July 25, 1944. J. S. LEWIS 2,354,388

SMOKING PIPE

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Fig 1

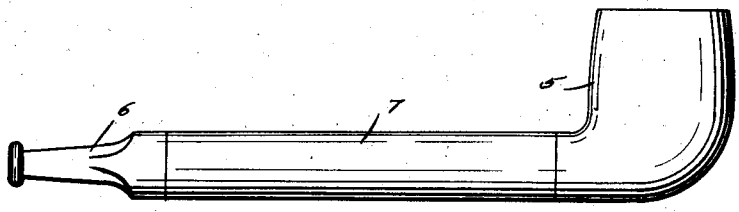


Fig 2

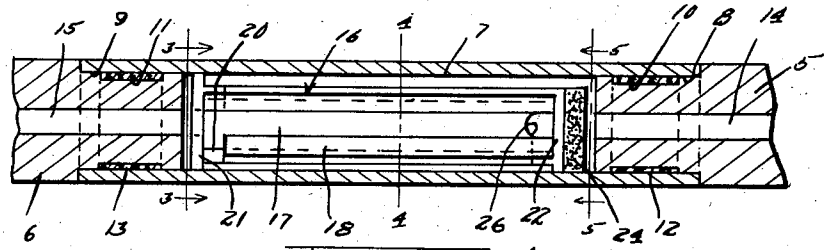


Fig 4

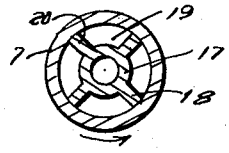


Fig 3

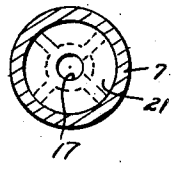


Fig 5

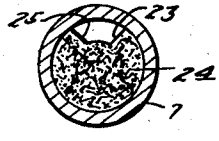
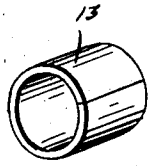


Fig 6



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Fig 8 Fig 7 Fig 9

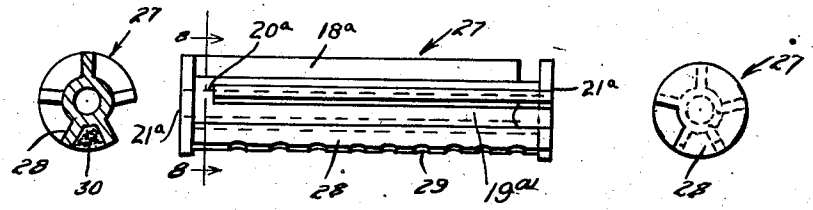


Fig 11 Fig 10 Fig 12

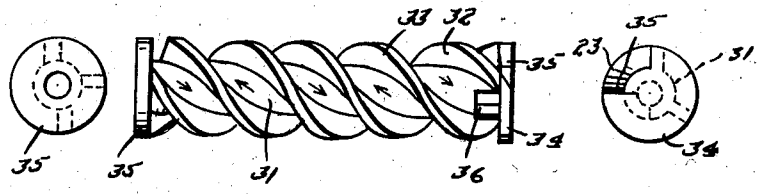
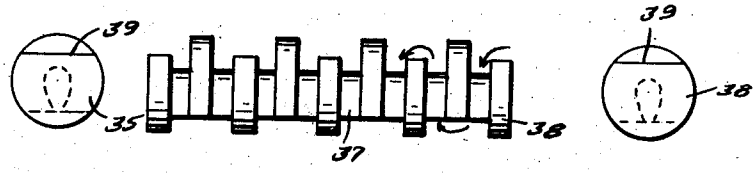


Fig 14 Fig 13 Fig 15



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Patented July 25, 1944 2,354,388

UNITED STATES PATENT OFFICE

2,354,388

SMOKING PIPE

John S. Lewis, Frederick, Okla.

Application August 22, 1942, Serial No. 455,790

1 Claim. (Cl. 131—218)

The present invention relates to new and useful improvements in smoking pipes and has for its primary object to provide a filter positioned in the pipe stem and embodies a baffle member having sinuous passages therein along which the smoke is adapted to travel whereby to increase the length of travel of the smoke to aid in the dissipation of the heat with less possibility of particles of tobacco getting through the pipe.

A further important object of the invention is to provide a baffle member preferably constructed of pressed paper which may be discarded, when desired, and which may act as an absorbent and which also may be treated to release a pleasant odor during the smoking of the pipe.

A further object is to provide a filter of this character of simple and practical construction, which is efficient and reliable in performance, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout and in which:

Figure 1 is a side elevational view of a smoke pipe constructed in accordance with the present invention.

Figure 2 is a fragmentary longitudinal sectional view through a portion of the stem.

Figures 3, 4 and 5 are transverse sectional views taken respectively on the lines 3—3, 4—4 and 5—5 of Figure 2.

Figure 6 is a perspective view of one of the cork gaskets at the end of the filter.

Figure 7 is a side elevational view of a modified baffle member.

Figure 8 is a transverse sectional view taken substantially on a line 8—8 of Figure 7.

Figure 9 is an end elevational view of the baffle shown in Figure 7.

Figure 10 is a side elevational view of a further modified baffle construction.

Figure 11 is an end elevational view of one end of the baffle shown in Figure 10.

Figure 12 is a similar view of the intake end of the baffle.

Figure 13 is a side elevational view of a further baffle member.

Figures 14 and 15 are end elevational views of the discharge and intake ends, respectively, of the baffle illustrated in Figure 13.

Referring now to the drawings in detail and with particular reference to the form of the invention illustrated in Figures 1 to 5, inclusive, the numeral 5 designates the bowl of a smoking pipe, while the numeral 6 designates the bit end and the numeral 7 designates an intermediate connecting tube therefor. The stem portion of the bowl 5 is reduced as shown at 8 and the inner end of the bit 6 is reduced as shown at 9 and the reduced portions 8 and 9 are formed with annular grooves 10 and 11, respectively, within which are seated cork gaskets 12 and 13, respectively, the gaskets being split longitudinally as shown in Figure 6 of the drawings to permit mounting of the gaskets in position.

The smoke passage in the stem portion of the bowl is designated at 14 and the smoke passage in the bit 6 is designated at 15.

Positioned in the tube 7 is a baffle member designated generally at 16 and which constitutes a tubular core 17 from which longitudinally extending fins 18 project in a radial direction, the edges of the fins bearing against the inner surface of the tube 7.

The fins 18 define smoke passages or channels 19 extending longitudinally of the baffle, and the opposite end of each alternate rib is notched or interrupted as shown at 20 to provide communication between adjacent passages 19. The ends of the passages 19 adjacent the bit 6 are closed by a disk member 21 and the ends of the passages 19 adjacent the bowl 5 are closed by a disk 22, said last-named disk having a notch 23 formed in one edge thereof to provide communication with one of the passages 19.

Also positioned in the tube 7 against the disk 22 is a disk 24 of absorbent material also provided with a notch 25 registering with the notch 23. The disk 24 is spaced from the adjacent end of the bowl portion of the pipe shown to advantage in Figure 2 of the drawings. The core 17, at its end adjacent the disk 22 is formed with an opening 26, the opening being arranged in the passage 19 that is remotely connected to the passage communicating with the notches 23 and 25 so that the smoke will travel longitudinally through the respective passages in a counter-clockwise order as indicated by the arrow in Figure 4 of the drawings.

In Figures 7 to 9, inclusive, of the drawings, I have illustrated a modified form of baffle designated generally at 27 and in which a pair of the longitudinal ribs 28, at the lower portion of the baffle have notches 29 formed therein and positioned between said ribs and disposed in the passage therebetween is an absorbent pad 30,

the pad being adapted to absorb any moisture that might be conveyed through the baffle together with the smoke. Each alternate rib 18a at the upper portion of the baffle has an opposite end spaced from an adjacent disk 21a to provide lateral passages 20a communicating with adjacent longitudinal passages 19a between the ribs.

In Figures 10 to 12, inclusive, a further modified baffle construction is illustrated and comprises the tubular core 31 around which is positioned spaced spirally formed ribs 32 and 33. The core 31 is provided with disks 34 and 35 at its opposite ends, the disk 34 having an intake notch 35 therein communicating with the channel between the spiral ribs 32 and 33 and the return channel, terminates in an opening 36 communicating with the core. The smoke travels in the manner illustrated by the arrows in Figure 10 in this form of the invention.

In Figures 13 to 15, inclusive, a further modified baffle construction is shown and comprises the solid core 37 on which is formed the longitudinally spaced segmental disks 38, each of the disks having a flat edge 39, the flat edge of adjacent disks being arranged at diametrically opposite sides of the baffle so that the smoke will travel in the manner as shown by the arrows in Figure 13 of the drawings.

From the foregoing it will be apparent that the baffles illustrated in the several forms of the invention cause the smoke to travel along a sinuous path longitudinally back and forth of the baffle and by so doing the heat is dissipated and the moisture carried with the smoke impinges on the walls of the passages in the baffle and is absorbed thereby.

It is believed the details of construction, advantages and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

Having described the invention, what is claimed as new is:

A filter for a smoking pipe adapted for mounting in a pipe stem, said filter comprising a tubular core of a diameter less than that of the stem, disks at each end of the core sealing the stem, said core being open at one end and closed at its other end, one of said disks having an opening, and circumferentially spaced longitudinally extending ribs carried by the core forming a tortuous passage, a pair of said ribs having notches on the edges thereof and an absorbent pad positioned between said pair of ribs, said core also having an opening for receiving smoke from the passage.

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