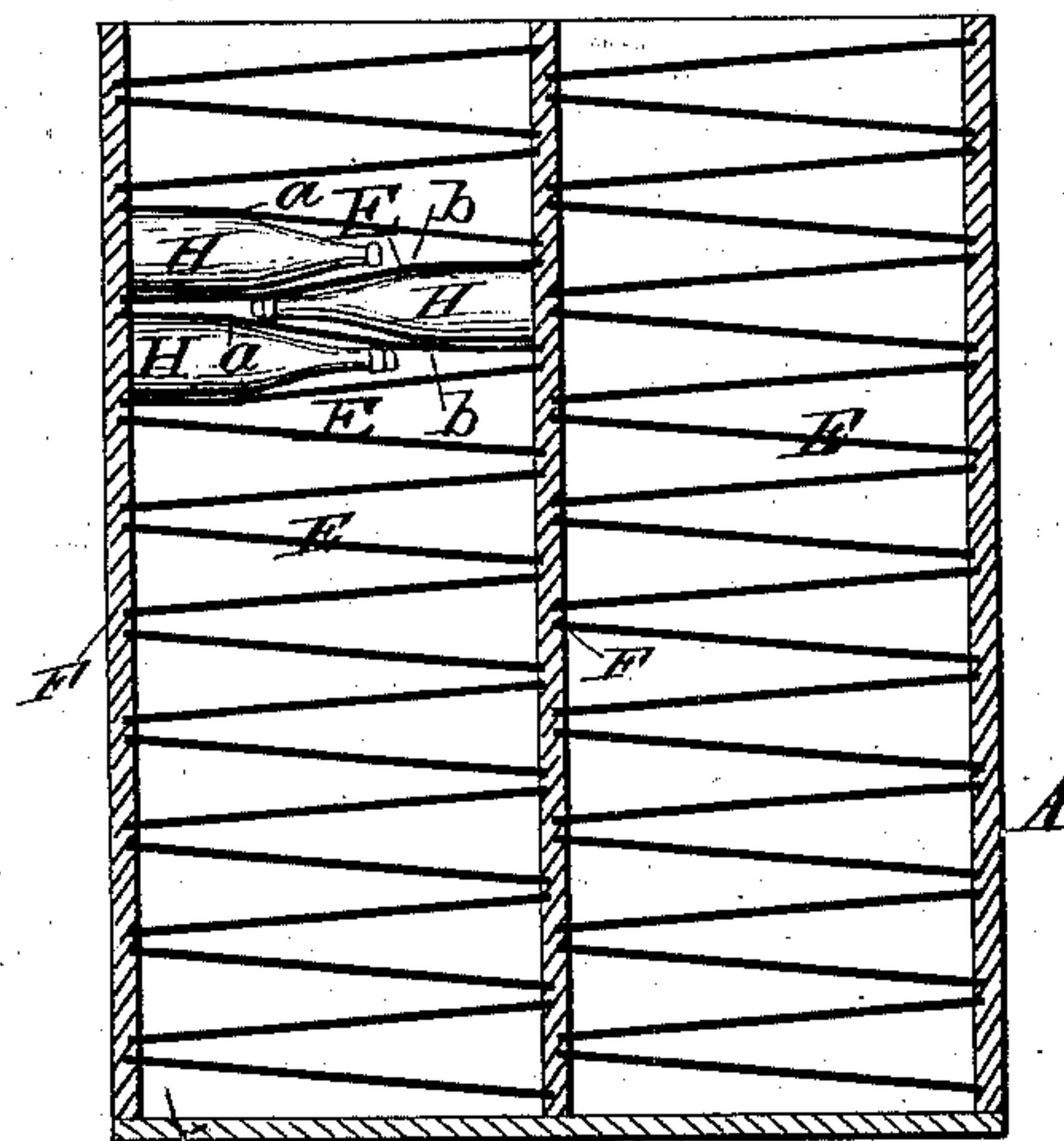
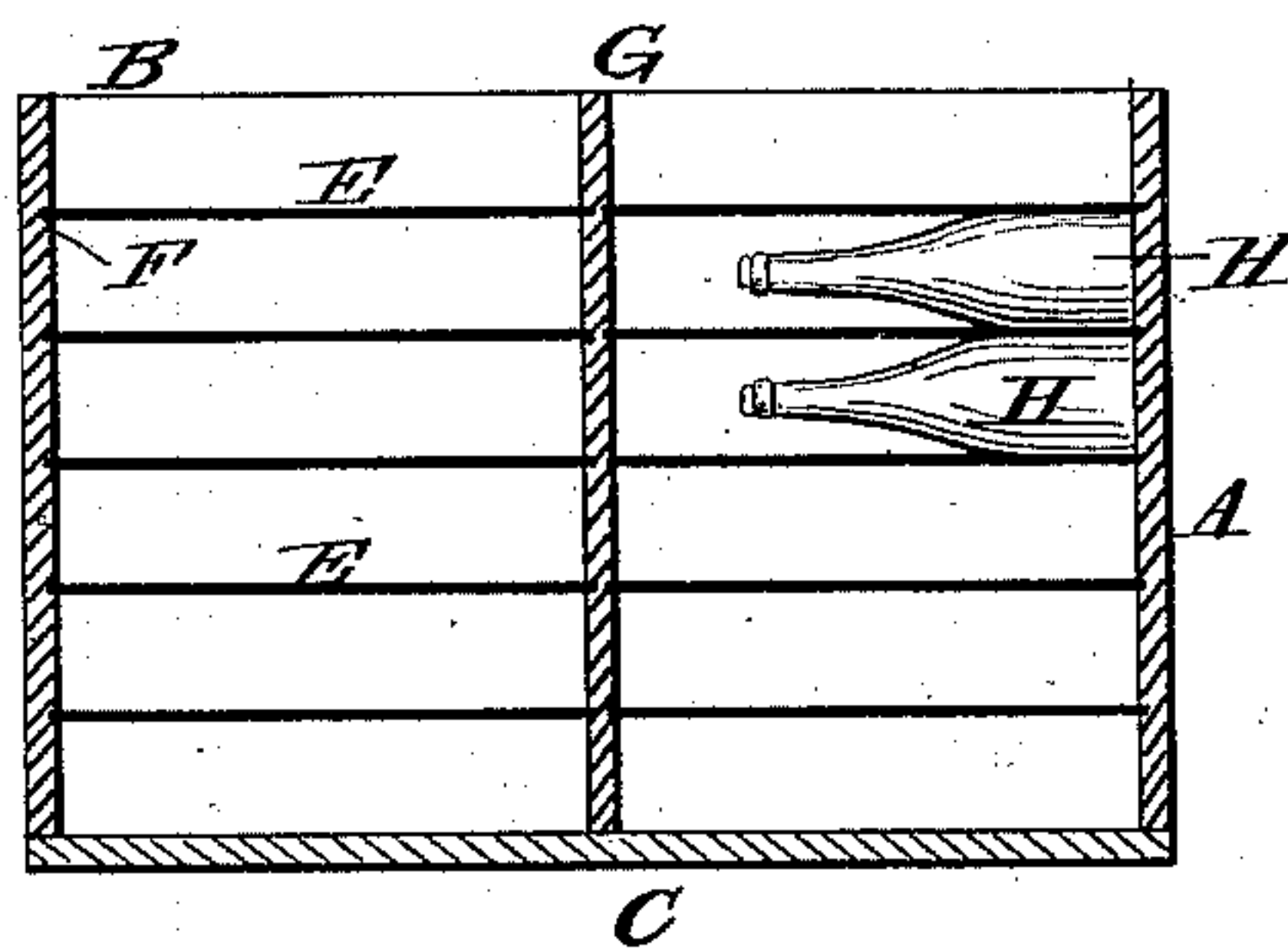


Fig. 2.



Attest.

*Sidney P. Hollingsworth*  
*Walter S. Dodge.*

Inventor.

*Thomas Cockcroft,*  
*by Dodge & Son,*  
*Attys.*



# UNITED STATES PATENT OFFICE.

THOMAS COCKCROFT, OF BIRKENHEAD, COUNTY OF CHESTER, ENGLAND.

## METHOD OF PACKING BOTTLES AND OTHER ARTICLES.

SPECIFICATION forming part of Letters Patent No. 258,379, dated May 23, 1882.

Application filed April 14, 1882. (No model.) Patented in England November 20, 1879, No. 4,729.

*To all whom it may concern:*

Be it known that I, THOMAS COCKCROFT, of Birkenhead, in the county of Chester, Kingdom of England, have invented certain Improvements in Methods of Packing Bottles and other Articles, of which the following is a specification.

My invention relates to a novel method of packing bottles and similar articles larger at one end than at the other; and it consists in forcing them between flexible partitions, in the manner hereinafter described, whereby the partitions are bent out of their normal shape and caused to exert a constant pressure upon the vessels.

In order to explain more clearly the mode of carrying out the present invention, I have shown and will proceed to describe a packing-case constructed for that purpose, but would say that the case itself constitutes the subject-matter of a separate application previously filed by me, and is not claimed herein. The form I prefer has one or more series of partitions running across it obliquely, every partition meeting its next neighbor at one end in a groove, so as to present a zigzag series of partitions, each groove, except the end ones, taking two partition ends. If there be a central cross-partition, the grooves are arranged alternately, so that the grooves on the opposite sides of the partition shall not come opposite each other. This arrangement not only avoids unnecessary weakening of the middle wall or partition, but also prevents the bottoms of bottles from being placed directly in line on opposite sides thereof, and causes both the bottles and the elastic partitions to assist in supporting the central wall or partition. The partitions are thin laths, and when placed in position the bottles are inserted with their necks pointing to the apex of the compartment, and the partitions are sprung out by the bottles, each bottle occupying one compartment. Consequently each bottle aids in giving an elastic partition to keep the contiguous bottles tight. There can be numerous layers, a thin layer of wood separating the different layers of bottles.

The invention is best described by aid of the accompanying drawings, in which Figure 1 is

a plan of box with the two adjoining laths fitting into the same groove in each case; Fig. 2, a transverse section of the same, and Fig. 3 a modification in which each lath has a separate groove.

In these drawings, A are the sides of the box, which can be single, if desired, or double, as in Figs. 1, 2, and 3. In case it be double and grooved, the grooves are so arranged as to alternate on opposite sides of the central partition, as shown. B and C are the top and bottom. E E are the laths or partitions between the bottles; F F, grooves, and G vertical cross-partition; H H, a few bottles shown in position.

In some cases it is not desirable to bring the two partitions so as to actually meet in the groove. In such case each partition has a groove for itself, and the obliquity of the partition is designed so as to follow a straight line nearest approaching the average contour of the bottle, but preferably cutting across some salient angle, so as to put a strain upon the partition. Fig. 3 shows a plan of this variation, and Fig. 2 will act as a sectional view to explain this also.

The bottles and other articles, H, are forced between the partitions E, with their large and small ends alternated, as shown, so that they bear upon opposite sides of the partitions at different points, *a* and *b*, in the length thereof, and produce a double bend or flexure therein, as shown in Figs. 1 and 3, thus causing a firm but elastic pressure upon each bottle or article, which effectually prevents their shaking about, yet takes up the concussion or shock of rough handling of the case.

My English patent does not specifically claim the method of packing herein set forth, though designed to cover broadly a case by which said method may be carried out.

Having thus described my invention, what I claim is—

1. The herein-described method of packing bottles and other articles larger at one end than at the other, consisting in forcing said articles between flexible partitions with the large and small ends alternated, substantially as set forth, whereby a double flexure is formed in the partition, as explained.

2. The herein-described method of packing  
bottles and other articles larger at one end  
than at the other, consisting in forcing a se-  
ries of two or more of said articles between flat  
5 flexible partitions against opposite sides of  
such partitions at points on the said partitions  
not opposite to each other, thus producing a

flexure and a retention of said partitions in an  
abnormal form, whereby a double flexure is  
formed in the partitions, as explained.

THOMAS COCKCROFT.

Witnesses:

WM. P. THOMPSON,  
I. O. O'BRIEN.