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1,868,469

SMOKING APPARATUS

Filed April 19, 1930

FIG. 1.

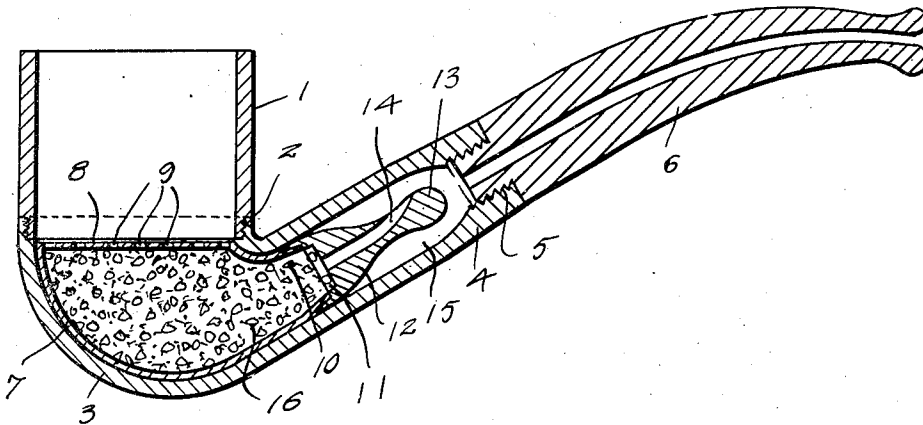


FIG. 2.

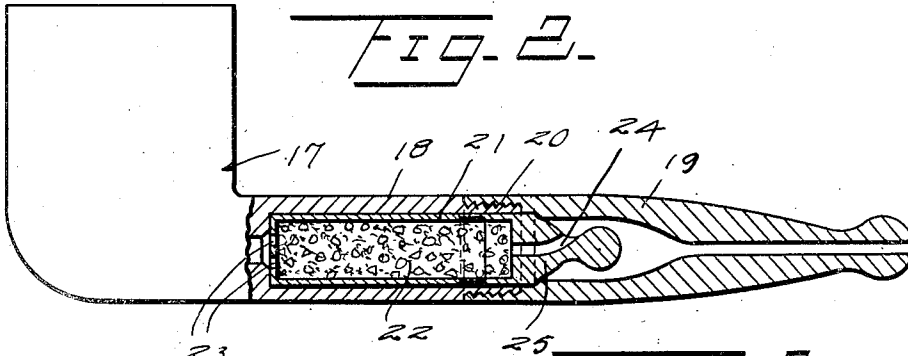


FIG. 3.

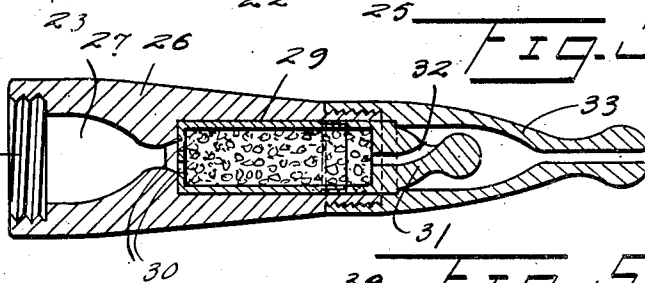
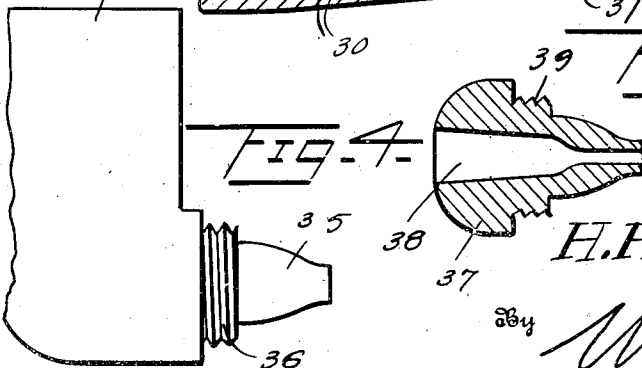


FIG. 4.



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SMOKING APPARATUS

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This invention relates to improvements in smoking apparatus such as pipes, cigar and cigarette holders.

The primary object of the present invention is to provide a means for removing the toxic principles, particularly nicotine, from tobacco as it is being used through the intervention of an absorbent material between the burning body of the tobacco and the point where the smoke from the same is drawn into the mouth of the smoker.

Another object of the invention is to provide an improved means for placing the material employed for removing the toxic matter from the tobacco smoke in position between the point where the tobacco is burning and the mouth of the smoker so that while the smoke must all pass through the material none of the material itself can be drawn into the smoker's mouth.

A still further object of the invention is to provide a receptacle for the toxic principle absorbing material which may be removed from the pipe or the cigarette or cigar holder and subjected to a certain treatment whereby the poisonous material which has been absorbed may be destroyed and the absorbent material replaced for further use.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:

Figure 1 is a longitudinal sectional view through a curved stem pipe showing one method of maintaining the poison absorbing material therein.

Figure 2 is a longitudinal sectional view through the stem of a straight stem pipe showing another method of maintaining the absorbent material in place.

Figure 3 is a longitudinal sectional view

through a holder which may be employed as a cigar holder, showing the manner in which the absorbent material is held in the stem thereof.

Figure 4 shows in elevation a portion of a pipe bowl having a partially threaded short stem whereby the holder shown in Figure 3 may be attached to the bowl to form a straight stem pipe.

Figure 5 is a view in section of an attachment for the stem or holder shown in Figure 3 whereby the same may be converted for use as a cigarette holder.

Referring more particularly to the drawing the numeral 1 indicates in Figure 1 the bowl of a pipe which, as shown, is threadably attached as at 2 to the bottom or heel 3 thereof. From this heel there extends the stem portion 4 to which is threadably attached as at 5 the usual bit 6.

Formed to fit in the heel of the pipe bowl is a shell 7 of a suitable metal such for example as aluminum which has a flat top 8 perforated as indicated at 9, upon which rests the tobacco placed in the bowl 1. The shell 7 being formed, as previously stated, to conform to the shape of the heel 3 of the pipe bowl has a laterally directed tubular extension 10 which projects into the stem 4. As shown, this extension is tapered slightly at its end so as to frictionally receive the tapered bore 11 formed in the end of a tip member 12 which is of gradually decreasing diameter toward the opposite end terminating in the bowl or head 13. Through this tip there extends a passage 14 which opens laterally through the wall thereof adjacent the end 13, this lateral opening of the passage being normally directed upwardly when the pipe is in use so that the chamber 15 formed thereabout in the stem of the pipe serves as a saliva trap. Also, by providing this chamber 15 the smoke passing there-through will be materially cooled before it is drawn into the mouth of the smoker.

The shell 7 is packed with activated carbon 16. This substance absorbs the nicotine and other poisonous matter which would pass from the burning tobacco into the mouth of the smoker, thus removing from the smoke

its principles which normally have a bad effect upon the health of the smoker.

In Figure 2 there is shown a pipe of the straight stem type, the same being indicated generally by the numeral 17. The stem 18 to which the bit 19 is threadably attached as indicated at 20 is bored to a sufficiently large diameter to receive a metal cylinder 21. The forward end of this cylinder 21, which is packed with activated carbon 22 is apertured as indicated at 23 to permit the smoke from tobacco burning in the bowl of the pipe to pass through the cylinder and through the passage 24 formed in the tip 25 which closes the other end of the cylinder, this tip as shown being within the forward portion of the bit 19.

In Figure 3 there is shown a stem 26 having the bore therethrough enlarged at its forward end as indicated at 27 and interiorly screw threaded as at 28. The bore at the rear end of this stem is suitably enlarged to receive a metal cylinder 29 similar to the cylinder 21 shown in Figure 2, the forward end of which is apertured as indicated at 30 while the rear end has the tip 31 thereon through which the passage 32 is formed, the stem end of this passage opening into the adjacent end of the cylinder. This tip 31, the same as in the pipe structure shown in Figure 2, projects into the bit 33 which is threadably attached to the stem 26 and which maintains the tip and the cylinder in position.

The enlarged portion 27 of the bore of the stem 26 is designed to receive the tip of a cigar so that this element may be used as a cigar holder. By providing a pipe bowl 34 having a short stem 35 formed to snugly position in the portion 27 of the holder and threaded at its inner end as indicated at 36 for engagement with the threads 28 of the holder it is possible to form a pipe, the stem of which is provided with the activated carbon container for absorbing nicotine from the tobacco smoke the same as in the structure shown in Figure 2.

In addition to providing a pipe bowl with a stem adapted to be engaged by the holder 26 there is provided a tip 37 having a bore formed therethrough, the forward end of which is enlarged as shown at 38 and shaped to frictionally engage a cigarette, the other end of the tip being shaped to snugly position in the enlarged portion 27 of the holder bore and provided with a threaded portion 39 for engaging the threads 28 of the holder. With this tip attached the cigar holder is converted into a cigarette holder.

From the foregoing description it will be readily appreciated that by equipping pipes and cigar and cigarette holders with the activated carbon containing shells or cylinders described, tobacco may be smoked without producing the harmful effects which would ordinarily be produced if smoked without

this device. In addition to this by placing the carbon in removable containers the latter may be removed from the pipe or the holder when it is considered desirable and subjected to a high heat which will destroy all of the absorbed poisons and restore the carbon to its former condition so that the same may be again used.

The activated carbon referred to throughout the specification is the carbon which is made from cocoanut shell and is accepted by chemists as "activated carbon." This carbon which is prepared by a special process has absorbing qualities for gases and liquids which far surpass other forms of carbon.

Having thus described my invention, what I claim is:

1. In a smoking pipe, a bowl having a heel, a stem integral with the heel and a bit attached to the stem, a coupling between the bowl and the heel whereby the bowl may be removed, a shell formed to fit in said heel and having a perforated top normally forming the bottom of the bowl and further having a laterally directed portion opening into the stem, said stem having a relatively large bore, an elongated tip formed at one end to receive said laterally directed portion and gradually decreasing in diameter toward the other end and further having a longitudinal passage therethrough opening at one end into the shell and at the other end opening through the side of the tip, and an absorbent material in said shell consisting of activated carbon.

2. In a smoking pipe, a bowl having a heel, a stem attached to the heel and a bit integral with the stem, a shell formed to fit in said heel and having a perforated top normally forming the bottom of the bowl and further having a laterally directed portion opening into the stem, said stem having a relatively large bore, an elongated tip formed at one end to receive said laterally directed portion and gradually decreasing in diameter towards the other end and having a longitudinal passage therethrough opening at one end into the shell and at the other end opening through the side of the tip into the stem, and an absorbent material packed in said shell.

In testimony whereof I hereunto affix my signature.

HURSEL H. BROADWAY.