No. 801,401. PATENTED OCT. 10, 1905.

H. G. ROTH.

UNIT SYSTEM DISPLAY BIN.

APPLICATION FILED DEC. 2, 1904.

2 SHEETS—SHEET 1.

Fig. 1.

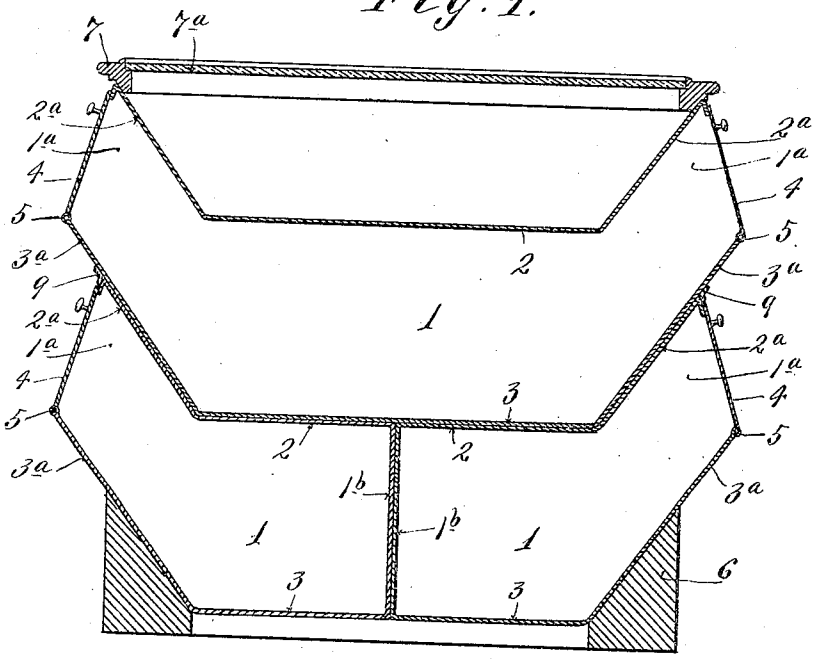
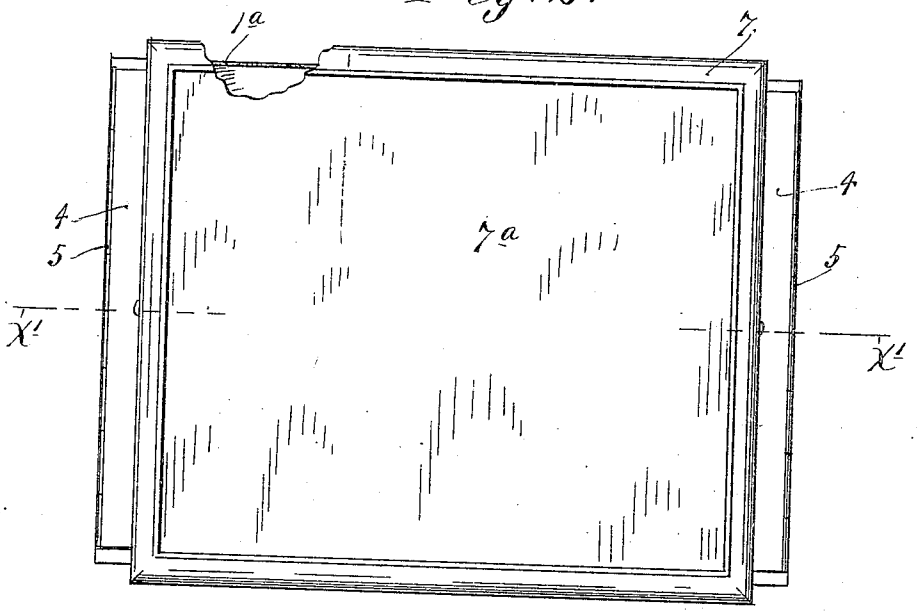


Fig. 2.



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Fig. 3.

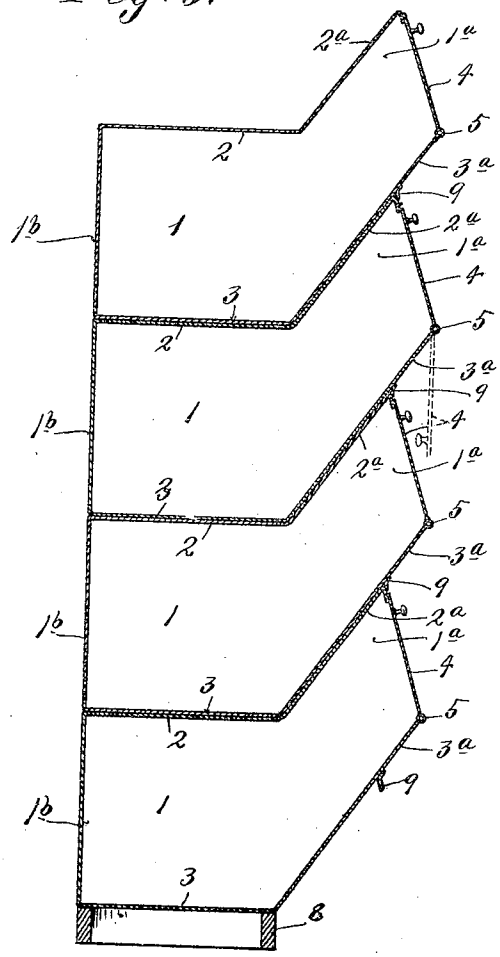
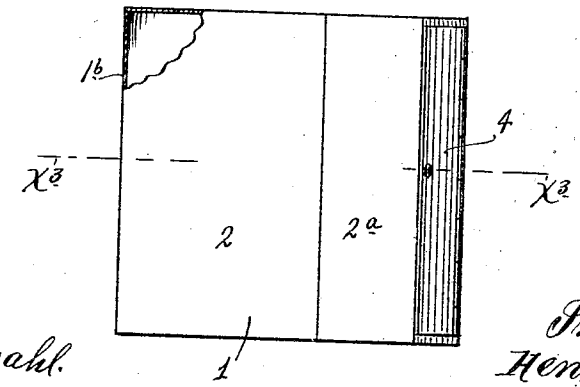


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY G. ROTH, OF MINNEAPOLIS, MINNESOTA.

UNIT-SYSTEM DISPLAY-BIN.

No. 801,401. Specification of Letters Patent. Patented Oct. 10, 1905.

Application filed December 2, 1904. Serial No. 235,247.

To all whom it may concern:

Be it known that I, HENRY G. ROTH, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Unit-System Display-Bins; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My present invention has for its especial object to provide an improved unit system of display-bins adapted to be put together to form a counter or cabinet of variable capacity, according to the number of bins used.

The invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

In the accompanying drawings, which illustrate my invention, like characters indicate like parts throughout the several views.

Figure 1 is a vertical section taken transversely through a plurality of assembled bins designed in accordance with my invention on the line $x' x'$ of Fig. 2. Fig. 2 is a plan view of the parts shown in Fig. 1, some parts being broken away. Fig. 3 is a vertical section on the line $x^3 x^3$ of Fig. 4, showing the bins assembled to afford a cabinet; and Fig. 4 is a plan view of the parts shown in Fig. 3.

The numeral 1 indicates the body portion of the improved bin, said body portion having vertically-spaced horizontally-disposed upper and lower walls 2 and 3, respectively. The upper and lower walls 2 and 3 are formed with oblique upwardly and outwardly extending portions 2^a and 3^a, respectively, that extend approximately at an angle of ninety degrees thereto. The sides of the body 1 are extended at 1^a, so as to afford sides which rigidly unite and follow outwardly and upwardly the top and bottom plate extensions 2^a and 3^a. The openings at the outer ends of the inclined entrance-passages afforded by the extensions 1^a, 2^a, and 3^a are, as shown, normally closed by hinged lids 4, that are pivoted at 5 to the said extensions 3^a.

In some instances the bins are made double-ended, as shown at the intermediate portion of Fig. 1; but in other instances the said bins are sectioned or divided, as shown at the bottom in Fig. 1, the said divided bins or bin-sections being closed at their abutting ends by walls 1^b, which may be fixed thereto or in the form of doors. In the arrangement of the bins shown in Fig. 1 the lower bins are rested in a rim-like base 6, which is recessed to receive them, and a counter-table 7 is detachably seated on the upper edge of the upper bin. The counter-table 7 may be provided with a glass plate 7^a when a show-case is desired, and the depression in the top of the upper bin may be used to contain goods or articles to be sold.

In the arrangement illustrated in Figs. 3 and 4 a plurality of divided bins are placed one on top of the other and the lower bin is, as shown, rested upon a base 8. The inclined walls 3^a of the bins are preferably provided with depending stop-flanges 9, that engage the ends of the walls 2^a of the bins below them to assist in holding the several bins in vertical alinement.

It is clear from the foregoing statements that the upper and lower plates of the bins are formed on the same lines, so that the bottom of one bin will fit the top of the other, thereby making it possible to pile the bins one on top of the other to any desired extent. It is here very important to note that the inclined bottom plate extensions 3^a extend upward and terminate approximately in the horizontal plane of the top plate 2, thereby leaving the opening, which is normally closed by the door or lid 4 above said plate 2. This permits the bin proper to be completely filled and even affords additional space at the extremity or extremities of the bin which may be filled above the plane of said top plate 2. The purpose of extending upward the extremities of the bin is therefore twofold—to-wit, to afford means for seating the bins one on top of the other and to elevate the entrance-passage thereto, so that the bins may be completely filled. The desirability of a unit-system bin, by means of which the capacity of counters, cabinets, and other devices formed therefrom may be varied at will, is too obvious to require further comment. The bins would usually, but not always, be formed out of sheet metal.

From what has been said it will be understood that the device described is capable of modification within the scope of my invention as herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. A bin having its top, bottom and side plates extended upward, and provided with an

entrance-passage that extends above the horizontal portion of the said top plate, substantially as described.

2. A vertically-arranged series of bins having, at their open ends, their bottom plates extended upward and outward, and terminating approximately in the horizonal planes of their top plates, substantially as described.

3. A bin 1 having vertically-spaced horizontally-extended upper and lower plates 2 and 3, respectively, said plates 2 and 3 having respectively inclined extensions 2^a and 3^a extended therefrom on the same angle, said plate extension 3^a extending upward approximately into the plane of said plate 2, and the sides of said bin being extended to form sides to said plate extensions 2^a and 3^a, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY G. ROTH.

Witnesses:
ETHEL BAILEY,
H. D. KILGORE.