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ATTACHMENT DEVICE FOR DRINKING CUP DISPENSERS

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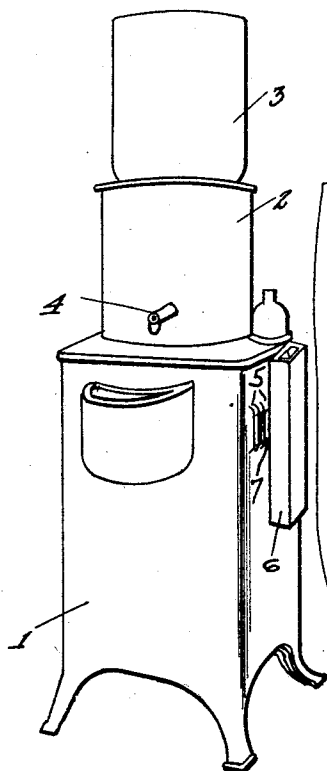


Fig. 1.

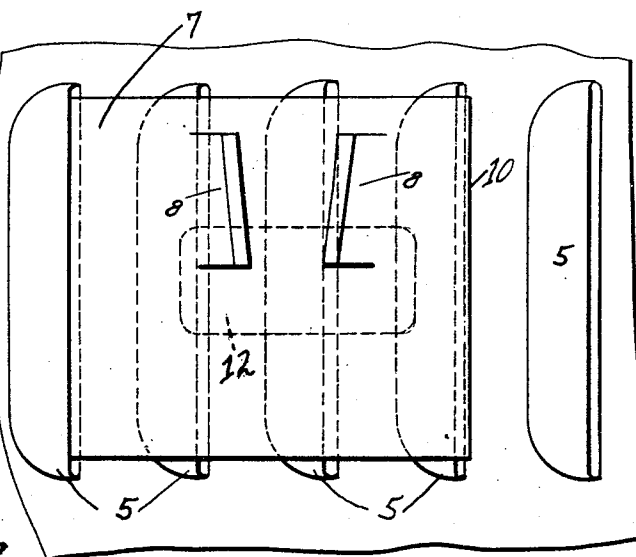


Fig. 2.

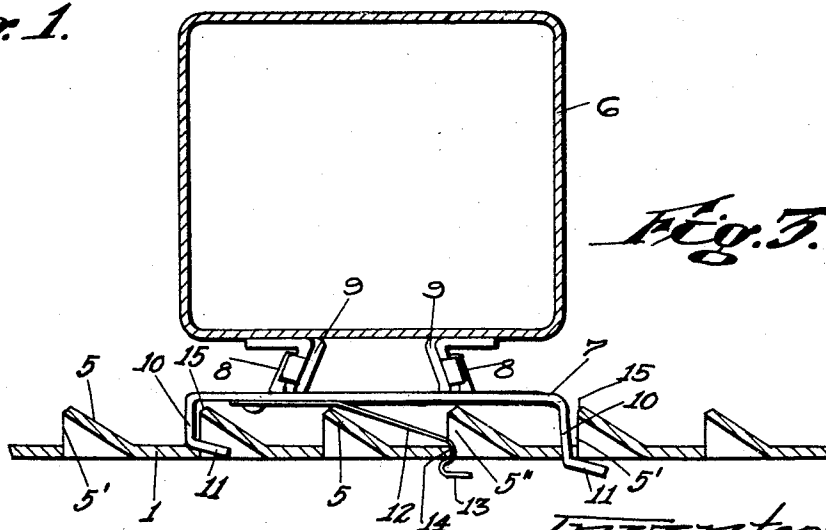


Fig. 3.

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UNITED STATES PATENT OFFICE

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ATTACHMENT DEVICE FOR DRINKING CUP DISPENSERS

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The present invention relates to an attachment device whereby a drinking-cup dispenser may be conveniently mounted and supported upon a water-supply apparatus of a well known type which chills the water by mechanical refrigeration.

The attachment device of the present invention consists essentially of a bracket or equivalent element that is self-attaching to the ventilating louvers provided in the casing of the refrigerating unit, said bracket being adapted to retain and support a supply of drinking-cups in convenient reach of the users of the apparatus. The several features and advantages of the invention will more fully appear from the following detailed description thereof, taken in connection with the accompanying drawings, in which:—

Fig. 1 is a perspective view of water-supply apparatus of the mechanical refrigeration type, having my invention applied thereto.

Fig. 2 is an enlarged scale fragmentary view in side elevation, showing the relation of my invention to the ventilating louvers of the water-supply apparatus.

Fig. 3 is a large scale view in horizontal section, showing the invention.

Like reference characters refer to like parts in the different figures.

Referring first to Fig. 1 there is indicated a drinking-water supply-apparatus of a well known type, consisting essentially of a casing 1 enclosing the motor and compressor, not shown, of the refrigerating mechanism, and a superposed water-chilling unit 2, having inverted thereon a large water bottle 3,—the arrangement being such that the water from said bottle, as drawn off through a suitable spigot 4, is chilled to the desired temperature.

The casing 1 in apparatus of this type ordinarily provides for ventilation purposes a series of louvers 5, 5, here shown as arranged vertically, and formed in the usual way by slitting and deflecting the material of said casing. According to my invention the openings 5' provided by said louvers are utilized for the convenient attachment to said casing of a drinking-cup container or cabinet 6 of any well known type, here shown by way of example as adapted to support vertically

a stack of nested cups, with provision for withdrawal of said cups, one by one, from the top of said cabinet. To this end, I provide for the attachment of the cabinet 6 to a plate or bracket 7 which, as hereinafter described, is capable of ready retention in the louvers 5, 5; as here shown, the outer face of plate 7 provides projecting lugs 8, 8 to form an undercut tapered slideway for the reception of matching projections 9, 9 secured to the back wall of cabinet 6, so that the latter when lowered into position will be securely held by its own weight to the plate or bracket 7. This means of attachment between cabinet 6 and plate 7 forms of itself no part of the present invention, since any convenient means of securing these parts together may be employed. The invention resides primarily in the construction of plate or bracket 7 that enables it, in the absence of extraneous securing devices of any sort, to attach itself securely to the casing 1, by cooperation with the louvers 5, 5 of the latter.

To this end, the plate 7, as shown in Fig. 2, is made of a width which corresponds substantially to the height of the louver openings 5', 5', so that certain extensions at the ends of said plate, as hereinafter described, can be received vertically in said openings, with only a slight amount of vertical play. The length of the flat portion of plate 7, as best shown in Fig. 3, corresponds substantially to the distance between three or more of the louver openings 5', 5'. At both ends of this flat portion, the material of the plate is bent substantially at right angles as shown at 10, 10, and the extremities of these bends 10, 10 are deflected to form tongues 11, 11 extending in the same direction, so as to be receivable in two of the louver openings 5', 5' when the plate 7 is held in a manner to register the said tongues 11, 11 with said openings.

In this position of registration, a slight horizontal movement of the plate, to project the tongues 11, 11 through said pair of louver openings 5', 5', carries a leaf spring 12, secured at one end to the inner side of plate 7, into an intermediate louver opening 5''. Said leaf spring 12 has its free end in the form of a hook 13, and the act of registration

above described, in conjunction with said horizontal movement, serves to flex the said spring until the hook 13 snaps past the edge 14 of louver opening 5' into the position shown by Fig. 3, where said hook operative-ly engages said edge and prevents horizontal shifting of the plate or bracket 7 such as would withdraw the tongues 11, 11 from the louver openings 5', 5'. Any horizontal movement in the other direction is of course prevented by the engagement of the bends 10, 10 with the edges 15, 15 of the louvers, and thus the plate or bracket 7 is securely held on the casing 1 by its above described cooperation with the louver openings of said casing. Accidental displacement or removal of said bracket is impossible; the only way to effect its removal is by means of an instrument inserted between the bracket and the casing from above or from below, to engage the spring 12 and flex the hook 13 thereof outwardly past the edge 14 of louver opening 5'.

I claim:

1. A holder of the class described, having end projections extending in the same direction and receivable in two spaced substantially vertical openings of a casing, said projections being offset from the plane of said holder, whereby endwise movement of the holder in one direction is prevented, and resilient means carried by said holder and adapted to spring past the edge of an intermediate casing opening when the end projections are so inserted, thereby to prevent endwise movement of the holder in the opposite direction.

2. A holder of the class described, having end portions receivable by horizontal movement in two of a series of substantially vertical casing openings, and a spring projection on said holder having a hooked free end, adapted by said movement to engage with the edge of an intermediate casing opening to lock said holder against horizontal movement in the opposite direction.

3. A holder of the class described for self-attachment to a series of louver openings of a casing or the like, said holder having end projections receivable in two of said openings when the holder is moved endwise in one direction, and having a third projection which is sprung over the edge of an intermediate opening by said endwise movement, thereby to prevent opposite endwise movement of said holder.

4. A holder of the class described for self-attachment to louver openings of a casing or the like, said holder having projections insertible in said openings by substantially endwise movement of said holder, one of said projections adapted to spring past an edge of an opening to prevent opposite endwise movement of said holder.

5. A device of the class described for self-attachment to a series of substantially paral-

lel openings in a casing or the like, said device having offset end projections extending in the same direction and insertible in two of the non-adjacent openings of said series, thereby preventing endwise movement of said device in one direction, and resilient means carried by said device and adapted to spring past the edge of an intermediate opening of said series when the end projections are so inserted, thereby to prevent endwise movement of the device in the opposite direction.

Dated this seventeenth day of March, 1930.
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