

(No Model.)

2 Sheets—Sheet 1.

B. T. WINCHESTER.
VIAL CASE.

No. 551,022.

Patented Dec. 10, 1895.

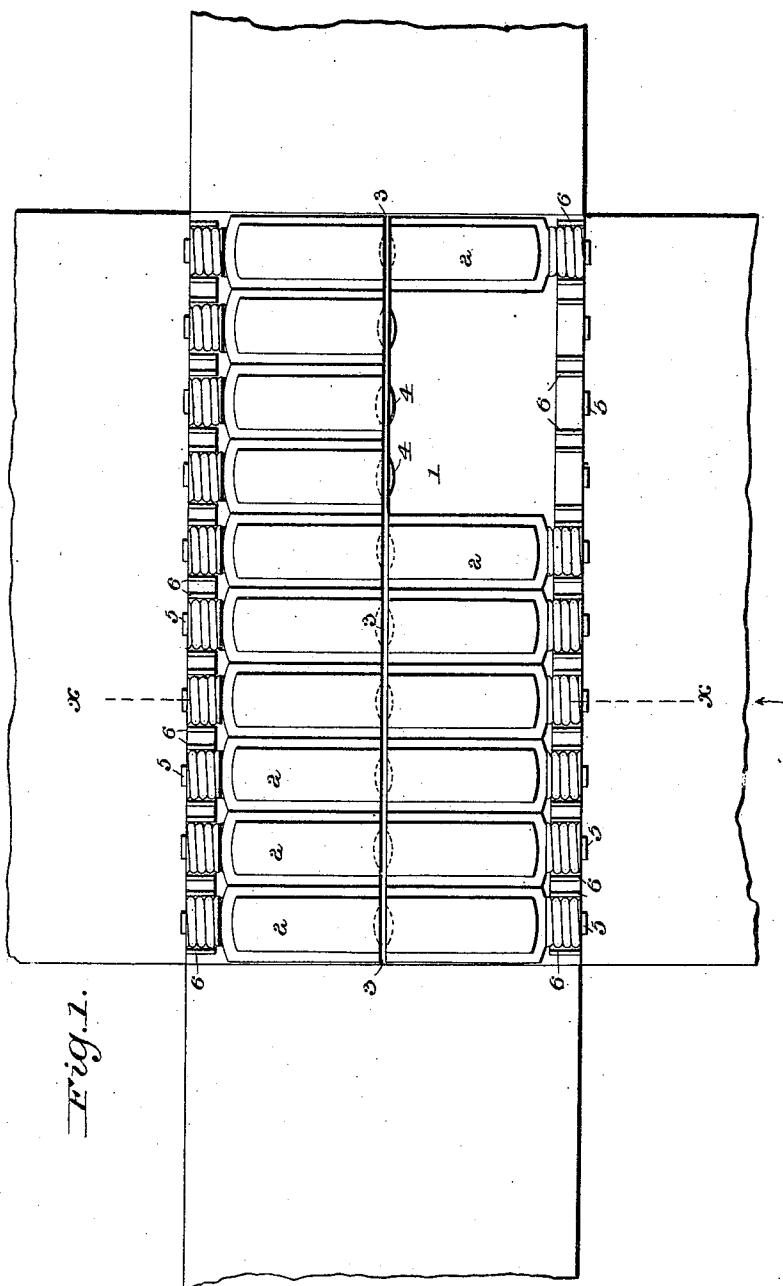
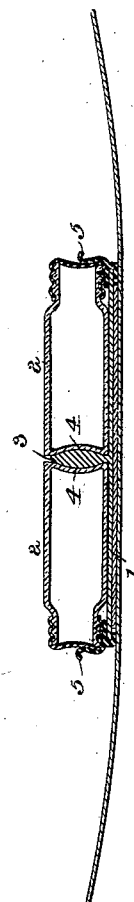


Fig. 2.



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Fig. 3.

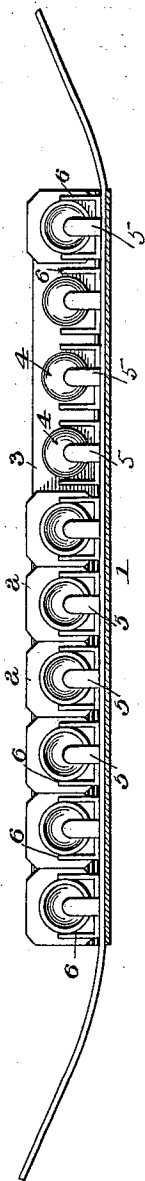


Fig. 5.

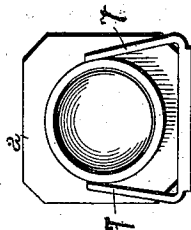
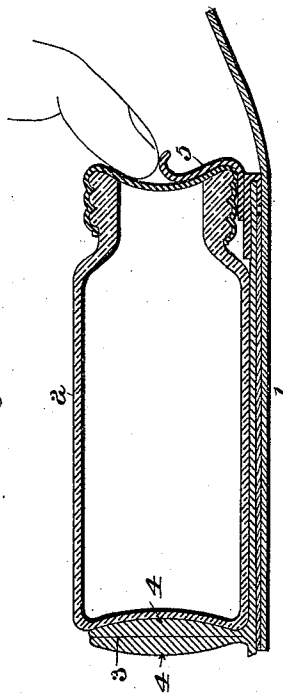


Fig. 4.



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UNITED STATES PATENT OFFICE.

BENJAMIN T. WINCHESTER, OF BALTIMORE, MARYLAND.

VIAL-CASE.

SPECIFICATION forming part of Letters Patent No. 551,022, dated December 10, 1895.

Application filed March 22, 1895. Serial No. 542,846. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN T. WINCHESTER, of Baltimore, State of Maryland, have invented a new and useful Improvement in Vial-Cases, of which the following is a specification.

This invention has reference to vial-cases designed more particularly for physicians' use and comprising a case having a series of retaining devices adapted to hold the vials removably in place side by side.

My invention comprehends various novel constructions and arrangements of parts having in view simplicity and convenience and economy of space, as will be fully pointed out in the specification and claims.

In the accompanying drawings, Figure 1 is a top plan view of a vial-case having my invention embodied therein, certain of the spaces for the vials being empty to expose other parts to view. Fig. 2 is a transverse vertical section on the line *xx*. Fig. 3 is a side elevation as viewed in the direction indicated by the arrow in Fig. 1. Fig. 4 is an enlarged view showing how the vials are removed. Fig. 5 is an elevation of a modification.

My improved case comprises a flat bed-piece 1, preferably of a width to receive two rows of vials 2, which are placed end to end and side by side, as shown in Fig. 1. This bed-piece is provided at its four edges with covering-flaps adapted to fold over and inclose the vials. In the center of the bed-piece I locate a vertical longitudinally-extending strip or partition 3, formed, preferably, of metal and having on opposite sides a series of protuberances or bosses 4, arranged at intervals. These bosses are adapted to enter depressions in the bottoms of the vials when the latter are seated end to end against the partition, as shown. These bosses entering the depressions in the vials serve to prevent the latter from moving laterally or upwardly after being placed in position. In connection with this peculiar retaining device for the bottom of the vials I employ retaining devices for the tops of the vials, of any suitable construction, adapted to hold the vials securely in place, but arranged to permit them to be removed when desired. The preferred form of the retaining devices for the tops of the vials is represented in the

drawings in Figs. 1, 2, 3, and 4 as consisting of a vertical spring-finger 5, fixed at its lower end to the outer edge of the bed-piece, whence it extends upward and is curved inward and then outward, the inwardly-curved portion being adapted to enter a cavity or depression in the cap or top of the vial. This spring-finger extends about one-third of the distance from the bottom of the cap, so that a space is left in which the finger may be inserted, as shown in Fig. 4, to remove the vial. It will be seen, therefore, that the cavity in the cap forms two functions or offices: First, it affords a means for the engagement of the spring-retaining finger, and, second, it affords a means for the removal of the vial by the finger.

The vials are formed with reduced necks, on which the caps are screwed, and when in place these necks enter guiding-sockets formed by two upwardly-extending lips 6, located on opposite sides of the neck, as shown in Fig. 3.

In certain cases I propose to dispense with the spring-retaining fingers 5, as described, and to substitute for the same a spring-clamp 7, adapted to clasp the sides of the cap, as shown in Fig. 5. These clamps serve in this case as guiding-sockets also, and prevent both the lateral movement of the vial and its vertical movement.

I prefer to employ vials square in cross-section for the reason that they may by the employment of my retaining devices, as described, be placed closely side by side abutting, and in this manner a greater number of vials of a greater capacity may be employed than if the retaining devices extended between the vials or if the vials were circular in cross-section.

As a further advantage incidental to the employment of the square vials, they may be readily and quickly placed in the proper positions with the labels uppermost, it being but necessary to seat the lower straight edge of the bottom flatly against the bed-piece, after which the vial may be pushed down in the retaining device without liability of its shifting or turning, as would be the case were the vial circular in cross-section.

Having thus described my invention, what I claim is—

1. In a vial case the combination with the

fixed vertical strip provided at intervals with
a series of bosses adapted each to enter a de-
pression in the bottom of a vial, of suitable
retaining devices adapted to engage the tops
5 of the same.

2. In a vial case the combination with the
flat bed, of the central partition rising there-
from and provided on opposite sides at inter-
vals with bosses adapted each to enter a de-
10 pression in the bottom of the vial and retain-
ing devices at opposite edges of the bed adapt-
ed to engage the tops of the vials.

3. In a vial case the combination with the
fixed vertical strip provided at intervals with

a series of bosses adapted each to enter a de- 15
pression in the bottom of the vial, of guiding
sockets for the necks of the said vials sus-
tained by the bed and retaining devices also
sustained by the bed and adapted to engage
the tops of the vials. 20

In testimony whereof I hereunto set my
hand, this 15th day of March, 1895, in the
presence of two attesting witnesses.

BENJAMIN T. WINCHESTER.

Witnesses:

S. M. BYERS,

ALICE WINCHESTER.