Aug. 4, 1925. 1,548,406

H. F. BOES

SMOKER'S EQUIPMENT FOR VEHICLES

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Fig. 1.

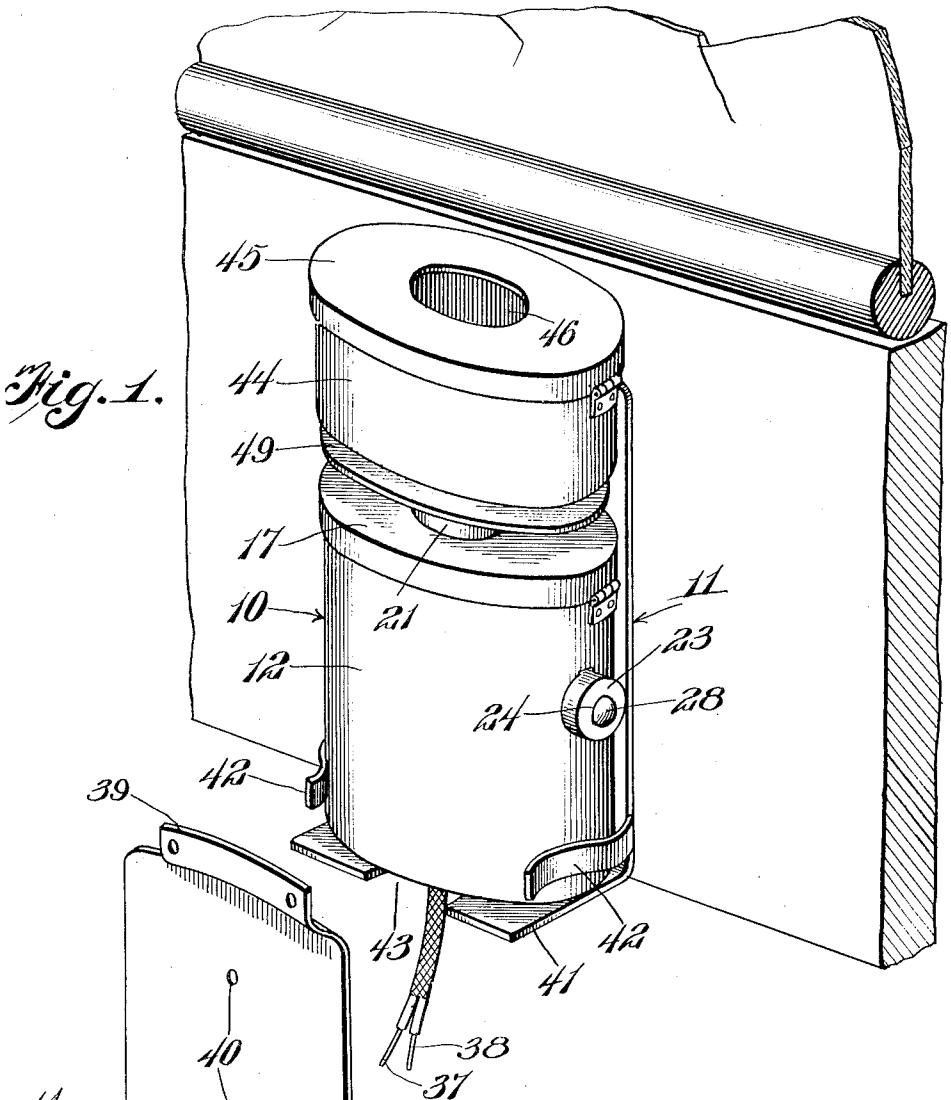
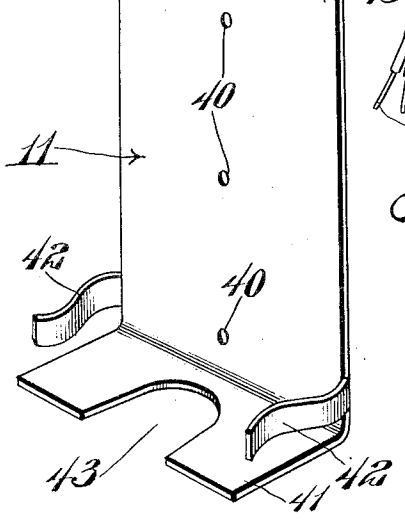


Fig. 2.



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Fig. 3.

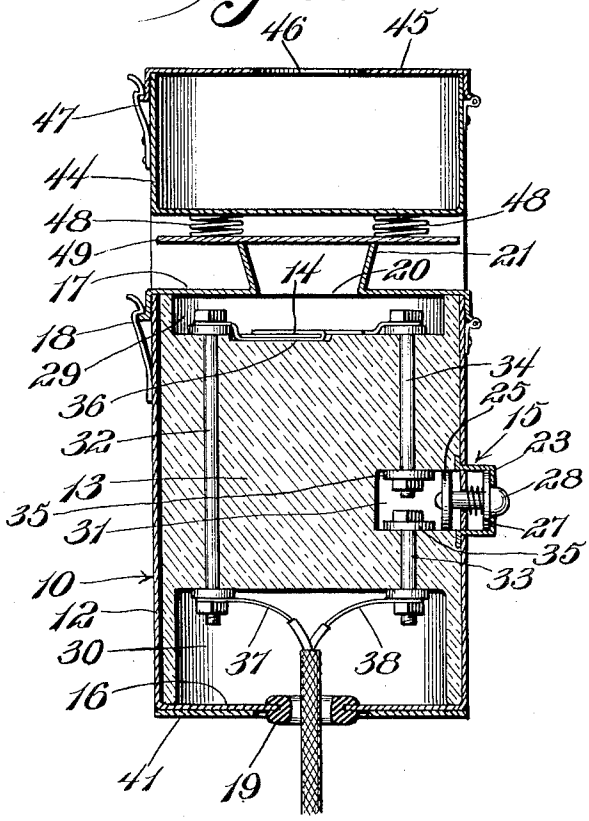


Fig. 4.

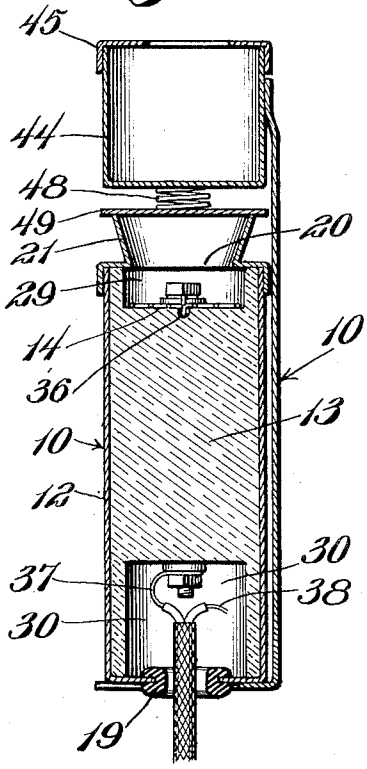


Fig. 5.

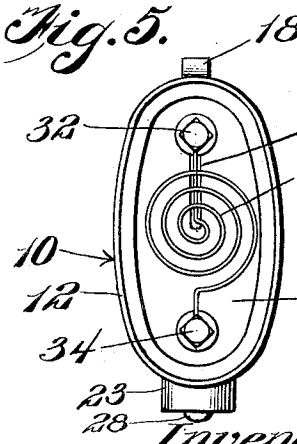
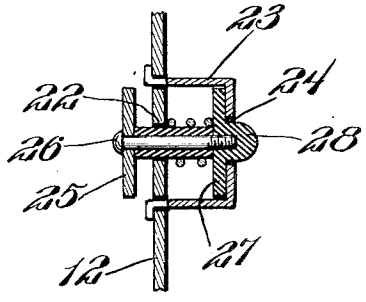


Fig. 6.



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UNITED STATES PATENT OFFICE.

HARRY F. BOES, OF PHILADELPHIA, PENNSYLVANIA.

SMOKER'S EQUIPMENT FOR VEHICLES.

Application filed February 10, 1925. Serial No. 8,277.

To all whom it may concern:

Be it known that I, HARRY F. BOES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Smokers' Equipments for Vehicles, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to smokers' equipment for vehicles and more particularly to smokers' equipment for an automobile including an element for lighting cigars and cigarettes and a second element for receiving the ashes and for supporting the first named element.

An important object of the invention is to provide a device of this character in which the support coacts with the lighting element in such manner that the resistance wire employed as a lighting element is protected from the accumulation of dust and dirt to tend to cause objectionable odors and short circuit the resistance element when the same is actuated.

A still further object of the invention is to provide a novel and improved structure in the lighting element.

These and other objects I attain by the construction shown in the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a perspective showing a cigar lighter and combined support and ash receiver attached to the dash board of an automobile;

Figure 2 is a perspective of the bracket removed;

Figure 3 is a vertical sectional view through the assemblage;

Figure 4 is a vertical sectional view at right angles to that shown in Figure 3;

Figure 5 is a top plan view of the lighter removed; and

Figure 6 is a detailed sectional view taken through the switch.

Referring now more particularly to the drawings, the attachment includes a lighting element 10, a bracket 11 for receiving the lighting element and adapted to be attached to any portion of the car. The lighting element includes an outer case 12, a porcelain 13 supporting the resistance coil 14 which forms the active element of the lighter and a switch 15 supported from the casing by means of which this coil may be energized.

The case 12 is preferably oval in cross section having one end thereof formed for the rigid closure 16 and the opposite end thereof the swinging closure 17 having a snap catch 18 by means of which it may be held in closed position. The rigid closure 16 is provided with a central opening having an insulating bushing 19 for the passage of feed wires while the swinging closure 17 is provided with a central opening 20 and has extending upwardly from this opening at the sides thereof a flange 21 forming a cup about the sides of the opening. One side of the case has formed therein an opening 22 and to the case about this opening is secured a switch housing 23 having a wall facing the wall of the casing in spaced relation thereto which is provided with a central opening 24. Arranged interiorly of the switch casing is a conductor plate 25 having a pin 26 extending through the opening and secured to the inner face of a push button 27. The pin has a bushed insulation through the metal of the casing and is surrounded by a spring engaging the push button and urging the same outwardly so that a knob 28 carried by this push button projects through the opening 24 of the switch housing 23.

The porcelain 13 is constructed to interiorly fit the casing 12 and is of approximately the same length as the casing. In its upper end, this porcelain is formed with a shallow recess 29 and in its lower end with a deeper recess 30. In a side wall of the porcelain at such point that it aligns with the switch plate 25, when the porcelain is in position within the case, a recess 31 is formed of slightly greater size than the plate 25. Directed through the body of the porcelain longitudinally thereof is a conductor 32 in the form of a suitably washered copper bolt and directed longitudinally of the casing from the lower end thereof into the adjacent end of the recess 31 is a second bolt 33. A third bolt 34 extends from the opposite side of the recess 31 to the upper end of the porcelain. It will be seen that the ends of these bolts are readily accessible so that they may be readily inserted in the porcelain and secured in position. The ends of the bolts 33, 34 projecting into the recess have washers 35, the purpose of which will presently appear.

Located between the bolts 32, 34 upon the

upper end of the porcelain body and at the face of the upper recess 29 is a resistance element 14. This resistance element is preferably in the form of a spirally coiled mat having its outer terminal connected to one of the bolts and its inner terminal connected to a slot 36 and engaged with the other of the bolts. The inner ends of the bolts 32, 33 are adapted for connection with lead wires 37, 38 from a source of current. It will be obvious that when they are so connected, a circuit for the resistance element is produced which is interrupted between bolts 33 and 34. This circuit, when the porcelain is positioned within the casing, may be completed by forcing the push button 27 inwardly against the action of the spring so that the plate 25 bridges the washers 35 and completes the circuit. The push button 27 is formed from insulation and since the pin 26 is insulated from the casing at the opening 22 and this push button, by its engagement with the switch housing 23, prevents the plate 25 from coming into contact with the inner surface of the casing 12, this casing never enters into the circuit and there is no danger of leakage at times when the push button is not being operated. The lead wires 37, 38 may be of any desired length and pass through the bushing 19 permitting the lighting element to be shifted from one part of the vehicle to another to suit the convenience of the occupants thereof.

The bracket 11 includes an attaching portion 39 in the form of a sheet of metal having attaching element receiving openings 40 formed therein. From the lower end of this attaching portion, a base 41 extends horizontally and is adapted to receive the lower end 16 of the lighting element. Extending outwardly from the sides of the attaching portion are spring clips 42 embracing the sides of the lighting element to maintain the same against disarrangement upon the shelf. The shelf 41 is formed with a notch 43 through which the lead wires 37, 38 may pass. At its upper end the bracket has attached thereto an ash tray 44 having a hinged cover 45 formed with the central opening 46 through which ashes may be deposited in the tray and a snap catch 47 by means of which it may be held in closed position against the jarring action of the vehicle when in movement. Attached to the bottom of this ash tray are a pair of springs 48 to the lower ends of which is secured a plate 49. This plate is spaced from the shelf 41 a distance such that it must be forced upwardly against the action of the springs 48 when inserting the cigar lighter into its position in the bracket and this plate will accordingly spring downwardly and effectually seal the upper end of the cup 21 and prevent dust or any other substance from entering the mouth of this cup and coming to rest upon the resistance element which is exposed by the opening 20.

It will be obvious that the construction hereinbefore set forth is capable of a considerable range of change and modification without in any manner departing from the spirit of my invention and I accordingly do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. Smokers' equipment for vehicles including a lighting element and a supporting bracket therefor, said lighting element having an opening, an electrical resistance coil arranged beneath the opening and adapted to be energized to render the lighting element operative, said bracket including a support for the bottom of the lighting element and a spring pressed plate engaging the lighting element at the opening and sealing the opening to prevent the entry of dust and dirt thereto.

2. Smokers' equipment for vehicles including a lighting element and a supporting bracket therefor, said lighting element having an opening, an electrical resistance coil arranged beneath the opening and adapted to be energized to render the lighting element operative, said bracket including a support for the bottom of the lighting element, a spring pressed plate engaging the lighting element at the opening and sealing the opening to prevent the entry of dust and dirt thereto; and means for maintaining the lighting element in position upon the base.

3. Smokers' equipment for vehicles including a lighting element and a supporting bracket therefor, said lighting element having an opening, an electrical resistance coil arranged beneath the opening and adapted to be energized to render the lighting element operative, said bracket including a support for the bottom of the lighting element, a spring pressed plate engaging the lighting element at the opening and sealing the opening to prevent the entry of dust and dirt thereto, and an ash receiver from which said spring pressed plate is supported.

4. A cigar lighter comprising a casing, a porcelain arranged within the casing, the casing having a hinged top provided with an opening, the porcelain within the casing provided beneath the top with a resistance mat, said porcelain having extending longitudinally thereof connections for said mat, one of said connections being in the form of a pair of bolts having adjacent ends thereof spaced and means carried by the casing and movable toward the porcelain from the exterior of the casing for connecting adjacent ends of said bolts.

5. A cigar lighter comprising a casing, a porcelain arranged within the casing, the casing having a hinged top provided with

an opening, the porcelain within the casing provided beneath the top with a resistance mat, said porcelain having extending longitudinally thereof connections for said mat, one of said connections being in the form of a pair of bolts having adjacent ends thereof spaced and means carried by the casing and movable toward the porcelain from the exterior of the casing for connecting adjacent ends of said bolts, said means being insulated from and maintained in spaced relation to the casing.

In testimony whereof I hereunto affix my signature.

HARRY F. BOES.