

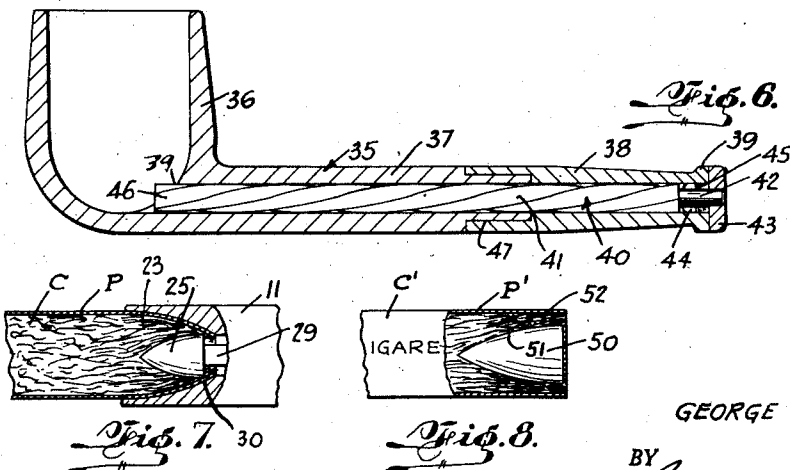
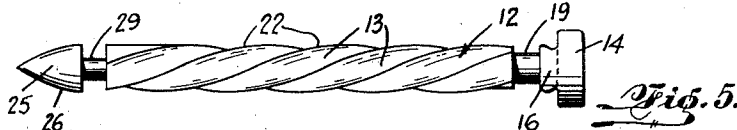
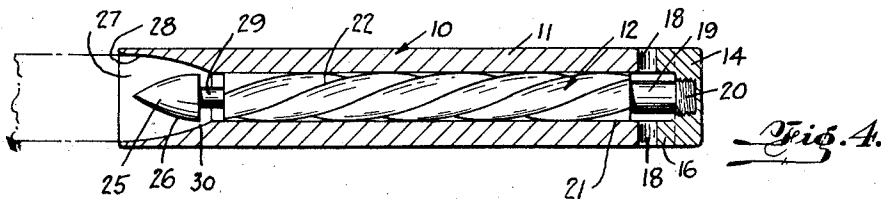
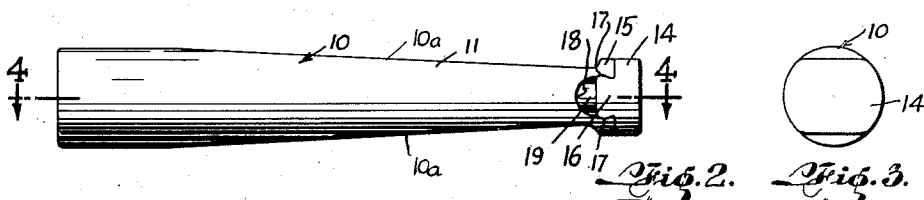
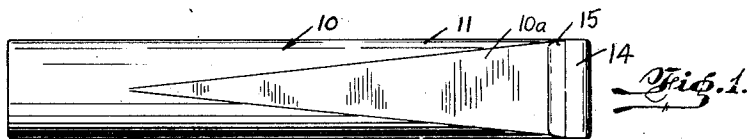
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2,402,680

SMOKING IMPLEMENT

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SMOKING IMPLEMENT

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

It is an object of the present invention to provide a very efficient and practical smoking implement which embodies means for filtering, purifying and cleaning tobacco smoke. Another object of the invention is to provide filtering and purifying means which are also employable to scrape the internal wall of a cigarette or cigar holder or the stem of a pipe to rid the same of any sediment resulting from the passage of the smoke therethrough.

A further object of the present invention resides in the provision of a smoking implement wherein the smoke at the mouth tip thereof is diverted laterally and the usual central smoke emitting orifice at the very tip of the implement is eliminated whereby the usual burning sensation of smoking is prevented, since the smoke will not impinge directly upon the tongue but will be deflected through the lateral openings; and, furthermore, whereby saliva will be prevented from entering the holder or stem by contact of the tongue therewith. A smoker usually passes his tongue against the tip-end of the mouthpiece while smoking, thereby depositing saliva within the stem or holder of the conventional smoking implement.

Yet another object of the present invention is to provide a cigarette holder and tobacco smoke purifying and filtering means therefor, wherein the holder body and said means cooperate to conically shape the end of the cigarette engaging the holder thereby folding or crimping the cigarette paper and compressing the tobacco at said end between the said means and holder body so that the smoke when drawn through said end of the cigarette will be filtered by the compressed tobacco and folded paper.

Still another object of the present invention resides in the provision of smoke cleaning and filtering means which may form part of a cigarette or cigar holder, or which may be inserted in the shank or stem of tobacco smoking pipes, which means are arranged in the path of the smoke or fumes (produced from an ignited cigarette, cigar or pipe of tobacco) drawn by the smoker so that the smoke and fumes will be drawn in contact with said means to be thereby cleaned and purified or otherwise modified before it reaches the mouth of the smoker. Elimination of the harmful and undesirable elements from the smoke is produced by condensation, and/or collection or adherence thereof on and to ele-

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ments of said means which are located in the path of the smoke, the said means being of sufficient capacity to safely clean the volume of smoke liberated from the article smoked.

A further object of the present invention is to provide in the smoke passage of a smoking implement a preferably metallic spindle or shaft having spiral grooves and adapted to engage the internal wall of the implement surrounding said passage, the said spindle or shaft being capable of freeing the smoke of the tars, resins and other undesirable and harmful constituents or impurities in its travel through said smoke passage and being utilizable as a scrubber for removing and eliminating such harmful and undesirable constituents of the smoke which settles or is deposited on the wall of the passage.

The metallic spindle or shaft functioning as condenser and collector is capable of removing from the smoke the undesirable constituents, such as, for example, nicotine, tar, the pyridine bases, ammonia, and the like, and ridding the smoke of staining qualities. The spindle is made preferably of metal as the tars, nicotine and resins have an affinity for metals, especially when in a moistened state.

Yet another object of the present invention is to provide the mouthpiece end of the smoking implement with a removable plug or imperforate member which functions as a finger grip for manipulating the filter shaft, that is, to remove the latter from the smoke passage or to work the same in the smoke passage for cleaning the wall of the smoke passage.

A still further object of the present invention resides in providing a slug or tip for the mouth end of a cigarette which slug when inserted into the end of the cigarette will cause the tobacco there surrounding to compress, thus providing filtering means for the smoke which is made to pass through this compressed portion of the cigarette.

If desired this plug may be used as a filter and as a carrier of remedial means by being impregnated or coated with a desired remedy which may include such preparations as menthol, camphorated oil, pine oil, and the like. These preparations will be liberated by the purified smoke as the same is drawn in contact with the plug and conveyed to the mouth and throat of the smoker to thereby counteract or relieve irritation and other unpleasant symptoms. This slug or tip may be employed separately or may form part of or be joined to the aforementioned spindle or shaft for purifying and or medicating the tobacco smoke

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and may have a porous body to provide means for absorbing and chemically binding or otherwise removing and eliminating the harmful and undesirable constituents from the smoke of cigarettes, cigars and tobacco pipes.

The above and other objects and advantageous features of the invention are accomplished by the novel and practical construction, combination and arrangement of parts hereinafter disclosed and illustrated in the accompanying drawing, constituting an essential part of the disclosure, and in which:

Fig. 1 is a top elevational view of a cigarette holder made in accordance with the invention;

Fig. 2 is a side elevational view of Fig. 1;

Fig. 3 is a right hand end view of Fig. 2;

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2;

Fig. 5 is a side elevational view of the filtering and condensing insert;

Fig. 6 is a sectional view taken through a pipe embodying the invention;

Fig. 7 is a left hand end portion of Fig. 4 (in section) having applied thereto the end portion of a cigarette shown in section; and

Fig. 8 is a side view of the mouthpiece end of a cigarette having applied thereto a tapered filter slug.

Referring now more particularly to the drawing, there is disclosed in Figs. 1-4, inclusive, a cigarette or cigar holder 10 having its top and bottom 10a tapering toward its mouth engaging end 15. The shell 11 of holder 10 houses a filter and condenser insert or tobacco smoke purifier 12 preferably made of metal and having longitudinally arranged spiral grooves in its intermediate portion 13. Threadedly engaging the diametrically reduced rear end 19 of insert 12 as by means of threads 20, is a preferably non-metallic plug or tip 14 which abuts against the mouth engaging end of the shell or housing 11.

Housing or shell 11 has a longitudinal bore 21 terminating at the front end of the holder in a tapering hollow enlargement 27 and at its other end communicating with a transverse channel, groove or recess 18 disposed at the mouth engaging end 15 of the holder 10.

Plug or tip 14 is provided with projections 16 adapted for locking engagement with the walls of notches 17, the notches 17 being formed in side extensions of the shell 11 at opposite sides of the recess 18. These shell extensions will spread sufficiently for locking engagement with the projections on the plug or tip 14 to permit the projections to be snapped into the notches 17. When tip member 14 is in locking engagement with the walls of notches 17, recess 18 becomes a tunnel having lateral openings through which the smoke drawn through the holder escapes into the mouth of the smoker the projections 16 being short of the depth of said recess so as not to impede passage of the smoke through the lateral openings. Thus, the smoke is prevented by the solid tip 14 from continuing in the same direction as the bore 21 and will be deflected laterally by the tip or plug 14, passing through the lateral openings in channel 18. Plug 14 prevents saliva from entering the holder 10 directly from the tip of the tongue which usually engages the tip-end of a cigarette holder.

The front section of insert 12 is provided with a diametrically reduced portion 29 terminating in an enlarged tapered, pointed or conically shaped end 25, which when insert 12 is in operable position, is located in the conical bore 27

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at the front of the holder 10. Head 25 of insert 12 at its maximum diameter is no larger than the diameter of the intermediate portion 13 so that the insert may be withdrawn from bore 21. The spiral threads 22 engage the wall of bore 21, so that by its rotation within and or withdrawal from bore 21, it will scrape and clean the said wall of foreign matter deposited thereon by the passing smoke.

Referring to Figs. 7 and 4, upon applying cigarette C to holder 10, the rear end of the cigarette is made to be penetrated by head 25 of insert 12, and at the same time this end of the cigarette is coned by being forced within conical bore 27. As a result of this penetration and coning of the cigarette end, the tobacco thereat between and adjacent head 25 and the diametrically reducing portion 30 of wall 28 of bore 27, will be compressed and the paper P folded or crimped providing an additional filtering medium for the smoke.

The paper P of the cigarette C engages the wall 28 of bore 27 and the wall 26 of head 25 engages the tobacco 23.

It is evident from the drawing and the above description that as cigarette C is being smoked, the smoke will be at least partially filtered in passing through the compressed tobacco 23 and the cigarette paper P. The insert 12 acts as a condenser for the moisture of the smoke, as well as providing a means upon which the tar, nicotine, resins and other substances in the smoke will collect during the passage of the smoke through the spiral grooves 13 from the cigarette. Metal has an affinity for tars and resins, especially when in a moistened state. The reduced portions 29 and 19 respectively permit the smoke to enter spiral grooves 13 and to flow into recess 18 for exit through the lateral openings of the latter.

Fig. 6 illustrates the invention as applied to a pipe 35, having the bowl 36, stem 37 connected at 47 to mouthpiece 38 terminating in the enlarged end 39 against which abuts the plug or tip 43 engaging the reduced shank end 42 of insert 40 disposed within the bores of mouthpiece 38 and stem 37. Insert 40 has the longitudinal spiral grooves 41 and its end 46 projects within the opening 39a connecting the hollow of bowl 35 with the bore in the stem 37. The numeral 44 represents the lateral openings equivalent to the lateral openings of recess 18, and the numeral 45 indicates the projections similar to the hereinabove mentioned projections 16.

Fig. 8 discloses the mouth-engaging end of a cigarette C' having the paper wrapper P'. Inserted within this end of the cigarette is a conically-shaped or pointed slug 50. The tobacco 52 is compressed between the wall 51 of the slug 50 and the paper P'. This slug may be made of inert material, in which case the smoke will be filtered in passing through the compressed tobacco 52, or slug 50 may be made of activated carbon or other material which will absorb the foreign matter in the smoke in which case the smoke will also pass in filtered condition through slug 50. Slug 50 may be medicated if desired.

Although the drawing and the above specification disclose the best modes in which I have contemplated embodying my invention, I desire in no way to be limited to the details of such disclosure, for in the further practical application of my invention many changes in the form and proportions may be made as circumstances require or experience suggests without departing from

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the spirit of the invention within the scope of the appended claims.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is:

1. A cigarette or cigar holder or the like, comprising a longitudinal housing having open ends and a longitudinal bore intermediate said ends, a substantially conical bore at one of said ends communicating with said intermediate bore, a recess at the other of said ends disposed transversely of said intermediate bore and communicating therewith, a removable member, said member closing said other of said ends and constituting a wall for said recess whereby a bore is formed of said recess having openings disposed transversely of said intermediate bore, and a shaft secured at one of its ends to said member and extending within said intermediate bore, said shaft having its other end tapered and extending within said conical bore, said shaft having a portion intermediate its said ends provided with a spiral groove and engageable with the wall of said intermediate bore, the wall of said recess having notches and said member having projections receivable in said notches.

2. A cigarette or cigar holder or the like, comprising a longitudinal housing having open ends and a longitudinal bore intermediate said ends, a substantially conical bore at one of said ends communicating with said intermediate bore, a recess at the other of said ends disposed transversely of said intermediate bore and communicating with the latter, a removable member, said member closing said other of said ends and constituting a wall for said recess whereby a bore is formed of said recess having openings disposed transversely of said intermediate bore, and a shaft secured at one of its ends to said member and extending within said intermediate bore, said shaft having its other end tapered and extending within said conical bore, said shaft having a portion intermediate its said ends provided with a spiral groove and engageable with the wall of said intermediate bore, said member having at least one projection received in said recess and having a friction grip with a side of said recess to hold said member in place, said projection being short of the depth of said recess and cooperating therewith to form an opening therebetween.

3. A cigarette or cigar holder comprising a housing having an open end adapted to receive a cigar or cigarette, said housing having a longitudinal bore communicating with said open end, said open end being conical, and a device extending within said bore and having a smooth surfaced tapered portion extending within said open end and having a connecting portion at the inner end of the tapered portion of appreciably smaller diameter than said tapered portion and of appreciably smaller diameter than the surrounding conical wall in the same transverse plane, the conical wall of said open end and the surface of said tapered portion being spaced apart and converging toward the inner end of the conical wall and adapted to cooperate to compress the tobacco of said cigar or cigarette therebetween and to conically fold or crease the wrapper of said cigar or cigarette in the space between said conical wall and said connecting portion when the cigar or cigarette is applied, whereby said compressed tobacco and said wrapper act as a filter for smoke coming from said cigar or cigarette through said bore, said device being adapted to modify said smoke.

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4. A cigarette or cigar holder, comprising a longitudinal housing having open ends and a longitudinal bore intermediate said ends, one of said ends having a substantially conical bore for receiving an end portion of a cigarette or cigar and communicating with said intermediate bore, the other of said ends having a recess disposed transversely of said intermediate bore and communicating with the latter, a removable member at said other of said ends and constituting a wall for said recess whereby a smoke passage is formed having openings disposed transversely of said intermediate bore, and a shaft having a grooved intermediate portion disposed within said intermediate bore and end portions, one of said end portions being less in cross sectional area than said intermediate portion providing a smoke passage communicating with said first-named passage and being attached to said member, the other of said end portions having a tapered head extending within said conical bore, and a section of said shaft connecting said head and said intermediate portion, said connecting section being smaller in cross-sectional area than that of said intermediate portion and the head to receive the end portion of the wrapper of said cigarette or cigar and grip said wrapper in the housing.

5. A cigarette or cigar holder, comprising a longitudinal housing having open ends and a longitudinal bore intermediate said ends, one of said ends having a substantially conical bore for receiving an end portion of a cigarette or cigar and communicating with said intermediate bore, the other of said ends having a recess disposed transversely of said intermediate bore and communicating with the latter, a removable member at said other of said ends and constituting a wall for said recess whereby a smoke passage is formed having openings disposed transversely of said intermediate bore, and a shaft having a grooved intermediate portion disposed within said intermediate bore and end portions, one of said end portions being less in cross sectional area than said intermediate portion providing a smoke passage communicating with said first-named passage and being attached to said member, the other of said end portions having a tapered head extending within said conical bore, and said last-mentioned end portion of said shaft being of smaller cross sectional area than the head to receive the end portion of the wrapper of said cigarette or cigar between said head and the conical bore.

6. A smoking implement comprising a body having a longitudinal smoke passage, one end of said body having a recess disposed transversely of said passage and communicating therewith, a removable member at said end of said body constituting a wall for said recess whereby a smoke passage is formed having openings disposed transversely of said longitudinal smoke passage, and a shaft disposed within said longitudinal smoke passage, said shaft having a cross-sectionally reduced portion extending within said recess, said member being attached to said shaft at said portion and having at least one projection extending within said recess less than the depth of the recess for lateral communication therethrough to the smoke passage, said projection having a friction grip with the sides of the recess to hold the removable member in place.

7. In combination with a smoking implement having a body provided at one end with a substantially conical bore and at the other end with a transverse recess and a longitudinal bore inter-

mediate said ends and in communication therewith, said conical and longitudinal bores having a common axis, of a removable rigid member insertable in said bores, said member having a substantially conical head projecting within said conical bore and spaced symmetrically from the surrounding walls thereof, the sides of said conical bore and head converging toward the inner end of the conical bore, a grooved intermediate portion disposed within said longitudinal bore, and an end portion smaller in cross sectional area than said intermediate portion and disposed within said transverse recess and extending therefrom, and a solid element secured to said end portion and constituting a front wall for said recess whereby a smoke passage is formed from said recess.

8. In combination with a smoking implement having a body provided at one of its ends with a bore adapted to receive a cigarette, cigar or the like and at the other of its ends with a transverse recess and a longitudinal bore intermediate said ends and in communication therewith, said bores having a common axis, of a removable rigid member insertable in said bores, said member having a substantially conical head projecting within said first-named bore and spaced symmetrically from the surrounding walls thereof, the sides of said conical bore and head converging toward the inner end of the conical bore, a grooved intermediate portion disposed within said longitudinal bore, and an end portion smaller in cross-sectional area than said intermediate portion and disposed within said transverse recess and extending therefrom, and a solid element secured to said end portion and constituting a front wall for said recess whereby a smoke passage is formed from said recess.

9. In combination with a smoking implement having a body provided at one of its ends with a bore adapted to receive a cigarette, cigar or the like and at the other of its ends with a transverse recess and a longitudinal bore intermediate said ends and in communication therewith, said conical and longitudinal bores having a common axis, of a removable rigid member insertable in said bores, said member having a substantially conical head projecting within said conical bore and spaced symmetrically from the surrounding walls thereof, the sides of said conical bore and head converging toward the inner end of the conical bore, a grooved intermediate portion disposed within said longitudinal bore, and an end portion disposed within said transverse recess and extending therefrom, and a solid element secured to said end portion and constituting a front wall for said recess whereby a smoke passage is formed from said recess.

10. In combination with a smoking implement having a body provided at one of its ends with a substantially conical bore adapted to receive a cigarette, cigar or the like and at the other of its ends with a transverse recess and a longitudinal bore intermediate said ends and in communication therewith, said conical and longitudinal bores having a common axis, of a removable rigid member insertable in said bores, said member

having a substantially conical head projecting within said conical bore and spaced symmetrically from the surrounding walls thereof, the sides of said conical bore and head converging toward the inner end of the conical bore and adapted to pierce the end portion of a cigarette inserted in said conical bore, a grooved intermediate portion disposed within said longitudinal bore, and an end portion disposed within said transverse recess and extending therefrom, and a solid element secured to said end portion and constituting a front wall for said recess whereby a smoke passage is formed from said recess, said head being spaced from the conical wall of said conical bore, whereby when an end of the cigarette is pierced by said head the tobacco at said latter end will be compressed against said conical wall and the wrapper at said latter end will be creased providing filtering means for the smoke passing through the pierced end of the cigarette.

11. A cigarette or cigar holder or the like, comprising a body having a longitudinal smoke passage terminating in open ends, a substantially conical bore at one of said ends, a recess at the other of said ends disposed transversely of said passage and communicating therewith, a removable member at said other of said ends constituting a wall for said recess whereby a smoke passage is formed having openings disposed transversely of said longitudinal smoke passage, and a shaft disposed within said longitudinal smoke passage, said shaft having a tapered head extending within said conical bore, said shaft having a cross-sectionally reduced portion extending within said recess, said member being attached to said shaft at said portion and having at least one projection extending within said recess less than the depth of the recess for lateral communication therethrough to the smoke passage, said projection having a friction grip with the sides of the recess to hold the removable member in place.

12. A cigarette or cigar holder or the like, comprising a body having a longitudinal smoke passage terminating in open ends, a substantially conical bore at one of said ends, a recess at the other of said ends disposed transversely of said passage and communicating therewith, a removable member at said other of said ends constituting a wall for said recess whereby a smoke passage is formed having openings disposed transversely of said longitudinal smoke passage, and a shaft disposed within said longitudinal smoke passage, said shaft having a tapered head extending within said conical bore, said tapered head of said shaft being smaller than said tapered bore for receiving the end portion of the wrapper of the cigarette or cigar between said head and said conical bore, said shaft having a cross-sectionally reduced portion extending within said recess, said member being attached to said shaft at said portion and having at least one projection extending within said recess less than the depth of the recess for lateral communication therethrough to the smoke passage, said projection having a friction grip with the sides of the recess to hold the removable member in place.

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