July 28, 1925

1,547,337

S. D. LOCKE

ASH TRAY, RECEIVER, AND STAND.

Filed Dec. 1, 1923

2 Sheets-Sheet 1

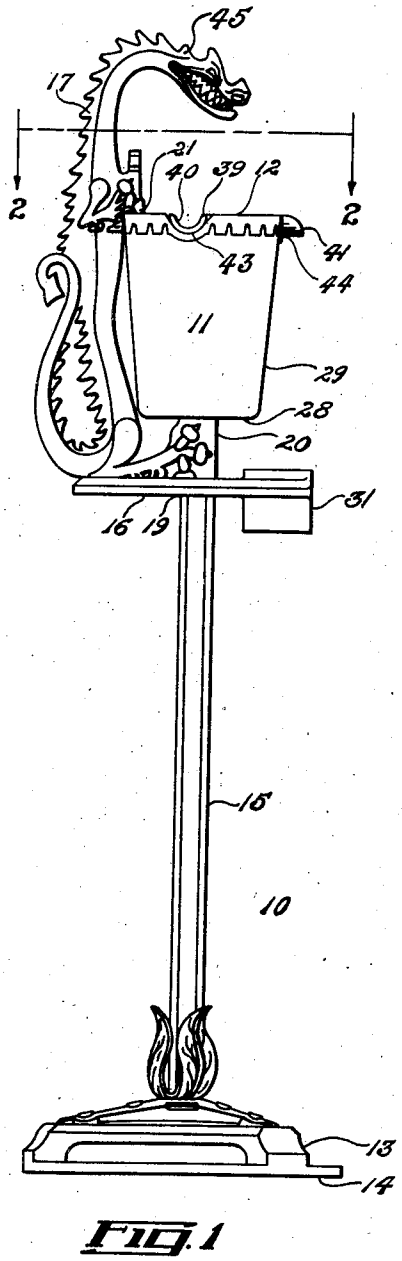


Fig. 1

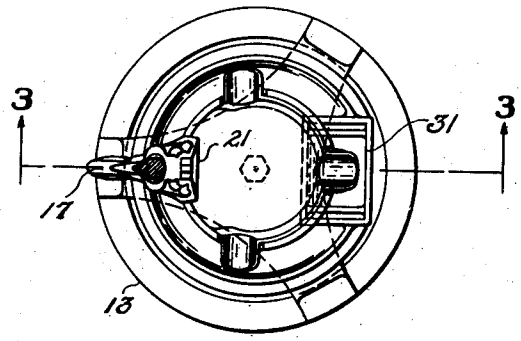


Fig. 2

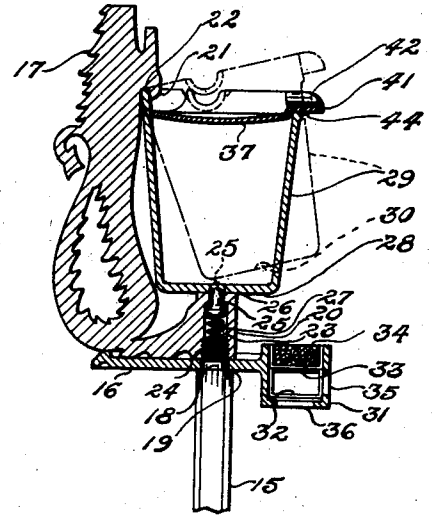


Fig. 3

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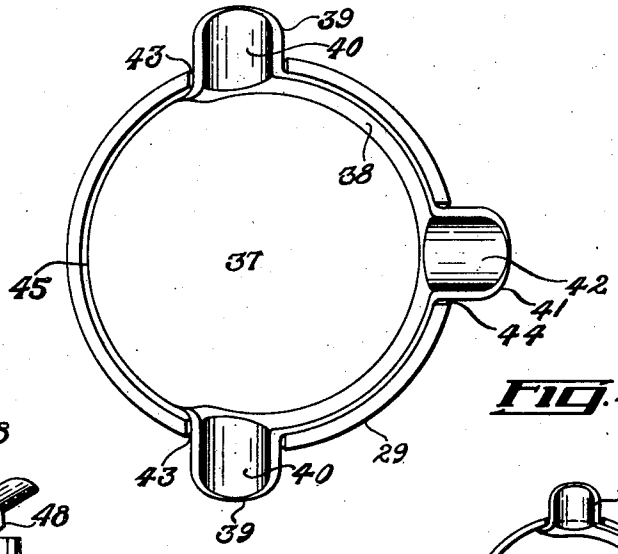


FIG. 4

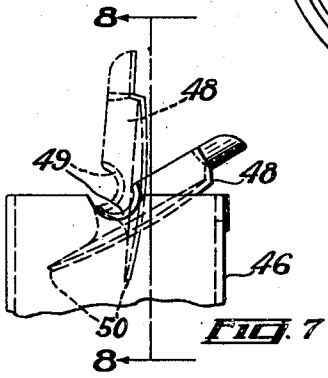


FIG. 7

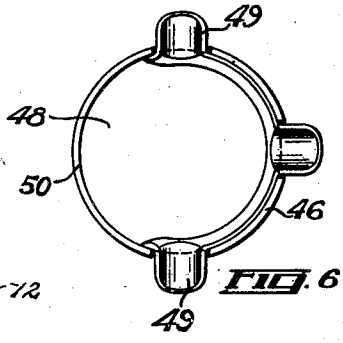


FIG. 6

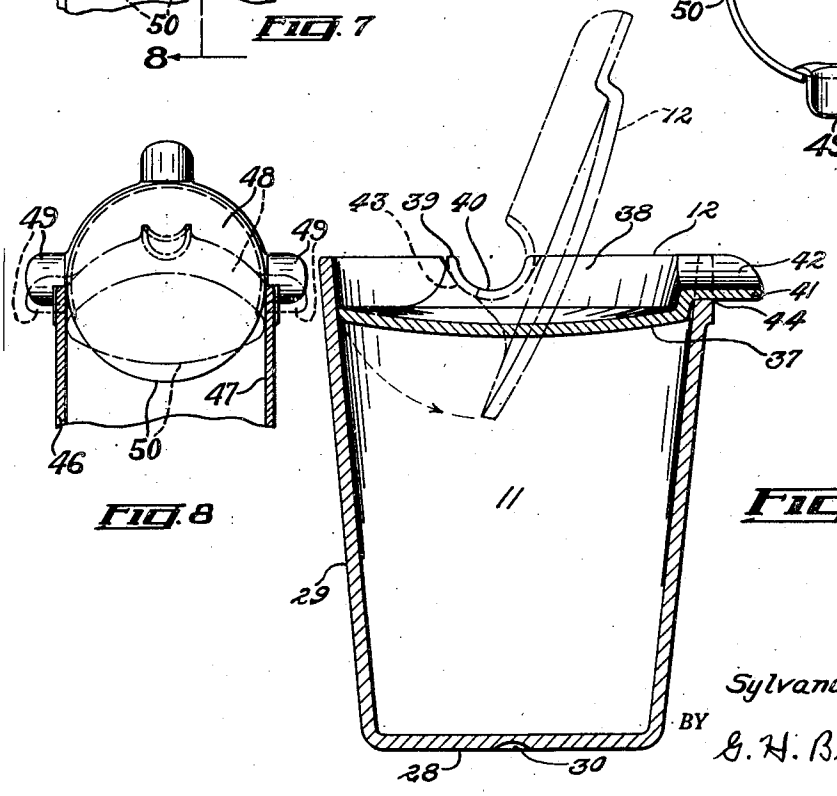


FIG. 8

FIG. 5

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Patented July 28, 1925. 1,547,337

UNITED STATES PATENT OFFICE.

SYLVANUS D. LOCKE, OF BRIDGEPORT, CONNECTICUT.

ASH TRAY, RECEIVER, AND STAND.

Application filed December 1, 1923. Serial No. 678,016.

To all whom it may concern:

Be it known that SYLVANUS D. LOCKE, a citizen of the United States, and resident of Bridgeport, in the county of Fairfield and State of Connecticut, has invented certain new and useful Improvements in Ash Trays, Receivers, and Stands, of which the following is a specification.

This invention relates to an ash tray, receiver and stand, and the object of the invention is to provide a receptacle, for receiving ashes and other refuse, having a removable cover constituting an improved ash tray rotatably associated with the receptacle in novel manner, and to provide a stand of simple and improved design having unique means for conveniently and removably holding the receptacle against accidental displacement.

A purpose of the invention is to provide an ash receiver having sockets and a depression in its upper, open end, and to provide a dish-shape ash tray adapted to cover said receiver in smoke-tight fashion, the tray having off center trunnions rotatably and removably fitting said sockets and a finger piece (which may be a counterweight) adapted to rest in said depression, and the trunnions being arranged at opposite sides of the tray above the base thereof, at greater distance from the side of the receiver having the depression than from the opposite side thereof, to produce an arrangement of ash tray and receiver (1) wherein the portion of the tray which moves in the receiver will rotate clear of the receiver wall to offer no interference between the receiver and tray during manipulation of the tray to open or closed position, usually by means of the finger piece or counterweight; and (2) wherein there will be an opening between the upper face of the tray body and the receiver equal to at least one-half of the area of the space at the mouth of the receiver when the tray is in wide open position, all as will be fully set forth.

A further purpose is to provide an ash tray with trunnions and finger piece or counterweight constituted by a single piece of metal or other material, and to construct said trunnions, and preferably to construct said finger piece or counterweight, to serve as holders for cigars or cigarettes.

A still further purpose is to provide the improved stand with a support for the receiver or receptacle, and to associate with said support a simple spring device for clamping and removably holding the receptacle in fixed relation to the stand.

Additional purposes are to provide, in connection with the ash tray and receiver, a stand having a convenient arrangement including a table beneath the receiver for smokers' paraphernalia, such as cigars, cigarettes, pipes, tobacco, and matches, and having a relatively heavy base insuring stability; and to equip the portion of the stand having the receiver support with a handle of improved structure situated centrally of the stand above the ash tray and receiver, whereby the ash tray, receiver and stand can be conveniently portable, to be moved from place to place in upright position without liability of accidental removal of the receiver from the stand, of the ash tray from the receiver, or of the smokers' paraphernalia from the ash tray or from the table of the stand.

With the above objects and purposes in view, as well as others which will appear as the specification proceeds, the invention comprises the construction, arrangement and combination of parts as now to be fully described and as hereinafter to be specifically claimed, it being understood that the disclosure herein is merely illustrative of the principles of the invention and meant in no way in a limiting sense, changes in details of construction and arrangement of parts being permissible so long as within the scope of the appended claims.

In the accompanying drawings forming a part of this specification,

Fig. 1 is an elevational view of the ash tray, receiver and stand of the present invention;

Fig. 2 is a sectional view on line 2—2 in Fig. 1;

Fig. 3 is a sectional view on line 3—3 in Fig. 2;

Fig. 4 is a top plan view, on an enlarged scale, of the ash tray and receiver of Figs. 1 to 3;

Fig. 5 is a vertical central sectional view of the ash tray and receiver, on the scale of Fig. 4;

Fig. 6 is a top plan view, on a smaller scale, of an ash tray and receiver somewhat

similar to the tray and receiver of the invention, but having its trunnions arranged diametrically opposite each other;

Fig. 7 is a fragmentary elevational view detailing features of the tray and receiver of Fig. 6; and

Fig. 8 is a sectional view as on line 8—8 in Fig. 7.

With respect to the drawings and the numerals of reference indicated thereon, 10 denotes generally the stand, 11 the receiver, and 12 the ash tray of the novel device.

Of the stand, 13 is a base of relatively heavy metal, having a flat, preferably ring-shape bottom 14 adapted to rest squarely upon a floor or other surface, 15 is a pedestal, shown as hexagonal, extending vertically upward from the central portion of the base, and 16 and 17 denote, respectively, a table and a receiver support carried by the upper portion of the pedestal. The pedestal may be threaded into the base or secured thereto in some other convenient manner.

As disclosed more clearly in Fig. 3, the table has a preferably centrally arranged opening snugly receiving a threaded reduced extension 18 of the pedestal, and the lower face of the table adjacent its opening rests upon a horizontal, circular shoulder 19 constituting the upper end of the hexagonal part of the pedestal adjacent the reduced extension 18.

The receiver support, shown in the form of a dragon, includes a rest 20 for the bottom of the ash or refuse receiver 11, and a hook member 21, shown as the forward claws of the dragon, providing a slot 22 for the upper edge of said receiver. The rest 20 has a cavity 23 with threads 24 adjacent its preferably flat, lower end, these threads being adapted to receive the threaded extension 18 of the pedestal in such manner that when the support is screwed down on the pedestal and against the table, both the support and table are rigidly fixed to the pedestal.

The rest of the receiver support also includes a spring device for clamping and removably holding the receptacle in its fixed relation to the support. As shown, this spring device is constituted by a suitable pin 25 in the cavity 23 normally protruding through an opening in the flat, upper end 26 thereof, as indicated in dotted lines in Fig. 3, there being a coil spring 27 in the cavity and between the pin and upper end of the reduced extension 18. Clearly, a ball could be substituted for the pin 25.

The receiver as illustrated is of conical shape, it having a flat bottom 28 and divergent side wall 29, although the receiver could be of different configuration, and in the central portion of the bottom of the receiver is a suitable depression 30 to receive the pin 25 of the spring device.

The manner in which the receiver is removably attached to its support is indicated in dotted lines in Fig. 3. The hook member 21 is, naturally, not directly above the rest 20, but is off at one side above said rest, so that when the receiver is tilted and its upper edge is inserted in the slot 22 provided by the hook member, the bottom 28 thereof is in a plane somewhat above the upper end 26 of the rest. When the receiver is swung to vertical position, toward the dragon, the depression 30 finds the resilient pin 25 and the pin seats in the depression. While the receiver will not become accidentally displaced, it can, clearly, be easily removed when this is intended. Preferably, the distance between the hook member 21 and rest 20 is such that the bottom of the receiver bears squarely upon the upper end of the rest, but should this distance be a trifle greater, the pin itself would support the receiver, the hook member 21 being of some considerable width to preclude the possibility of turning movement of the receiver on the pin. See Fig. 2.

The table 16 may be an ordinary table. As shown it includes an integral container 31 for matches, 32 representing a safety match box cover, 33 a match box removed from the cover and resting thereon, 34 matches accessible at the open, upper end of the container, 35 a slot in a side of the container whereby matches taken from the box can be scratched against the cover 32 in usual manner, and 36 denoting an opening in the container bottom whereby the match box when empty can be easily removed. Desirably, the table is circular, is located not too far distant from the receiver, and is of less diameter than the base of the stand, to enhance the appearance of the device.

The ash tray and its manner of association with the receiver is best shown in Figs. 4 and 5. In said figures, the tray is disclosed as of dish-shape, including a relatively flat body 37 which merges into an upwardly disposed side wall 38 extending about three-fifths of the distance about the body. At its opposite ends the side wall merges into outwardly extending trunnions 39 situated somewhat above the body 37, at greater distance from the side of said body having the side wall than from the free edge 45 thereof, and provided upon their upper sides with cigar- or cigarette-receiving depressions 40. Half-way between its ends the side wall has an integral finger piece or counterweight 41 also provided upon its upper side with a cigar or cigarette-receiving depression 42. The upper end of the receiver has sockets 43 to receive the trunnions 39, and a depression 44 to receive the finger piece or counterweight 41, the complementary arrangement of the trunnions and

sockets, and the finger piece or counterweight and depression, being such that the ash tray can be positioned upon the receiver, with its body horizontal, so that the space at the upper end of the receiver is completely closed in smoke-tight fashion.

To move the tray to open or closed position, as indicated in dotted and in full lines in Fig. 5, it can be rotated on its trunnions as an axis, the finger piece or counterweight usually being employed for this purpose. Obviously, as the tray is so rotated, its side moving in the interior of the receiver must clear the wall thereof, and said side not only moves upwardly and downwardly in the receiver during the tray's rotation, but moves transversely as well. As will now be fully set forth, it is necessary to arrange the trunnions in off center relation, after the fashion shown, as well as above the body of the tray, to provide clearance between the side of the tray in the receiver and the receiver wall during manipulation of the tray about its trunnions as an axis. This can best be demonstrated by referring to the tray and receiver of Figs. 6, 7 and 8. In said figures, 46 represents a receiver which may be a duplicate of the receiver 11, but which has a straight wall 47 as disclosed, and 48 is a tray similar in all respects and mounted (when in closed position) in sockets and depression in the upper end of the receiver in the same manner as the tray of Figs. 4 and 5, with the exception that the sockets of the receiver and the trunnions 49 are situated directly opposite each other. Evidently, the free edge 50 of the tray 48 would offer no interference to the manipulation of the tray (say from closed to open position) in the manner fully described, the greatest width of said edge 50 being less than the width of space in the receiver which said edge occupies at any time during the full swing of said tray from closed to open position, this because said edge is situated below the axis of the tray to swing downwardly and transversely in the receiver, first toward the center or fullest width of said receiver, and afterwards beyond said center to a width of said receiver smaller than the center width but greater than the width of tray comprised in said free edge. But as best shown in full and dotted lines in Figs. 7 and 8, portions of said tray beneath the trunnions 49 and between said trunnions and edge 50, would preclude manipulation of the tray. Clearly, the portions mentioned cannot move downwardly and transversely in the receiver so long as the trunnions rest in the sockets, this because when the tray of Figs. 6 to 8 is in closed position, its full width or diameter, from trunnion to trunnion, is closely fitted in the full width or diameter of the receiver adjacent or at its open end, these widths or diameters being approximately equal. Evidently, an attempt to rotate the tray would merely lift the trunnions 49 out of their sockets, the portions of said tray beneath the trunnions, being spaced apart a distance greater than the width of the receiver at the location to which said portions are attempting to swing, riding upwardly over the receiver wall. In Fig. 7 the tray is shown in full and dotted lines in partially open position, and in dotted lines in wide open position, while in Fig. 8, the full line tray is wide open and the dotted line tray is partially closed. Note in the figures that when the tray is wide open, the trunnions have completely left their sockets and that the tray has been practically ousted from the receiver with no definite support.

Referring again to Fig. 5, it will be apparent that the arrangement of the trunnions 39 above the body 37 of the tray makes provision for no interference between the free edge 45 and the receiver wall in about the same manner as fully explained in connection with the showing of Figs. 6 to 8, when the tray is manipulated on its axis. It is to provide clearance between said receiver wall and portions of said tray beneath said trunnions and between said trunnions and edge 45 that the trunnions are in off center relation. Evidently, the trunnions must be off center a sufficient amount to allow the parts of the side wall 38 beneath the trunnions and between the trunnions and edge 45 to swing downwardly and transversely to the extent necessary to rotate the tray to wide open position without interference between the receiver and tray. That is to say, the width of tray between the trunnions 39 must be less than the full width thereof to fit in a width of the receiver less than its full width, and the off center arrangement of the trunnions must be such that as the tray is rotated (say from closed toward open position), the side of the tray within the receiver can move downwardly and transversely, first into the center or full width of the receiver and then beyond said center to a width smaller than said center width but greater than the width of tray comprised between said trunnions, barely reaching, or failing to reach, a width of said receiver equal to said width of tray comprised between said trunnions when the tray has reached its wide open position.

The portion of the tray between the trunnions and finger piece or counterweight of course offers no interference to ready manipulation of the tray, the side wall of said portion nicely fitting within the upper, open end of the receiver. The finger piece alone may constitute means limiting the extent to which the side of the tray body having the side wall can move into the receptacle, or said side wall could have an extension adapted to rest upon the upper edge of the re-

ceiver, or both said finger piece and said extension could be utilized.

Clearly, when the tray is in wide open position (see the dotted tray, Fig. 5), there can be an opening between the body 37 and the receiver equal to at least one-half of the area of the space at the mouth of the receiver. The advantage of this feature is obvious.

Attention is called to the fact that the portion of the tray opposite the finger piece or counterweight does not become removed from the receiver during its normal use, and, therefore, needs no side wall.

As will be more clear from Fig. 1, the body of the support, (the dragon there shown), is extended upwardly and curved forwardly over the base of the stand, the receiver and ash tray, as denoted at 45, to provide a handle situated centrally of the stand for lifting and carrying the device, the weight of the stand base then insuring the vertical position of the article of manufacture so that smokers' paraphernalia will not be spilled.

Having thus fully described the invention, what I claim as new and desire to secure by Letters Patent is.

1. In combination, an ash receiver having an upper, open end, and an ash tray adapted to rotatably fit in said upper, open end of the receiver to alone entirely cover said open end in smoke-tight fashion, said tray and receiver having cooperating pivotal means for the tray arranged at the opposite sides of the tray and receiver above the base of the tray and at greater distance from one side of the tray and of the receiver than from the opposite side thereof.

2. In combination, an ash receiver having off-center sockets in its upper, open end, an ash tray adapted to alone entirely cover said receiver and having trunnions rotatably and removably fitting said sockets, the trunnions being arranged at opposite sides of the tray above the base thereof, at greater distance from one side of the receiver than from the opposite side thereof.

3. In combination, an ash receiver having off-center sockets and a depression in its upper, open end, a dish-shape ash tray adapted to cover said receiver in smoke-tight fashion, a finger piece upon the tray adapted to rest in said depression, and off-center trunnions upon the tray rotatably and removably fitting said sockets, the trunnions being arranged at opposite sides of the tray above the base thereof, at greater distance from the side of the receiver having the depression than from the opposite side thereof.

4. In combination, an ash receiver having an open end provided with off-center sockets, and an ash tray adapted to alone entirely cover said receiver, said ash tray having a body adapted to lie in the receiver beneath the upper edge thereof and an upwardly protruding side wall extending less than the whole distance about said body, and said side wall having off-center trunnions rotatably fitting said sockets.

5. In combination, an ash receiver having an open end provided with off-center sockets and a depression, and an ash tray adapted to entirely cover said receiver, said ash tray having a body adapted to lie horizontally in the receiver beneath the upper edge thereof and an upwardly protruding side wall extending less than the whole distance about said body, and said side wall having trunnions rotatably fitting said sockets and a finger piece adapted to lie in said depression, the trunnions being arranged opposite each other at greater distance from the side of said body having the finger piece than from the opposite side thereof.

6. In combination, an ash receiver having an open end provided with off-center sockets, and an ash tray adapted to entirely cover said receiver, said ash tray having a body adapted to lie horizontally in the receiver beneath the upper edge thereof and an upwardly protruding side wall extending less than the whole distance about said body, and said side wall having trunnions rotatably fitting said sockets and a device limiting the extent to which the side of the body having the side wall can move downwardly in the receptacle, the trunnions being arranged opposite each other at greater distance from the side of the body having the device than from the opposite side thereof, whereby the tray can be freely rotated in the receptacle, as fully described.

7. In combination, an ash receiver having sockets in its upper end, and an ash tray having trunnions rotatable in said sockets and a counterweight for normally holding the tray in horizontal position on said receiver, the trunnions and counterweight including a cigar- and cigarette-receiving depression.

8. In combination, an ash receiver having sockets and a depression in its upper end, and a one-piece ash tray including trunnions rotatably and removably mounted in said sockets and a finger piece adapted to lie in said depression.

9. In combination, an ash receiver having off-center sockets in its upper end, and a one-piece ash tray including trunnions rotatably and removably mounted in said sockets, the margin of said tray being adapted to engage the upstanding walls of said receiver to completely close the same, and the trunnions being arranged at the opposite sides of the tray above its base, at greater distance from one side of the receiver than from the opposite side thereof.

10. In combination, an ash receiver having an upper, open end, and an ash tray adapted

to rotatably fit in said upper, open end of the receiver against its walls to entirely cover said open end in smoke-tight fashion, said tray and receiver having cooperating pivotal means for the tray arranged at the opposite sides of the tray and receiver above the base of the tray and at greater distance from one side of the tray and of the receiver than from the opposite side thereof.

11. In combination, an ash receiver having an upper, open end, and an ash tray adapted to rotatably fit in said upper, open end in smoke-tight fashion, the area of the tray being approximately equal to the area of the portion of the open end of the receiver in which the tray fits, said tray and receiver having cooperating pivotal means for the tray arranged at the opposite sides of the tray above its base at greater distance from one side of the receiver than from the opposite side thereof.

12. In combination, an ash receiver having off-center sockets in its upper, open end, and an ash tray adapted to entirely cover said receiver and having trunnions rotatably and removably fitting said sockets, the trunnions being arranged at the opposite sides of the tray above its base, at greater distance from one side of the tray and of the receiver than from the opposite side thereof.

13. An ash tray consisting of a single piece of material including a body having an upwardly protruding side wall extending more than one-half the distance about said body, trunnions at the opposite end portions of said side walls, and a finger piece upon said side wall between said trunnions, said trunnions and finger piece including a cigar- and cigarette-receiving depression.

14. In combination, a receiver having an open end and a bottom with depression, a hook member for the upper edge of the receiver providing a slot into which said edge extends, and a rest for said bottom including a spring pressed member adapted to removably enter said depression to clamp the receiver between the rest and hook member.

15. In combination, a receiver having an open upper end, and a support for the receiver, said support including a member with slot adapted to receive the upper edge of the receiver, and with rest for the bottom thereof, the rest including a spring pressed member adapted to engage the receiver bottom to hold its upper edge in engagement with the base of said slot.

16. In combination, a receiver having an open end and a flat bottom with centrally arranged depression, and a support for said receiver, the support including a downwardly projecting hook member providing a slot in which the upper edge of said receiver is adapted to lie, and a rest for said receiver bottom, the rest including a spring pressed pin adapted to enter said depression to clamp the receiver between the rest and hook member.

17. In combination, a receiver having a flat bottom and open upper end, and a support for the receiver, said support including a member with a slot adapted to receive the upper edge of the receiver, and with a rest having a flat top for the receiver bottom, the rest being located in a plane lower than the slot, at one side thereof, and including a spring pressed member tending to lift said bottom to hold said upper edge in said slot.

18. In combination, an ash receiving receptacle having sockets, a removable cover therefor constituting an ash tray rotatably mounted on the receptacle to completely close the same, the tray having trunnions removably mounted in said sockets of the receptacle and the trunnions having depressions adapting them for service as cigar- and cigarette-holders, and a stand having a spring clamp device for removably holding the receptacle in vertical position.

19. In a device of the character described, a base, a receiver support carried thereby and spaced therefrom, and a receiver upon said support and directly above the base, the support extending upwardly at one side only of the base and receiver and having an approximately horizontal portion situated directly above the receiver to serve as a handle for transporting the device in upright position.

Signed at Bridgeport, in the county of Fairfield, and State of Connecticut, this 26th day of November A. D., 1923.

SYLVANUS D. LOCKE.