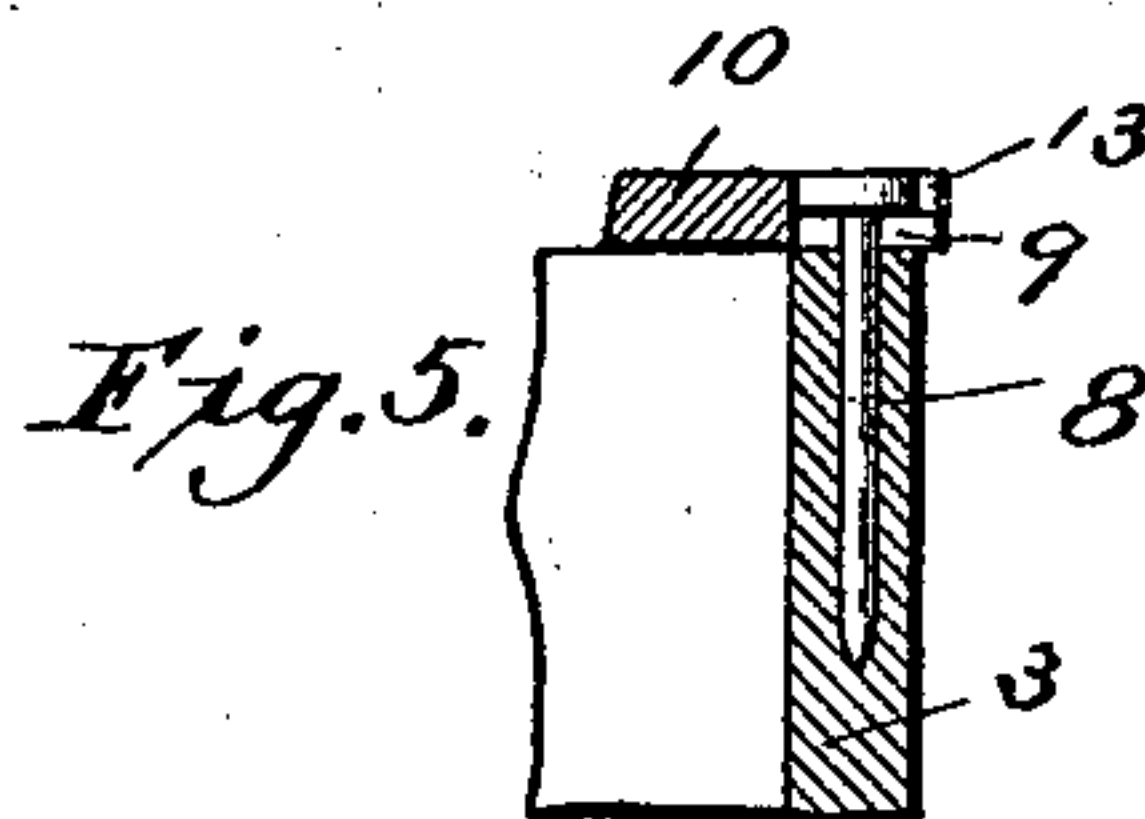
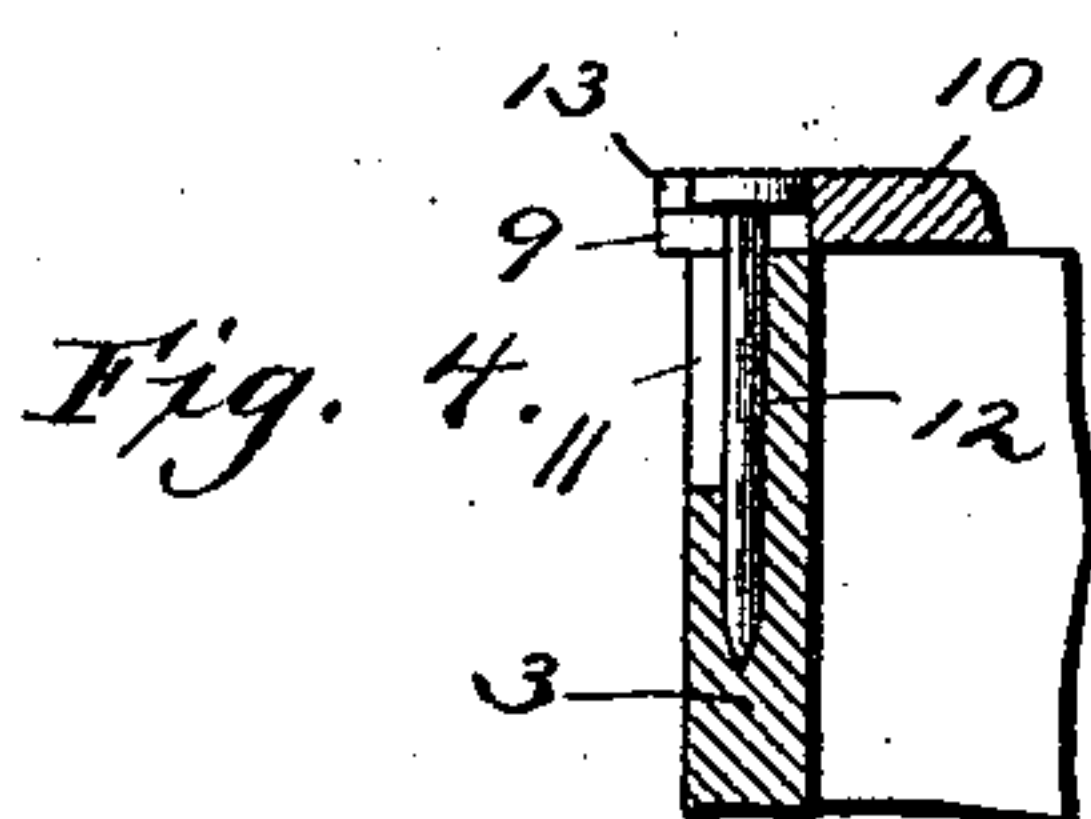
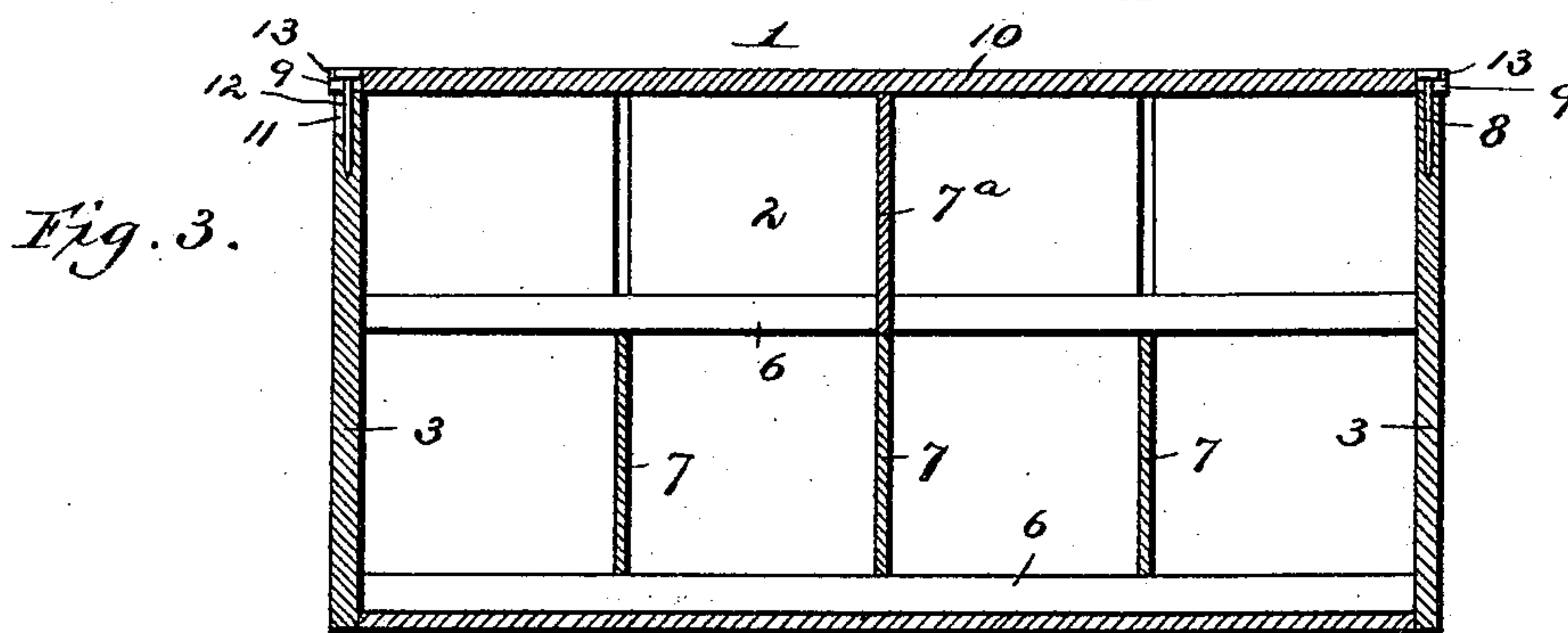
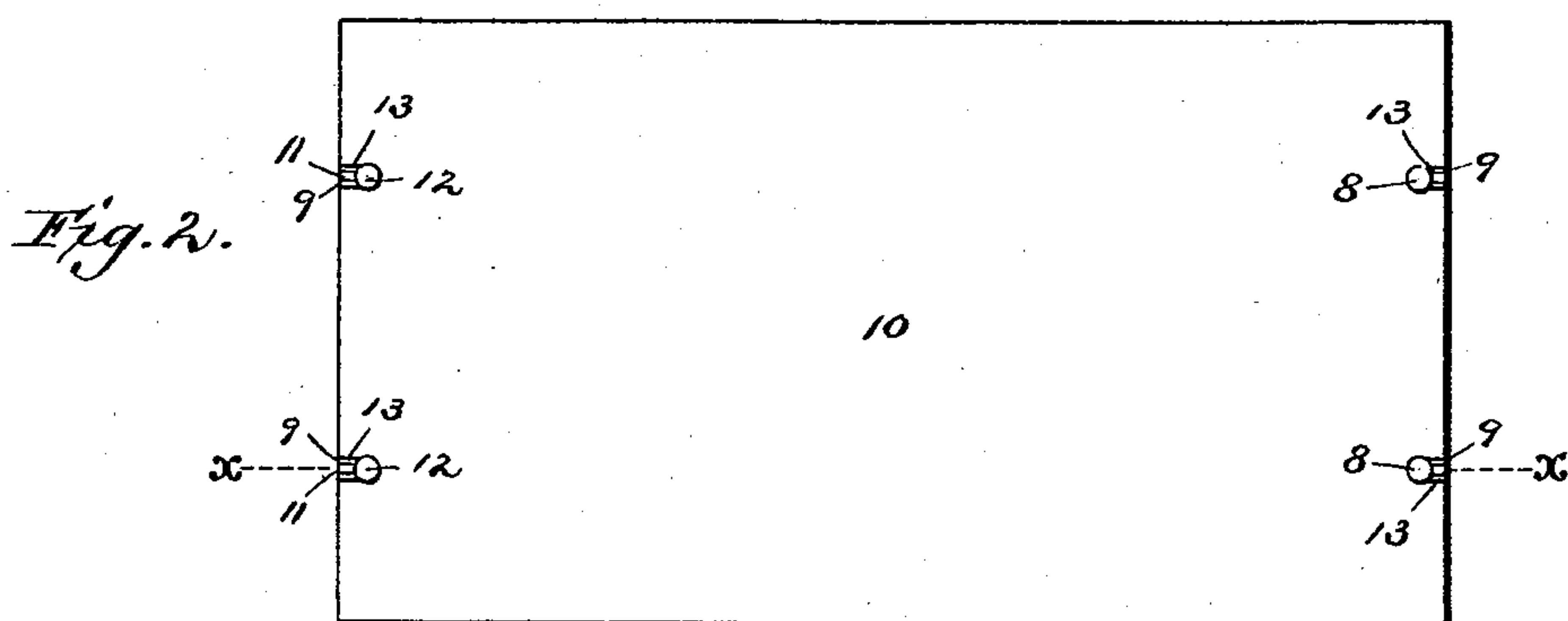
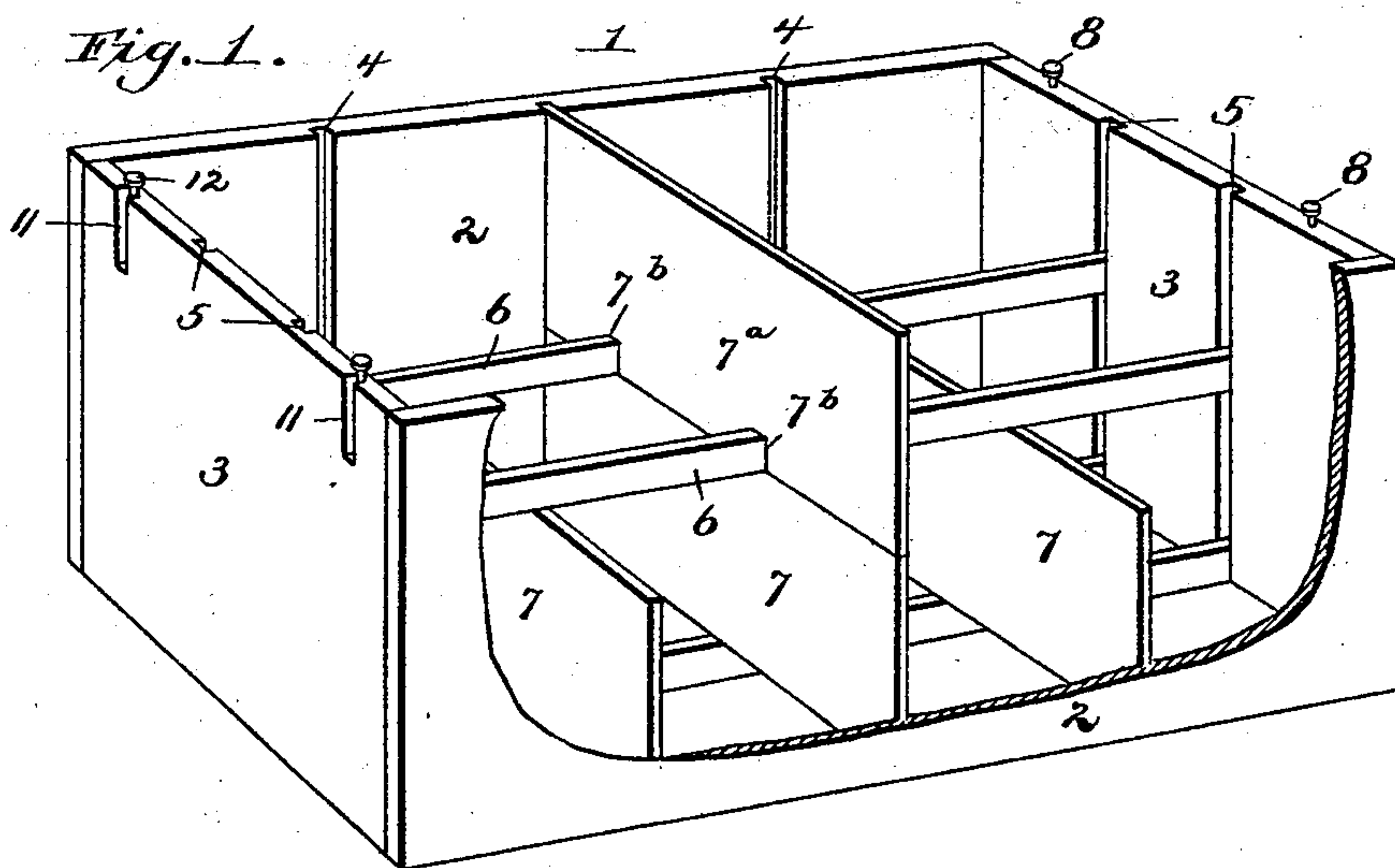


(No Model.)

J. M. LEAVER & E. J. VANCE.
SHIPPING CASE.

No. 519,429.

Patented May 8, 1894.



Witnesses

Harry L. Amer.
J. H. Riley

By their Attorneys.

Inventors

Emery J. Vance
and
James M. Leaver.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JAMES M. LEAVER AND EMERY J. VANCE, OF BAY CITY, MICHIGAN.

SHIPPING-CASE.

SPECIFICATION forming part of Letters Patent No. 519,429, dated May 8, 1894.

Application filed June 21, 1893. Renewed April 7, 1894. Serial No. 506,777. (No model.)

To all whom it may concern:

Be it known that we, JAMES M. LEAVER, a subject of the Queen of England, and EMERY J. VANCE, a citizen of the United States, both residing at Bay City, in the county of Bay and State of Michigan, have invented a new and useful Shipping-Case, of which the following is a specification.

The invention relates to improvements in shipping cases.

The object of the present invention is to improve the construction of shipping cases having cells for the reception of bottles, jars and the like, to enable the partitions, forming the cells, to be cheaply, conveniently and rapidly constructed and assembled, and to facilitate rapid attachment of covers to and their removal from the bodies of shipping cases.

A further object of the invention is to effect the attachment and removal of the covers without necessitating driving and withdrawing the fastening devices.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a shipping case constructed in accordance with this invention, the top being removed, and one of its sides being broken away. Fig. 2 is a plan view, the top being in position. Fig. 3 is a longitudinal sectional view on line $x-x$ of Fig. 2. Figs. 4 and 5 are enlarged detail sectional views showing the fastening devices.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a box provided at the inner faces of its sides 2 and ends 3 with vertically disposed grooves or recesses 4 and 5 extending from the top or cover to the bottom of the box, and receiving longitudinal strips 6 and transverse strips 7, which form cells for the reception of bottles, jars and the like. The longitudinal and transverse strips are arranged in horizontal tiers, and rest upon one another to form an interior framework for constructing the cells. These partition strips, which may be of any number and size,

may be readily inserted in the vertical grooves 4 and 5 of the box, and are adapted to be quickly removed if desired. They are securely retained against movement by a centrally disposed locking strip 7^a, which is provided at its lower edges with slots or recesses 7^b to receive the adjacent longitudinally disposed strips, and to permit the lower edge of the locking strip to rest upon the upper edge of the adjacent transverse partition strip 7. One locking strip is sufficient to retain the framework in position, but more may be employed if desired. It has a bearing upon the adjacent transverse strip almost the entire length of the latter; it stiffens the boxes and supports them when they are piled on one another, and it also supports and strengthens the sides of the box and stiffens the upper tier of longitudinal strips.

It will be readily seen that the tiers or partition strips may be readily assembled, that they are firmly retained in position, and that they serve to brace and support the box or shipping case in which they are used.

The box is provided at one end with projecting headed fastening devices 8 extending vertically from the upper edge of the box, and adapted to engage recesses 9 of a cover or top 10; and the other end of the box is provided on its exterior at its upper edge with vertically disposed recesses 11 receiving resilient fastening devices 12, which are provided with heads and engage recesses 9 of the cover 10. The fastening devices 8 and 12 are preferably formed by or consist of nails, and the latter ones are constructed of resilient or spring metal to enable the top or cover 10 to be readily moved longitudinally and sprung out of engagement with the stationary headed fastening devices 8, or the resilient fastening devices 12 may be sprung outward out of engagement with the recesses 9 to permit the top or cover to be readily removed. The spring or resilient nails or fastening devices 12 may be constructed of steel, brass or any other resilient metal. The top or cover 10 may be recessed or rabbeted at 13 around the recesses 9 in order that the heads of the fastening devices may not project out of the recesses or slots 9 above the upper face of the top or cover.

It will readily be seen that the fastening

devices enable the cover or top to be readily and rapidly secured on the body of the box or case, and quickly detached therefrom without withdrawing them.

5 By employing the continuous vertical grooves at the inner faces of both the sides and ends of the box, together with the locking strip, the partition strips may not only be rapidly assembled, but it is also unnecessary
10 to have the partition strips themselves interlocked at their adjacent edges.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or
15 sacrificing any of the advantages of this invention.

What we claim is—

1. The combination of a shipping case provided at the inner faces of its sides and ends
20 with vertically disposed continuous recesses, the non-interlocked longitudinal and transverse partition strips arranged in horizontal tiers upon one another and having their ends removably fitting in said grooves, and a trans-
25 versely disposed locking strip arranged above the partition strips and having its ends fitted in recesses at the sides of the case and pro-

vided at its lower edge with slots receiving the upper longitudinal strips, said locking strip having its lower edge supported upon
30 the upper edge of the adjacent transverse strip, substantially as described.

2. The combination of a shipping case provided at one end on its outer face with vertical recesses, resilient headed fastening de-
35 vices secured in the bottoms of the recesses of the shipping case and having their shanks free to swing outward and projecting from the upper edge of the same and adapted to be sprung outward, stationary headed fastening
40 devices projecting from the upper edge of the other end of the shipping case, and a top or cover provided at its ends with recesses receiving the fastening devices, substantially
45 as and for the purpose described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

JAMES M. LEAVER.
EMERY J. VANCE.

Witnesses:

H. A. BENCE,
I. TABOR.