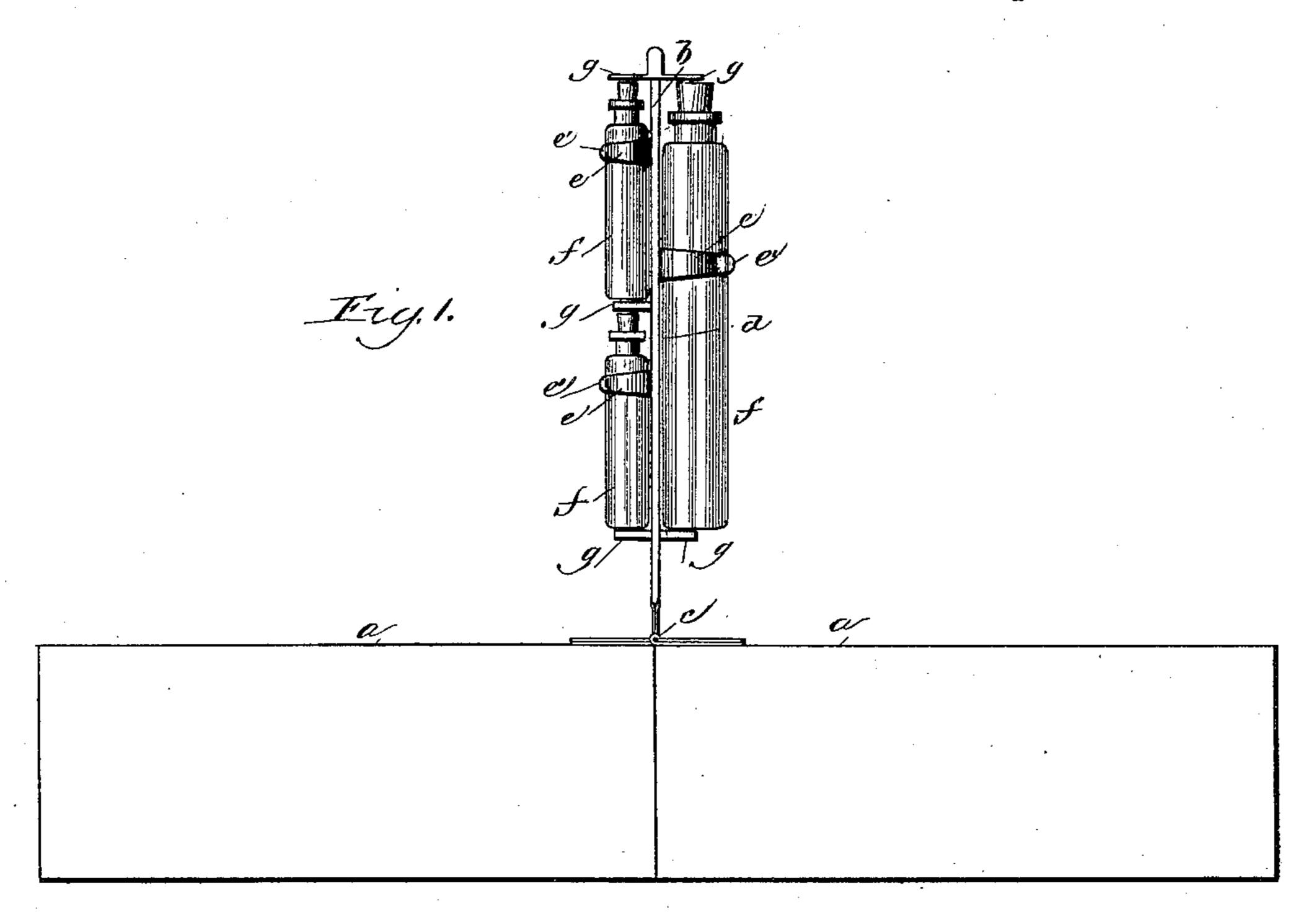
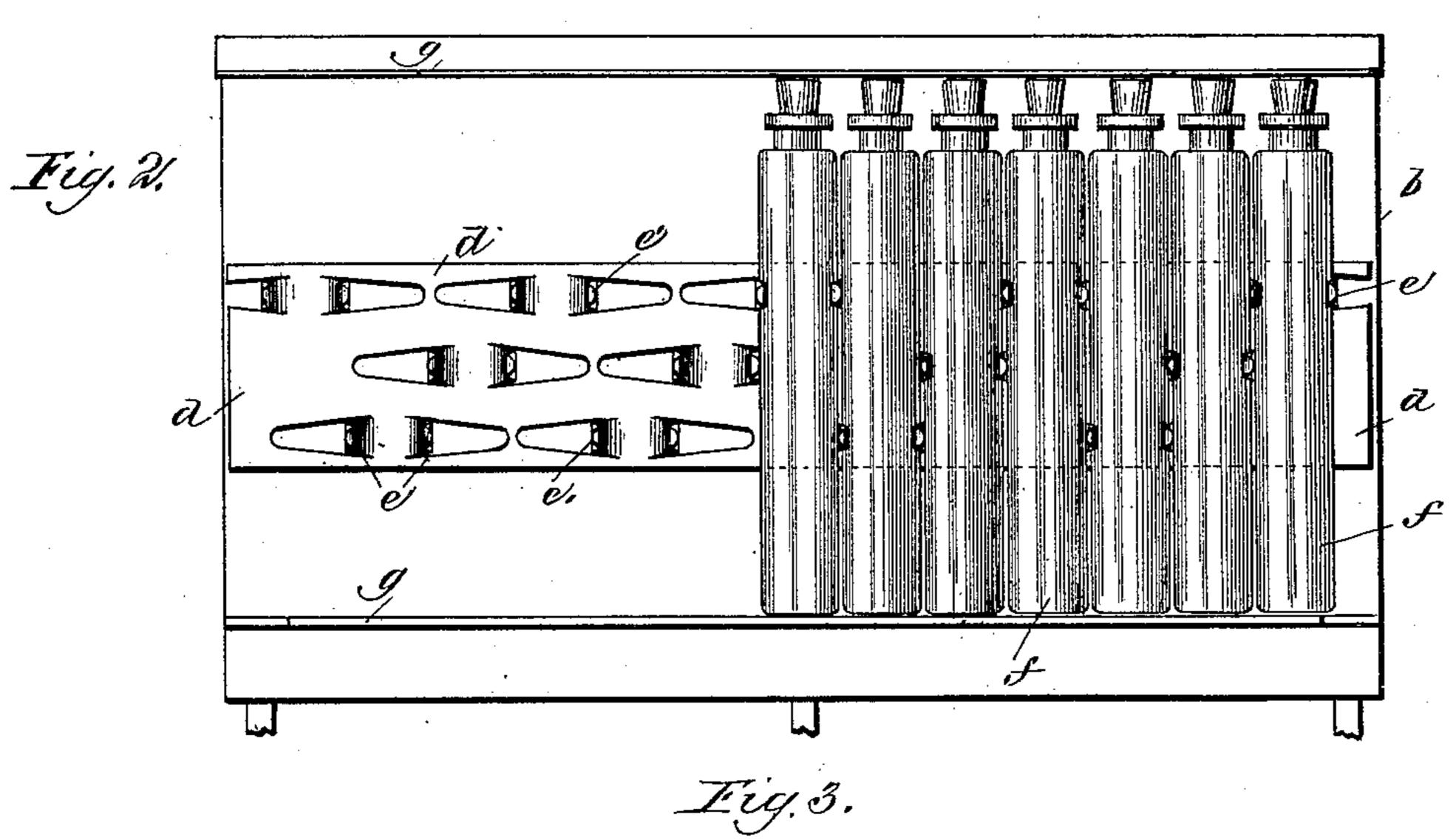
(No Model.)

J. A. COMSTOCK. BOTTLE HOLDING DEVICE.

No. 435,401.

Patented Sept. 2, 1890.





Inventor John a. Comstock by Gridley Latether.

By Arther.

United States Patent Office.

JOHN A. COMSTOCK, OF EVANSTON, ILLINOIS.

BOTTLE-HOLDING DEVICE.

SPECIFICATION forming part of Letters Patent No. 435,401, dated September 2, 1890.

Application filed June 10, 1890. Serial No. 354,975. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. COMSTOCK, of Evanston, in the county of Cook and State of Illinois, have invented a new, useful, and 5 Improved Bottle-Holding Device, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in which—

ro Figure 1 is an end view of an open medicine-case, showing one of the hinged bottleholding frames embodying the features of my improvement, said frame being arranged in a vertical position. Fig. 2 is a face view of 15 one side thereof in detail, showing a portion of the bottles removed; and Fig. 3 is an enlarged detail view, in longitudinal section, of a portion of the plate upon which is formed the bottle-holding clamps, the bottles being shown 20 in section therein.

Like letters of reference in the different

figures indicate like parts.

The object of my invention is to provide a clamping device for holding bottles in medi-25 cine-cases and elsewhere, which may be simple, cheap, easily and rapidly constructed, and attached to a frame or case, and which may permit the bottles to be more readily inserted and removed than other devices heretofore 30 employed, holding them firmly in position and at the same time occupying a minimum of space, all of which is hereinafter more particularly described and claimed.

Referring to the drawings, a represents an 35 ordinary medicine-case arranged to open in book form and provided with one or more of the usual bottle-holding frames b, hinged to

the case, as shown at c.

Rigidly attached to the face of the hinged 40 or folding flap or frame b by means of rivets, screws, or otherwise is a plate d, preferably made from sheet-brass or other suitable spring metal, from which tongues e are cut by means of a suitable die and then bent out-45 wardly from the face of the sheet in a curved form, each pair of tongues throughout the series being bent toward each other, while the ends e' are bent outwardly to permit the bottles f to be pressed into the clasp formed 50 by the curved tongues and to be grasped thereby, as more clearly shown in Fig. 3. This arrangement permits the bottles to be lis—

pushed into place and withdrawn with the utmost ease, the spring-clamps yielding sufficiently for this purpose, while they serve to 55 hold the bottles firmly in place. By withdrawing the bottles in the way indicated flanges g g may be attached to the flap b to prevent an endwise movement of the bottles, which is a most desirable feature.

Important advantages result from the use of the metal plate d, viz: By making the plate sufficiently wide a series of rows of guards e may be formed on the plate, so that when bent as shown a bottle may be placed be- 65 tween the guards formed in a given row upon the plate, another between the next in the adjoining row, and a third in another row, thus alternating, so that the bottles may be placed closely together, only one thickness 70 of metal intervening, while each bottle, except those upon the outer ends of the plate, is guarded from lateral movement by the three rows of guards instead of by a single one in the middle. This serves to prevent any dis- 75 placement of the bottles.

A further advantage in making the springs e integral with the plate is that they are much stronger, and considerable time is saved in making the attachment. Were they to be 80 attached singly, each spring would have to be riveted separately with not less than two rivets. As the metal employed is thin and the rivets could not be countersunk, their heads would not only prevent the bottle from 85 lying closely against the metal, but would tend to break the bottle. By forming the spring from the plate itself the surface is left smooth. Moreover, were each spring independent the rivet-holes therein would tend 90 to weaken it.

It is obvious that one or more plates d may be attached to the part b, according to the size and character of the bottles or vials to be held thereby. In Fig. 1 two small and one 95 large plate are employed. The plates d may also be attached to the interior of the case a, if desired, or to a cupboard or wall, or wherever it is necessary to keep bottles for use. It would be found of great value in a labora- 100 tory.

Having thus described my invention, what I claim, and desire to secure by Letters Patent,

1. The combination, with a medicine-case, of a sheet-metal plate having a series of curved spring bottle-holding clamps formed thereon in alternate adjacent rows or series, whereby the clamps for adjacent bottles may be in different rows, substantially as described.

2. The combination, with a medicine-case, of the plate d, having a series of springs e formed thereon in adjacent rows and integral

therewith, substantially as shown and de-10 scribed.

In testimony whereof I have signed this specification, in the presence of two subscribing witnesses, this 2d day of June, 1890.

JOHN A. COMSTOCK.

Witnesses:

D. H. FLETCHER, J. B. HALPENNY.