Nov. 20, 1951 A. MARSHALL 2,575,634

SMOKER'S PIPE CLEANER

Filed April 25, 1949

Fig.1.

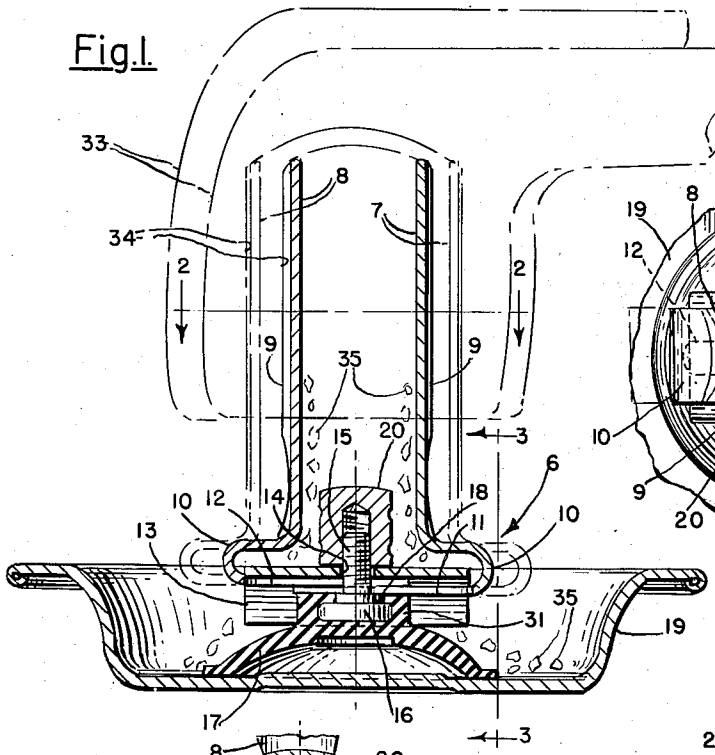
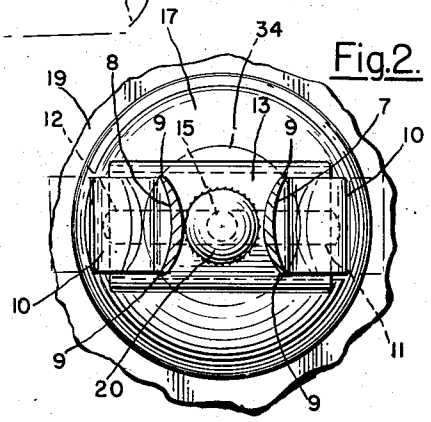


Fig.2.



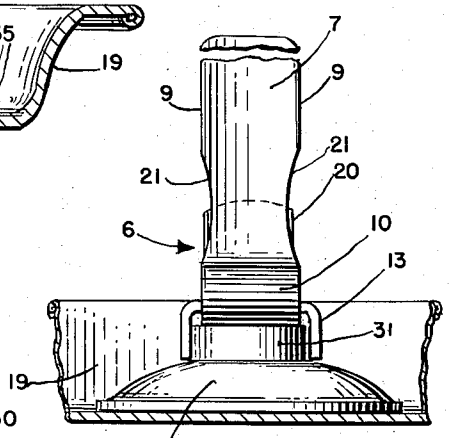


Fig.3.

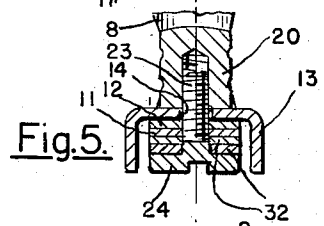


Fig.5.

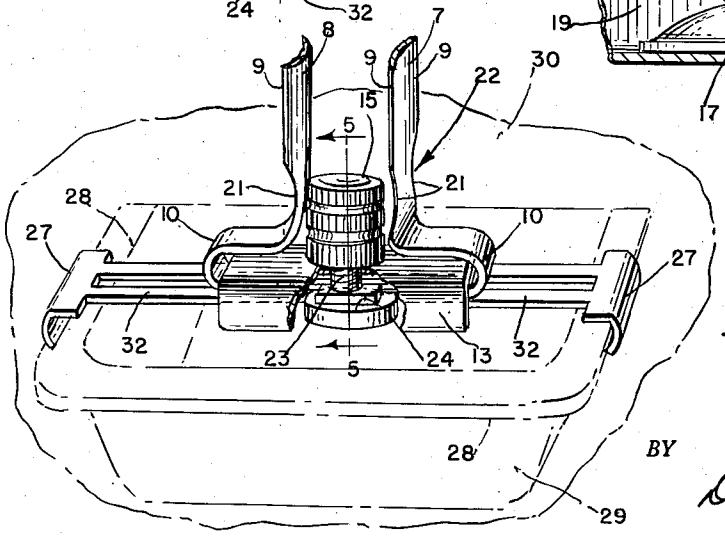


Fig.4

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Patented Nov. 20, 1951

2,575,634

UNITED STATES PATENT OFFICE

2,575,634

SMOKER'S PIPE CLEANER

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Application April 25, 1949, Serial No. 89,477

3 Claims. (Cl. 131—232)

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My invention relates to adjustable smoker's pipe cleaning devices attachable to ash trays and the like.

A most important object of my invention is to provide a smoker's pipe cleaning device having a pair of double edged scraping blades which are adjustable to fit the tobacco cavities of pipe bowls of different sizes.

A further important object of my invention is to provide an adjustable smoker's pipe cleaning device that is attachable within the ash containing chamber of an ash tray by means of a rubber suction cup.

A still further object of my invention is to provide an adjustable smoker's pipe cleaning device attachable to ash trays and the like, the pipe cleaning blades of which are so positioned that the ashes and dottle from the pipe bowl will fall into the attached ash tray as the pipe is being cleaned.

A further object of my invention is to provide an adjustable smoker's pipe cleaning device attachable by adjustable clamping means to the rim of an ash tray such as the type of ash tray mounted on a vehicle dashboard.

A still further object of my invention is to provide an adjustable smoker's pipe cleaning device attachable to ash trays and the like that is simple in design and may be economically produced in quantities.

Other objects and advantages embraced in my invention will be disclosed in the following description and the accompanying illustrations in which like parts are designated by like numerals and in which;

Fig. 1 is a cross-sectional view of one form of my invention shown in association with an ash tray and showing in phantom lines a pipe bowl being cleaned thereby.

Fig. 2 is a top view of my invention partly in cross-section taken looking in the directions of arrows 2—2 on Fig. 1.

Fig. 3 is an end view of my invention taken looking in the direction of arrows 3—3 on Fig. 1.

Fig. 4 is a perspective view of a second form of my invention in which clamping means are used in connection therewith for clamping the smoker's pipe cleaner to the rim of a dashboard ash tray.

Fig. 5 is a cross-sectional view of the second form of my invention taken substantially on line 5—5 on Fig. 4.

Referring to the illustrations, one form of my invention is generally designated 6 and consists of scraping blades 7 and 8, the blade portion of

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which is arcuate in cross-section with the scraping edges 9 inclined outwardly. The lower portions of scraping blades 7 and 8 are bent and formed into hair pin bends 10, the free ends of which are formed into bifurcated extensions 11 and 12 at right angles to the scraping blades 7 and 8. The said scraping blades 7 and 8 are mounted with their bifurcated extensions 11 and 12 secured within channel bracket 13 by means of a locking screw 15 through locating hole 14 in channel bracket 13. The head 16 of locking screw 15 is provided with a shoulder portion 18, which in association with knurled cap screw 20, provides locking means to hold the bifurcated extensions 11 and 12 tightly clamped against channel bracket 13. The head 16 of locking screw 15 is embedded within the head 31 of a rubber suction cup 17 in this form of my invention.

The scraping blades 7 and 8 are slightly arcuate in cross-section with the scraping edges 9 pointing outwardly at 34 to engage the sides of pipe bowl cavity of pipe bowl 33. The said scraping blades 7 and 8 may be relieved at their lower portions 21 for access to knurled cap screw 20.

In the second form of my invention illustrated in Figs. 4 and 5 the scraping blades 7 and 8, channel bracket 13 and cap screw 23 are similar to those illustrated and described in the first form designated 6 of my invention. The shoulder locking screw 23 has a flat head 24 to engage the forked portions of adjustable clamping members 32, upon the outer ends of which are formed clamping portions 27. The said adjustable clamping members 25 and 26 are slideably adjustable to engage the rim 28 of an ash tray such as a dash board ash tray 29 by their clamping portions 27. The said dashboard ash tray 29 may be of any common size or shape as found on the dashboard 30 of a vehicle.

My adjustable smoker's pipe cleaning device 22 is quickly adjustable to the rim 28 of any ash tray by loosening cap screw 20 and adjusting the adjustable clamping members 32 to the rim thereof. The scraping blades 7 and 8 in both forms 6 and 22 of my invention may be adjusted or set at varying distances from each other to fit within the pipe bowl cavity 34 of varying sizes of pipes 33.

To clean a pipe using my adjustable smoker's pipe cleaning device, the pipe bowl 33 is placed with the cavity 34 downward over scraping blades 7 and 8. The said blades 7 and 8 are adjusted by means of cap screw 20 to the size of cavity 34 and the pipe is twisted in a rotary motion to remove ashes and dottle 35 encrusted therein. The

action of scraping edges 9 loosens the said ashes and dottle 35 as the pipe is rotated and the position of the pipe cleaning device within an ash tray 19 causes the said ashes and dottle to fall within the ash tray.

A most important feature of my invention is the adjustability of scraping blades 7 and 8, permitting them to be closely adjusted to the inner surface of pipe bowl cavity 34. The arcuate shape of blades 7 and 8 with the outwardly inclined scraping edges 9 presents four scraping edges to the pipe bowl cavity 34, for quickly cleaning ashes and dottle therein by a single rotating action of the pipe bowl. The said ashes and dottle will fall within the ash tray, a decided advantage over other types of pipe cleaners wherein ash and dottle must be collected with a certainty of some spillage.

Although my invention has been described, the terms used are to be deemed terms of description rather than terms of limitation, my intention being to retain the right to all mechanical equivalents of the structural elements depicted, provided they fall within the purview of the appended claims.

Having thus disclosed and revealed my invention, what I claim as new and desire to secure by Letters Patent is:

1. Smoker's pipe cleaning means comprising, a support, pipe scraper blade means adjustably secured to the said support, securing means for attaching removably the said pipe scraper blade means to the said support, the said pipe scraper blade means including, a pair of pipe scraper blade elements having concave upright portions resulting in two scraper edges on each blade of said pair of pipe scraper blade elements, the said upright portions provided with hair-pin bent portions at the bottom thereof terminating in bifurcated portions assembled in overlapping and coincident relationship, channel bracket means in superimposed relationship over the said bifurcated portions to prevent lateral displacement thereof, and attaching means for securing removably the said pipe cleaning means to another related article, the said securing means securing simultaneously the said scraper blade means in varied adjustable positions to the said channel bracket means and to the said attaching means in varied adjustable positions.

2. Smoker's pipe cleaning means according to claim 1, further characterized in that the said attaching means consists of a pair of adjustable clamping members each provided with clamping portions adapted to straddle flanged portions of said related article and terminating in fork portions secured in adjustable and superimposed relationship adjacent the said bifurcated portions.

3. In smoker's pipe cleaning means, pipe scraper blade means, attaching means for securing removably and adjustably the said pipe scraper blade means to another related article, comprising channel bracket means straddling superimposed base portions of the said pipe scraper blade means in superimposition over superimposed portions of the said attaching means to prevent lateral displacement of both the said pipe scraper blade means and the said attaching means, and screw and nut means for adjustably securing the said pipe scraper blade means to the said attaching means permitting independent adjustments of the said pipe scraper blade means and the said attaching means.

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