Dec. 8, 1931. S. F. PRATT ET AL 1,835,897

RECEPTACLE WITH TRAYS

Filed Sept. 12, 1930

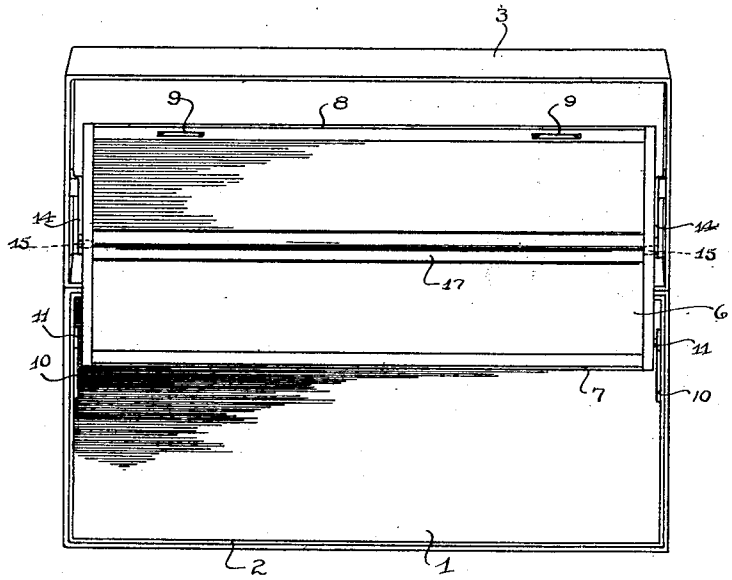


Fig. 1

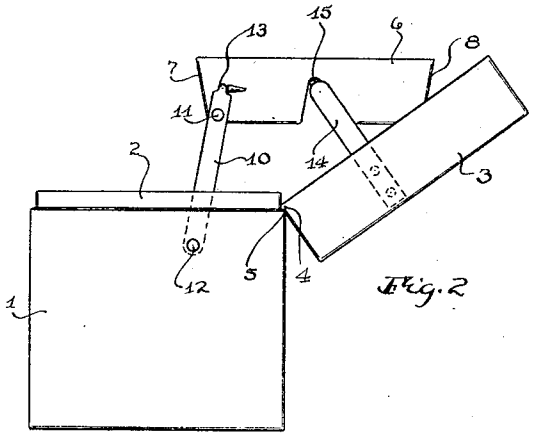


Fig. 2

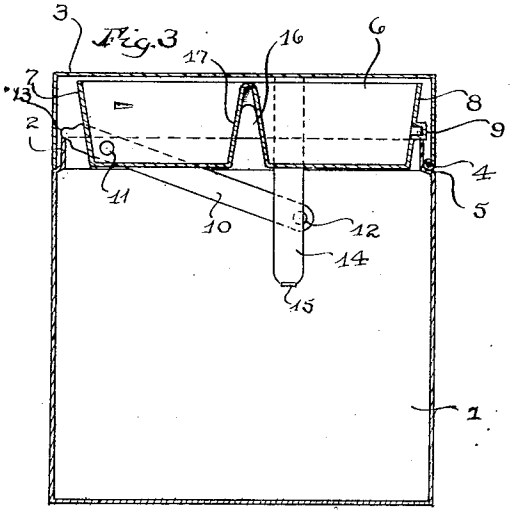


Fig. 3

INVENTOR
Seely F. Pratt and
Arnold H. Hansen
BY
H. H. Simms
their ATTORNEY

Patented Dec. 8, 1931 1,835,897

UNITED STATES PATENT OFFICE

SEELY F. PRATT AND ARNOLD H. HANSEN, OF ROCHESTER, NEW YORK, ASSIGNORS TO UNION CHEST AND CABINET CORPORATION, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK

RECEPTACLE WITH TRAYS

Application filed September 12, 1930. Serial No. 481,464.

The present invention relates to receptacles with trays and an object thereof is to provide a simple and inexpensive construction which will move the tray upwardly and rearwardly as the top or cover of the receptacle is opened and forwardly and downwardly as the top or cover is closed.

To these and other ends, the invention consists of certain parts and combinations of parts, all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings:

Fig. 1 is a plan view showing the receptacle in open position;

Fig. 2 is an end view showing the receptacle in open position; and

Fig. 3 is a transverse section through the receptacle showing the latter closed.

In the illustrated embodiment of the invention, 1 indicates the receptacle body having, in this instance, a rectangular horizontal cross section with a restricted upper portion 2 about which fits a top 3 or cover of the flanged or chamber type hinged at 4 to the rear wall of the top so that the latter when in extreme open position will rest against the shoulder 5 at the base of the restricted portion 2.

Within the upper portion of the receptacle body fits a tray 6 having its front and its back walls 7 and 8 declining inwardly from their upper edges. The back wall preferably has a plurality of lugs or abutments 9 pressed outwardly therefrom to rest on the upper edge of the rear wall of the receptacle body to form a rear support for the tray when the latter is in its lowered position. The forward portion of the tray, when the latter is in the lower position, is supported by two links 10 pivoted at 11 to opposite end walls of the tray and at 12 to the inner sides of the end walls of the receptacle body. The pivots 11 are arranged adjacent the front walls of the tray and the pivots 12 are arranged beneath the tray and nearer the rear wall of the receptacle than the front wall. The forward ends of these links have extensions 13 acting as stops or rests and resting on the upper edge of the front wall of the receptacle body when the tray is in its lowest position. These extensions also assist in limiting the opening movement of the cover to take the strain off the cover, and to this end stop lugs 16 are pressed outwardly from the end walls of the tray to be engaged by said extensions shortly before the cover flange can engage the shoulder 5.

Movement of the tray upwardly and rearwardly to the positions shown in Figs. 1 and 2 is effected, in this instance, by two arms 14 which are rigidly secured to the inner faces of the end flanges of the top or cover and depend downwardly and forwardly therefrom into the lower receptacle. Each of these arms carries an inwardly extending projection 15 which are adapted to enter the ends of a downwardly opening channel 16 in the under side of the tray 6, this channel being formed in a partition 17 which divides the tray into two compartments. The ends of this channel, by opening at the end walls of the tray, form in effect downwardly opening recesses in said end walls into which the projections 15 enter when the cover 3 is swung to a certain position so as to engage the walls of the recesses and in this way lift the tray upwardly and rearwardly. In this movement, the tray is guided by the swinging links 10. The lengths of the links and the arms 14 are such that the tray maintains, in any plane to which it may be shifted by the cover, a horizontal position. After a time, the cover comes to rest as shown in Fig. 2, and the tray lies in a horizontal position above the cover and the receptacle body exposing the interior of the receptacle body for access as well as the tray. When the cover is moved toward closed position, the tray is pushed forwardly until the centers 13 are in advance of the centers 12, after which the tray descends of its own weight under control of the arms 14 until such tray again rests at the top of the receptacle body, after which the arm projections 15 pass out of engagement with the tray and move downwardly into the receptacle. It will be seen that a lost motion takes place between the cover and the tray both on the opening and the closing movements of the cover.

What we claim as our invention and desire to secure by Letters Patent is:

1. The combination with a receptacle body and a chambered cover hinged to the rear wall thereof, of a tray, having a projection on its rear wall for engaging the top edge of the receptacle body, two links pivoted to the end walls of the tray and on the inner sides of the end walls of the receptacle body and having portions engaging the front wall of the receptacle body to support the forward part of the tray, and a lost motion connection between the cover and the tray for effecting the movement of the latter upwardly and rearwardly as the cover is opened and forwardly and downwardly as the cover is closed.

2. The combination with a receptacle body, and a cover hinged to the rear wall thereof, of a tray, links pivoted to the forward portion of the tray and to the receptacle below said tray, and two arms rigid with the cover depending therefrom on opposite ends of the tray and having a lost motion connection with the tray in rear of the links for effecting the elevation and rearward movement of the tray with the opening of the cover and the forward and downward movement of the tray on the closing of the cover.

3. The combination with a receptacle body and a cover hinged to the rear wall of the body, of a tray, links pivoted to the tray and to the body below the tray, and an arm depending from the cover and rigid therewith, said arm extending below the tray when the cover is in closed position and having a portion normally lying out of engagement with the tray but movable into engagement with the tray in rear of the pivots of the links when the cover is being opened to lift the tray and cause such tray to move rearwardly as it moves upwardly.

4. The combination with a receptacle body and a cover hinged to the rear wall thereof, of a tray, links pivoted to the forward portion of the tray and to the body below said tray, and two arms rigid with the cover and depending therefrom at opposite ends of the tray, said arms having pintles lying below the tray when the cover is closed and movable into engagement with the tray in rear of the link pivots to lift the tray and move it rearwardly as the cover is opened.

5. The combination with a receptacle body, and a cover hinged to the rear wall of the body, of a tray, links pivoted to the end walls of the tray near the front wall of the latter and to the end walls of the body in rear of the tray pivots of such link when the tray is in lower position, cooperating portions on the tray and the body supporting said tray against swinging on the link pivots when the tray is in its lowered position, the end walls of the tray having downwardly opening recesses in rear of the link pivots thereon, and two arms rigid with and depending from the cover at opposite ends of the tray, said arms having inwardly projecting pintles situated when the tray is in lowered position outside of said recesses, but movable when the cover is opened to enter said recesses, engage the walls thereof and lift the tray to carry it upwardly and rearwardly.

6. The combination with a receptacle body and a chambered hinged closure therefor, of a tray having supporting means on its rear wall to rest on the upper edge of the receptacle when in lowered position and having also downwardly opening recesses or ways in its end walls, two supporting links pivoted within the receptacle to the end walls and also pivoted on the outer sides of the end walls of the tray, said links, when the tray is in its lowered position, resting on the upper edge of the front wall of the receptacle body to limit their downward movement and thus support the tray at its front on said front wall, two tray lifters and supports projecting in rigid relation to the closure downwardly therefrom and having means for operating in and out of the ways to cause said supports to lift the tray and swing it rearwardly on the links.

7. The combination with a receptacle body and a chambered hinged closure therefor, of a tray having supporting means on its rear wall to rest on the upper edge of the receptacle when in lowered position and having also downwardly opening recesses or ways in its end walls, two supporting links pivoted within the receptacle to the end walls and also pivoted on the outer sides of the end walls of the tray, said links, when the tray is in its lowered position, resting on the upper edge of the front wall of the receptacle body to limit their downward movement and thus support the tray at its front on said front wall, two tray lifters and supports projecting in rigid relation to the closure downwardly therefrom and having means for operating in and out of the ways to cause said supports to lift the tray and swing it rearwardly on the links, and stops on the end walls of the tray engaged by said links to limit the upward movement of the tray.

SEELY F. PRATT.
ARNOLD H. HANSEN.