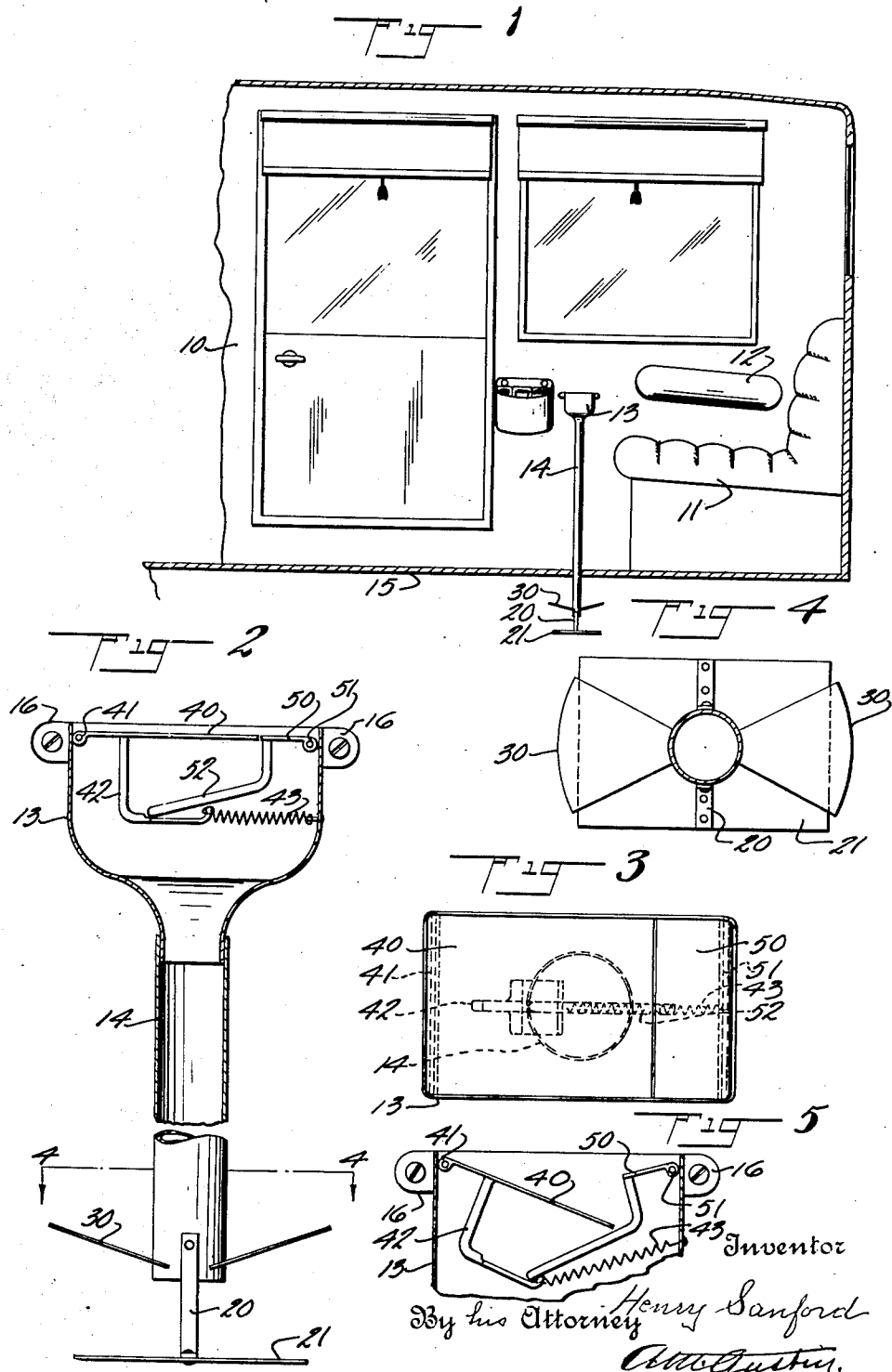


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MATERIAL RECEPTACLE
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UNITED STATES PATENT OFFICE.

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MATERIAL RECEPTACLE.

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To all whom it may concern:

Be it known that I, HENRY SANFORD, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Material Receptacles, of which the following is a specification.

This invention relates to ash and other waste material receptacles and more particularly to such receptacles for use in combination with closed passenger vehicles.

Some of the objects of the invention are to provide in combination with a closed vehicle a receptacle for cigar ashes or stubs, cigarette ashes or stubs, waste material and the like; to provide improved means for creating a vacuum in connection with such a device for positively withdrawing such materials; to provide simple and efficient means for conducting the materials described to a point outside of the vehicle; to provide means for retaining cigar or cigarette stubs, which may be smoldering, in a position spaced apart from leakage of inflammable products such as oils or gasoline used in the operation of self-propelled vehicles; to provide means for such retention of smoldering materials while the vehicle is at rest, the material being automatically ejected upon movement of the vehicle; to provide a displaceable cover for the receptacle which is readily and conveniently operable when holding a lighted cigar; to provide such displaceable covering means as will retire within the receptacle to receive ashes; and to provide other features as will appear in the following description taken in connection with the accompanying drawing.

Referring to the drawing,

Fig. 1 shows a side view of the interior of a vehicle, such as a limousine or sedan;

Fig. 2 shows a detailed elevation of the receptacle, conducting passage and retaining means;

Fig. 3 shows a plan view of the receptacle;

Fig. 4 shows a horizontal section taken on the line 4-4 of Fig. 3; and

Fig. 5 shows a view of the receptacle with the lid thereof in open position.

Like reference characters denote like parts in the various figures of the drawing.

Referring to the drawing there is shown one embodiment of the invention applied to a limousine or sedan 10, having a usual seat

11 with an arm rest 12. It is understood, however, that the invention may be practiced with reference to any form of closed vehicle such as a railroad car, carriage or the like. Attached to a suitable portion of the body of the vehicle 10, about the level of seat 11 and arm rest 12, is a receptacle 13 preferably formed of sheet metal or other desired material. The receptacle 13 may be of any convenient shape, preferably that of a rectangular open box, with its sides curving inwardly to join a vertical pipe 14. The pipe 14 extends through floor 15 of the vehicle, and attached to the walls thereof in any suitable manner as for example by means of a plurality of pipe cleats (not shown) of conventional type. The receptacle 13 may be attached to the wall of the vehicle by means of a pair of ears 16 extending outwardly from the receptacle and each having an aperture for receiving a usual wood screw or other fastening means.

The lower end of the pipe 14 is provided with a pair of L-shaped brackets 20, each having a vertical and a horizontal portion, the vertical portion being riveted or otherwise secured to the end portion of the pipe in a plane transverse to the normal direction of movement of the vehicle. Secured to the horizontal portions of the brackets 20 in a similar manner is a substantially flat platform member 21, here shown as freely open and exposed all around. The arrangement is such that the plane of the member 21 is spaced apart from the lower end of the pipe 14, and its area is relatively much greater than the cross section area of the pipe. Thus material dropped through the pipe when the vehicle is standing still will collect upon the platform 21, the area of the platform being sufficiently great to retain a considerable amount of material. When the vehicle is at rest, there is danger of lubricating oil leaking to the roadway; and particularly in the case of gasoline propelled vehicles the seepage may be of highly inflammable nature. The platform 21 constitutes a retaining means whereby lighted or smoldering cigar or cigarette stubs are effectually prevented from coming in contact with such pools of inflammable liquid, or with waste paper or other material below the body of the vehicle while at rest, and danger of fire is therefore minimized.

Secured to the exterior wall of the pipe 14

near the lower extremity thereof, is a pair of air deflectors such as 30. These are preferably formed of a suitable sheet metal cut in the shape of a fan. The tapered end of each of the deflectors is cut to a concave shape corresponding in curvature to the shape of the pipe 14. The opposite end edge may be cut to any desired shape, that shown being in the form of an arc concentric with the pipe 14. Each of the deflectors 30 may be attached to the pipe by means of angularly bent braces (not shown) riveted or otherwise secured to the respective deflector and to the pipe. The deflectors extend through their length in the general direction of movement of the vehicle, so that the air will be deflected by the lowerly disposed surface of the deflector facing the direction of movement. Thus an effective current of air is caused to sweep down upon and across the platform 21, opposite the opening of the pipe 14, and a partial vacuum is created within the pipe, which tends to draw any foreign matter downwardly through the pipe.

The upholstery of the car may be arranged to partly conceal the pipe 14. If a textile is used for upholstering it may be readily arranged to cover the greater portion of the pipe 14 positioned within the body of the vehicle, and suitable tape (not shown) may be sewed in rows parallel to the pipe to maintain the upholstery in fixed position. With leather upholstery, the pipe 14 may be provided with a suitable surface finish to match. The shape of the pipe 14 may be circular or rectangular as may be most convenient.

The receptacle 13 is provided with a main lid 40 of rectangular shape, preferably made of a suitable sheet metal or the like. The lid 40 has a width slightly less than the interior width of the receptacle 13, and is pivoted on a horizontal pin 41 held in fixed position between the transverse walls of the receptacle at one end thereof. Attached to the lower surface of the main lid 40 there is provided one or more L-shaped brackets such as 42. The end portion of the horizontally disposed part of the bracket 42 is preferably widened for a purpose which will be subsequently set forth. It may also be curved in the form of a cam, if desired, to facilitate the operation. A retractile spring 43 is attached to the free end of the bracket 42 and to the wall of the receptacle opposite the pin 41 and substantially in the horizontal plane of the free end. Thus the lid 40 is normally yieldingly held in a horizontal plane to form a partial cover or lid for the receptacle.

For operating the main lid 40, and forming the remaining portion of the cover or lid of the receptacle, there is provided an auxiliary lid 50, also of rectangular shape

and made of a suitable sheet metal or the like. The dimensions of the auxiliary lid 50 are such as to form an effective seal for the receptacle, and corresponds to that portion of the horizontal cross section area of the receptacle not covered by the main lid 40. The auxiliary lid 50 is pivotally mounted on a pin or rod 51 held in fixed position between the transverse walls of the receptacle at the end opposite the pin 41. Attached to the lower surface of the auxiliary lid 50 opposite each bracket 42, there is provided an actuating arm 52, extending diagonally downwards and terminating immediately adjacent the upper surface of the horizontal part of the bracket 42, this part having been widened to form a suitable sliding surface for the end of the arm 52.

The device may be assembled by inserting the sections of the pipe 14 through a suitable orifice in the floor 15 of the vehicle. The brackets 20 and the deflectors 30 may be secured to the pipe 14 either before or after the pipe 14 is applied to the vehicle. If it has been secured thereto in advance, it may be necessary to run the vehicle over a suitable pit during the insertion of the device. The receptacle 13 is then attached to the pipe, and is itself fastened by the fastening means provided. The pipe 14 is also secured as has been described.

In operation, assuming first that the vehicle is standing still, the user extends his arm towards the device, and applies his fourth and fifth, or other fingers to the auxiliary lid 50. Downward pressure thereupon moves the bracket 42 downwardly and the motion of the lid 40 is relatively much greater than that of the auxiliary lid 50. Thus the top of the receptacle is conveniently opened, and when the person's hold is released upon the material to be deposited, the material falls through the receptacle, and also through the passage formed by the pipe 14, upon the platform 21. When the car is started, the passage of air across the platform 21 blows off the material, there being then virtually no danger of the car becoming ignited, by inflammable material in the roadway.

Assuming the vehicle 10 to be in motion there will be a current of air passing the lower mouth of the pipe 14, and the partial vacuum thus created in the pipe will suck or draw out any material deposited in the receptacle. It is obvious that the lids 40, 50 are operable in the same manner as above described. Movement of the vehicle in the reverse direction produces a corresponding result, as will be readily seen.

When the user releases the pressure from the auxiliary lid 50, the spring 43 restores the lid 40 to its horizontal position, and the rod 52 is actuated thereby to restore the auxiliary lid 50 to normal. The device is

thus automatically restored to normal available for subsequent use.

Thus it will be seen that I have provided an efficient receptacle for waste materials in closed vehicles, whereby such materials are easily disposed of without littering the interior of the vehicle or injuring its upholstery; also the means provided can readily be installed in a vehicle of the type known as limousine or sedan and when so installed will match the interior decorations thereof, so as to form a part of the ornamentation in the same manner as a vanity case or similar fitting. With the use of my device danger of fire either to the upholstery of the car or to inflammable material which may be lying on the roadway underneath the car is minimized; and lighted cigars or cigarettes will be efficiently prevented from igniting such materials under conditions which might ignite the vehicle itself.

While I have shown and described and have pointed out in the annexed claims certain novel features of my invention, it will be understood that various omissions, substitutions and changes in the form and details of the device illustrated and in its operation may be made by those skilled in the art without departing from the spirit of my invention.

Having thus described my invention, I claim:

1. The combination with a vehicle employing inflammable liquid, of an ash receiver in the vehicle and a platform beneath the vehicle freely open and exposed, with a passage from receiver to platform, and a fan shaped deflector over said platform extending in the direction of movement of the vehicle for directing a current of air across the platform when the vehicle is in motion.

2. The combination with a vehicle employing inflammable liquid, of an ash receiver in the vehicle and a platform beneath

the vehicle freely open and exposed, with a passage from receiver to platform, and a pair of tapered wind deflectors for directing a current of air upon said platform when the vehicle is in motion.

3. The combination with a vehicle employing inflammable liquid, of an ash receiver in the vehicle and a platform beneath the vehicle freely open and exposed, with a passage from receiver to platform, and a pair of deflectors over said platform for directing a current of air over it when the vehicle is in motion.

4. The combination with a vehicle employing inflammable liquid, of an ash receiver in the vehicle and a platform beneath the vehicle freely open and exposed, with a passage from receiver to platform, a fan shaped deflector positioned above said platform and extending towards the direction of normal movement of the vehicle for directing a current of air across said platform, and a second fan shaped deflector positioned above the platform and extending opposite to the normal direction of movement of the vehicle for creating a partial vacuum in said passage.

5. The combination with a vehicle employing inflammable liquid, of an ash receiver in the vehicle about at seat level and a platform beneath the vehicle for retaining ashes so long as the vehicle remains at rest, a conduit with a passage from receiver to retaining means, a self-closing cover for the receiver opened by downward pressure from the cigar-holding hand, and a fan shaped deflector over said platform extending in the direction of movement of the vehicle for directing a current of air across the platform when the vehicle is in motion.

Signed at New York in the county of New York and State of New York, this 21st day of October A. D., 1921.

HENRY SANFORD.