

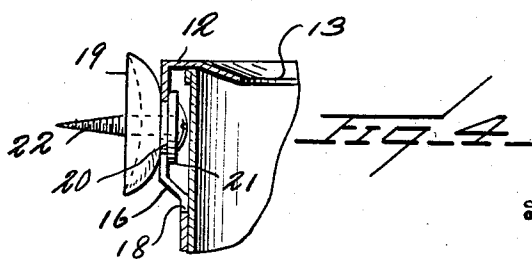
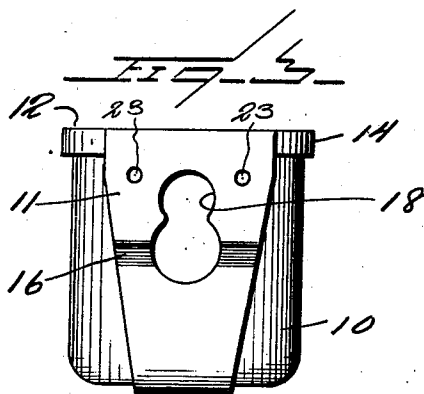
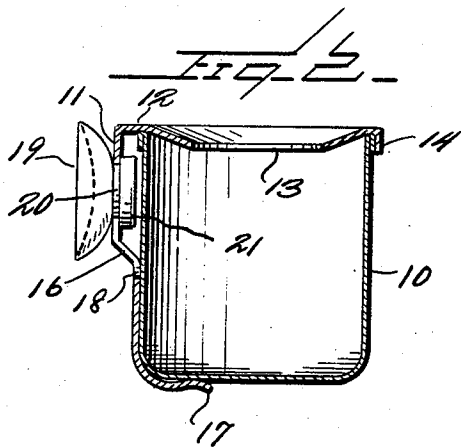
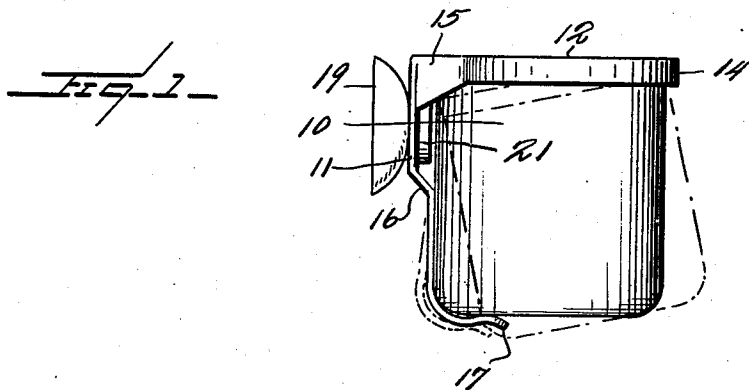
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HANDY ASH TRAY AND EMERGENCY DRINKING CUP

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# UNITED STATES PATENT OFFICE

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## HANDY ASH TRAY AND EMERGENCY DRINKING CUP

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This invention relates to ash trays or receivers and the general object of the present invention is to provide an ash tray which will be very light and handy and which is supported by a vacuum cup, permitting the ash tray to be supported in any desired place, the lightness of the ash tray and of the bracket supporting the same permitting it to be supported indefinitely by the vacuum cup.

Another object is to provide an ash tray which may be readily detached from its support and which is of such form that it can be readily cleaned and used as a drinking cup.

Still another object is to provide a support for the ash tray proper of thin resilient metal so formed as to support the ash tray firmly in receiving position but permit the ash tray to be readily slid in or out and in this connection to provide a support or bracket having a cover for the ash tray or receiver proper so formed that it will resiliently clamp down upon and engage against the entire rim of the ash tray and clamp the ash tray firmly against any accidental displacement.

Another object is to so form this support or bracket that it may be readily detached with the tray itself from the vacuum cup when the vacuum cup is applied to a desk or other support.

A further object in this connection is to provide a vacuum cup which is readily removable from the support or bracket and readily engageable therewith so as to permit a screw to be passed through the center of the vacuum cup to permanently hold the vacuum cup upon a desk, table, or other article of furniture or support, thus permitting the vacuum cup to be attached securely onto articles whose surface is uneven and then permitting the ash tray bracket or support to be easily threaded on the knob of the vacuum cup, after which the ash tray can be removed, emptied, replaced as many times as it is necessary, and if it be desired, to entirely remove the ash tray itself, the bracket for the ash tray can be unthreaded from the vacuum cup leaving the vacuum cup upon the face of the article of furniture.

Our invention is illustrated in the accompanying drawings wherein—

Figure 1 is a side elevation of an ash receiver constructed in accordance with our invention;

Figure 2 is a vertical sectional view thereof;

Figure 3 is a rear view thereof with the vacuum cup removed; and

Figure 4 is a fragmentary sectional view through the receptacle and bracket, showing a screw extending through the vacuum cup.

Referring to these drawings, 10 designates an ash receiving cup or tray which is made of thin metal or like material and is very light. Preferably, this cup will be enameled or otherwise finished attractively. The cup has a slightly rounded bottom and a flanged upper end.

The holder for the cup is formed of a single strip of sheet metal, bent at right angles to form the bracket portion 11 constituted by a vertical web and a cover portion 12 which extends over the top of the cup 10 and is formed with a central opening 13. The margin of this portion 12 is formed with a downwardly extending flange 14, which flange at its rear end adjacent the bracket portion 11 is widened as at 15 so that the ends of these widened portions bear against the bracket portion 11 and thus support the portion 12 at right angles to the bracket portion. The cover portion 12 has an extra spring set which would cause the front edge of the cover, when the cup or tray 10 is removed, to drop down beyond a position at right angles to the bracket portion 11 if it were not that the ends of this widened portion 15 abut against the face of the bracket portion 11, thus providing stops preventing a too great downward movement of the cover 12 when the cup is removed.

The bracket portion 11 substantially midway of its length is bent inward as at 16 and then extends downward and has a tongue 17 which extends beneath the cup 10, the extremity of the portion 17 being bent downward so as to permit the ready insertion of the cup.

When the cup of tray 10 is inserted the forward upper corner of the cup is disposed beneath the forward end of the flange 14, as shown in dotted lines in Fig. 1, and then the

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cup is pushed upward and rearward over the tongue 17. This movement causes a slight upward movement of the cover portion 12 against the resilience of this cover portion and thus this portion 12 clamps the cup or tray firmly in place between the cover portion 12 and the tongue 17.

The spring tension of the cover therefore when the cup or tray is inserted, presses the cup or tray down onto the tongue or shelf 17 and this same spring tension of the cover causes the whole extent of the open end of the ash cup or tray to register with the cover. The tongue 17 is provided merely as a support for the bottom of the cup or tray so that the resilience of the cover may cause it to properly function. This tongue or shield 17 extends at right angles with the bracket portion but is curved so that it will register with the curvature at the bottom of the cup or tray.

The bracket portion is formed with a key-hole slot 18, the lower portion of the slot having a relatively large diameter and the upper portion having a relatively small diameter. The lower portion of the slot intersects the bend 11. Engaged through this slot is the shank of a rubber vacuum cup 19. This is formed with the usual contracted neck 20 and an inner enlargement or button 21. This button may be inserted through the larger portion of the slot 18 and then pushed upward so that the neck 20 will pass through the constricted portion of the slot and be engaged in the upper or smaller portion thereof, as illustrated in the drawings.

It will be noted that the lower portion of the key hole slot is slightly larger than the button or base 21 of the vacuum cup while the upper portion of the key hole slot is smaller in diameter than the diameter of this base portion 21 and has a size approximately equal to the neck 20 of the vacuum cup. Inasmuch as the vacuum cup is of rubber, it follows that when it is pushed upward, the neck 20 is compressed by the constricted portion of the key hole slot and then extends within the portion 18 of the key hole slot. Thus while the bracket may be detached from the button or vice versa, the expansibility of the rubber will tend to hold the vacuum cup and the bracket against any accidental dislodgment such as might occur by an upward jar upon the bottom of the cup.

By reason of the detachability of the vacuum cup from the bracket, it is possible to remove the vacuum cup and insert a screw therein and into a desk or other article of furniture or support to thus permanently hold the vacuum cup to this article. This is only used where the surface of the article is so rough as to prevent the vacuum cup from adhering to articles, such as card tables, office desks, wooden chair arms, etc.

The screw 22 can be inserted through the vacuum cup and thus permanently hold the

vacuum cup in place so that the cup under these circumstances becomes a practically permanent part of the article of furniture to which it is applied. By virtue of the fact that the bracket portion is deflected or angled at 16, this angle intersecting the lower opening of the key-hole slot, the bracket 11 may then be readily threaded upon the vacuum cup. The tray or receptacle 10 may then be removed at any time when filled with ashes, the ashes discharged, and the cup replaced, and then if desired the bracket and the cup together may be removed from engagement with the vacuum cup and put away. This is particularly convenient for card tables upon which these ash trays may be placed, as when through playing the bracket and tray may be removed from the table, leaving the vacuum cup attached thereto and the card table may be then folded up and put away, the vacuum cup or cups along the edges of the card table acting as buffers, preventing the marring of the card table. It will be noted also that the lower portion of the angularly bent bracket 11 forms a stop to limit the inward movement of the ash tray when it is being inserted. If, at any time it be desired to use the bracket, ash tray, and vacuum cup, the screw 22 may be readily removed and then the vacuum cup will function in the manner originally stated.

It will be seen in Fig. 1 that the cup 10 is held in place by the tongue 17 and by the flange 14 but that the cup may be readily withdrawn by pulling outward on the lower portion of the cup which causes the cup to tilt and detaches it from its engagement with the flange 14. By inserting the upper end of the cup in engagement beneath the flange 14 and then pushing upward and inward on the cup, the cup will be forced into place above the tongue 17 and held securely in this position. The vacuum cup 19 is, of course, to be moistened with water and then may be applied to a windshield, instrument board, desk, chair, or any other situation where it is desired to be used.

As shown in Fig. 3 the bracket 11 is also formed with apertures 23 for the passage of screws, thus permitting the vacuum cup to be entirely detached from the bracket, and the bracket engaged with an article of furniture, the wall, or any other suitable support by these screws.

The device is simple, cheap, neat and thoroughly effective and the bracket 11 with the slightly depressed rim 12 will be made in one piece of sheet metal by stamping, and then bent at right angles to form the bracket and portion 12.

It is to be noted that the bottom part of the ash tray or receptacle is so curved as to fit the end of the finger. This permits the ash tray to be readily removed, washed out, and used as an emergency drinking cup.

Obviously, slight modifications may be made in the design and details of construction without departing from the spirit of the invention as defined in the appended claims.

5 Of course it will be understood that when screws or nails are forced through the vacuum cup the same vacuum cup can never again be used as a vacuum cup, as the holes  
10 would prevent any formation of a vacuum and new and unperforated vacuum cups would have to be used in order to function as vacuum cups.

What we claim is—

15 1. An article of the character described including a receptacle, a bracket with which the receptacle is detachably engaged, the bracket being outwardly offset away from the receptacle at its upper portion, the lower  
20 portion of the bracket fitting against the receptacle and said bracket having a vertically extending key hole slot intersecting the offset portion, and a bracket supporting device detachably engageable with the bracket in said  
25 slot.

2. As an article of manufacture, a resilient clamping bracket for detachably supporting and retaining a receptacle, having in its back a vertical web formed with two holes of different diameters, the two holes overlapping  
30 so as to form a constricted passage between the holes, the upper portion of said web being outwardly offset with relation to the receptacle and the lower portion, the lower end  
35 of said offset portion intersecting the lower hole, thereby permitting the button part of a vacuum cup to be inserted through the large hole and drawn upward through the constricted passage.

40 3. An article of the character described including a receptacle, a bracket with which the receptacle is detachably engaged, the bracket being outwardly offset away from the receptacle at its upper portion, the lower  
45 portion of the bracket fitting against the receptacle and having a key hole slot, the larger portion of the key hole slot being intersected by the lower end of the offset portion of the bracket, and a vacuum cup having a button  
50 detachably engaged in said slot, the offset intersecting the slot permitting the bracket to be removed from the button or inserted thereon.

In testimony whereof we hereunto affix our  
55 signatures.

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WILLIAM L. PIEROTTI.