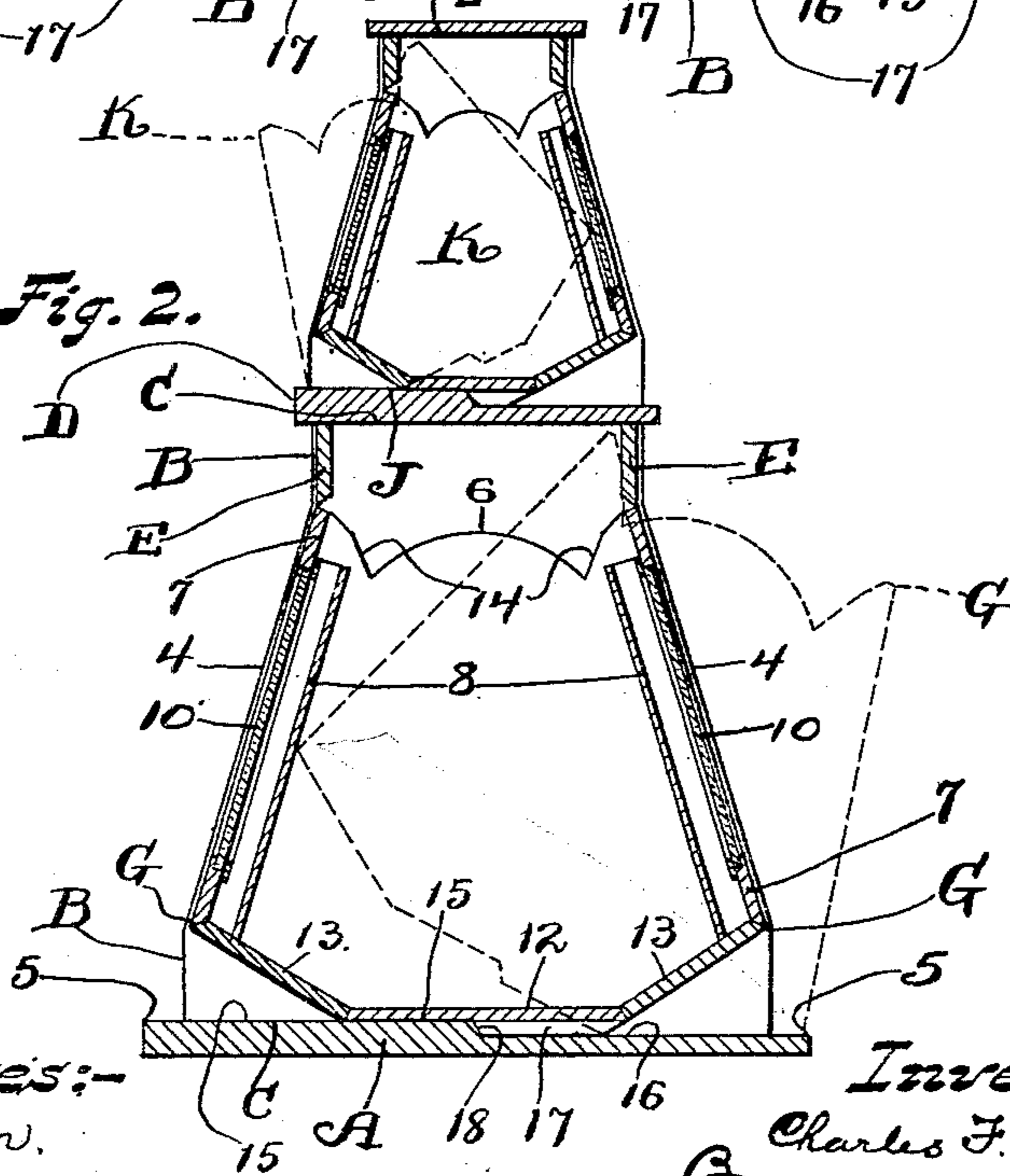


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UNITED STATES PATENT OFFICE.

CHARLES F. KURZ, OF CLEVELAND, OHIO.

BIN-CABINET.

No. 904,622.

Specification of Letters Patent.

Patented Nov. 24, 1908.

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To all whom it may concern:

Be it known that I, CHARLES F. KURZ, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Bin-Cabinets; and I 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 pertains to make and use the same.

This invention relates to improvements in bin-cabinets.

The primary object of this invention is to provide a bin-cabinet comprising a case having a compartment or opening extending therethrough between the sides of the case; a bin arranged within the said opening in the closed position of the bin and tiltable into an opening position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its positions so that the contents of the bin are accessible at the one or the other end of the said opening according as the bin has been tilted in the one or the other direction.

Another object is not only to have the said compartment or opening open at both side edges of the side walls of the said compartment, but to have the bin in the said opening provided with two downwardly diverging front-forming walls extending in the closed position of the bin between the aforesaid side walls of the opening at opposite ends respectively of the opening.

Another object is to provide the said downwardly diverging front-forming walls of the bin at their inner sides with pockets and to furthermore provide the said walls with windows arranged to display any merchandise or commodity placed within the said bin for display at the said windows.

Another object is to provide the said bin with a bottom having a central portion which is arranged horizontally in the closed position of the bin and end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the said position of the bin and to cause the bottom of the bin-containing compartment or opening to afford bearing to the central portion of the bin-bottom in the closed position of the bin and to the one or the other end-portion of the bin-bottom according as the bin

has been tilted into the one or the other of its open positions.

Another object is to render the tiltable bin removable horizontally from the bin-containing compartment or opening in one direction, and to provide means for preventing the removal horizontally of the bin from the said opening in the opposite direction.

Another object is to provide the bin-cabinet with two superimposed rows of laterally spaced compartments or openings which extend through the cabinet, a base forming the bottoms of the openings of the lower row of openings, a section forming the top walls of the openings of the lower row of openings and the bottoms of the openings of the upper row of openings, and a bin within each compartment or opening, and to so form the bin-containing compartments or openings and the bins that the contour of the cabinet is symmetrical.

Another object is to provide a bin-cabinet of the character indicated which is simple and inexpensive in construction.

With these objects in view, and to the end of realizing other features hereinafter appearing, this invention consists in certain features of construction, and combinations of parts, hereinafter described, pointed out in the claims, and illustrated in the accompanying drawings.

In the said drawings, Figure 1 is an elevation of a bin-cabinet embodying my invention. Fig. 2 is a vertical section on line 2—2, Fig. 1.

The case or stationary portion of my improved bin-cabinet comprises a wooden base A which is arranged horizontally and forms the bottoms of the compartments or openings of a horizontal row of laterally spaced compartments or openings C which extend through the cabinet. Each compartment or opening C is formed between two laterally spaced vertically arranged parallel wooden sections B which extend transversely of and are suitably secured to the base A and form opposite side walls respectively of the said opening. Each compartment or opening C therefore extends transversely of the base A and through the cabinet and is open at the side edges of the side walls of the said opening. A horizontally arranged wooden section D forms the top walls of the compartments or openings C and extends across and rests upon the upper ends of and is

suitably secured to the walls B. Two suitably supported wooden bars E and E extend between the side walls of each compartment or opening C at opposite ends respectively of the said opening next below the top wall of the said compartment or opening, and the central portions 4 of the side edges of the side walls of the said opening diverge downwardly from adjacent the lower edges of the said bars. The base A is preferably enough wider than the section D to extend under the side walls of each compartment or opening C from side edge to side edge of the said walls and somewhat outwardly beyond the said side edges, as at 5. Within each compartment or opening C is arranged a bin G which is contained wholly within the said opening in the closed position of the bin and tiltable endwise of the said opening into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its positions. It will be observed therefore that my improved bin-cabinet comprises a case having a compartment or opening which has laterally spaced side walls and extends through the cabinet, which opening is open at both side edges of the said walls and contains a bin which is tiltable into an open position at each end of the said opening. Preferably each bin G consists of two laterally spaced side pieces 6 and 6 which form the side walls of the chamber of the bin, and the bin has two downwardly diverging oppositely arranged front-forming walls 7 and 7 extending in the closed position of the bin between the side walls of the compartment or opening C containing the said bin at opposite ends respectively of the said opening. Preferably each front-forming wall 7 of each bin is provided at its inner side with a pocket 8 and has a window 10 arranged to render visible any merchandise or commodity placed within the said pocket for display at the said window.

Each bin G is preferably provided with a bottom whose central portion 12 is arranged horizontally in the closed position of the bin, which bottom has opposite end-portions 13 thereof diverging upwardly toward opposite front-forming walls 7 respectively of the bin in the closed position of the bin, and the compartment or opening C engaged by the said bin has its bottom affording bearing to the central portion 12 of the bin-bottom in the closed position of the bin and to the one or the other end-portion 13 of the bin-bottom according as the bin is tilted into the one or the other of its open positions. To render the contour of the cabinet symmetrical the downwardly diverging portions 4 of opposite side edges of each side wall of each bin-containing compartment or opening C

are substantially parallel or conform to the opposite front-forming walls 7 of the bin engaging the said opening. Each bin G has preferably at least one of its side walls 6 provided at the upper end with two oppositely arranged and inwardly facing shoulders 14 spaced between the front-forming walls 7 of the bin, and the case or stationary portion of the cabinet has two stop-forming members cooperating with the said oppositely arranged shoulders respectively in limiting the tilting of the bin in opposite directions respectively, and the said stop-forming members are preferably formed by the bars E which extend between the upper ends of the side walls of the compartment or opening C engaged by the said bin. That is, the relative arrangement of the parts is such that the one or the other of the said shoulders 14 of each bin engages the inner side of the one or the other of the said bars E according as the bin has been tilted into the one or the other of its open positions. In dotted lines Fig. 2 a bin G is shown tilted into one of its open positions, and it will be observed therefore that the engagement of one of the shoulders 14 on a bin and the bar E engaged by the said shoulder in the said position of the bin constitute means for preventing horizontal outward displacement of the bin when the bin has been actuated into its said position. It will be observed therefore that the bars E extending between the side walls of each compartment or opening C and the shoulders 14 of the bin within the said opening constitute means for preventing outward displacement of the bin when the bin has been actuated into the one or the other of its open positions. It will also be observed that the bottom of each compartment or opening C has two upper surfaces 15 and 16 arranged the one 15 higher than the other 16 and extending from a point centrally between the ends of the said opening toward opposite ends respectively of the opening, that the central portion 12 of the bottom of the bin engaging the said opening has direct bearing upon the upper 15 of the said surfaces in the closed position of the bin, and that the bin has depending members 17 projecting below the said central portion 12 of the bin-bottom and resting upon the lower 16 of the said surfaces in the last-mentioned position of the bin. The shoulder 18 formed between the two upper surfaces 15 and 16 of the bottom of each compartment or opening C is preferably beveled to avoid interference with the tilting of the bin engaging the said opening, and the depending members 17 of the said bin conform to and engage the said shoulder in the closed position of the bin. It will be observed therefore that the shoulders 18 formed on the bottom of each compartment or opening C and the depending members

17 of the bin within the said opening prevent the removal horizontally of the bin from the said opening in the one direction in the closed position of the bin, but that
 5 the said bin in its said position is free to be removed horizontally from the said opening in the other direction, so that the bin can be readily removed in the last-mentioned direction for cleaning or other purposes. It will
 10 be observed also that one of the end-portions 13 of the bottom of each bin G engages the lower top surface 16 of the base A upon tilting the bin into an open position in one direction, and that the other of the said end-
 15 portions 13 of the bin-bottom is arranged to engage the upper top surface 15 of the said base upon tilting the bin into an open position in the opposite direction. Hence the said end-portions of the said bottom and the
 20 said base constitute means for limiting the tilting of the bin.

Another horizontal row of laterally spaced compartments or openings J is formed next above the section D which, as already indicated, forms the top walls of the compartments or openings C, and tiltable bins K are arranged within the said upper compartments or openings. The compartments or openings J extend through the cabinet and
 25 are parallel with the compartments or openings C, and the section D forms the bottom walls of the upper compartments or openings J. The formation of the upper compartments or openings J is substantially the
 30 same as the formation of the lower compartments or openings C, except that the upper compartments or openings are smaller in dimensions than the lower compartments or openings. The bins K in the upper compartments or openings J substantially correspond in construction with but of course are smaller in dimensions than the bins G in the lower compartments or openings C, and the means for limiting the movement of the upper bins K substantially correspond in construction and operation with the means for limiting the movement of the lower bins. In dotted lines, Fig. 2, one of the bins K is shown tilted in a direction opposite to the
 40 direction in which a bin G is shown tilted. It will be observed also that the front-forming walls of the bins K in the openings of the upper row of openings J are arranged substantially parallel with the adjacent
 45 front-forming walls of the bins G engaging the openings of the lower row of openings C when all the bins are in their closed position, so that the contour of a cabinet having two superimposed rows of tiltable bins is symmetrical. Moreover, in a cabinet having two superimposed rows of bins it is quite important to employ a section D which is enough narrower than the base A to avoid any objectionable projection thereof over the
 50 front-forming walls of the bins G, and con-

sequently the bins K and the openings J engaged by the last-mentioned bins are necessarily considerably smaller in dimensions than the bins G and openings C respectively.

What I claim is:—

1. In a bin-cabinet, the combination, with a case having an opening extending there-through, of a bin arranged within the said opening in the closed position of the bin and
 75 tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin has
 80 two front-forming walls arranged at opposite ends respectively of the said opening in the closed position of the bin, said bin having a bottom which has end-portions diverging upwardly toward opposite front-forming
 85 walls respectively of the bin in the closed position of the bin, and the aforesaid opening having a bottom which affords bearing to the bin under the central portion of the bin-bottom in the closed position of
 90 the bin and under the one or the other end-portion of the bin-bottom according as the bin is tilted into the one or the other of its open positions.

2. In a bin-cabinet, the combination, with
 95 a case having a compartment which has laterally spaced side walls and open at both side edges of the said walls, of a bin arranged within the said compartment in the closed position of the bin and tiltable into an
 100 open position in opposite directions, which bin has two downwardly diverging front-forming walls extending in the closed position of the bin between the aforesaid side walls of the compartment, said bin having
 105 a bottom which has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, and the aforesaid compartment having a bottom which affords
 110 bearing to the bin under the central portion of the bin-bottom in the closed position of the bin and under the one or the other end-portion of the bin-bottom according as the bin is tilted into the one or the other of its
 115 open positions.

3. In a bin-cabinet, the combination, with a case having an opening extending there-through, of a bin arranged within the said opening in the closed position of the bin and
 120 tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin
 125 has two front-forming walls arranged at opposite ends respectively of the said opening in the closed position of the bin, said bin having a bottom whose central portion is arranged horizontally in the closed position
 130

of the bin, which bottom has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, and the aforesaid opening having a bottom which affords bearing to the central portion of the bin-bottom in the closed position of the bin and to the one or the other end-portion of the bin-bottom according as the bin is tilted into the one or the other of its open positions.

4. In a bin-cabinet, the combination, with a case having a compartment which has laterally spaced side walls and open at both side edges of the said walls, of a bin arranged within the said compartment in the closed position of the bin and tiltable into an open position in opposite directions, which bin has two downwardly diverging front-forming walls extending in the closed position of the bin between the aforesaid side walls of the compartment, said bin having a bottom whose central portion is arranged horizontally in the closed position of the bin, which bottom has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, and the aforesaid compartment having a bottom which affords bearing to the central portion of the bin-bottom in the closed position of the bin and to the one or the other end-portion of the bin-bottom according as the bin is tilted into the one or the other of its open positions.

5. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin is removable horizontally from the said opening at one end of the opening, and means for preventing the removal of the bin horizontally from the said opening at the opposite end of the opening.

6. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin has two front-forming walls arranged at opposite ends of the said opening in the closed position of the bin, said bin being removable horizontally from the said opening at one end of the opening and having a bottom whose central portion is arranged horizontally in the closed position of the bin, which bottom has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, and the

said opening having a bottom which affords bearing to the central portion of the bin-bottom in the closed position of the bin and to the one or the other end-portion of the bin-bottom according as the bin has been tilted into the one or the other of its open positions.

7. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, which opening has a bottom which has two upper surfaces arranged the one higher than the other and extending from a point centrally between the ends of the opening toward opposite ends respectively of the opening, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, said bin having a bottom which in the closed position of the bin has direct bearing on the upper of the aforesaid surfaces and being provided with depending members which in the closed position of the bin have bearing on the lower of the said surfaces.

8. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, which opening has a bottom which has two upper surfaces arranged the one higher than the other and extending from a point centrally between the ends of the opening toward opposite ends respectively of the opening, said bottom having the shoulder which is formed between the said surfaces beveled, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, said bin having a bottom which in the closed position of the bin rests on the upper of the aforesaid surfaces and being provided with depending members which rest on the lower of the said surfaces in the closed position of the bin.

9. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, which opening has a bottom which has two upper surfaces arranged the one higher than the other and extending from a point centrally between the ends of the opening toward opposite ends respectively of the opening, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin has two downwardly diverging front-forming walls arranged at opposite ends of the said opening in the closed position of the bin, said bin resting on both

of the aforesaid surfaces in the closed position of the bin and having a bottom which has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, one of the said end-portions of the bin-bottom engaging the lower of the aforesaid surfaces upon tilting the bin into an open position in one direction, and the other of the said end-portions of the bin-bottom being arranged to engage the upper of the said surfaces upon tilting the bin into an open position in the opposite direction.

10. In a bin-cabinet, the combination, with a case having a compartment or opening extending therethrough, which opening has a bottom which has two upper surfaces arranged the one higher than the other and extending from a point centrally between the ends of the opening toward opposite ends respectively of the opening, of a bin engaging the said opening and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the said opening according as the bin has been tilted into the one or the other of its open positions, which bin has two downwardly diverging front-forming walls arranged at opposite ends of the said opening in the closed position of the bin, said bin having a bottom whose central portion is arranged horizontally and rests on the upper of the aforesaid surfaces in the closed position of the bin and being provided with depending members which in the last-mentioned position of the bin rest on the lower of the said surfaces, which bottom has end-portions diverging upwardly toward opposite front-forming walls respectively of the bin in the closed position of the bin, one of said end-portions of the bin-bottom engaging the lower of the surfaces upon tilting the bin into an open position in one direction, and the other of the said end-portions of the bin-bottom being arranged to engage the upper of the said surfaces upon tilting the bin into an open position in the opposite direction.

11. A bin-cabinet having the following:— a lower row of laterally spaced compartments or openings extending through the cabinet; a base forming the bottoms of the said openings; a section forming the top walls of the said openings and narrower

than the base; a row of laterally spaced openings extending through the cabinet above the said top-wall-forming section; bins engaging the said openings and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the respective opening according as the respective bin has been tilted into the one or the other of its open positions, said bins being each provided with two downwardly diverging front-forming walls arranged at opposite ends of the respective opening in the closed position of the bin, and the front-forming walls of the bins in the openings of the upper row of openings being arranged substantially parallel with the adjacent front-forming walls of the bins arranged in the openings of the lower row of openings when all the bins are in their closed position.

12. A bin-cabinet having the following:— a lower row of laterally spaced compartments or openings extending through the cabinet; a base forming the bottoms of the said openings; a section forming the top walls of the said openings and narrower than the base; a row of laterally spaced openings extending through the cabinet next above the top-wall-forming section and having their bottom walls formed by the said section; bins engaging the said openings and tiltable into an open position in opposite directions and projecting beyond the one or the other end of the respective opening according as the bin has been tilted into the one or the other of its open positions, said bins being each provided with two downwardly diverging front-forming walls arranged at opposite ends of the respective opening in the closed position of the bin, and the front-forming walls of the bins in the openings of the upper row of openings being arranged substantially parallel with the adjacent front-forming walls of the bins arranged in the openings of the lower row of openings when all the bins are in their closed position.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

CHARLES F. KURZ.

Witnesses:

B. C. BROWN,
VICTOR C. LYNCH.