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2,465,752

AUTOMATIC COMBINATION CONTAINER AND COVER

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FIG 1

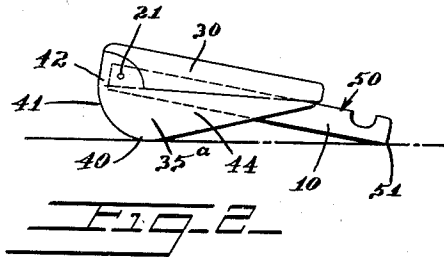
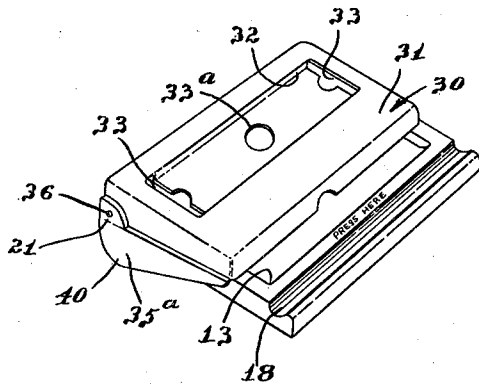


FIG 3

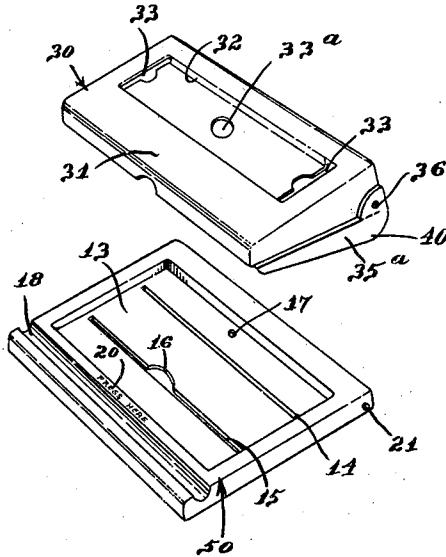
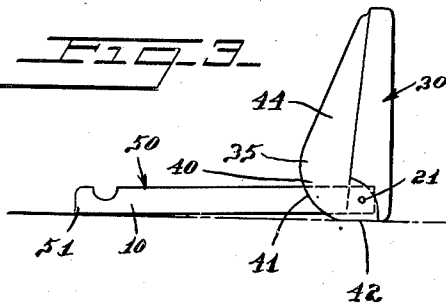


FIG 4

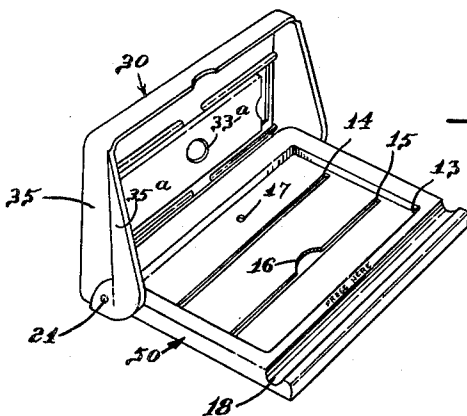


FIG 5

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2,465,752

AUTOMATIC COMBINATION CONTAINER
AND COVER

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12 Claims. (Cl. 206—63)

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My present invention relates to an automatic container having a base section and a cover section with the cover section so arranged that the cover will normally be closed; but a simple pressure of the hand at a convenient portion of the base will cause the cover to tilt to the open position, rendering the upper surface of the base section visible.

The base section which is covered by the automatically operable cover may have any suitable or appropriate conformation to adapt it to a variety of purposes. Thus, its upper surface may have a depression or well therein specifically fitted and arranged to receive the tab of a memorandum pad, index pad, or other type of stationery unit.

The well or depression of the base section may be sufficiently deep and appropriately dimensioned so that the base section may be adapted to utilization as a cigarette box, jewelry container, hair-pin container, or as a container for many other purposes.

The cover section may also be provided, if desired, with a well or depression in its upper surface adapting it to receive a calendar pad, advertising device, a mirror, ornamentation of various kinds, and other replaceable or permanently attached items.

In one embodiment where my automatic unit is sold as a desk unit, the base section may be arranged so that a telephone index pad may be secured therein, the pad being covered by the cover section, the cover section extending down to a point where only the index tabs of the telephone index pad are visible. The upper or cover section may then have provision for insertion of a calendar pad.

Thus, while my novel unit is adapted to many purposes including among those previously mentioned and in addition to many other usages its adaptation as a pin or clip tray, a tray for individual sheets or for any other article which may be permanently secured or removably placed in the unit, it is nevertheless a simplified structure requiring in most cases no modification in changing from one use to another, and in some cases only minor modifications.

While my unit may preferably be made of any thermo-setting or thermo-plastic material, it may also be made of wood, metal, paper board, leather, or other materials, and the cover and base sections may individually be made of different materials or combinations of different materials, and the base may also be arranged so that in addition or in place of providing a sup-

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port for solid objects, it may serve as an ash-tray, powder container, or for other similar purposes.

The tilting back of the cover as above pointed out occurs automatically when pressure is applied at an appropriate convenient point; but the cover when it is tilted to the vertical position rendering the contents of the bottom section available, provides a shield for the base, blocking the view of the base with respect to anyone but the actual user of the article.

Thus, where the base section contains a memorandum pad, markings on the memorandum pad may automatically be concealed from anyone but the user even though the pad is in use.

My invention is directed to the principle of construction of the cover member in conjunction with the base section so that the cover member may open without any mechanical or other assistance other than that the base must be so arranged that its rear end, that is, the point of attachment of the cover thereto, be off the surface on which the unit rests.

The primary object of my invention, however, is the arrangement of the cover member in such manner that finger pressure at the forward end of the base member will cause the cover to tilt automatically to a vertical position uncovering the base.

For this purpose the cover member is pivoted at the rear end of the base member and extends below the bottom of the base member on a forwardly directed curve so that the point of contact of the cover with the surface on which the unit rests is located between the pivot point of the cover and the front end of the base.

Finger pressure adjacent the front end of the base will thus result in downward pressure at the rear end of the base as well and hence downward pressure at the pivot point of the cover.

Since this downward pressure is rearwardly of the point of contact of the cover with the surface on which the unit rests, this will be translated effectively into upward pressure by the action of forces on the point on which the cover extension engages the surface, thus causing the cover to pivot upwardly about its pivot.

Thus, another object of my invention is the provision of a novel container unit provided with a cover wherein the cover may automatically tilt to uncover the base member on the application of finger pressure to a portion of the base member.

Another object of my invention is the arrangement of the cover member so that its pivot on the base and its point of contact with the surface on

which the unit rests are so arranged that downward pressure on any portion of the base member will result effectively in downward pressure on the pivot of the cover and corresponding upward pressure on the point of engagement of the cover with the surface.

Another object of my invention is the provision of a novel container unit provided with a base section for retention of an index pad or memorandum pad or other contents as above noted and a cover section hingedly connected thereto provided with means for retention of a calendar pad or other pad, or other inserts as an advertising message, a display case or other product or article.

Another object of my invention is the formation and construction of a novel combination container having a base and a cover section including means for presenting either the upper surface of the base or the upper surface of the cover to view at the will of the user.

Essentially, as above pointed out, my invention contemplates an arrangement of the base so that one end of the base rests on the surface or table top on which the entire unit rests. The other end of the base is raised clear of the surface or table top by the curved camming member of the cover section, which camming member is so arranged that on the application of finger pressure at the first mentioned portion of the base, the cover will be rotated to the open position.

The foregoing and many other objects of my invention will become apparent in the following description and drawings in which

Figure 1 is a view in perspective of my novel desk unit in closed position.

Figure 2 is a schematic side view showing the closed position of the unit.

Figure 3 is a schematic side view showing the open position of the unit.

Figure 4 is an expanded view showing the relationship of the parts of the unit.

Figure 5 is a view in perspective showing the unit of Figure 1 in open position.

Referring now to the figures, my novel unit comprises a base member 10 preferably made of a readily moldable thermo-plastic or thermo-setting plastic material having a depressed well 13 in its upper surface.

The cover and the base may individually or in combination be made of all types of material including metal, leather, wood, paper, fibre, or combinations of any such materials. The cover and base may be the same color or contrasting colors, and each of the cover and base may themselves be made in combinations of colors where desired. Thus, the base may be of metal or wood and the top may be of leather or may be leather covered. Other combinations of materials will readily suggest themselves.

The bottom wall of well 13 is provided with a pair of slots 14, 15 to receive a tab of an index pad, memorandum pad, or other suitable material which may be placed in the well 13. The recess 16 in the center slot 15 facilitates the passing through of the tab of a memorandum pad where one is used.

The memorandum or index pad which may be used in connection with the unit is not shown herein since these are of standard well-known construction.

A hole 17 may be provided in the base for attaching other elements which it may be desired to mount in the well 13 of the base. Thus, instead of an index pad, a flat sheet may be se-

cured to the bottom wall of well 13 of the base, covering up the slots 14 and 15, or the base may be made without slots 14 and 15 and even without the hole 17 to serve as a container for ashes, powder, paper clips, bobby pins, etc., or an advertising device or ornament or other solid object, or other type of pad may be secured in the well 13 in any suitable manner, as for instance by passing a fastening device through the hole 17.

The forward end of the base 10 may have any suitable construction and, for instance, may be provided with the transverse pen or pencil recess 18.

In appropriate cases where the device is to be used as a container for powder, paper clips, or other elements where a pencil recess or trough 18 is not desired, such pencil recess or trough may be omitted entirely, or suitable means such as a contrasting ornamental filler may be placed in the pencil recess or trough 18. One such contrasting trough or pencil recess filler may be a transparent piece of cellulose acetate poured into the recess and hardened therein.

The cover member as shown extends down only so far as would be necessary to cover the body of an indexed pad, leaving the index tabs visible.

Where the base member is to be utilized to hold other elements, such as cigarettes, jewelry, powder, ashes, etc., the end of the cover member may extend clear down beyond the forward end of the well 13 in the base to completely cover the well.

The forward edge of the cover member may indeed be arranged to enter into a slot provided adjacent the forward end of the base in order to provide an efficient and complete closure for the unit. The forward end of the base may, if necessary, be provided at 20 with a legend such as the legend shown "Press here" to guide the user in exerting pressure in the correct position to operate the mechanism in the manner herein-after described.

The rear end of the base is provided with extensions 21, 21 preferably integrally formed with the base. These extensions provide a pivot for the cover member 30.

The cover member 30 as shown in the figures has an upper surface 31 containing a depressed well 32 provided with suitable recesses or slots 33, 33 to receive a tab or extension of a calendar pad or other suitable pad.

The depressed well 32 may also be arranged to provide a support for an inset display case showing some product or an advertising panel, or for any other suitable material. If desired, the well 32 may even be provided with a lid so that the cover itself will be a container.

The slots 33, 33 as arranged may actually receive and position the entire pad, maintaining the entire pad or other insert against the base of the recess 32, the side ends of the pad or inserts extending through slots 33, 33 beneath the top surface of the cover.

The calendar pad may then be pinched or slid out of the slots each month to facilitate the removal of the top sheet or the top sheet may simply be pulled off.

Other types of inserts may, of course, be used in the recess 32 where desired; I have here shown my composite unit constructed as a combined index or memorandum pad and calendar pad arrangement.

The additional opening 33a may be provided to facilitate securing of any additional insert

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which may be desired. Where the well 32 of the cover is to be used as a container for loose articles and is in turn to be provided with a lid, then of course the base of the well 32 will be flat and unbroken.

The cover 30 is provided with the side flanges 35,35 each of which has an opening 36 which may be sprung over the lug or extension 21 on each side of the base 10, thereby pivoting the cover 30 on the base 10.

A reinforcement 35a may be provided along the sides of the flanges 35 and extending up over the openings 36 so that the ends of the lugs or extensions 21 will be flush with the outer surface of the flanges 35 when they are in position.

The side flanges 35 are specifically curved as shown in the figures so that the point 40 at which the side flanges engage the table is located forwardly of the pivot 21 on each side, and therefore is located between the pivot 21 and the front end of the base 10 having the pencil recess 18 and the finger guide 20.

The portion 41 of each side flange 35 between the point of engagement 40 with the surface on which the unit rests and the rear 40 of the cover is curved as shown so that the cover may readily pivot from the position of Figures 1 and 2 to the position of Figures 3 and 5.

The forward ends 44 of the side flanges are curved and shaped so that the cover 30 engages the surface on which the unit rests only at the points or areas 40.

The curve 41 is preferably a rounded one, as shown in the figures, so that irrespective of the angle at which the cover may be, the point 40 of engagement with the surface will always be effectively a point contact so that the unit may by slight pressure at point 20 be operated to raise the cover only partly, and then by additional pressure may be operated to raise the cover all the way.

Where it is desired to so arrange the unit that the cover will, however, be closed or snapped to a full open position, then instead of a curve at 41, it would be necessary then to use simply a straight line so that the unit would snap from the point of contact 40 to a full open position, terminating with the straight line in contact with the surface.

With the present arrangement a slight but continuous pressure will operate the unit to open the cover all the way. Reducing the pressure and pressing for only a minute interval of time as determined by the user will open the cover only part way. As a practical matter, I have found that a slight finger pressure of but a few ounces will serve to open the cover entirely and the user may readily determine for himself after one or two attempts just what pressure will serve to open the cover only part way.

Thus, where the unit is used as a covered ash-tray, only a slight opening of the cover is needed to deposit ashes. Where it is used as a cigarette container, only a partial opening of the cover is needed, to remove a cigarette. Where it is used as a memorandum pad, then the cover should snap to the full open position of Figure 3 in order to enable appropriate markings to be made on the memorandum pad.

It will thus be seen from a comparison of Figures 2 and 3 that when pressure is applied to the forward end of the base at approximately the area 50 of Figure 2, this downward pressure will also be transmitted to the pivot or lug 21 and the entire base will act as a lever pivoting

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downwardly around point 51 which is the line of engagement of the forward end of the base with the surface on which the unit rests thereby exerting downward pressure on the lugs or pivots 21.

This downward pressure being exerted rearwardly of the points of contact 40 of the side flanges 35 of the cover 30 with the surface will, therefore, exert a corresponding counterclockwise rotative effect on the points of contact 40 with respect to Figure 2.

This will result in rotation of the points 40 of flanges 35 around the pivots 21 and hence in rotation of the entire cover 30 from the position of Figure 2 to the position of Figure 3.

Consequently, when the user desires to obtain access to the well 13 in the base, he need merely place his finger at the area 20 exerting a slight downward pressure therein. This will cause the cover to snap from the position of Figures 1 and 2 to the position of Figures 3 and 4.

He may then consult the index pad or other contents in well 13 or make notes thereon and when he is finished he may then rotate the cover back from the position of Figures 3 and 5 to the position of Figures 1 and 2.

Since the cover snaps from the position of Figures 1 and 2 to the position of Figures 3 and 5, any note or view which the user may wish to make or do even while another person is present will be shielded automatically from the view of the other person.

Various means may be provided in conjunction with my invention, including various stippling or ornamental elements, special arrangements or conformations of the cover or of the base, provision for advertising messages or legends, provision for more than one pencil recess 18, if desired.

While my unit will operate simply on downward finger pressure at the area 50 as above described, it will also operate on rearward movement of the entire unit, especially where the point 40 is in good frictional engagement with the surface on which the unit rests.

I have found that the natural tendency of operating my unit is that when finger pressure is applied at the area 20 at the same time some rearward force is exerted by the user without specific instruction to do so.

Actually I have found that either action, downward pressure at point 20 or a rearward push, will serve to open the unit.

The combination of these two forces causes the cover 30 to snap from the position of Figures 1 and 2 to the position of Figures 3 and 5 with practically no effort.

By the arrangement herein shown, the two-piece unit can be disconnected and used separately, the top portion as a calendar or other purpose; the bottom portion as a separate memorandum pad or calendar support, display device, container for cigarettes, paper clips, jewelry, powder, ashes, etc.

The sides and top may be appropriately decorated when desired. Thus, a thermometer may be placed on one side of the cover or other elements or materials may be incorporated.

In the foregoing I have described my invention solely in connection with specific illustrative embodiments thereof. Since many variations and modifications of my invention will now be obvious to those skilled in the art, I prefer to be bound not by the specific disclosure herein contained, but only by the appended claims,

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ing said cover to rotate from closed to open position.

4. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface.

25 5. A container comprising a base section and a
cover section; said cover section being rotat-
ably connected to said base section at one end
of said base section and being rotatable about
said connection from a position where it encloses
30 at least a portion of the upper surface of said
base section to a position where it reveals the
upper surface of the base section; said cover
having depending side sections at the region of
securement of the cover to the base; said side
35 sections extending below the lowest portion of
the base at said region; said container being
adapted to rest on a surface with said depend-
ent side sections of the cover and the end of
the base opposite said side sections in engage-
40 ment with said surface; said side sections being
curved to provide substantially a point contact
between said side sections and said surface; said
point contact being located on each side between
the point of rotatable securement of the cover to
45 the base and the end of the base in contact with
said surface and a pencil recess in a portion of
the base beyond the end of said cover.

7. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it en-

closes at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; a recess in the upper surface of said base forming a container; said cover permitting a portion of said recessed container to be exposed to view when covered.

8. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; a recess in the upper surface of said base forming a container and a recess in the upper surface of said cover forming a container.

9. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; and a recess in the upper surface of said cover forming a container.

10. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface

of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; a recess in the upper surface of said base forming a container; the recess in said base providing means for securing a pad therein.

11. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; a recess in the upper surface of said base forming a container; the recess in said cover providing means for securing a pad therein.

12. A container comprising a base section and a cover section; said cover section being rotatably connected to said base section at one end of said base section and being rotatable about said connection from a position where it encloses at least a portion of the upper surface of said base section to a position where it reveals the upper surface of the base section; said cover having depending side sections at the region of securement of the cover to the base; said side sections extending below the lowest portion of the base at said region; said container being adapted to rest on a surface with said dependent side sections of the cover and the end of the base opposite said side sections in engagement with said surface; said side sections being curved to provide substantially a point of contact between said side sections and said surface; said point contact being located on each side between the point of rotatable securement of the cover to the base and the end of the base in contact with said surface; said base and cover member being disconnectable to form separate units.

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REFERENCES CITED

The following references are of record in the file of this patent:

FOREIGN PATENTS

Number	Country	Date
434,751	Great Britain	Sept. 9, 1935