

United States Patent

[11] 3,587,594

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[21] Appl. No. **888,472**
[22] Filed **Dec. 29, 1969**
[45] Patented **June 28, 1971**

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[54] **SMOKING PIPE CONDITIONER**
8 Claims, 4 Drawing Figs.

[52] U.S. Cl. 131/172,
34/104
[51] Int. Cl. A24f 11/00
[50] Field of Search 131/170,
171, 172, 178; 34/104, 106

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ABSTRACT: A support for cradling a smoking pipe with its bowl portion opening upwardly and including a blower assembly operable to blow variable quantities of air down into the bowl of a pipe cradled from the support. The blower assembly includes an electric drive motor and the support includes a normally open pressure sensitive switch which is automatically closed upon the placement of a pipe on the support in position to be cradled thereby. Further, the pressure sensitive switch is serially disposed in an electrical circuit electrically connecting the electric motor for the blower assembly to a suitable source of electrical potential whereby the blower assembly will be actuated any time a pipe is cradled by the support.

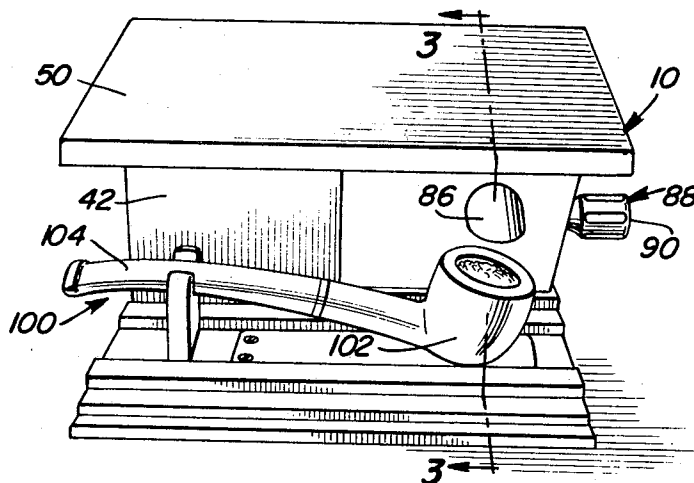


Fig. 1

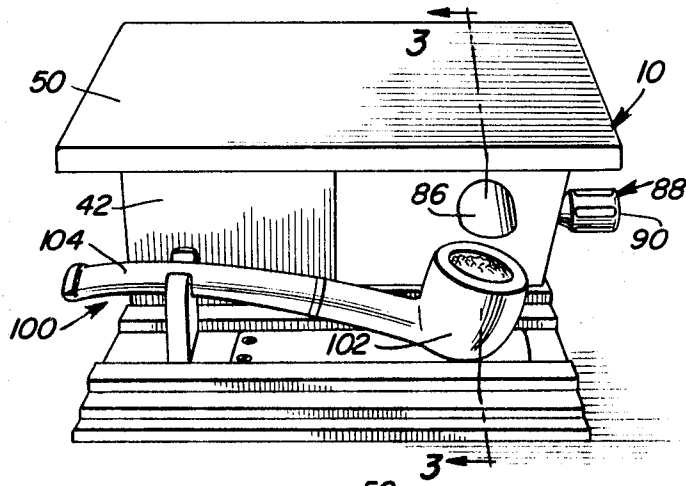


Fig. 2

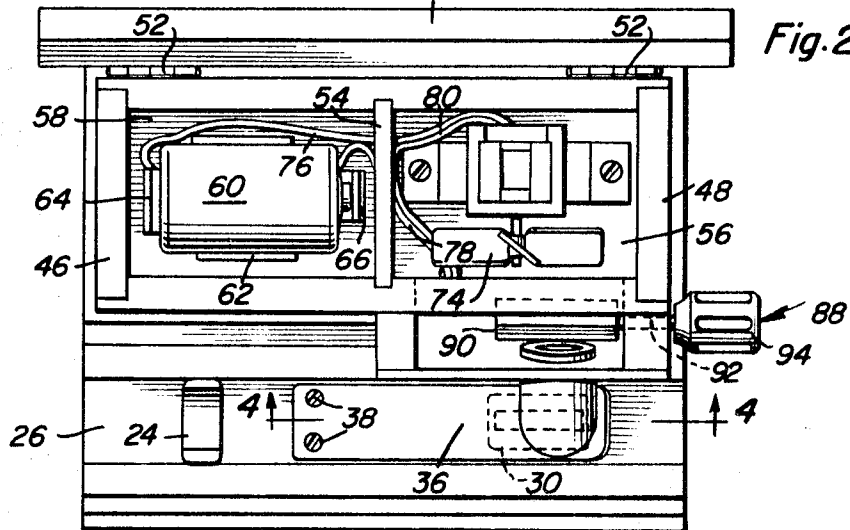


Fig. 4

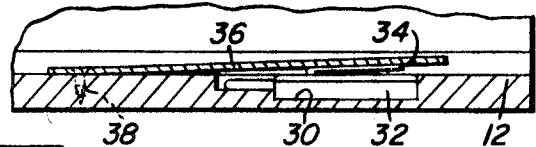
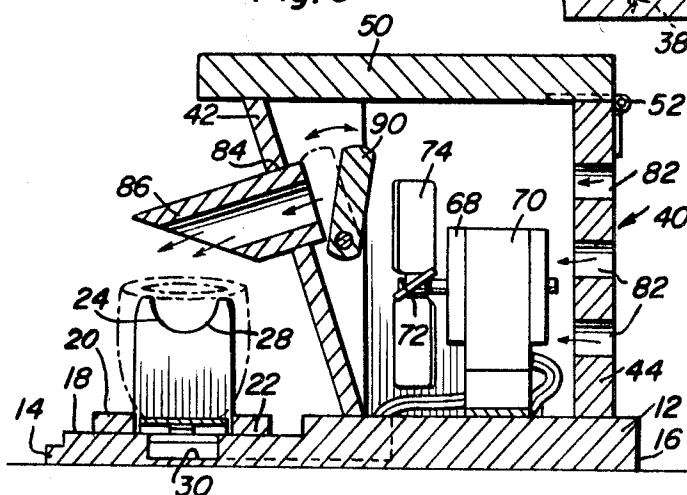


Fig. 3



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SMOKING PIPE CONDITIONER

The smoking pipe conditioner of the instant invention has been designed to provide a means whereby variable quantities of air may be blown downwardly into the bowl of a pipe and outwardly through the stem portion of the pipe. By utilizing such a structure means is provided whereby a pipe may be broken in or presmoked. In addition, a pipe which has been smoked and has moisture remaining therein may be acted upon by the conditioner in order to cause air to flow through the pipe until the interior of the pipe is fully dried.

The main object of this invention is to provide an apparatus by which a new pipe may be broken in or presmoked.

Another object of this invention is to provide a pipe conditioner which may be utilized to evaporate moisture remaining within a pipe after the latter has been smoked.

A still further object of this invention is to provide a pipe conditioner in accordance with the preceding objects and including means for cradling an associated pipe in predetermined position and further means operative in response to a pipe being disposed in the predetermined position for actuating the blower assembly of the pipe conditioner.

Another object of this invention is to provide a pipe conditioner in accordance with the preceding objects and including means by which the quantity of air being blown down into the bowl of a pipe associated therewith may be varied as desired.

A still further object of this invention is to provide a pipe conditioner including an electrically actuatable blower assembly and also a self-contained source of electrical potential for supplying operating current to the motor of the blower assembly, whereby a fully portable apparatus is provided.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIG. 1 is a perspective view of the smoking pipe conditioner of the instant invention;

FIG. 2 is an enlarged top plan view of the pipe conditioner with the hinged top thereof swung to an upstanding open position;

FIG. 3 is an enlarged transverse vertical sectional view taken substantially upon the plane indicated by the section line 3-3 of FIG. 1; and

FIG. 4 is a fragmentary enlarged longitudinal vertical sectional view taken substantially upon the plane indicated by the section line 4-4 of FIG. 2.

Referring now more specifically to the drawings, the numeral 10 generally designates the pipe conditioner of the instant invention. The conditioner 10 includes a support base 12 which is generally horizontally disposed and includes front and rear sides 14 and 16. The front portion of the base 12 includes a forward relieved area 18 upon whose upper surface a pair of generally parallel transversely extending strips 20 and 22 are secured. The strips 20 and 22 are spaced apart and therefore define an upwardly opening channel therebetween.

An upright support 24 has its lower end secured within the channel 26 defined between the strips 20 and 22 and the upper end of the standard 24 includes an upwardly opening notch 28.

The end of the channel 26 remote from the standard 24 an upwardly opening recess 30 formed therein and a normally open switch 32 is disposed within the recess 30 and includes an upper actuator 34 which may be depressed to close the switch 32. An elongated flexible cover plate 36 has one end secured in the channel 26 by means of suitable fasteners 38 and the other end of the cover plate 36 overlies the switch 32 in the actuator 34. The actuator 34 is urged upwardly to the position thereof illustrated in FIG. 4 of the drawings by means (not shown) disposed within the switch 32 and the actuator 34 is depressible to close the switch 32 upon slight downward pressure applied to the cover plate 36 above the actuator 34.

A housing referred to in general by the reference numeral 40 is supported from the base 12 and includes a forwardly and upwardly inclined front wall 43 and a substantially vertical rear wall 44. Corresponding ends of the front and rear walls 42 and 44 are interconnected by means of upstanding opposite sidewalls 46 and 48 and a hinged top wall or cover 50 is secured to the upper marginal edge portion of the rear wall 44 by means of hinge assemblies 52 and may be swung from the closed position thereof illustrated in FIGS. 1 and 3 and the drawings to the open position thereof illustrated in FIG. 2 of the drawings to provide access to the interior of the housing 40.

The housing 40 includes a partition 54 which extends between the front and rear walls 42 and 44 intermediate the opposite end walls 46 and 48 and the partition 54 divides the interior of the housing 40 into a right-hand compartment 56 and a left-hand compartment 58.

A conventional storage battery 60 is mounted within the left-hand compartment 58 by means of suitable supporting structure 62 and a pair of plate contacts 64 and 66 are disposed in electrical contact with the opposite ends of the storage battery 60.

An electric motor 68 is mounted in the right-hand compartment 56 by means of a suitable mounting structure 70 and the motor 68 includes a rotatable output shaft 72 upon which an axial flow blade assembly 74 is mounted. The output shaft 72 is horizontally disposed and extends between the front and rear walls 42 and 44 of the housing 40. A plurality of electrical conductors 76, 78 and 80 electrically connect the storage battery 60 to the motor 68 through the switch 32 whereby the motor 68 may be actuated upon downward pressure applied to the cover plate 36 above the actuator 34. The electric motor 68 and axial flow fan 74 comprise a blower assembly and the rear wall includes a plurality of air inlet openings 82 for admitting air into the right-hand compartment 56 in which the blower assembly is disposed. Further the front wall 42 includes an opening 84 therein in which the inlet end of an outlet tube 86 is secured. The tube 86 includes an outlet end disposed forwardly of the front wall 42 and in vertical registry with the switch 32. Further, the tube 86 is forwardly and downwardly inclined.

A valve assembly referred to in general by the reference numeral 88 is provided and includes a blade type head portion 90 mounted on an actuating shaft 92 journaled through the end wall 48. In addition, a control knob 94 is mounted on the actuating shaft 92 outwardly of the end wall 48 and it may be seen that oscillation of the knob 94 will cause oscillation of the blade type valve head 90 so as to control the flow of air into the inlet end of the tube 86. Accordingly, when the blower assembly is actuated by downward pressure on the cover plate 36 air is drawn into the right-hand compartment 56 through the inlet openings 82 and forced outwardly through the tube 86 at a rate determined by the positioning of the valve head 90.

With attention now invited more specifically to FIGS. 1 and 3 of the drawings there may be seen a conventional form of smoking pipe referred to in general by the reference numeral 100 including a bowl portion 102 which opens upwardly and a generally horizontally disposed stem portion 104. The pipe 100 is positioned with its stem portion 104 cradled in the upwardly opening recess or notch 28 formed in the standard 24 and with its bowl portion resting upon the cover plate 36 and embracingly received between the strips 20 and 22. The weight of the bowl portion 102 is sufficient to downwardly depress the cover plate 36 and the switch actuator 34 so as to close the switch 32 and initiate actuation of the electric motor 68.

If it is desired to break-in or presmoke a new pipe, the bowl portion of the pipe is filled with tobacco and the tobacco is lit in the usual manner. Then, the pipe is positioned as indicated by the pipe 100 with its upwardly opening bowl portion disposed in an area downwardly upon which air being discharged from the tube 86 will be blown. Positioning of the

pipe on the cover plate 36 will of course cause air to be blown downwardly into the bowl of the pipe and outward through the stem portion thereof. Also, if a pipe which has been smoked is to be dried, the empty pipe is positioned in the same manner as the pipe 100 whereupon the blower assembly will be actuated and air will be blown downwardly into the bowl portion and out through the stem portion of the pipe to be dried.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

I claim:

1. A mount including support means for supporting a pipe therefrom with the bowl portion of the pipe opening upwardly and disposed in a predetermined location, blower means supported by said mount and actuable to blow air downwardly through said predetermined location, said blower including an electric driving motor, said support means including a normally open pressure sensitive switch assembly having a vertically shiftable actuator normally biased upwardly toward an upper limit position and shiftable downwardly to close said switch assembly, said support means including means for supporting said pipe with its bowl portion resting upon said actuator to urge the latter downwardly from said upper limit position by the weight of said bowl resting thereon whereby said switch will be automatically closed in response to a pipe being supported from said support means, and circuit means electrically connected to said motor, having said switch means serially connected therein and adapted to electrically connect said motor to a suitable source of electrical potential.

2. The combination of claim 1 wherein said mount includes a housing including one upstanding wall extending upwardly beside said location, said one wall including means defining an outlet opening, said blower means being disposed within said housing and operative to discharge air therefrom through said outlet opening, said housing including air inlet means for said blower means remotely located relative to said outlet opening, said outlet opening opening downwardly toward said location.

3. The combination of claim 2 wherein said mount includes a housing having valve means disposed therewithin in opera-

tive association with the inlet end of said outlet opening for variably controlling the flow of air thereinto, said valve means including a movable actuator portion disposed outwardly of and manually operable from the exterior of said housing.

4. The combination of claim 1 wherein said mount includes a housing including one upstanding wall extending upwardly beside said location, said one wall including means defining an outlet opening, said blower means being disposed within said housing and operative to discharge air therefrom through said outlet opening, said housing including air inlet means for said blower means remotely located relative to said outlet opening, said outlet opening opening downwardly toward said location, said housing including a second upstanding wall spaced from and generally paralleling said one wall, said motor being disposed between said walls and including a generally horizontal rotatable output shaft upon which an axial flow impeller is mounted, said impeller being operable to discharge air therefrom toward said one wall and the inlet end of said outlet opening.

5. The combination of claim 4 wherein said housing includes a hinged top wall extending between said one wall and said second wall.

6. The combination of claim 4 including a storage battery disposed within said housing, said circuit means electrically connecting said storage battery to said motor through said switch means.

7. The combination of claim 6 wherein said mount includes valve means disposed within said housing in operative association with the inlet end of said outlet opening for variably controlling the flow of air thereinto, said valve means including a movable actuator portion disposed outwardly of and manually operable from the exterior of said housing.

8. The combination of claim 1 wherein said mount includes a housing including one upstanding wall extending upwardly beside said area, said one wall including means defining an outlet opening, said blower means being disposed within said housing and operative to discharge air therefrom through said outlet opening, said housing including air inlet means for said blower assembly remotely located relative to said outlet opening, said outlet opening opening downwardly toward said location, and a storage battery disposed within said housing, said circuit means electrically connecting said storage battery to said motor through said switch means.

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