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WASTE RECEPTACLE

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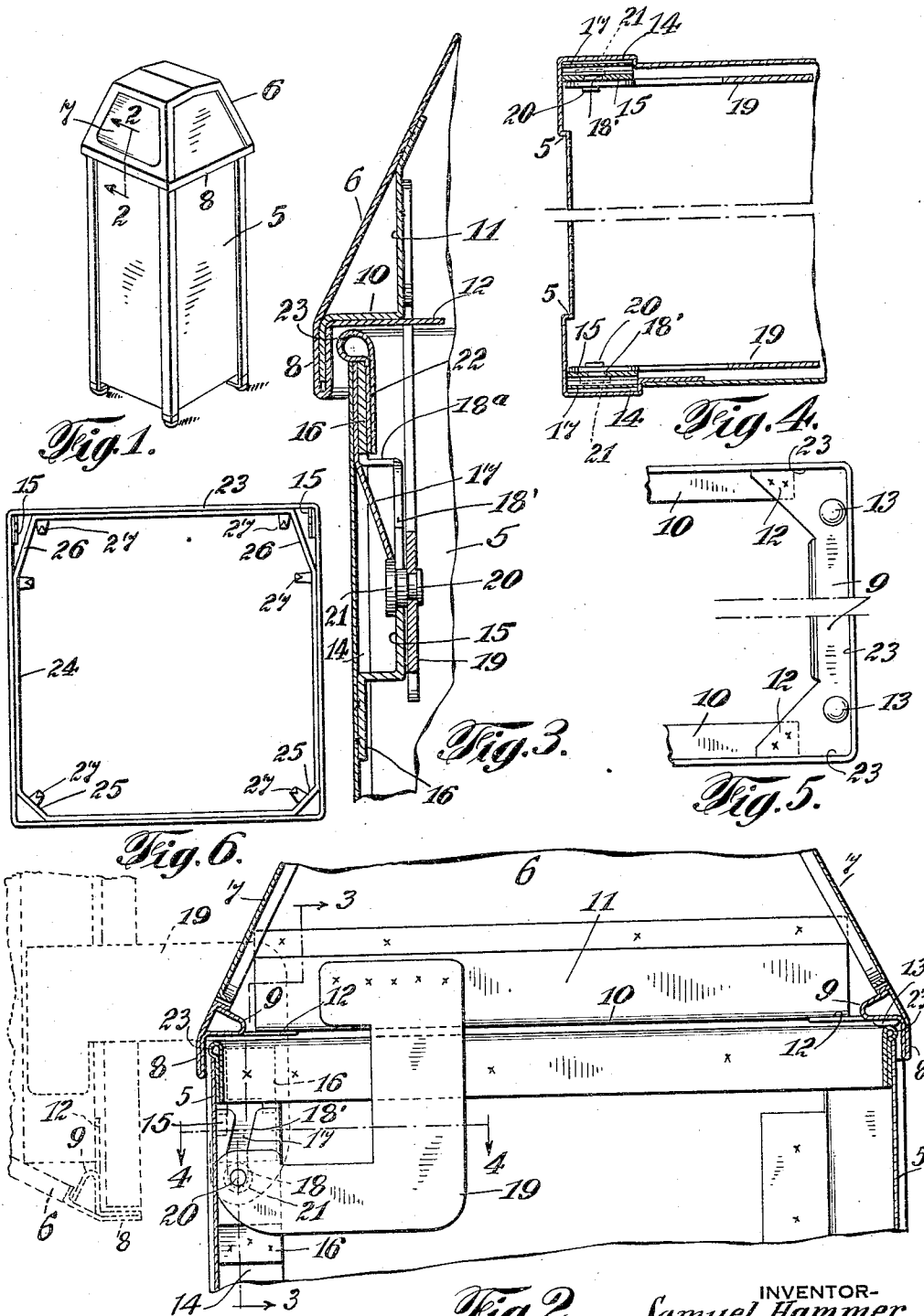


Fig. 2.

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WASTE RECEPTACLE

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This invention relates to waste receptacles, and has for its general object and purpose to provide certain improvements in a receptacle of the type disclosed in my pending application for patent Serial No. 617,767, filed June 17, 1932, whereby the utility and durability, as well as the attractive appearance of the receptacle is materially increased.

It is one of the important objects of the invention to provide an improved means for movably supporting the top or cover upon the body of the receptacle, the said supporting means, when the cover is in closed position, being completely concealed from view, and operating to rigidly sustain the cover in its open position with the lower end thereof disposed in laterally spaced relation from one side wall of the receptacle body and substantially parallel thereto. Thus, unobstructed access is afforded to the upper end of the receptacle while damage to the cover and marring of the surface finish on the receptacle walls by violent contact of the cover therewith is obviated.

It is a further object of my invention to provide improved means for hingedly mounting the cover embodying hinge arms rigidly fixed at one of their ends to the cover, and means for pivotally supporting said arms at their other ends within the receptacle body. Preferably, I provide a simple and effective device for securely though releasably retaining the latter ends of the hinge arms in their mounted position, and which permits of the complete detachment of the receptacle cover, as may be desired for the purpose of thoroughly cleansing the interior of the receptacle body.

It is also a detail object of the invention in one embodiment thereof to provide simple and effective means for strongly reinforcing the body walls of the receptacle at their upper edges, the said means being provided with suitable devices for detachably suspending the waste receiving bag within the receptacle, such reinforcing means serving to prevent the bag material becoming caught or entangled in the hinge connections between the cover and the body of the receptacle.

With the above and other objects in view,

the invention consists in the improved waste receptacle, and in the form, construction and relative arrangement of its several parts as will be hereinafter more fully described, illustrated in the accompanying drawing, and subsequently incorporated in the subjoined claims.

In the drawing wherein I have disclosed one simple and practical embodiment of the invention, and in which similar reference characters designate corresponding parts throughout the several views,—

Figure 1 is a perspective view of a waste receptacle provided with my present improvements;

Fig. 2 is an enlarged fragmentary vertical section of the upper end of the receptacle body and the cover therefor showing the latter in dotted lines in its open position;

Fig. 3 is an enlarged vertical sectional view taken on the line 3—3 of Fig. 2;

Fig. 4 is a horizontal sectional view taken on the line 4—4 of Fig. 2;

Fig. 5 is a fragmentary bottom plan view of the receptacle cover; and

Fig. 6 is a top plan view of the receptacle body illustrating the reinforcing means for the walls thereof.

Referring in detail to the drawing, the body 5 and cover 6 of the receptacle are of the same general form and construction as described in my copending application above referred to, the cover 6 being provided with opposite upwardly converging side walls provided with openings therein normally closed by the counter-balanced doors indicated at 7.

The marginal base rim 8 at the lower open end of the cover which is formed by bending the edges of the metal cover sheet inwardly and upwardly is adapted to extend downwardly below the upper edge of the receptacle body when the cover is in its closed position. At the upper edge of this rim beneath each of the door openings, the metal sheet is extended inwardly and then bent outwardly to form the reinforcing ribs 9 cooperating with the inwardly extending flanges at the lower edges of the door openings, as in the previous construction. Within the rim 8

depending from the other side walls of the receptacle cover, the outer downwardly extending edges of the angular metal strips 10 are secured, each of said strips having a
 5 horizontal inwardly extending portion and an inner upwardly extending portion 11 which is welded or otherwise permanently secured at its upper edge to the side wall of the cover. To the horizontal portions of
 10 these metal strips, the opposite ends of the inwardly extending parts of the rim 8 beneath the door openings are welded as indicated at 12. These end portions of the flanges or extensions of the metal sheet at one side
 15 of the cover are provided with protuberances indicated at 13 for a purpose which will be later referred to.

The metal sheet from which the rectangular body 5 of the receptacle is formed is embossed at its corners to represent supporting corner posts, thus providing internal
 20 vertically extending channels indicated at 14. In the complementary channels on opposite side walls of the receptacle body, the angularly off-set ends 16 of the vertically
 25 disposed supporting brackets 15 are positioned. Between the upper end 16 of each bracket member and the receptacle wall, one end of a leaf spring 17 is interposed,
 30 the free resiliently yieldable part of said spring extending inwardly towards the intermediate portion of the bracket 15 and having its lower end normally positioned in close relation thereto. The opposite
 35 ends of the bracket, and the end of the leaf spring 17 are securely welded to the body wall of the receptacle.

The intermediate vertically disposed part of the supporting bracket 15 is provided with
 40 a slot 18 therein, the upper end portion of which is obliquely inclined as indicated at 18' in divergent relation to the body wall of the receptacle which extends at right angles to the plane of the bracket member. The horizontal
 45 connecting portion of the bracket between its upper fixed end and said intermediate portion thereof is provided with a recess or opening indicated at 18a as a continuation of said slot.

As herein shown, the cover 6 is hingedly
 50 mounted on the supporting brackets 15 by means of the angular or L-shaped hinge arms 19. These arms at one of their ends are welded to the vertically disposed parts
 55 11 of the metal strips 10 on the cover, the other end portions of said arms extending in parallel relation to the open end of the cover and being provided at their extremities with the pivot studs 20 riveted or otherwise
 60 securely fixed to the arms at one of their ends and being provided at their other ends with the enlarged heads 21.

To the inner sides of the vertical walls of the receptacle body at their upper ends, the
 65 edge portions of a sheet metal head strip 22

are securely welded, the tubular bead 23 formed in the intermediate part of said strip projecting outwardly and overlying the edges of the receptacle walls. As an additional
 70 reinforcement, I may also provide the continuous bead strip 24 of similar form welded to the inner side of the strip 22 as shown in Fig. 6 of the drawing. This supplementary reinforcing bead strip at the
 75 front corners of the receptacle body has the parts 25 extending at an angle across said corners and at the rear corners of the receptacle body has the parts 26 extending at an angle to the receptacle walls across said corners. The hinge arms 19 of the receptacle
 80 cover are adapted to move vertically between these parts 26 of the bead strip 24 and the main reinforcing bead strip 22. The bead strip 24 is provided with suitably located hooks or other devices 27 for detachably connecting the upper edges of a bag of paper,
 85 cloth or other material to said bead strip. The parts 26 of this bead strip serve to hold the edges of the bag away from the movable hinge arms 19 so that there will be no interference with the free and unrestricted operation of these arms.

In mounting the cover 6 on the body of the receptacle, it is only necessary to align the
 90 pivot studs 20 with the upper open ends of the slots 18 in the supporting brackets and with the heads 21 of said rivets positioned outwardly from the plane of the intermediate part of the bracket. The hinge arms are
 100 then moved downwardly with the cover so that the intermediate portions of the studs 20 enter the oblique portions 18' of the slots in the bracket members and are guided thereby into the lower ends of said slots. The
 105 heads 21 on said studs act against the leaf springs 17 to deflect the same from their normal positions until the studs are seated in the lower ends of the respective slots. The springs then return to normal position with their lower ends above and in closely adjacent
 110 relation to the heads 21, thus preventing vertical upward movement of the said pivot studs in the brackets.

From the above description, it will be seen
 115 that when the cover is in closed position on the body of the receptacle, as shown in full lines in Fig. 2 of the drawing the hinge arms 19 and the mounting therefor are entirely concealed within the body of the receptacle,
 120 while the marginal rim 8 at the lower open end of the receptacle cover extends downwardly below the reinforcing bead 23 on the receptacle walls and also conceals the same from view. Thus, as indicated in Fig. 1,
 125 the receptacle will present a very neat and attractive appearance. Since such receptacles may be produced in convenient sizes for office or home use, this is an important consideration.

When the receptacle cover is moved to its 130

open position in order to remove the bag or sack and the collected material from the body of the receptacle, as indicated in dotted lines in Fig. 2 of the drawing, the hinge arms 19 at the juncture of their angular portions rest upon the reinforced upper edge of the rear wall of the receptacle and rigidly sustain the receptacle cover in laterally spaced relation from said wall, and with the lower open end thereof substantially parallel to said wall. Thus free access is afforded to the receptacle body without obstruction by the cover, and at the same time contact of this cover with the outer surface of the body wall whereby the rim 8 of the cover might be distorted and the surface finish of the receptacle wall marred, is obviated. When the cover is moved to closed position, only the protuberances 13 have contact upon the bead 23 at the upper edge of the front wall of the receptacle body, the depending rim 8 of the cover being in clearance relation to this reinforcing bead. Thus the surface finish, usually enamel, is preserved against mutilation which would render the article unsightly in either the closed or open positions of the cover.

From the foregoing description considered in connection with the accompanying drawing, it will be seen that my present disclosure includes features of construction and practical utility which materially add to the serviceability of the receptacle disclosed in my pending application. Nevertheless, manufacturing cost of such receptacle is not thereby materially increased. While I have provided means as above described which securely retains the cover in connection with the body of the receptacle for swinging or hinging movement to open and closed positions, this construction also admits of said cover being easily and quickly removed or completely detached from the body of the receptacle, since it is only necessary to insert the end of the screw-driver or other implement between the intermediate parts of brackets 15 and the leaf springs 17, and press the lower ends of said springs outwardly so that the pivot studs 20 on the hinge arms may be moved upward through the slots 18. With the cover thus detached or removed, the body of the receptacle can be easily handled for the purpose of thoroughly cleansing the interior thereof.

I have above referred to a construction of my improved waste receptacle which has been found highly satisfactory in practical use. Nevertheless, it is to be understood that as to the several novel features thereof, the same may also be incorporated in various other alternative structural forms, and I accordingly reserve the privilege of resorting to all such legitimate changes therein as may be fairly embodied within the spirit and scope of the invention as claimed.

I claim:

1. A receptacle, a cover therefor, means connecting the cover with the receptacle including a hinge member connected at one of its ends to the cover, and means for mounting said member at its other end upon the receptacle body interiorly thereof and within the area enclosed by said cover, said member lying in close parallel relation to a wall of the receptacle body and intermediate of its ends having bearing contact upon a vertical wall of the receptacle when the cover is in open position to sustain said cover out of contact with the receptacle wall and in laterally spaced relation to the open top of the receptacle.

2. A receptacle, a cover therefor, hinge arms fixed at one of their ends to the inner side of the cover and projecting from the open end thereof, means for hingedly mounting said arms at their other ends interiorly of the receptacle body within the area thereof enclosed by said cover and closely adjacent to opposite side walls of the receptacle body for movement in parallel relation thereto, said hinge arms being constructed for bearing contact upon a vertical wall of the receptacle to limit movement of the cover to its open position and to rigidly sustain said cover with its open end disposed in laterally spaced relation from said receptacle wall.

3. A receptacle, a cover therefor, hinge arms fixed at one of their ends to the inner side of the cover, supporting brackets secured within the receptacle body adjacent opposite walls thereof, and means for pivotally and detachably mounting said hinge arms at their other ends upon said brackets to move in parallel relation to said walls and support said cover for swinging movement through an arc of substantially 90 degrees to and from its closed position, said hinge arms having bearing contact upon one of the receptacle walls to sustain said cover in an open position and in laterally spaced relation from said receptacle wall.

4. A receptacle, a cover therefor, L-shaped hinge arms fixed at one of their ends to the inner side of the cover, supporting brackets secured to the inner sides of opposite body walls of the receptacle, and means for detachably mounting said hinge arms at their other ends for pivotal movement on said brackets, said hinge arms having bearing contact upon the upper end of one of the receptacle walls to sustain said cover in an open position and in laterally spaced relation from said receptacle wall.

5. A receptacle, a cover therefor, L-shaped hinge arms fixed at one of their ends to the inner side of the cover, supporting brackets secured to the inner sides of opposite body walls of the receptacle, each of said brackets having a vertically extending slot open at its upper end, a stud fixed in the other end of

each hinge arm, removably seated in the lower ends of the respective slots, manually displaceable elements associated with said brackets and cooperating with said studs to releasably retain the latter in said slots, said hinge arms having bearing contact upon the upper end of one of the receptacle walls to sustain said cover in an open position and in laterally spaced relation from said receptacle wall.

6. A receptacle having a body of substantially rectangular form, a reinforcing bead secured to the upper edges of the receptacle walls, a cover for the open end of the receptacle body, hinge arms fixed to the inner side of opposite walls of the cover, supporting brackets secured to the side walls of the receptacle body in opposite corners thereof to which the other ends of said arms are hingedly mounted, and a supplemental reinforcing bead secured to the upper ends of the receptacle walls inwardly of said first named bead having means for the attachment of a waste receiving sack thereto, and parts of said supplementary bead extending at an angle across the corners of the receptacle body to prevent contact of the waste receiving sack with the movable hinge arms.

7. A receptacle of polygonal form and a cover therefor; means connecting the cover with the receptacle and completely housed within the receptacle and cover when the latter is in its closed position, said means including hinge members fixed at one of their ends to opposite sides of the cover and pivotally mounted at their other ends in opposite corners of the receptacle body to move in closely parallel relation to adjacent vertical walls of the receptacle, and said members when the cover is open, having bearing contact upon the receptacle body, to sustain said cover in laterally spaced non-contacting relation to said body.

8. A receptacle of polygonal form and a cover therefor; means for hingedly mounting said cover on the receptacle body comprising members rigidly fixed at one of their ends to opposite walls of the cover interiorly thereof, each of said members having a part projecting from the open side of the cover, and a second part extending at an angle to said first named part and in the plane thereof, brackets secured within the receptacle body in spaced relation to its upper edge and respectively adjacent to a wall of said body; each bracket having a bearing seat, and pivot studs on the ends of the second named parts of said hinge members engaged with said bearing seats, said members moving in parallel relation to said receptacle walls and coacting with another wall of the receptacle body to sustain the cover in open position.

9. A receptacle of rectangular form and a cover therefor; means for hingedly mounting said cover upon the receptacle body at

opposite sides thereof, each of said means comprising a single member having angularly related portions disposed in the same plane, one of said portions being rigidly fixed to one side of the cover interiorly thereof, and means for pivotally supporting the other portion of said member at its free end within one corner of the receptacle body below the upper end thereof, for movement in close parallel relation to a side wall of the receptacle, and said latter portions of the hinge members contacting with the receptacle body to limit movement of the cover to its open position and sustain said cover at one side of the receptacle out of contacting engagement therewith.

10. A receptacle of rectangular form and a cover therefor, hinge members fixedly connected at one of their ends to the cover and projecting outwardly from the bottom of the cover in spaced relation to opposite corners thereof, means for pivotally supporting said hinge members within the receptacle body at a substantial distance below the upper edge of said body for movement in parallel relation to opposite side walls of the body, said hinge members sustaining the cover in open position in spaced non-contacting relation to the receptacle body and extending inwardly when the cover is closed at an appreciable angle with respect to the body wall of the receptacle connecting said side walls thereof.

11. A receptacle of rectangular form and a cover therefor, hinge members fixedly connected at one of their ends to the cover and projecting outwardly from the bottom of the cover in spaced relation to opposite corners thereof, means for pivotally supporting said hinge members within the receptacle body at a substantial distance below the upper edge of said body for movement in parallel relation to opposite side walls of the body, the end portions of the hinge members extending downwardly within the receptacle contacting with the connecting body wall between said side walls of the receptacle body to limit movement of the cover to open position, and said hinge members extending inwardly at an appreciable angle to said connecting wall when the cover is in its closed position.

In testimony that I claim the foregoing as my invention, I have signed my name hereto.

SAMUEL HAMMER.